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**STATUS OF INTERVENORS' PROPOSED STIPULATED EXHIBITS**

		Documents	Form of Request	Date Response Provided	GRU/GREC's Position	Comments
1		All of Intervenor's Interrogatories and GRU/GREC's Responses	Intervenor's Undated Request for Stipulated Documents and Exhibits for Hearing of May 3, 2010	4/19/10	<b>Stahmer</b> – Yes to 1a through 1d and 2 NO to all others.  <b>Deevey</b> – Yes to 5a through 5c, 6, 10, 12, 14, 15, 17, 18, 19, 20 NO to all others	Subject to objections to preamble language of Stahmer's 1
2	(no docs)	All of Intervenor's PODs and GRU/GREC's Responses	Intervenor's Undated Request for Stipulated Documents and Exhibits for Hearing of May 3, 2010	4/19/10	No	
3	Reports 3	GDS 2006 "Peer review of ICF DSM Consultings"	Intervenor's Undated Request for Stipulated Documents and Exhibits for Hearing of May 3, 2010	4/19/10	No	
4	Proposed Exhibits 9	"Updated GDS Review of ICF DSM Analysis"	Intervenor's Undated Request for Stipulated Documents and Exhibits for Hearing of May 3, 2010	4/19/10	No	
5	Reports 5	USDA Report: "Georgia's Timber Industry—An Assessment of Timber Product Output and Use, 2007"	Intervenor's Undated Request for Stipulated Documents and Exhibits for Hearing of May 3, 2010	4/19/10	Yes	

FLORIDA PUBLIC SERVICE COMMISSION

DOCUMENT NUMBER-DATE  
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DOCKET NO. 090451-EM EXHIBIT 92  
 COMPANY INTERVENORS DEEVEY/STAHMER  
 WITNESS COMPOSITE EXHIBIT  
 DATE 5/3/10

6	Reports 5	USDA Report "Florida Timber Industry--An Assessment of Timber Product Output and Use, 2007"	Intervenors' Undated Request for Stipulated Documents and Exhibits for Hearing of May 3, 2010	4/19/10	Yes	
7	Reports 6  (just websites)	Composite Ex. of US. Dept. of Labor Stats. a) BLS Producer Price Index for Steel; b) BLS Producer Price Index Detailed Reports for 5/09, 4/09, 1/09	Intervenors' Undated Request for Stipulated Documents and Exhibits for Hearing of May 3, 2010	4/19/10	No	
8	Reports 7  (no doc)	U.S. Energy Independence and Security Act of 2007 (7 USC 17001 et. seq.)	Intervenors' Undated Request for Stipulated Documents and Exhibits for Hearing of May 3, 2010	4/19/10	No	
9	Reports 8  (no doc)	U.S. Food Conservation and Energy Act of 2008 (7 USC 8701 et. seq.)	Intervenors' Undated Request for Stipulated Documents and Exhibits for Hearing of May 3, 2010	4/19/10	No	
10	Reports 9	Climate Leaders Greenhouse Gas Inventory Protocol Optional Module Guidance "Using Offsets to Help Climate Leaders Achieve Their GHG Reduction Goals"	Intervenors' Undated Request for Stipulated Documents and Exhibits for Hearing of May 3, 2010	4/19/10	No	
11	Reports 10	40 CFR 60.750-60.755 Performance Standards for New Stationary Sources	Intervenors' Undated Request for Stipulated Documents and Exhibits for Hearing of May 3, 2010	4/19/10	No	

12	Reports 11	Presentation to Gainesville City Commission 11/26/07 "GRU Wholesale Contracts"	Intervenors' Undated Request for Stipulated Documents and Exhibits for Hearing of May 3, 2010	4/19/10	No	
13		GRU-Seminole Contract	Deevey E-mail 4/10/10	RSW e-mail 4/13/10	Yes	Subject to document being true and correct copy of original
14		GRU-City of Alachua Contract	Deevey E-mail 4/10/10	RSW e-mail 4/13/10	Yes	Subject to document being true and correct copy of original
15	Proposed Exhibit 13	Deevey Composite Exhibit/ Provision of Table 5.1	Deevey E-mail 4/15/10	RSW e-mail 4/15/10	No	
16		GRU TYSP's 2005, 2006, 2008, 2009, 2010	Deevey E-mail 4/19/10	JTL Memo 4/26/10	Yes	
17	Proposed Exhibit 6	Composite Ex.: GREC City Commission Chronology Includes a) Summary prepared by Deevey b) Minutes of City Commission Meetings - 1/28/08, 10/8/07, 3/24/08, 2/11/08, 4/28/08, 5/12/08, 5/7/09 c) Presentations made to Commission d) Back-up documents submitted to Commission e-1) 2003 Workshop Presentation e-2) 5/8/05 Newspaper Article	Deevey E-mail 4/19/10	JTL Memo 4/26/10	Proposed Response a) No b) Yes c) No d) No e-1) No e-2) No	

*In Record see Exh 69*

*In Record see Exh 69*

*Kim*

18	Proposed Exhibit 7	Gainesville Citizen Organization Letters: Letters from NAACP, Citizens for Renewable Energy and Women for Wise Growth	Deevey E-mail 4/19/10	JTL Memo 4/26/10	No	
19	Proposed Exhibit 1	"City of Gainesville Baseline Year 1605b Greenhouse Gas Inventory Report"	Deevey E-mail 4/19/10	JTL Memo 4/26/10	No	
20		Non-Redacted Nacogdoches RFP Response	Deevey E-mail 4/23/10	JTL Memo 4/26/10	No	Staff has asked and we have agreed to stipulate to the Redacted Version
21	Proposed Exhibit 15	USDA Forest Products Lab Fuel Value Calculator	Deevey E-mail 4/23/10	JTL Memo 4/26/10	No	
22		Non-Redacted Sterling Planet RFP Response	Deevey E-mail 4/23/10	JTL Memo 4/26/10	No	Staff has asked and we have agreed to stipulate to the Redacted Version
23		Non-Redacted Covanta RFP Response	Deevey E-mail 4/23/10	JTL Memo 4/26/10	No	Staff has asked and we have agreed to stipulate to the Redacted Version
24	<b>EXHIBIT 7</b>	<b>Non-Redacted GRU/GREC LLC PPA</b>	<b>Deevey E-mail 4/23/10</b>	<b>JTL Memo 4/26/10</b>	<b>Yes</b> <i>is already</i>	<b>Previously admitted into evidence</b>
25	Proposed Exhibit 10	E-mail Exchange between Deevey and City Attorney 3/22/10 E-mail from Deevey to Radson (w/letter attached), 3/25/10 e-mail from Deevey to Radson, 4/1/10 e-mail from Radson to Deevey (with letter attached)	Deevey E-mail 4/23/10	JTL Memo 4/26/10	No	Part of this e-mail stream was attached as an exhibit to our response to the motion to compel

26		USDA Report "The 2007 Energy Act vs. the 2008 Farm Bill"	Deevey E-mail 4/19/10	JTL Memo 4/26/10	No	
27	Proposed Exhibit 11	E-Mail exchange between Deevey and P. Wheat (Chair, Alachua County Energy Conservation Comm.), Tax Appraiser Ed Crapo, McLendon and Regan concerning property tax issues	Stahmer E-mail 4/26/10	JTL Memo 4/26/10	No	
28	Proposed Exhibit 12	Composite Exhibit Changes in Capacity Need, 2005 through 2010	Stahmer E-mail 4/26/10	JTL Memo 4/26/10	No	Several tables appear to be from GRU 2008 TYSP, last table appears to be a staff exhibit from initial hearing
29	Proposed Exhibit 18	Newspaper Articles re: Project: Gainesville Sun 4/28/08; 5/11/08	Stahmer E-mail 4/26/10	JTL Memo 4/26/10	No	
30	Proposed Exhibit 20	Summary Table of GREC Costs Reported in Newspaper Articles	Stahmer E-mail 4/26/10	JTL Memo 4/26/10	No	Table prepared by Intervenors
31		Unredacted Haddad Memo Task 1	Stahmer E-mail 4/26/10	JTL Memo 4/26/10	No	
32		Unredacted Haddad Memo Task 2	Stahmer E-mail 4/26/10	JTL Memo 4/26/10	No	
33		Unredacted Haddad Memo Task 3	Stahmer E-mail 4/26/10	JTL Memo 4/26/10	No	

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

In re: Joint petition to determine need for Gainesville Renewable Energy Center in Alachua County, by Gainesville Regional Utilities and Gainesville Renewable Energy Center, LLC.	DOCKET NO. 090451-EM DATED: APRIL 5, 2010
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**OBJECTIONS AND RESPONSES TO INTERVENOR DEEVEY'S FIRST SET OF  
INTERROGATORIES (No. 1- 14)  
TO PETITIONERS GRU AND GREC LLC**

Gainesville Regional Utilities (GRU) and Gainesville Renewable Energy Center, LLC (GREC LLC), collectively "Petitioners," pursuant to Rule 28-106.206, Florida Administrative Code, Rule 1.340, Florida Rules of Civil Procedure, and the Order Establishing Procedure in this matter, hereby respond to Intervenor Deevey's First Set of Interrogatories (No. 1-14).

The answers to Interrogatories Nos. 1, 2, 3, 5, 6, 7, 9, 12, 13, and 14 of Intervenor Deevey's First Set of Interrogatories (No. 1-14) are provided by Edward J. Regan, Assistant General Manager for Strategic Planning, Gainesville Regional Utilities, 301 SE 4<sup>th</sup> Avenue, Gainesville, Florida 32601.

The answers to Interrogatories Nos. 4, 8, and 11 of Intervenor Deevey's First Set of Interrogatories (No. 1-14) are provided by Richard D. Bachmeier, Electric System Planning Director, Gainesville Regional Utilities, 301 SE 4<sup>th</sup> Avenue, Gainesville, Florida 32601.

The answer to Interrogatory No. 10 of Intervenor Deevey's First Set of Interrogatories (No. 1-14) is provided by Robert W. Klemans, Supervising Utility Engineer, Gainesville Regional Utilities, 301 SE 4<sup>th</sup> Avenue, Gainesville, Florida 32601.

**5. Identify any and all written notices, advertisements or other forms of written information in or by which the City/GRU gave notice to the public regarding the following impacts of the GREC Project on costs to retail ratepayers:**

- a) the energy and the fuel adjustment charge,
- b) City utility tax,
- c) any fee designed to collect money to reimburse GREC for its local property taxes.

### **OBJECTIONS**

GRU and GREC LLC object to this interrogatory on the ground that it seeks in large part information that Intervenor Deevey has already obtained through GRU's/the City of Gainesville's responses to Intervenor Deevey's two hundred fifty three (253) public records requests since April 2004, documented in the Attachment DROG 1-1, as well as information already provided to the Commission in this docket, which is therefore equally available to Intervenor Deevey as it is to the Petitioners.

### **Response to Interrogatory No. 5a-c**

Without waiving the foregoing objections, and in the interest of being as cooperative as possible, the Petitioners respond as follows.

The response to this question is contained in the Petitioners' responses to Interrogatories Nos. 79a and 79b, which were previously provided to the FPSC Staff. In the interest of cooperation, those responses are repeated here, subject to minor edits and updated as necessary and appropriate. To avoid confusion, the numbering and labeling of electronic information in response to this and Intervenor Deevey's other Interrogatories and provided on the CD provided in response to Intervenor Deevey's First Request for Production of Documents will conform to the numbering of referenced interrogatories and document production requests originally propounded by FPSC Staff

GRU's customers were informed by:

1. Thirty-seven (37) televised presentations to the Gainesville City Commission and subsequent media articles for the period 2002 to 2009 addressed the relative merits of various energy supply and demand side management options. Note that a presentation made on March 3, 2006 specifically addressed the customer bill effects of various generation alternatives, but the GREC facility was not under consideration at that time.

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2. A detailed and specific PowerPoint presentation including customer bill impacts of the GREC power purchase agreement under various scenarios was presented to the Gainesville City Commission at a televised public meeting on May 7, 2009. It should be noted that the seven City Commissioners voted unanimously at that meeting to approve the contract between GRU and GREC LLC. This presentation was video recorded and is still accessible to the public to be seen and heard on the City of Gainesville's web site. Please refer to the CD file included in the response to Intervenor Deevey's Production of Documents request titled POD9a, which includes a copy of the PowerPoint presentation discussed previously in this response.
3. A comprehensive front-page article (above the centerfold) in the Gainesville Sun included rate effects in a highlighted offset box on May 8, 2008.
4. A customer information article citing that the proposed biomass fueled facility would result in increases to fuel adjustment when the plant initially came online was posted on GRU's website ([www.GRU.com](http://www.GRU.com)) with a "click to go there" link to the PowerPoint presentation described in Item 2 (above) within a few days following the May 7, 2009, City Commission meeting. The link to that presentation is currently still active.
5. All GRU's residential and commercial customers (approximately 93,000) were notified in their June 2009 monthly customer bulletin bill insert of the decision that had been made and notifying them of a future fuel adjustment increase when the biomass plant initially comes on-line.

The PowerPoint presentation and documentation of the City Commission meeting on May 7, 2009 as well as the link to the video recording has previously been provided in the Petitioners' response to Staff's Production of Documents Request No. 14. Also included are the newspaper article from May 8, 2009, the customer information article posted on GRU's web site, and a copy of the customer bulletin mailed out to all residential and commercial customers during the June billing cycle.

Following is a more detailed description of the indicated customer information items and activities.

Long Term Public Outreach. GRU's numerous presentations made at over seventy (70) public meetings during the development of its Integrated Resource Plan during the years 2004 through 2008 often compared the production costs of various forms of electrical production and energy conservation, with the obvious implications this had on utility bills. Thirty seven (37) of these presentations were made at City Commission meetings

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which were televised on the local public access television station. Video recordings of presentations made since October 2007 are available to the public for viewing on-line on the City of Gainesville's web site.

Customer Bill Impacts. Detailed and specific bill impacts were presented at the May 7, 2009 City Commission meeting. This presentation has been provided in full in digital format under Production of Documents (POD) 9a under the Calendar Year 2009 folder, and summarized in Section 15 of the GREC Need for Power Application (Exhibit No. 27 [GREC-1]). The shape of the cost curves of GREC compared to Florida's wholesale market for firm capacity and energy as well as risk factors that would affect bill impacts were addressed on pages 21 to 32 of the May 7, 2009 City Commission presentation and the results of the risk assessment performed by the GRU staff are summarized in the tables included on pages 33 through 36. To aid in the complete comprehension by both the City Commission and the public watching on television, the results of the GRU staff studies were expressed as the effect on a 1,000 kWh residential bill; this usage level is approximately 20 percent greater than the average monthly consumption by GRU's residential customers. The results were expressed for 2014 (the first full year of GREC operation) and 2019 (five years later) in both dollars per month and as a percentage. For the purposes of future bill comparisons electrical costs were assumed to escalate at 2.5 percent annually.

The incremental risk factors studied and presented both individually and cumulatively in the tables on pages 33 through 36 included:

- High, base, and low natural gas price forecasts;
- Net effect after fuel savings;
- Effect of prepayment structures;
- Effect of either a zero or \$12/MWh value of environmental attributes;
- The present value of capacity avoided in 2023;
- Indirect benefits from taxes paid by off-system resale of output;
- Missing the ITC Grant deadline of 1/1/2014 for commercial operation; and
- Expiration of the federal production tax credit.

It should be noted that the value for environmental attributes of \$12/MWh employed by GRU in the May 7, 2009 presentation was quite conservative. The Energy Information Administration evaluation of H.R. 2454 entitled *Energy Market and Economic Impacts of H.R. 2454, the American Clean Energy and Security Act of 2009*, published in August

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2009 and employed for the scenarios evaluated in the GREC Need for Power Application (Exhibit No. 27 [GREC-1]) suggest significantly higher numbers. The EIA 2009 report modeled the effects of H.R. 2454 on the value of carbon offsets adjusted for the effects of the economic stimulus package. This study showed results of \$20.90/MWh to \$61.43/MWh for the value of carbon offsets in 2014, and values of \$33.79/MWh to \$99.31/MWh in 2019 (assuming GRU's current average carbon content of electricity of 0.85 metric tons per MWh), more than double GRU's scenario assumptions.

Internet Publicity. A customer information article citing that the proposed biomass fueled facility would result in increases to fuel adjustment charges when the plant initially came online was posted on GRU's website ([www.GRU.com](http://www.GRU.com)). The piece was posted within a few days and included a "click to go there" link to the PowerPoint presentation made to the Gainesville City Commission on May 7, 2009 as described above. A link to that presentation is currently still active on GRU's web site under "About Us" then "News" as follows:

<http://www.gru.com/AboutGRU/NewsReleases/Archives/Articles/news-2009-05-07.jsp>

Customer Bill Insert. All of GRU's residential and commercial customers (approximately 93,000) were notified in their June 2009 monthly customer bulletin of the decision that had been made and notifying them of a future fuel adjustment increase when the biomass plant initially comes on-line. The bill insert also included information to assist customers that might want to visit GRU's web site.

Other Notifications. The official record of the actions taken by the City Commission on May 7, 2009 have been provided digitally as part of the response to POD No. 9b and the links to the video recording of the meeting as broadcast were included in the response to POD No. 9c and the May 8 2009 press coverage was presented in response to POD No. 9i. The front page (above the centerfold) article published in the Gainesville Sun on May 8 2009 (see response to POD No. 9i) featured the bill increases in 2014 and 2019 as a boxed item on the front page (above the centerfold). The web information was posted a few days after May 7, 2009, and customer bill inserts were sent out during the June billing cycle. Copies of the May 7, 2009 Gainesville City Commission presentation, the Gainesville Sun article from May 8, the information piece posted on the web, and the customer bill insert are being submitted in response to POD No.14.

**b) City utility tax,**

**Response to Interrogatory No. 5b.**

There have been no communications regarding the impact of the GREC project on city utility taxes, because the GREC Project will not have any direct impact on the City utility tax.

**c) any fee designed to collect money to reimburse GREC for its local property taxes.**

**Response to Interrogatory No. 5c.**

There have been no communications regarding the impact of the GREC Project on any fee of the type suggested by this interrogatory, because GRU has not considered any such fee.

6. **Identify any provisions in the contract between the City/GRU and GREC that permit the City to withdraw from the contract prior to the commencement of construction of the Project. On May 12, 2008, the City Commission voted to authorize GRU General Manager to negotiate and sign a contract for 100 MW biomass-fueled generator, and unanimously approved an amendment to that motion: "Include in the negotiations a contractual binding back door out at the site certification point". (Minutes of the May 12, 2008, City Commission Meeting, available on the City's website). If there is no such provision in the contract, explain why it was not included. If there is no such provision in the contract, identify when and how the City Commission and the public were informed of the absence of this provision. If they were not so informed, explain why.**

**Response to Interrogatory No. 6**

The referenced provision is not in the Power Purchase Agreement (the "PPA") between GRU and GREC LLC. As reflected in the Minutes of the May 8, 2008 City Commission meeting, the Commission's direction to the General Manager was to "Include in the negotiations a contractual binding back door out at the certification point..." (emphasis supplied). Following the City Commission's direction, in the ensuing negotiations the General Manager and his staff proposed for GREC LLC consideration such a "back door out" provision, but concluded in the exercise of the General Manager's authority to negotiate and execute the contract that the quid pro quo for such a term required by GREC LLC was not in the economic best interest of the City/GRU. Prior to the May 7, 2009 City Commission approval of the PPA, the General Manager and Assistant General Manager, Strategic Planning, verbally advised the individual members of the City Commission of the conclusions reached regarding this issue.

**10. With regard to Mayor Hanrahan's Supplemental Pre-filed Testimony about the Mayors Conference on Climate Protection Agreement, explain how the GREC Project will assist the City in achieving the 7% goal of reductions in carbon emissions. In answering this interrogatory, include the following:**

**RESPONSE**

GREC will initially provide 50 MW and approximately 394,000 MWh per year of carbon neutral generation for the GRU system. This equates to reduction of 334,219 tonnes/year of CO<sub>2</sub> equivalents released from combustion of fossil fuels. This reduction, in conjunction with conservation, efficiency improvements, and other renewable generation initiatives, will assure that the City of Gainesville will meet its goal of reducing greenhouse gas emissions to 7 percent below 1990 emissions.

**a) What were the emissions in Gainesville in 1990 and what sources contributed to them? How were the emissions calculated?**

**Response to Interrogatory No. 10a**

- Electricity Generation and Purchased Power – 1,662,079 tonnes CO<sub>2</sub> equivalents
- Non-electric Generating Unit (Water and Wastewater, Natural Gas, Vehicles, etc.) – 264,481 tonnes CO<sub>2</sub> equivalents
- Total City of Gainesville Operations – 1,926,560 tonnes CO<sub>2</sub> equivalents

The above values were calculated using data from Continuous Emissions Monitoring Systems, fuel consumption and sales records, and EPA/DOE emissions factors.

**b) What were the emissions in Gainesville in 2008 and what sources contributed to them? How were these emissions calculated?**

**Response to Interrogatory No. 10b**

- Electricity Generation and Purchased Power – 1,863,570 tonnes CO<sub>2</sub> equivalents
- Non-electric Generating Unit (Water and Wastewater, Natural Gas, Vehicles, etc.) – 131,109 tonnes CO<sub>2</sub> equivalents (updated since publication of Gainesville Climate Change brochure)
- Total City of Gainesville Operations – 1,994,679 tonnes CO<sub>2</sub> equivalents

The above values were calculated using data from Continuous Emissions Monitoring Systems, fuel consumption and sales records, and EPA/DOE emissions factors.

**c) What are the anticipated emissions in Gainesville in 2013? How were these emissions calculated?**

**Response to Interrogatory No. 10c**

- Electricity Generation and Purchased Power – 1,440,824 tonnes CO<sub>2</sub> equivalents\*
- Non-electric Generating Unit (Water and Wastewater, Natural Gas, Vehicles, etc.) – 146,086 tonnes CO<sub>2</sub> equivalents
- Total City of Gainesville Operations – 1,586,910 tonnes CO<sub>2</sub> equivalents\*

\* NOTE: These values were calculated assuming that the GREC Project would be on-line for all of 2013, such that these values should be regarded as annualized values for Gainesville's Electricity Generation and Total City Operations as of the time, expected to be in 2013, when the GREC Project comes on-line.

The above values were calculated using data from Continuous Emissions Monitoring Systems, fuel consumption and sales projections, and EPA/DOE emissions factors.

**d) The table submitted in response to Staff's Interrogatory # 38 shows various changes in the level of emissions. How were the reductions in emissions calculated?**

**Response to Interrogatory No. 10d**

There was no table submitted in response to Staff's Interrogatory No. 38, however, Interrogatory No. 39 did include a table and the following response is in reference to the table in Interrogatory No. 39, which is also reproduced here for convenience. The reductions in emissions were calculated by multiplying the estimated increase in efficiency or the reduction in historic or projected electricity consumed by the system average carbon equivalent intensity of 0.85 tonnes/MWh.

<b>Historical and Future Reductions</b> (metric tons of CO <sub>2</sub> equivalents per year)		
<b>Source of Carbon Reductions</b>	<b>Historical Annual Reductions (thru end of 2008)</b>	<b>Projected Annual Reductions (by end of 2013)</b>
Repowering J. R. Kelly Unit 8	36,134	31,801
GRU Energy Conservation Programs	131,031	177,650
Acquiring Land Development Rights	31,824	31,824
Landfill Gas to Energy Project	3	19,678
LED Traffic Signals	1,036	2,967
Combined Heat and Power	0	22,557
Solar Photovoltaic Electricity	435	7,682
Biomass Power Plant <sup>(1)</sup>	0	334,219
Traffic Signal Synchronization	0	82,701
<b>Total</b>		<b>711,080</b>

<sup>(1)</sup> Assumes that in 2013, half of the capacity of the biomass unit will be sold off system.

**e) Explain how “Acquiring Land Development Rights” contributes to reductions in carbon emissions.**

**Response to Interrogatory No. 10e**

Acquiring land development rights provides control over a piece of property and assures that the tract of land can continue to sequester carbon in the plants themselves and in the soils. Trees can store large amounts of carbon in their standing biomass and if the wood is used for long-lived building products this constitutes an additional carbon sink. Soils also store carbon and proper management practices maximize the amount that is retained. In summary, by keeping these lands out of development, the storage of carbon in the soil and the capture of carbon in harvested building products results in substantial carbon offset credits.

**14. With regard to Mayor Hanrahan's Supplementary Pre-Filed Testimony and the answer to the question on page 11, line 15, relating to GRU's risk mitigation activities in connection with GREC, please explain how that answer relates to the mitigation by GRU or by the City Commission of risks to ratepayers. Please explain how the answers, and the references to the transcript of the February 9, 2010, PSC Agenda Conference contained in the question pertain to mitigation of risks to ratepayers. Please explain how you understand the term "mitigation of risks to ratepayers".**

**Response to Interrogatory No. 14**

In summary, Witness Hanrahan's answer that begins at page 11, line 22, and continues through page 12, line 13, explains that risks borne by utilities are also borne by their customers (or "ratepayers" in Intervenor Deevey's wording), and that there are risks of taking particular actions, such as proceeding with GREC, and corresponding risks of not taking particular actions. In this context, Witness Hanrahan's testimony – both in the cited answer and in preceding and following parts of her testimony – explains that the City Commission's decision to proceed with GREC was a fully informed, and unanimous, decision in which the City Commission attempted to choose the course of action that would minimize the total long-term cost risks to GRU's customers and that would also minimize customers' vulnerability to a number of economic and non-economic factors, including fuel supply disruptions and fuel cost volatility. In practical terms, the potential risks of proceeding with GREC, even under an unrealistic, worst-case scenario, may be in the range of \$60 million in net present value terms, while the potential risks of not proceeding with GREC are approximately ten times that amount

Witness Hanrahan's testimony also refers specifically to Witness Regan's analysis of risks. On page 4, lines 1 to 16 of witness Regan's supplemental testimony the following summary is provided:

"There are no economic disadvantages to GREC if the benefits in terms of jobs and the \$609 million (net present value in 2010 dollars) of increased regional income as testified to by Mayor Hanrahan are included in the calculations. Even if these benefits are excluded, the biggest risk for GRU ratepayers is to not proceed with the project. GREC is not only the most cost-effective alternative for GRU to obtain the renewable energy needed to meet the City's environmental policy objectives, but it also provides substantial hedging value against the following risk factors:

- Fuel supply, price volatility and cost;
- Reliability and production cost issues associated with an aging generation fleet;
- Ownership cost over-runs associated with adding new capacity;
- Potential reductions in unit efficiency through time;
- Unplanned outages;
- Renewable portfolio standard (RPS) requirements; and
- Carbon regulation."

All of these factors will result in costs to GRU's customers over the next thirty years related to providing reliable electricity in the face of escalating fossil fuel costs and declining fossil fuel reserves, the need to replace the older portions of GRU's fleet, and the costs to comply with new

carbon and renewable portfolio requirements. Much of witness Regan's supplemental testimony is dedicated to the quantification of these factors and the probabilities of their occurrence.

GRU understands the term "mitigation of risks to customers" to mean making decisions, and taking courses of actions, that attempt to minimize risks – both financial or economic risks, such as the risk of large increases in fossil fuel prices and the risk of large increases in regulatory costs associated with using fossil fuels to generate electricity, as well as economic risks that have been shifted to GREC LLC in the PPA, and other, physical risks such as the risk of fuel supply disruptions resulting in potentially being unable to meet demand – to GRU's customers.

The transcript citations in this interrogatory refer to the following:

Page 6, line 4: Staff's discussion of potential cost risk to GRU's customers of \$100 million, in net present value terms, under assumptions that GRU believes are not only unrealistic but in fact, impossible. Specifically, the assumption that GRU would not be able to sell 50 MW of the GREC Project's capacity for any price greater than zero is impossible for all practical purposes, and the assumption, implicit in the Staff's discussion, that there would be no carbon regulatory costs over the projected life of the GREC Project, is unrealistic at best.

Page 29, line 7: Commissioner Skop's recognition that the potential customer impacts of proceeding with the GREC Project, as reflected in the evidence presented at the December 15, 2009 hearing, might be \$400 million in net present value benefits to GRU's customers or might be \$100 million in net present value costs under other scenarios. (GRU reiterates its strong belief that the assumptions that underlie the \$100 million detriment scenario are unrealistic at best, and impossible in the case of the assumption that 50 MW of GREC capacity would have zero capacity value in the wholesale market.)

Page 37, line 4: This citation appears to be a typographical error, and that the intended citation was to line 14 on the same page 37. The discussion by Commissioner Skop at this part of the transcript again addressed the worst-case risk of a \$100 million cost to customers, his recognition that many assumptions are involved, and his concern that the risks may not be fully mitigated. Again, GRU strongly believes that the assumptions that produce this worst-case result are unrealistic at best.

Page 59, line 9: This citation appears to be a typographical error, and that the intended citation was to page 50, line 9, rather than to page 59, line 9. At page 50, line 9, Chairman Argenziano also mentioned the potential downside risk of \$100 million (in net present value terms). Again, GRU strongly believes that the assumptions that produce this worst-case result are unrealistic at best.

Thus, the cited passages (subject to the typographical errors noted above) all relate to the issues of risk and risk mitigation, and to the potential worst-case downside risk of \$100 million in net present value terms, that are to be addressed in the supplemental hearing on April 15, 2010. Witness Hanrahan's testimony addresses the risks of proceeding with GREC as compared to the substantial risks that GRU's customers will face if GREC does not go forward as proposed, and both Witness Hanrahan and Witness Regan conclude that the risk of not proceeding with GREC is much greater than the risks under a worst-case scenario.

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

In re: Joint petition to determine need for  
Gainesville Renewable Energy Center in  
Alachua County, by Gainesville Regional  
Utilities and Gainesville Renewable Energy  
Center, LLC.

DOCKET NO. 090451-EM

DATED: APRIL 12, 2010

**OBJECTIONS AND RESPONSES TO INTERVENOR DEEVEY'S  
SECOND SET OF INTERROGATORIES (NOS. 15- 20)  
TO PETITIONERS GRU AND GREC LLC**

Gainesville Regional Utilities (GRU) and Gainesville Renewable Energy Center, LLC (GREC LLC), collectively "Petitioners," pursuant to Rule 28-106.206, Florida Administrative Code, Rule 1.340, Florida Rules of Civil Procedure, the Order Establishing Procedure, and the Revised Order Establishing Procedure in this docket, hereby respond to Intervenor Deevey's Second Set of Interrogatories (Nos. 15-20).

The answers to Interrogatories Nos. 15 through 20 of Intervenor Deevey's Second Set of Interrogatories (No. 15-20) are provided by Edward J. Regan, Assistant General Manager for Strategic Planning, Gainesville Regional Utilities, 301 SE 4<sup>th</sup> Avenue, Gainesville, Florida 32601.

**15. Please discuss the wholesale contracts between GRU and the City of Alachua and Seminole Electric Cooperative, and address the following questions/subjects in your discussions:**

**a) How do you define the term "firm need" as used in your application in this proceeding?**

**Response to Interrogatory No 15a:**

Petitioners performed a word search of the Need for Power Application and did not find the term "firm need".

**b) When do each of the current contracts with the City of Alachua and Seminole Electric Cooperative expire?**

**Response to Interrogatory No 15b:**

The contract with the City of Alachua expires 12/31/2010. The contract with Seminole Electric Cooperative expires 12/31/2012.

**c) Is GRU under any legal requirement to extend these contracts and continue to serve these customers beyond December 31, 2012?**

**Response to Interrogatory No 15c:**

No.

**d) The GREC Need Application contains forecasts of the net energy for load in Table 4.1 and of the seasonal peak demand in Table 4.2. Do the figures in these tables represent the sums of the retail forecasts plus the forecasts for Alachua and Seminole? Does the forecast demand listed in Need Application Tables 5.1 and 5.2**

**which show GRU's projected capacity requirements with and without GREC forecast capacity represent the forecast firm retail demand plus the demand contributed by Alachua and Seminole?**

**Response to Interrogatory No 15d:**

The answer to both of these questions is yes.

**e) If the net energy for load and the seasonal demands of Alachua and Seminole do not represent firm demand after 2012, please explain why their forecast needs after 2012 are included in Tables 4.1, 4.2, 5.1 and 5.2 and are included in the chart showing firm need plus 15% reserve on page 20 of Exhibit 29 (referred to by Commissioner Skop during the hearing on December 16, 2009 in 12177 12-16 Transcript 1-88).**

**Response to Interrogatory No 15e:**

The net energy for load and seasonal demands for Alachua and Seminole do represent firm demands. GRU treats these loads as firm loads for GRU's planning purposes for the following reasons.

Both of GRU's contracts with Seminole and Alachua are fully bundled, all-requirements contracts that include ancillary services as well as wholesale power. These ancillary services include carrying necessary spinning reserves and reserve margins to meet the obligations of these load-serving entities. These contracts are priced to reflect these services and the margins earned serve to reduce the rates for GRU's retail customers. The area served by Seminole is the western portion of the Gainesville urban area, and the City of Alachua is contiguous to GRU's service territory to the north. Residents of both of these areas frequently visit and work in Gainesville and utilize the urban services that are in part paid for by the General Fund Transfer from GRU's electric system. GRU has served Seminole for 35 years, and the City of Alachua for 25 years. If GRU does not serve these customers, other utilities in Florida will, and serving these customers benefits both the City of Gainesville and GRU's retail customers.

**f) Is GRU currently conducting negotiations with either the City of Alachua or  
Seminole Electric Cooperative to extend their current contracts?**

**Response to Interrogatory No 15f:**

Yes.

**17. With reference to the Gainesville's policy goals of reducing CO2 emissions, please address the following subjects:**

**a) GREC's need application and the supplemental testimony of Mayor Hanrahan and Ed Regan refer to Gainesville's policy goal of reducing CO2 emissions. The use of natural gas for heating, cooking, and other tasks releases far less CO2 to the atmosphere than the use of electricity that has been generated either from coal-fired or from gas-fired generators. List the programs of GRU that promote the use of natural gas for these tasks, identify the participants and the cost to the utility of implementing these programs.**

**Response to Interrogatory No 17a:**

GRU's programs that promote natural gas usage include rebates for replacing electric appliances for space heating, cooking, water heating, and clothes drying with natural gas appliances, and rebates for builders to install gas delivery and piping into new construction. It is not practical to identify all of the participants in these programs. The actual expenses for these programs including rebates and administrative costs in fiscal year 2009 were \$225,000.

**b) Has Gainesville implemented programs to reduce energy consumption in City owned buildings? How effective have they been?**

**Response to Interrogatory No 17b:**

Yes. They have been very effective.

**18. GRU has provided estimates of the amount of CO<sub>2</sub>e released to the atmosphere by the utility and other greenhouse gas sources in the City and treats most of them as equivalent to an “offsets” credit that can compensate for current or future expected emissions from GRU or other sources. (Response to Staff’s Interrogatory 39, page 000043 in Exhibits document 00471-10). Please answer the following questions in connection with the estimates in the Table in this Interrogatory.**

**a) Does the methodology used by GRU to estimate its own emissions satisfy the requirements of the EPRI protocols or of other protocols (for example, the EPA Electric Utility Protocol for the 1605(b) Climate Partners Program, the widely-adopted protocol developed by the World Resources Institute, protocols under development in California or by RGGI states)?**

**Response to Interrogatory No 18a:**

The methodology used by GRU is the EPA Electric Utility Protocol for the 1605b Climate Partners Program.

**b) Did GRU follow any forest protocols regarding “conservation” lands on Deerhaven property and if so are they equivalent to the Forestry Greenhouse Gas Accounting protocol developed by California for its Climate Action Registry Project, or an equivalent one developed elsewhere (WRI, RGGI states, etc.)?**

**Response to Interrogatory No 18b:**

Yes. The forests on the Deerhaven property have been certified under two programs, the Stewardship Forest Program administered by the Florida Division of Forestry, and the American Tree Farm System.

**c) Did GRU determine that none of the its claimed offsets violate the “additionality” requirement of all protocols listed above, and that none involve double counting of the effects of selected carbon emission-reduction programs on overall emissions?**

**Response to Interrogatory No 18c:**

The Petitioners are not aware of the term "additionality" in this context, and have accordingly asked for clarification of this interrogatory. Subject to their pending request for clarification, the Petitioners respond as follows.

None of GRU's emissions reduction measurements involve double counting. The EPA Electric Utility Protocol for the 1605b Climate Partners Program, which GRU uses for this purpose, is explicitly designed to avoid double-counting.

**d) Did GRU or the City estimate the carbon emissions from homes, auto and bus travel, clearing land for development, or other GHG sources?**

**Response to Interrogatory No 18d:**

Only the changes in carbon emissions from actions taken by GRU and the City of Gainesville's traffic signalization operations have been estimated.

**e) Has the Gainesville City Commission ever compared the per unit cost of reducing greenhouse gas emissions with GREC with other more efficient (less costly) options for reducing those emissions?**

**Response to Interrogatory No 18e:**

GRU staff has performed calculations of the unit costs for reducing greenhouse gas emissions for various alternatives from time to time. Because GREC is cost-effective strictly as an energy supply, it is a very low cost means of reducing carbon emissions.

**f) Has GRU ever considered co-firing biomass with coal in Deerhaven Unit 2 as an option for reducing carbon emissions much less expensively than by means of GREC?**

**Response to Interrogatory No 18f:**

No. Such an option is not practicable.

- 19. How many of the sitting members of the City Commission will face re-election to the Commission after 2013, when GREC becomes operational?**

**Response to Interrogatory No 19:**

It is unknown how many of the sitting members of the City Commission will face re-election after 2013.

- 20. In the event future increases in wood fuel costs cause electricity costs to ratepayers be higher than is acceptable to them, what options would GRU have to renegotiate its contract and reduce costs? What incentives would GREC have to be accommodating?**

**Response to Interrogatory No 20:**

GRU would have the opportunity to ask GREC LLC, in good faith, to renegotiate pricing under the PPA. With respect to the part of the question that asks about GRU's ability to reduce costs, GRU has the right to take over fuel procurement responsibilities if GRU believes that doing so would reduce costs.

The PPA was designed to be mutually beneficial to both GRU and GREC LLC. Both GRU and GREC LLC are incented to resolve any concerns between them in an amicable and mutually beneficial manner given that their relationship is intended to be a long-term one.

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

In re: Joint petition to determine need for Gainesville Renewable Energy Center in Alachua County, by Gainesville Regional Utilities and Gainesville Renewable Energy Center, LLC.	DOCKET NO. 090451-EM DATED: APRIL 12, 2010
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**PETITIONERS' OBJECTIONS AND RESPONSES TO INTERVENER STAHMER'S  
FIRST SET OF INTERROGATORIES (#1-2)**

Gainesville Regional Utilities (GRU) and Gainesville Renewable Energy Center, LLC (GREC LLC), collectively "Petitioners," pursuant to Rule 28-106.206, Florida Administrative Code, Rule 1.340, Florida Rules of Civil Procedure, and the Revised Order Establishing Procedure in this matter, hereby respond to Intervenor Paula Stahmer's First Set of Interrogatories, Nos. 1 and 2.

The answers to Interrogatory Nos. 1 and 2 of Intervenor Stahmer's First Set of Interrogatories have been provided by Edward Regan, Assistant General Manager for Strategic Planning, Gainesville Regional Utilities, 301 SE 4<sup>th</sup> Avenue, Gainesville, Florida 32601.

**Response to Interrogatory No. 1**

This interrogatory incorrectly characterizes the representations made to the Gainesville City Commission on May 7, 2009. Slides 11 through 12 of the PowerPoint presentation identify 8 unprecedented events in the power industry indicating fundamental changes in the cost of new generation, only one factor of which was the cost of steel. Slide 13 from FERC illustrated how these changes were driving major cost increases in all generation technologies. The City Commission also experienced these changes directly during the

**With regard to the foregoing, please address the following:**

- a) **What was the data source of information about steel costs relied upon by GRU for the May 2009 presentation to the City?**

**Response to Interrogatory No. 1a**

The information about steel costs was publicly available information from sources considered to be reliable.

- b) **What index or other documented cost information was consulted by GRU?**

**Response to Interrogatory No. 1b**

GRU retained an independent consultant to develop and compare various indexing schemes. The firm retained was Haddad Resource Management Inc. The principal of this firm has many years experience negotiating similar contracts on behalf of utilities and was hired to study a number of different alternatives. These included Bureau of Labor Statistics indices, market data, a variety of Handy-Whitman Indices, such as the total steam production cost, Euro to Dollar exchange rates (substantial pieces of equipment will be sourced from overseas), a variety of consumer price indices and weighting schemes, and Engineering News-Record construction indices. The evaluation was performed under three separate

task orders to reflect GRU's preferences and to further refine the final indices to be applied.

- c) **Was any such information or documentation provided to the City Commission?**

**Response to Interrogatory No. 1c**

Yes, the purpose and need for indexing was explained to the Gainesville City Commission at the May 7, 2009 public meeting.

- d) **Did American Renewables or GREC provide the information relied upon by GRU?**

**Response to Interrogatory No. 1d**

No, GRU did not rely on any information provided by GREC with regard to cost increases and indexing.

2. Does the contract with GREC specify any ceiling on the cost of wood fuel? If so, identify the relevant contract provisions.

**Response to Interrogatory No. 2**

While there is no ceiling on the cost of wood fuel in the contract with GREC LLC, the contract does provide a number of mechanisms that allow GRU to manage this cost and associated risks. These mechanisms include the ability to review and coordinate fuel supply contracts, dispatch of the unit, and take over fuel purchasing to the extent not previously committed by GREC LLC. Finally, the PPA's provision for the sharing of any increases or savings in such costs between GRU and GREC LLC help assure that both parties' interests are aligned.

United States  
Department of  
Agriculture

Forest Service



Southern  
Research Station

Resource Bulletin  
SRS-153

# Florida's Timber Industry—An Assessment of Timber Product Output and Use, 2007

Tony G. Johnson,  
Jarek Nowak, and  
Rhonda M. Mathison

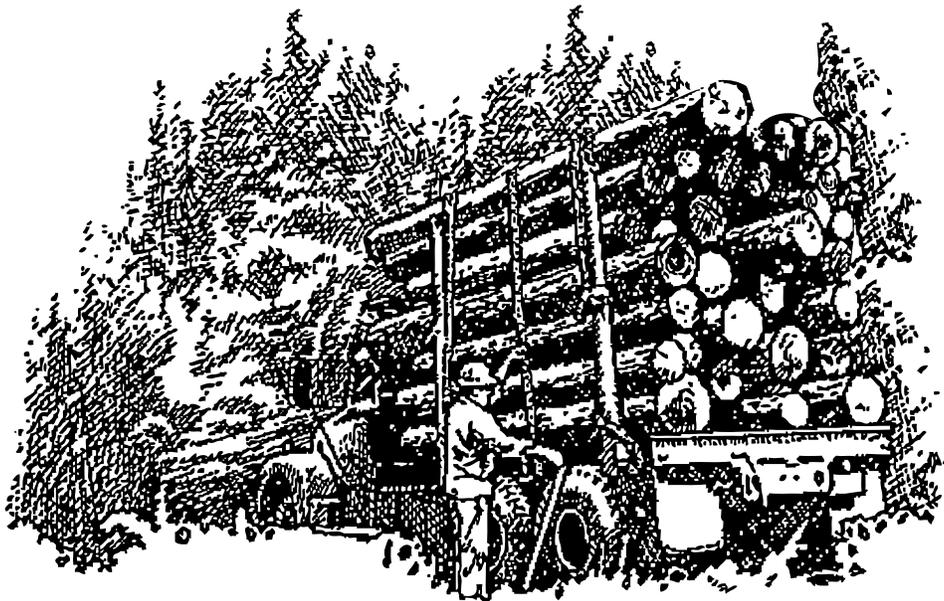


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## The Authors:

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June 2009

Southern Research Station  
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Asheville, NC 28804

## Foreword

This report contains the findings of a 2007 canvass of all primary wood-using plants in Florida, and presents changes in product output and residue use since 2005. It complements the Forest Inventory and Analysis periodic inventory of volume and removals from the State's timberland. The canvass was conducted to determine the amount and source of wood receipts and annual timber product drain, by county, in 2007 and to determine interstate and cross-regional movement of industrial roundwood. Only primary wood-using mills were canvassed. Primary mills are those that process roundwood in log or bolt form or as chipped roundwood. Examples of industrial roundwood products are saw logs, pulpwood, veneer logs, poles, and logs used for composite board products. Mills producing products from residues generated at primary and secondary processors were not canvassed. Trees chipped in the woods were included in the estimate of timber drain only if they were delivered to a primary domestic manufacturer.

A 100-percent canvass of all wood processors in Florida was conducted in 2008 to obtain information for 2007. In addition, roundwood from out-of-State mills known to be using logs or bolts harvested from Florida timberland was incorporated into Florida production estimates. Each mill was canvassed by mail or through personal contact at plant locations. Telephone contacts followed mailed questionnaire responses when additional information or clarification of a response was necessary. In the event of a nonresponse, data collected in previous surveys were updated using

current data collected for mills of similar size, product type, and location. Surveys for all timber products other than pulpwood began in 1958, and are currently conducted every 2 years.

Pulpwood production data were taken from an annual canvass of all southern pulpmills. Medium density fiberboard, insulating board, and hardboard plants were included in this survey.

## Acknowledgments

The authors thank Anthony T. Grossman and Dr. Marian Marinescu for review and comments; Carolyn Steppleton and Michael Howell for their tireless efforts in processing and accuracy of the data; Helen Beresford for timber product output database maintenance and support; Anne Jenkins, Janet Griffin, Sharon Johnson, and Charlene Walker for tables, graphs, and statistical checking; and the Southern Research Station (SRS) Technical Publications Team for editorial review, styling, and publication of this report.

The SRS gratefully acknowledges the cooperation and assistance provided by the Florida Department of Agriculture and Consumer Services, Division of Forestry in collecting mill data. Appreciation is also extended to forest industry and mill managers for providing timber products information.



## Timber Product Output Database Retrieval System

The Forest Inventory and Analysis (FIA) Research Work Unit of the USDA Forest Service developed the Timber Product Output (TPO) Database Retrieval System to help customers answer questions about timber harvesting and use in the Southern Region. This system acts as an interface to a standard set of consistently coded TPO data for each State and county in the region and Nation. This regional and national set of TPO data consists of 11 variables that describe for each county the roundwood products harvested, logging residues left in the woods, other timber removals (i.e. land clearing and reserved timber removals), and wood and bark residues generated by the county's primary wood-using mills. The system is available through the FIA Web site: <http://srsfia2.fs.fed.us/>.

The database is well documented and easy to use. The retrieval system allows the user to select the TPO variables of interest and generate a standard set of timber products, removals, and mill residue tables for the specified resource area, State, or region. The system has been logically divided into two sections to assist the user in making specific data requests. In section 1, the user will be asked to define the resource area, and section 2 generates tables for the specified area. In each section, the user is asked to supply specific options that will serve to customize the database retrieval.

There are four options available for defining the geographic area of interest. Each option provides an increasing level of detail. The region, subregion, State, or county defines an area. The user selects the option that best suits the level of detail required. Users who select county as an option should be aware that some counties have been combined due to data sensitivity. These combined counties are identified with asterisks in the output tables.

The TPO contacts are listed for each region to provide additional explanation or clarification.

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<sup>a</sup> All tables in this report are available in Microsoft® Excel workbook files. Upon request, these files will be supplied in the format the customer requests. The use of trade or firm names in this publication is for reader information and does not imply endorsement by the U.S. Department of Agriculture of any product or service.

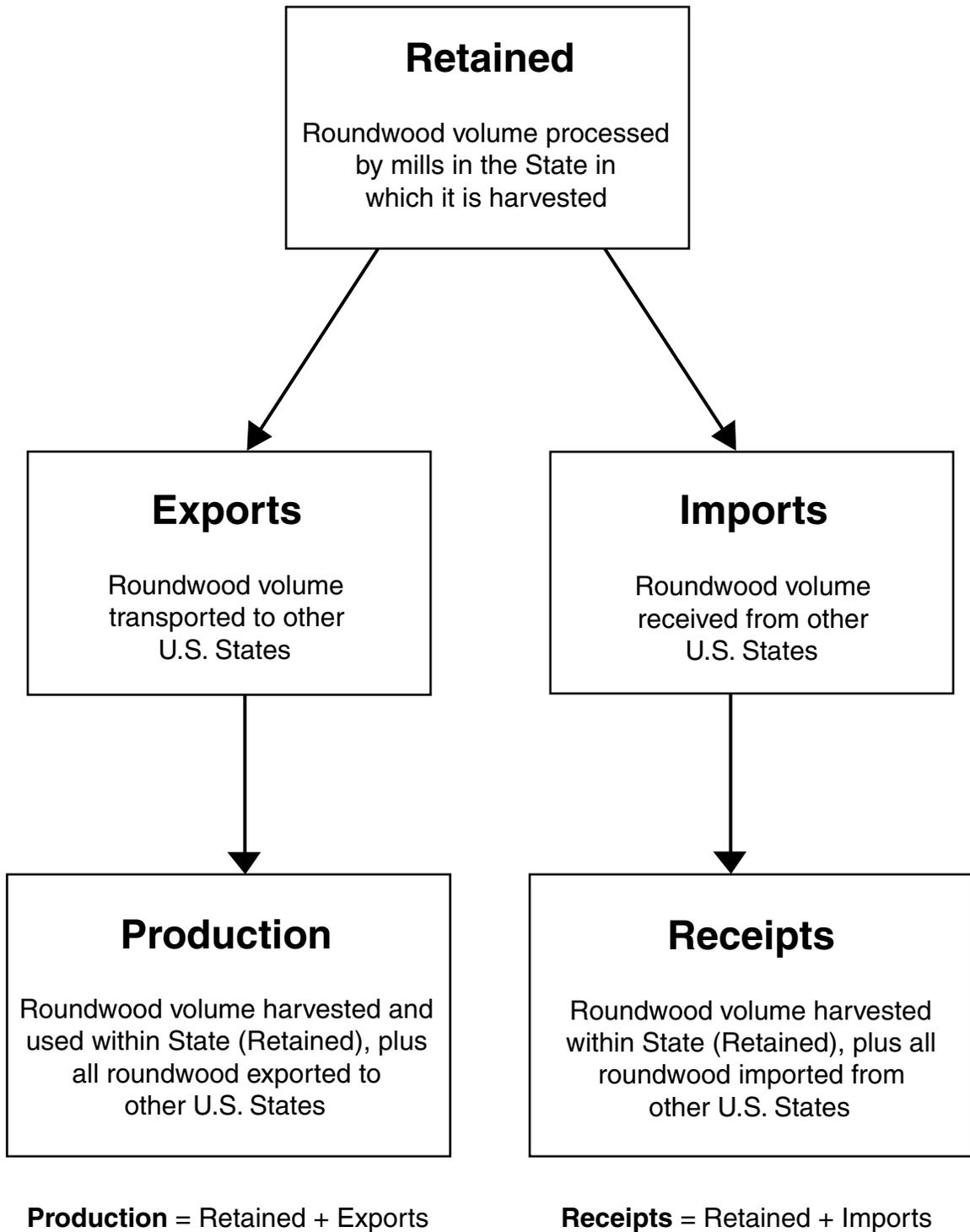


Figure 1—Movement of roundwood exports and imports within the United States.

# Florida's Timber Industry— An Assessment of Timber Product Output and Use, 2007

Tony G. Johnson, Jarek Nowak, and Rhonda M. Mathison

## Output of Industrial Timber Products

Note: Certain terms used in this report—retained, export, import, production, and receipts—have specialized meanings and relationships unique to the Forest Inventory and Analysis Units across the country that deal with timber product output (TPO) (fig. 1).

### All Products

- Industrial TPO from roundwood increased 46 million cubic feet, or 10 percent, while output of utilized plant products was up 21 million cubic feet, or 14 percent.
- Output of softwood roundwood products increased 12 percent to 468 million cubic feet, while hardwood roundwood products declined 20 percent to 23 million cubic feet (fig. 2).

- Pulpwood and saw logs were the principal roundwood products in 2007. Combined output of these products totaled 414 million cubic feet and accounted for 84 percent of Florida's total roundwood output (fig. 3).
- Total receipts at Florida mills, which included roundwood harvested and retained in the State, and roundwood imported from other States, increased 10 percent to 506 million cubic feet. Sixty-nine primary roundwood-using plants operated in Florida in 2007 (fig. 4).
- Across all products, 83 percent of roundwood harvested was retained for processing at Florida mills. Exports of roundwood to other States amounted to 85 million cubic feet, while imports of roundwood amounted to 100 million cubic feet, making the State a net importer of roundwood. Tables A.8 to A.11 show exports to and imports from other States by individual product type.

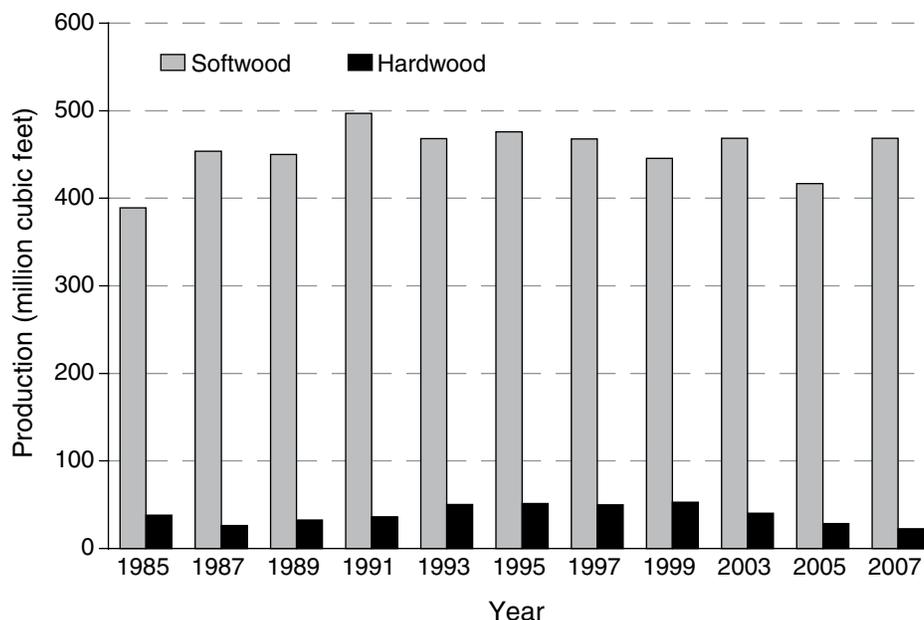


Figure 2—Roundwood production for all products by species group and year (see page 8 for references for individual years), Florida.

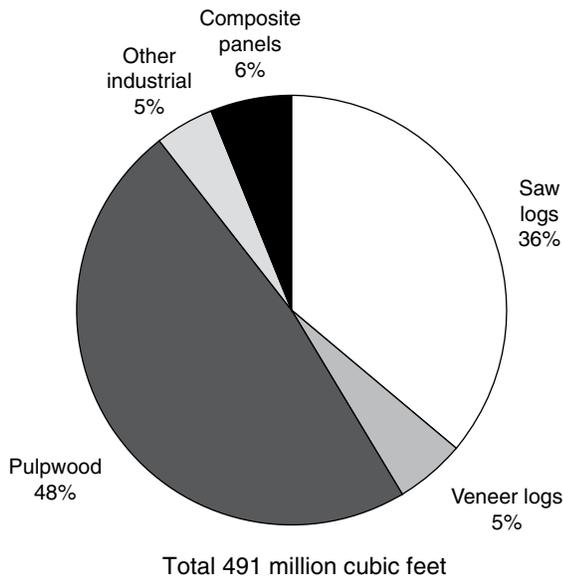


Figure 3—Roundwood production by type of product, Florida, 2007.

## Pulpwood

- Total pulpwood production, including chipped roundwood, was up 23 million cubic feet, or 11 percent, to 237 million cubic feet and accounted for 48 percent of the State's total roundwood TPO. Softwood output increased 14 percent to 221 million cubic feet (3.1 million cords); hardwood output declined 23 percent to 16 million cubic feet (207,000 cords) (fig. 5).
- Six pulpmills were operating and receiving roundwood in Florida in 2007, the same as in 2005. Total pulpwood receipts for these mills increased 12 million cubic feet to 248 million cubic feet, accounting for 49 percent of total receipts for all mills.
- Eighty percent of roundwood cut for pulpwood was retained for processing at Florida pulpmills. Roundwood pulpwood accounted for 55 percent of total known exports and 59 percent of total imports. Roundwood pulpwood imports amounted to 58 million cubic feet, 12 million cubic feet more than was exported, making the State a net importer of pulpwood for processing.

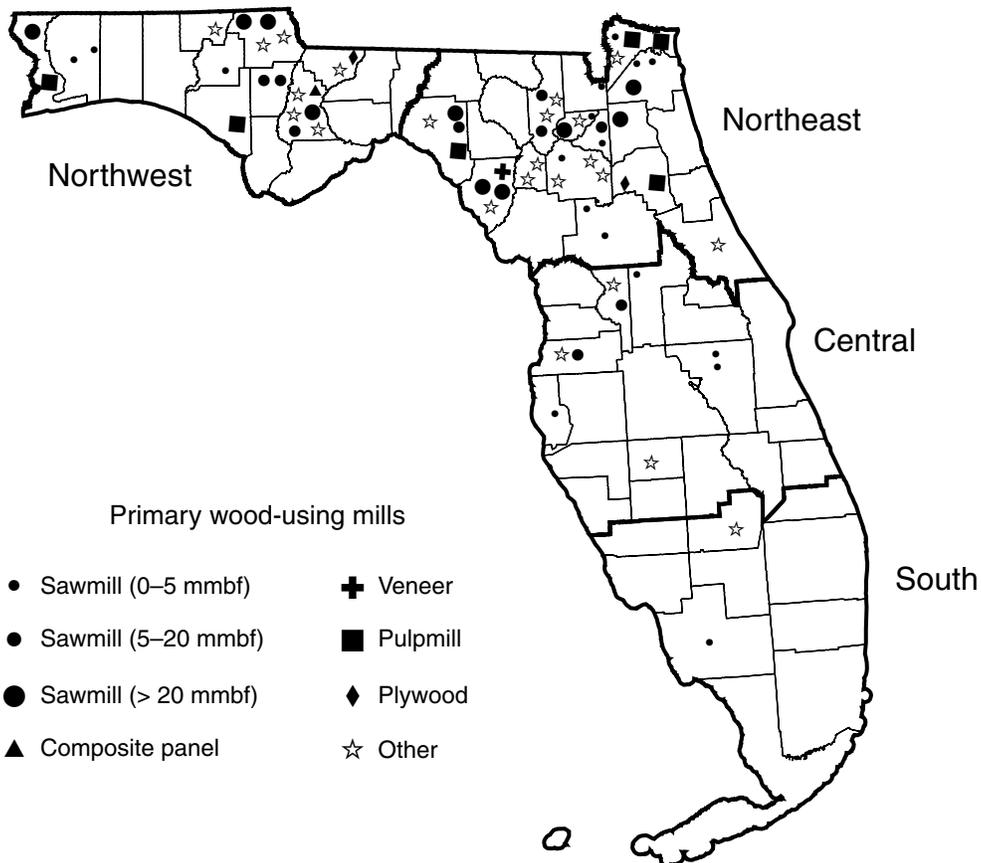


Figure 4—Primary wood-using mills by region, Florida, 2007.

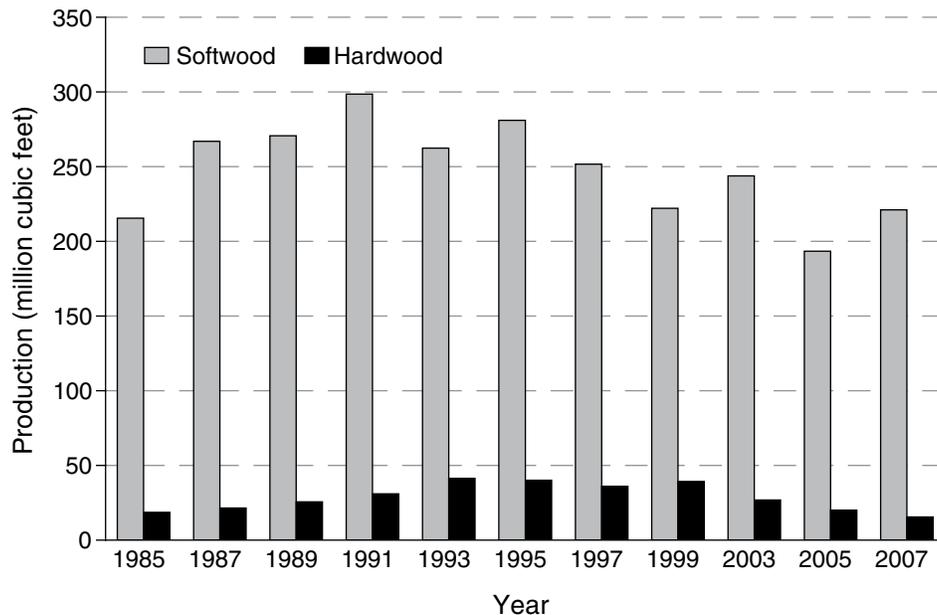


Figure 5—Roundwood pulpwood production by species group and year (see page 8 for references for individual years), Florida.

### Saw Logs

- Saw logs accounted for 36 percent of the State’s total roundwood products. Output of softwood saw logs increased 7 percent to 174 million cubic feet (909 million board feet, International ¼-inch rule), while that of hardwood saw logs was down nearly 12 percent to 4.0 million cubic feet (23 million board feet, International ¼-inch rule) (fig. 6).
- In 2007, Florida had 37 sawmills, 16 fewer than in 2005. Total saw-log receipts increased 31 million cubic feet to 186 million cubic feet. Softwood saw-log receipts were up 20 percent to 182 million cubic feet, while those of hardwoods were down 5 percent to 3.7 million cubic feet. Of the 37 mills operating in 2007, 18 mills, or 49 percent had receipts of <5 million board feet. Thirty-eight percent, or 14 mills, had receipts of >10 million board feet and accounted for 95 percent of saw-log receipts.
- Florida retained 87 percent of its saw-log production for within-State manufacture; saw-log imports exceeded exports by >8 million cubic feet in 2007.

### Veneer Logs

- Output of veneer logs in 2007 totaled 25.6 million cubic feet, and accounted for 5 percent of the State’s total

roundwood TPO volume. Softwood veneer production declined 3 percent to 24 million cubic feet (141 million board feet, International ¼-inch rule), while output of hardwood veneer logs dropped 10 percent to 1.4 million cubic feet (8.6 million board feet, International ¼-inch rule) (fig. 7).

- Three veneer mills operated in Florida in 2007. Total veneer log receipts declined 13 percent to 28.2 million cubic feet. Softwood receipts were down 14 percent to 27.3 million cubic feet, while hardwood receipts were up 11 percent to 916,000 cubic feet.
- Florida retained 78 percent of its veneer-log production for processing at veneer mills within State. Imports amounted to 8.2 million cubic feet, while exports totaled 5.6 million cubic feet, making the State a net importer of roundwood veneer logs.

### Composite Panels

- Roundwood harvested from Florida’s forests for composite panels increased 90 percent from 15.6 million cubic feet to 29.6 million cubic feet. Softwood output totaled 28.3 million cubic feet (399,000 cords); hardwood production dropped 14 percent from 1.4 million cubic feet to 1.2 million cubic feet (16,000 cords) (fig. 8).

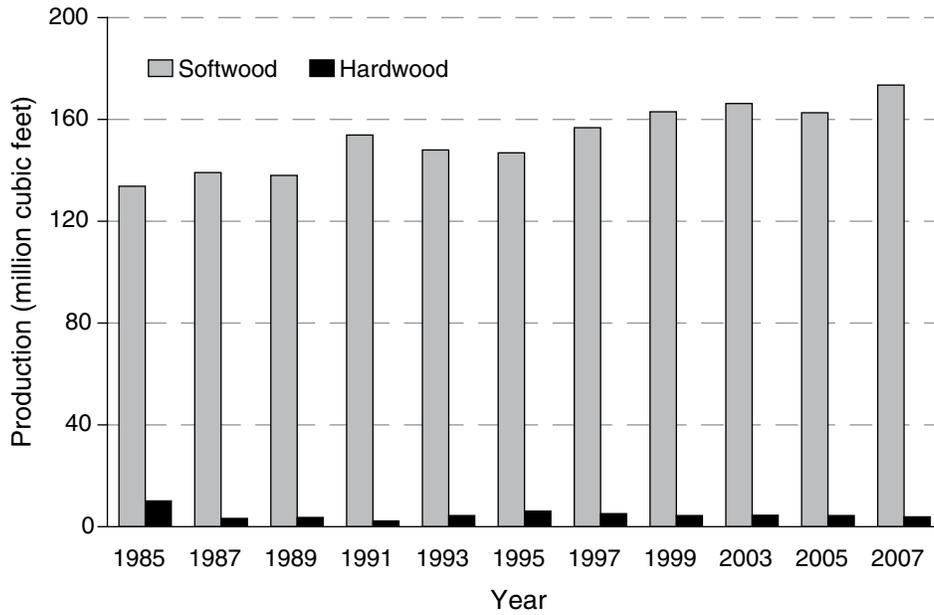


Figure 6—Roundwood saw-log production by species group and year (see page 8 for references for individual years), Florida.

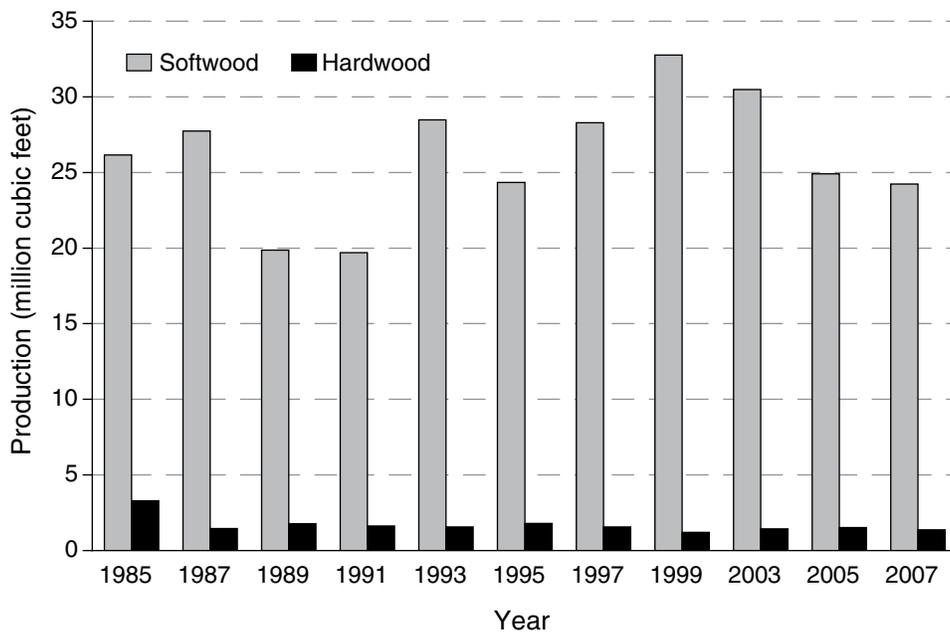


Figure 7—Roundwood veneer-log production by species group and year (see page 8 for references for individual years), Florida.

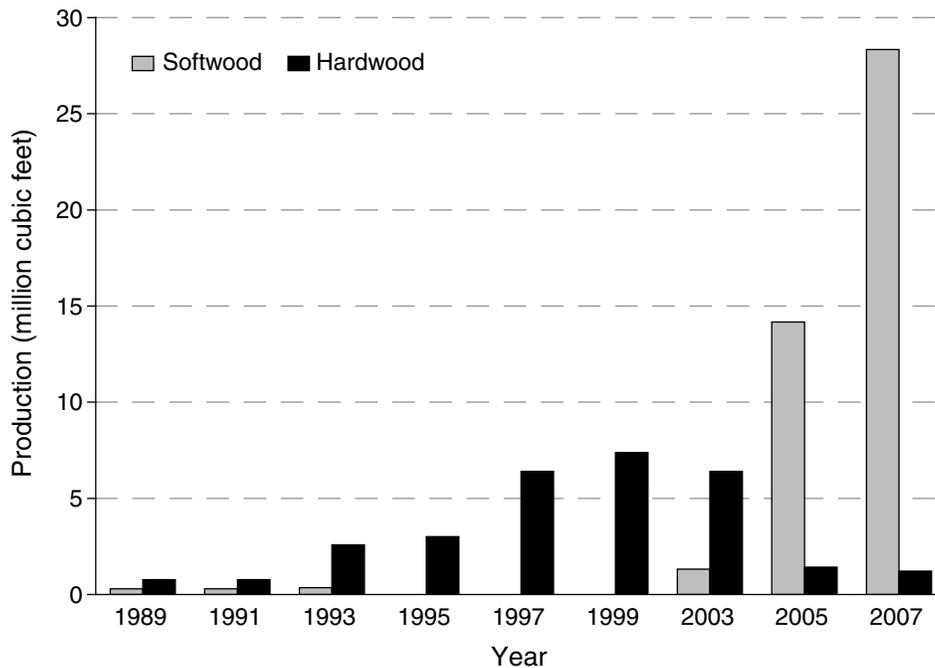


Figure 8—Roundwood production for composite panels by species group and year (see page 8 for references for individual years), Florida.

### Other Industrial Products

- Roundwood harvested for other industrial uses, such as poles, posts, mulch, firewood, logs for log homes, and all other industrial products, declined 3 percent to 21.9 million cubic feet. Softwood made up 97 percent of the other industrial product volume (fig. 9).
- Between 2005 and 2007, the number of plants producing other industrial products dropped from 30 to 22 mills.

### Plant Byproducts

- In 2007, processing of primary products in Florida mills generated 167 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 63 million cubic feet, and bark volume totaled 53 million cubic feet. Sawdust and shavings made up 30 percent of total residues, or 50 million cubic feet (fig. 10).
- The processing of saw logs generated 108 million cubic feet of mill residues, accounting for 64 percent of the total residues produced (fig. 11).

- Virtually all residues were used for a product (fig. 12). Fifty-four million cubic feet, or 85 percent, of the coarse residues were used to manufacture fiber products. Most of the bark was used for industrial fuel or other miscellaneous products, and 66 percent of the sawdust and shavings was used for industrial fuel.

### County Data

- Table A.14 shows softwood and hardwood product output by county and individual product type. Fifty-five of the sixty seven counties in Florida had either softwood or hardwood output. Fourteen counties (Baker, Bay, Calhoun, Columbia, Gadsden, Gulf, Hamilton, Jackson, Jefferson, Levy, Madison, Nassau, Taylor, and Washington) had combined softwood and hardwood product output of >15 million cubic feet each. These 14 counties total product output amounted to >268 million cubic feet and accounted for 55 percent of the State's total product output.

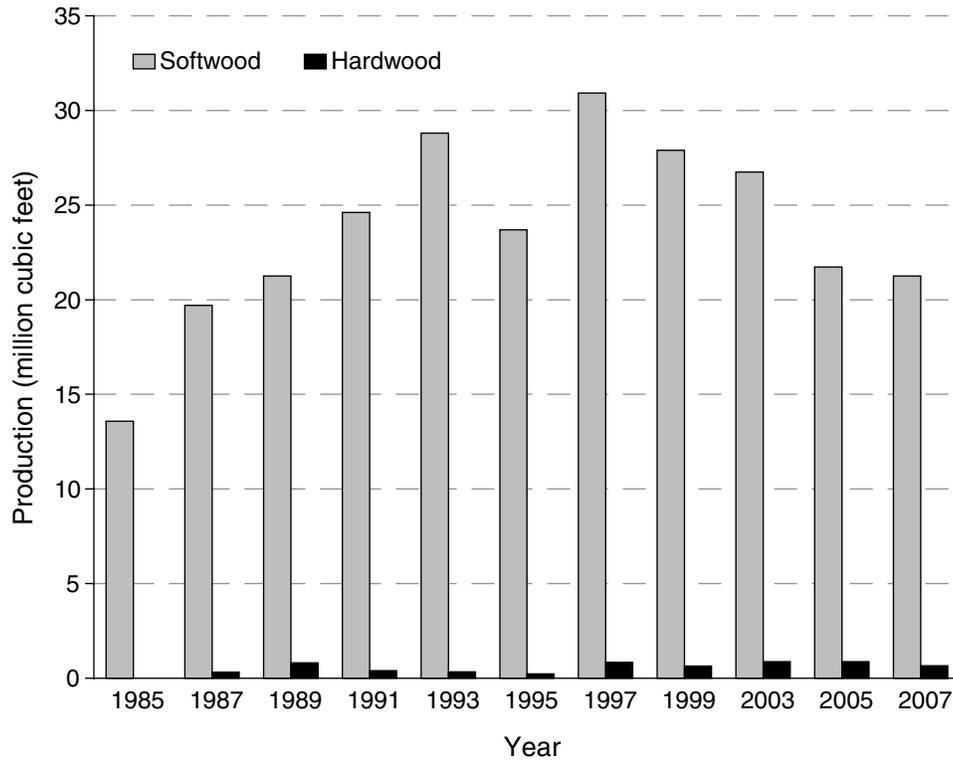


Figure 9—Roundwood production for other industrial products by species group and year (see page 8 for references for individual years), Florida.

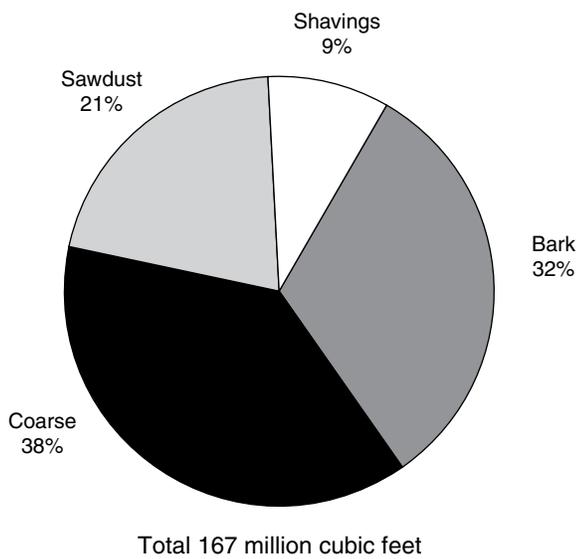


Figure 10—Primary mill residue by residue type, Florida, 2007.

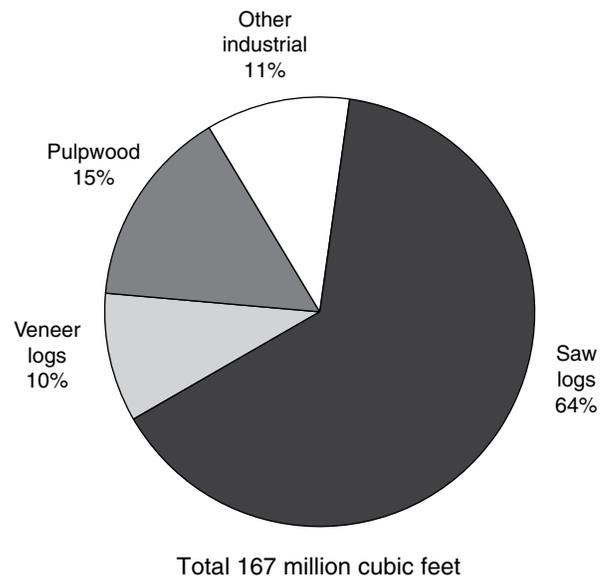


Figure 11—Primary mill residue produced by roundwood type, Florida, 2007.

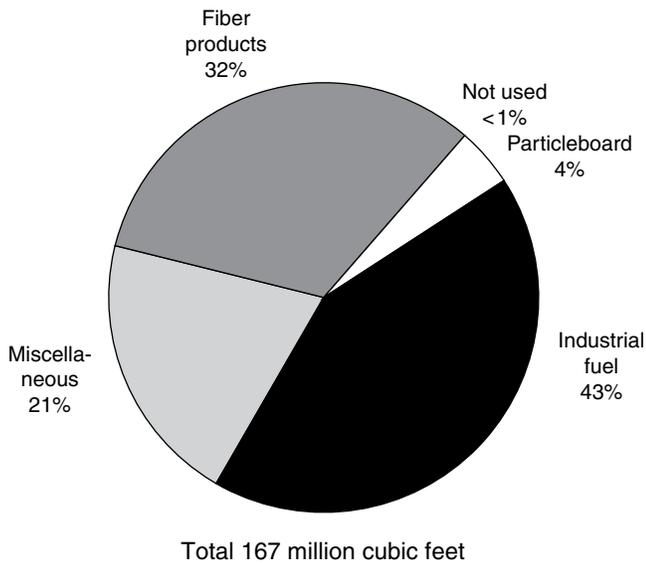


Figure 12—Disposal of residue by product, Florida, 2007.

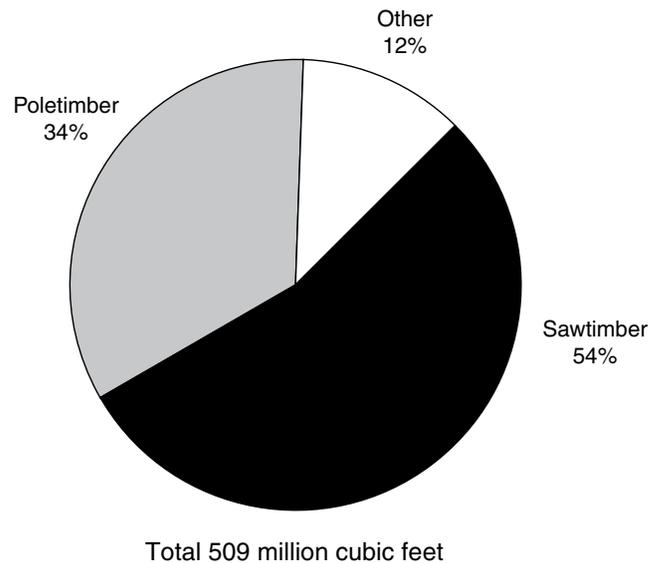


Figure 13—Roundwood output by source, Florida, 2007.

## Total Roundwood Output

Using the most recent inventory data for Florida, product output by source, ownership, and detailed species group was estimated.

### Source

- In addition to the 491 million cubic feet of roundwood output for industrial products, an estimated 18 million cubic feet was harvested for domestic fuelwood, bringing Florida's total roundwood output to 509 million cubic feet.
- Eighty-eight percent was considered growing-stock volume (sawtimber and poletimber) from timberland sources. Other sources (such as saplings; stumps, tops, and limbs of trees on timberland; and trees on nonforest land) contributed an estimated 60 million cubic feet, or 12 percent of total roundwood output (fig. 13).

### Ownership

- Forest industry and nonindustrial private forest lands contributed 103 and 373 million cubic feet, or 20 and 73 percent, respectively, of the total roundwood output. Public lands made up the remaining 7 percent, or 33 million cubic feet (fig. 14).

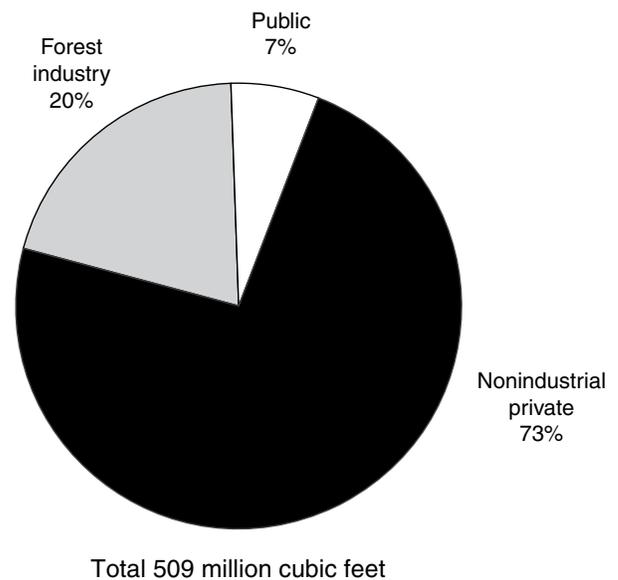


Figure 14—Roundwood output by ownership, Florida, 2007.

### Species

- The longleaf and slash pine group provided more volume than any other softwood species group; at 367 million cubic feet, it accounted for 78 percent of total softwood output (fig. 15). The red oak and white oak groups combined accounted for 15 million cubic feet of total hardwood output, or 38 percent (fig. 16).

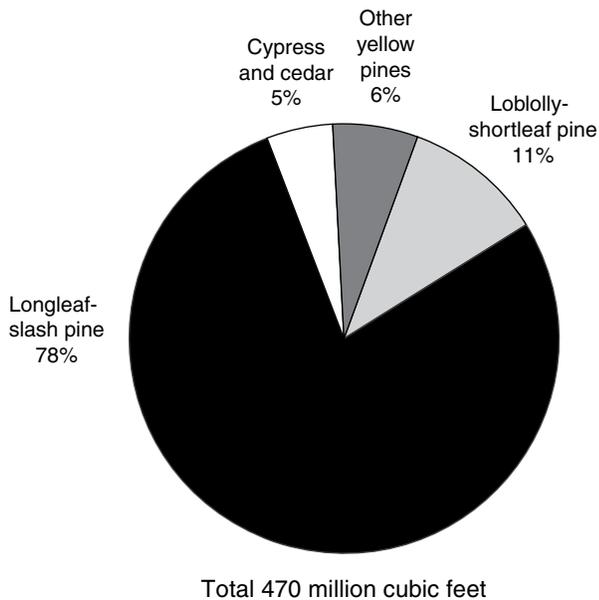


Figure 15—Roundwood output by softwood species group, Florida, 2007.

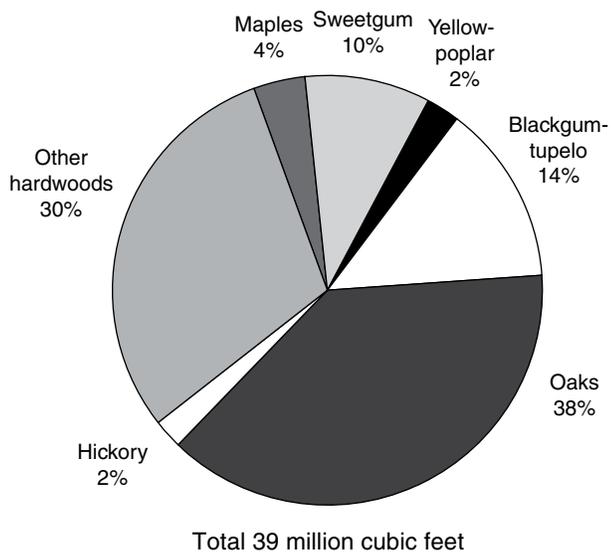


Figure 16—Roundwood output by hardwood species group, Florida, 2007.

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## Glossary

**Board foot.** A unit of measure applied to lumber that is 1-foot long, 1-foot wide, and 1-inch thick (or its equivalent) and also associated with roundwood as to its potential yield of such products.

**Byproducts.** Primary wood products, e.g., pulp chips, animal bedding, and fuelwood, recycled from mill residues.

**Composite panels.** Roundwood products manufactured into chips, wafers, strands, flakes, shavings, or sawdust and then reconstituted into a variety of panel and engineered lumber products.

**Consumption.** The quantity of a commodity, such as pulpwood, utilized by a particular mill or group of mills.

**Domestic fuelwood.** The volume of roundwood harvested to produce heat for residential settings.

**Drain.** The volume of roundwood removed from any geographic area where timber is grown.

**Exports.** The volume of domestic roundwood utilized by mills outside the State where timber was cut.

**Fiber products.** Byproducts used in the manufacture of pulp, paper, paperboard, and composite products, such as chipboard.

**Growing-stock removals.** The growing-stock volume removed from poletimber and sawtimber trees in the timberland inventory. (Note: Includes volume removed for roundwood products, logging residues, and other removals.)

**Growing-stock trees.** Living trees of commercial species classified as sawtimber, poletimber, saplings, and seedlings. Growing-stock trees must contain at least one 12-foot or two 8-foot logs in the saw-log portion, currently or potentially (if too small to qualify). The log(s) must meet dimension and merchantability standards and have, currently or potentially, one-third of the gross board-foot volume in sound wood.

**Growing-stock volume.** The cubic-foot volume of sound wood in growing-stock trees at least 5.0 inches d.b.h. from a 1-foot stump to a minimum 4.0-inch top d.o.b. of the central stem.

**Hardwoods.** Dicotyledonous trees, usually broadleaf and deciduous.

*Soft hardwoods.* Hardwood species with an average specific gravity of 0.50 or less, such as gums, yellow-poplar, cottonwoods, red maple, basswoods, and willows.

*Hard hardwoods.* Hardwood species with an average specific gravity >0.50, such as oaks, hard maples, hickories, and beech.

**Imports.** The volume of domestic roundwood delivered to a mill or group of mills in a specific State but harvested outside that State.

**Industrial fuelwood.** A roundwood product, with or without bark, used to generate energy at a manufacturing facility such as a wood-using mill.

**Industrial roundwood products.** Any primary use of the main stem of a tree, such as saw logs, pulpwood, veneer logs, intended to be processed into primary wood products such as lumber, wood pulp, sheathing, at primary wood-using mills.

**International ¼-inch rule.** A log rule or formula for estimating the board-foot volume of logs, allowing ½-inch of taper for each 4-foot length. The rule appears in a number of forms that allow for kerf. In the form used by FIA, a ¼-inch of kerf is assumed. This rule is used as the USDA Forest Service standard log rule in the Eastern United States.

**Log.** A primary forest product harvested in long, primarily 8-, 12-, and 16-foot lengths.

**Logging residues.** The unused merchantable portion of growing-stock trees cut or destroyed during logging operations.

**Merchantable portion.** That portion of live trees 5.0 inches d.b.h. and larger between a 1-foot stump and a minimum 4.0-inch top d.o.b. on the central stem. That portion of primary forks from the point of occurrence to a minimum 4.0-inch top d.o.b. is included.

**Merchantable volume.** Solid-wood volume in the merchantable portion of live trees.

**Noncommercial species.** Tree species of typically small size, poor form, or inferior quality that normally do not develop into trees suitable for industrial wood products.

**Nonforest land.** Land that has never supported forests and land formerly forested where timber production is precluded by development for other uses.

**Nongrowing-stock sources.** The net volume removed from the nongrowing-stock portions of poletimber and sawtimber trees (stumps, tops, limbs, cull sections of central stem) and from any portion of a rough, rotten, sapling, dead, or nonforest tree.

**Other forest land.** Forest land other than timberland and productive reserved forest land. It includes available and reserved forest land that is incapable of producing annually 20 cubic feet per acre of industrial wood under natural conditions because of adverse site conditions such as sterile soils, dry climate, poor drainage, high elevation, steepness, or rockiness.

**Other products.** A miscellaneous category of roundwood products, e.g., cooperage, excelsior, shingles, and mill residue byproducts (charcoal, bedding, mulch, etc.).

**Other removals.** The growing-stock volume of trees removed from the inventory by cultural operations such as timber stand improvement, land clearing, and other changes in land use, resulting in the removal of the trees from timberland.

**Other sources.** (See: Nongrowing-stock sources.)

**Ownership.** The property owned by one ownership unit, including all parcels of land in the United States.

*National forest land.* Federal land that has been legally designated as national forests or purchase units, and other land under the administration of the Forest Service, including experimental areas and Bankhead-Jones Title III land.

*Forest industry land.* Land owned by companies or individuals operating primary wood-using plants.

*Nonindustrial private forest (NIPF) land.* Privately owned land excluding forest industry land.

Corporate. Owned by corporations, including incorporated farm ownerships.

Individual. All lands owned by individuals, including farm operators.

*Other public.* An ownership class that includes all public lands except national forests.

Miscellaneous Federal land. Federal land other than national forests.

State, county, and municipal land. Land owned by States, counties, and local public agencies or municipalities, or land leased to these governmental units for 50 years or more.

**Plant residues.** Wood material generated in the production of timber products at primary manufacturing plants.

*Coarse residues.* Material, such as slabs, edgings, trim, veneer cores and ends, which is suitable for chipping.

*Fine residues.* Material, such as sawdust, shavings, and veneer residue, which is not suitable for chipping.

*Plant byproducts.* Residues (coarse or fine) used in the further manufacture of industrial products for consumer use, or as fuel.

*Unused plant residues.* Residues (coarse or fine) that are not used for any product, including fuel.

**Poletimber-size trees.** Softwoods 5.0 to 8.9 inches d.b.h. and hardwoods 5.0 to 10.9 inches d.b.h.

**Posts, poles, and pilings.** Roundwood products milled (cut or peeled) into standard sizes (lengths and circumferences) to be put in the ground to provide vertical and lateral support in buildings, foundations, utility lines, and fences. May also include nonindustrial (unmilled) products.

**Primary wood-using plants.** Industries that convert roundwood products (saw logs, veneer logs, pulpwood, etc.) into primary wood products, such as lumber, veneer or sheathing, wood pulp.

**Production.** The total volume of known roundwood harvested from land within a State, regardless of where it is consumed. Production is the sum of timber harvested and used within a State, and all roundwood exported to other States.

**Pulpwood.** A roundwood product that will be reduced to individual wood fibers by chemical or mechanical means. The fibers are used to make a broad generic group of pulp products that includes paper products, as well as fiberboard, insulating board, and paperboard.

**Receipts.** The quantity or volume of industrial roundwood received at a mill or by a group of mills in a State, regardless of the geographic source. Volume of roundwood receipts is equal to the volume of roundwood retained in a State plus roundwood imported from other States.

**Retained.** Roundwood volume harvested from and processed by mills within the same State.

**Rotten trees.** Live trees of commercial species not containing at least one 12-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, primarily because of rot or missing sections, and with less than one-third of the gross board-foot tree volume in sound material.

**Rough trees.** Live trees of commercial species not containing at least one 12-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, primarily because of roughness, poor form, splits, and cracks, and with less than one-third of the gross board-foot tree volume in sound material; and live trees of noncommercial species.

**Roundwood (roundwood logs).** Logs, bolts, or other round sections cut from trees for industrial manufacture or consumer uses.

**Roundwood chipped.** Any timber cut primarily for industrial manufacture, delivered to nonpulp mills, chipped, and then sold to pulpmills for use as fiber. Includes tops, jump sections, whole trees, and pulpwood sticks.

**Roundwood product drain.** That portion of total drain used for a product.

**Roundwood products.** Any primary product, such as lumber, veneer, composite panels, poles, pilings, pulp, or fuelwood that is produced from roundwood.

**Salvable dead trees.** Standing or downed dead trees that were formerly growing stock and considered merchantable. Trees must be at least 5.0 inches d.b.h. to qualify.

**Saplings.** Live trees 1.0 to 5.0 inches d.b.h.

**Saw log.** A roundwood product, usually 8 feet in length or longer, processed into a variety of sawn products such as lumber, cants, pallets, railroad ties, and timbers.

**Saw-log portion.** The part of the bole of sawtimber trees between a 1-foot stump and the saw-log top.

**Saw-log top.** The point on the bole of sawtimber trees above which a conventional saw log cannot be produced. The minimum saw-log top is 7.0 inches d.o.b. for softwoods and 9.0 inches d.o.b. for hardwoods for FIA standards.

**Sawtimber-size trees.** Softwoods 9.0 inches d.b.h. and larger and hardwoods 11.0 inches d.b.h. and larger.

**Sawtimber volume.** Growing-stock volume in the saw-log portion of sawtimber-sized trees in board feet (International ¼-inch rule).

**Seedlings.** Trees <1.0 inch d.b.h. and >1 foot tall for hardwoods, >6 inches tall for softwoods, and >0.5 inch in diameter at ground level for longleaf pine.

**Select red oaks.** A group of several red oak species composed of cherrybark, Shumard, and northern red oaks. Other red oak species are included in the “other red oaks” group.

**Select white oaks.** A group of several white oak species composed of white, swamp chestnut, swamp white, chinkapin, Durand, and bur oaks. Other white oak species are included in the “other white oaks” group.

**Softwoods.** Coniferous trees, usually evergreen, having leaves that are needles or scale like.

**Standard cord.** A unit of measure applied to roundwood, usually bolts or split wood. It is a stack of wood 4 feet high, 4 feet wide, and 8 feet long encompassing 128 cubic feet of wood, bark, and air space. This usually translates to approximately 75.0 to 81.0 cubic feet of solid wood for pulpwood, because pulpwood is more uniform.

**Standard unit.** A unit measure applied to roundwood timber products. Board feet (International ¼-inch rule) is the standard unit used for saw logs and veneer; cords are used for pulpwood, composite panel, and fuelwood; hundred pieces for poles; thousand pieces for posts; and thousand cubic feet for all other miscellaneous forest products.

**Timberland.** Forest land capable of producing 20 cubic feet of industrial wood per acre per year and not withdrawn from timber utilization.

**Timber product output.** The total volume of roundwood products from all sources plus the volume of byproducts recovered from mill residues (equals roundwood product drain).

**Timber products.** Roundwood products and byproducts.

**Timber removals.** The total volume of trees removed from the timberland inventory by harvesting, cultural operations such as stand improvement, land clearing, or changes in land use. (Note: Includes roundwood products, logging residues, and other removals.)

**Tree.** Woody plants having one erect perennial stem or trunk at least 3 inches d.b.h., a more or less definitely formed crown of foliage, and a height of at least 13 feet (at maturity).

**Upper-stem portion.** The part of the main stem of saw-timber trees above the saw-log top and the minimum top diameter of 4.0 inches outside bark, or to the point where the main stem breaks into limbs.

**Utilization studies.** Studies conducted on active logging operations to develop factors for merchantable portions of trees left in the woods (logging residues), logging damage, and utilization of the unmerchantable portion of growing-stock trees and nongrowing-stock trees.

**Veneer log.** A roundwood product either rotary cut, sliced, stamped, or sawn into a variety of veneer products such as plywood, finished panels, veneer sheets, or sheathing.

**Weight.** A unit of measure for mill residues, expressed as oven-dry tons (2,000 oven-dry pounds).

### Conversion Factors<sup>a</sup>

Saw logs	
Softwood	0.19121 cubic foot = 1 board foot 5.23 board feet = 1 cubic foot
Hardwood	0.16807 cubic foot = 1 board foot 5.95 board feet = 1 cubic foot
Veneer logs	
Softwood	0.17241 cubic foot = 1 board foot 5.80 board feet = 1 cubic foot
Hardwood	0.16129 cubic foot = 1 board foot 6.20 board feet = 1 cubic foot
Pulpwood <sup>b</sup>	
Softwood	71.00 cubic feet per cord
Hardwood	75.00 cubic feet per cord

<sup>a</sup> Conversion factors vary with stem size (d.b.h.) and species. The factors shown are for trees of average diameters removed in Florida during the latest survey period.

<sup>b</sup> Cubic feet of solid wood per cord.

## Species List<sup>a</sup>

Common name	Scientific name <sup>b</sup>	Common name	Scientific name <sup>b</sup>
<b>Softwoods</b>		<b>Hardwoods (continued)</b>	
Southern redcedar	<i>Juniperus silicicola</i> (Small) Bailey	Sweetgum	<i>Liquidambar styraciflua</i> L.
Eastern redcedar	<i>J. virginiana</i> L.	Yellow-poplar	<i>Liriodendron tulipifera</i> L.
Slash pine	<i>Pinus clausa</i> (Chapm. ex Englem.) Vasey ex Sarg.	Osage-orange	<i>Maclura pomifera</i> (Raf.) Schneid.
Shortleaf pine	<i>P. echinata</i> Mill.	Cucumbertree	<i>Magnolia acuminata</i> L.
Slash pine	<i>P. elliottii</i> Engelm.	Southern magnolia	<i>M. grandiflora</i> L.
Spruce pine	<i>P. glabra</i> Walt.	Bigleaf magnolia	<i>M. macrophylla</i> Michx.
Longleaf pine	<i>P. palustris</i> Mill.	Sweetbay	<i>M. virginiana</i> L.
Pond pine	<i>P. serotina</i> Michx.	Apple	<i>Malus</i> spp. Mill.
Loblolly pine	<i>P. taeda</i> L.	Chinaberry	<i>Melia azedarach</i> L.
Baldcypress	<i>Taxodium distichum</i> (L.) Rich.	White mulberry	<i>Morus alba</i> L.
Pondcypress	<i>T. distichum</i> var. <i>nutans</i>	Red mulberry	<i>M. rubra</i> L.
<b>Hardwoods</b>		Water tupelo	<i>Nyssa aquatica</i> L.
Florida maple	<i>Acer barbatum</i> Michx.	Blackgum	<i>N. sylvatica</i> Marsh.
Boxelder	<i>A. negundo</i> L.	Swamp tupelo	<i>N. sylvatica</i> var. <i>biflora</i> (Walt.) Sarg.
Red maple	<i>A. rubrum</i> L.	Eastern hophornbeam	<i>Ostrya virginiana</i> (Mill.) K. Koch
Silver maple	<i>A. saccharinum</i> L.	Sourwood	<i>Oxydendrum arboreum</i> (L.) DC.
Ailanthus	<i>Ailanthus altissima</i> (Mill.) Swingle	Redbay	<i>Persea borbonia</i> (L.) Spreng.
Tung-oil tree	<i>Aleurites fordii</i> Hemsl.	American sycamore	<i>Platanus occidentalis</i> L.
Serviceberry	<i>Amelanchier</i> spp. Med.	Cottonwood	<i>Populus</i> spp. L.
River birch	<i>Betula nigra</i> L.	Black cherry	<i>Prunus serotina</i> Ehrh.
American hornbeam	<i>Carpinus caroliniana</i> Walt.	White oak	<i>Quercus alba</i> L.
Hickory	<i>Carya</i> spp. Nutt.	Scarlet oak	<i>Q. coccinea</i> Muenchh.
Water hickory	<i>C. aquatica</i> (Michx. f.) Nutt.	Durand oak	<i>Q. durandii</i> Buckl.
Bitternut hickory	<i>C. cordiformis</i> (Wangenh.) K. Koch	Southern red oak	<i>Q. falcata</i> Michx.
Pignut hickory	<i>C. glabra</i> (Mill.) Sweet	Cherrybark oak	<i>Q. falcata</i> var. <i>pagodifolia</i> Ell.
Pecan	<i>C. illinoensis</i> (Wangenh.) K. Koch	Bluejack oak	<i>Q. incana</i> Bartr.
Shellbark hickory	<i>C. laciniosa</i> (Michx. f.) Loud.	Turkey oak	<i>Q. laevis</i> Walt.
Nutmeg hickory	<i>C. myristiciformis</i> (Michx. f.) Nutt.	Laurel oak	<i>Q. laurifolia</i> Michx.
Shagbark hickory	<i>C. ovata</i> (Mill.) K. Koch	Overcup oak	<i>Q. lyrata</i> Walt.
Black hickory	<i>C. texana</i> Buckl.	Swamp chestnut oak	<i>Q. michauxii</i> Nutt.
Mockernut hickory	<i>C. tomentosa</i> (Poir.) Nutt.	Chinkapin oak	<i>Q. muehlenbergii</i> Engelm.
Allegheny chinkapin	<i>Castanea pumila</i> Mill.	Water oak	<i>Q. nigra</i> L.
Chinkapin	<i>Castanopsis</i> (D. Don) Spach	Nuttall oak	<i>Q. nuttallii</i> Palmer
Catalpa	<i>Catalpa</i> spp. Scop.	Pin oak	<i>Q. palustris</i> Muenchh.
Sugarberry	<i>Celtis laevigata</i> Willd.	Willow oak	<i>Q. phellos</i> L.
Hackberry	<i>C. occidentalis</i> L.	Shumard oak	<i>Q. shumardii</i> Buckl.
Eastern redbud	<i>Cercis canadensis</i> L.	Post oak	<i>Q. stellata</i> Wangenh.
Flowering dogwood	<i>Cornus florida</i> L.	Black oak	<i>Q. velutina</i> Lam.
Hawthorn	<i>Crataegus</i> spp. L.	Live oak	<i>Q. virginiana</i> Mill.
Common persimmon	<i>Diospyros virginiana</i> L.	Willow	<i>Salix</i> spp. L.
American beech	<i>Fagus grandifolia</i> Ehrh.	Sassafras	<i>Sassafras albidum</i> (Nutt.) Nees
White ash	<i>Fraxinus americana</i> L.	American basswood	<i>Tilia americana</i> L.
Pumpkin ash	<i>F. profunda</i> (Bush) Bush	White basswood	<i>T. heterophylla</i> Vent.
Blue ash	<i>F. quadrangulata</i> Michx.	Winged elm	<i>Ulmus alata</i> Michx.
Waterlocust	<i>Gleditsia aquatica</i> Marsh.	American elm	<i>U. americana</i> L.
Honeylocust	<i>G. triacanthos</i> L.	Cedar elm	<i>U. crassifolia</i> Nutt.
American holly	<i>Ilex opaca</i> Ait.	Slippery elm	<i>U. rubra</i> Muhl.
Black walnut	<i>Juglans nigra</i> L.	September elm	<i>U. serotina</i> Sarg.
		Rock elm	<i>U. thomasi</i> Sarg.

<sup>a</sup> Common and scientific and common names of tree species  $\geq 1.0$  inch d.b.h. occurring in the FIA sample.

<sup>b</sup> Little (1979).

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**Table A.1—Output of industrial products by product and species group, Florida, 2005 and 2007**

Product and species group	Year		Change	Change percent
	2005	2007		
	- - - thousand cubic feet - - -			
Saw logs				
Softwood	162,617	173,532	10,915	6.7
Hardwood	4,415	3,899	-516	-11.7
Total	167,032	177,431	10,399	6.2
Veneer logs				
Softwood	24,905	24,229	-676	-2.7
Hardwood	1,526	1,371	-155	-10.2
Total	26,431	25,600	-831	-3.1
Pulpwood <sup>a</sup>				
Softwood	193,390	221,021	27,631	14.3
Hardwood	20,111	15,533	-4,578	-22.8
Total	213,501	236,554	23,053	10.8
Composite panels				
Softwood	14,164	28,335	14,171	100.0
Hardwood	1,418	1,218	-200	-14.1
Total	15,582	29,553	13,971	89.7
Other industrial				
Softwood	21,720	21,257	-463	-2.1
Hardwood	879	666	-213	-24.2
Total	22,599	21,923	-676	-3.0
All industrial				
Softwood	416,796	468,374	51,578	12.4
Hardwood	28,349	22,687	-5,662	-20.0
Total	445,145	491,061	45,916	10.3

<sup>a</sup> Includes roundwood delivered to nonpulp mills, then chipped and sold to pulpmills (4,102,000 cubic feet in 2005 and 1,403,000 cubic feet in 2007).

**Table A.2—Roundwood receipts by product and species group, Florida, 2005 and 2007**

Product and species group	Year		Change	Change
	2005	2007		
	<i>----- thousand cubic feet -----</i>			<i>percent</i>
Saw logs				
Softwood	151,182	181,979	30,797	20.4
Hardwood	3,912	3,701	-211	-5.4
Total	155,094	185,680	30,586	19.7
Veneer logs				
Softwood	31,632	27,258	-4,374	-13.8
Hardwood	828	916	88	10.6
Total	32,460	28,174	-4,286	-13.2
Pulpwood <sup>a</sup>				
Softwood	221,858	238,145	16,287	7.3
Hardwood	14,346	10,176	-4,170	-29.1
Total	236,204	248,321	12,117	5.1
Other industrial				
Softwood	35,405	43,260	7,855	22.2
Hardwood	879	664	-215	-24.5
Total	36,284	43,924	7,640	21.1
Total output				
Softwood	440,077	490,642	50,565	11.5
Hardwood	19,965	15,457	-4,508	-22.6
Total	460,042	506,099	46,057	10.0

<sup>a</sup> Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (4,392,000 cubic feet in 2005 and 1,434,000 cubic feet in 2007).

**Table A.3—Number of primary wood-using plants by type of mill, Florida, 1987 to 2007**

Type of mill	Year									
	1987	1989	1991	1993	1995	1997	1999	2003	2005	2007
	<i>number</i>									
Sawmills	97	85	71	64	68	58	53	53	53	37
Veneer mills	5	5	5	5	5	5	4	3	3	3
Pulpmills	10	9	9	8	8	8	6	6	6	6
Composite panel mills	0	0	0	0	0	0	0	0	1	1
Other mills	31	28	30	32	32	30	30	30	30	22
All plants	143	127	115	109	113	101	93	92	93	69

**Table A.4—Roundwood receipts by sawmill size, Florida, 2005 and 2007**

Sawmill size class <sup>a</sup> <i>mmbf</i>	2005			2007		
	Mills	Volume		Mills	Volume	
	<i>number</i>	<i>mbf</i>	<i>percent</i>	<i>number</i>	<i>mbf</i>	<i>percent</i>
<1.0	24	8,367	1	14	5,286	1
1.0–4.99	9	18,064	2	4	7,871	1
5.0–9.99	4	24,384	3	5	32,343	3
10.0–49.99	8	169,999	21	5	112,765	11
>50	8	594,127	73	9	816,717	84
Total	53	814,941	100	37	974,982	100

<sup>a</sup> Based on volume received as opposed to actual capacity.

**Table A.5—Roundwood receipts by species and type of mill, Florida, 2007**

Species	All mills	Type of mill				
		Sawmills	Veneer mills		Pulpmills <sup>a</sup>	Other mills
			Pine plywood	Other veneer		
<i>thousand cubic feet</i>						
<b>Softwood</b>						
Yellow pine	237,280	175,949	27,258	0	NA	34,073
Eastern white pine	0	0	0	0	NA	0
Cedar	2	0	0	0	NA	2
Cypress	15,018	5,878	0	0	NA	9,140
Other softwood	197	152	0	0	NA	45
Unclassified	238,145	0	0	0	238,145	0
Total softwoods	490,642	181,979	27,258	0	238,145	43,260
<b>Hardwood</b>						
Blackgum-tupelo	92	0	0	92	NA	0
Soft maple	92	0	0	92	NA	0
Sweetgum	404	130	0	274	NA	0
Yellow-poplar	366	0	0	366	NA	0
Other soft hardwood	436	436	0	0	NA	0
Hickory	289	242	0	0	NA	47
Red oak	1,134	973	0	0	NA	161
White oak	198	169	0	0	NA	29
Other hard hardwood	2,270	1,751	0	92	NA	427
Unclassified	10,176	0	0	0	10,176	0
Total hardwoods	15,457	3,701	0	916	10,176	664
All species	506,099	185,680	27,258	916	248,321	43,924

NA = not applicable.

<sup>a</sup> Collected only by softwood and hardwood and includes roundwood chipped.

**Table A.6—Industrial roundwood movement by year and species group, Florida, 2005 and 2007**

Year	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>thousand cubic feet</i>					
<b>Softwood</b>					
2005	416,796	58,146	358,650	81,427	440,077
2007	468,374	77,290	391,084	99,558	490,642
<b>Hardwood</b>					
2005	28,349	8,936	19,413	552	19,965
2007	22,687	7,357	15,330	127	15,457
<b>All species</b>					
2005	445,146	67,083	378,063	81,979	460,042
2007	491,061	84,647	406,414	99,685	506,099

**Table A.7—Industrial roundwood movement by product and species group, Florida, 2007**

Product and species group	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>thousand cubic feet</i>					
Saw logs					
Softwood	173,532	23,172	150,360	31,619	181,979
Hardwood	3,899	313	3,586	115	3,701
Total	177,431	23,485	153,946	31,734	185,680
Veneer logs					
Softwood	24,229	5,141	19,088	8,170	27,258
Hardwood	1,371	455	916	0	916
Total	25,600	5,596	20,004	8,170	28,174
Pulpwood <sup>a</sup>					
Softwood	221,021	41,232	179,789	58,356	238,145
Hardwood	15,533	5,369	10,164	12	10,176
Total	236,554	46,601	189,953	58,368	248,321
Other industrial					
Softwood	49,592	7,745	41,847	1,413	43,260
Hardwood	1,884	1,220	664	0	664
Total	51,476	8,965	42,511	1,413	43,924
Total output					
Softwood	468,374	77,290	391,084	99,558	490,642
Hardwood	22,687	7,357	15,330	127	15,457
Total	491,061	84,647	406,414	99,685	506,099

<sup>a</sup> Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills.

**Table A.8—Saw-log volume by destination, source, and species group, Florida, 2007**

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Florida (retained)	153,946	150,360	3,586
Exports to			
Alabama	5,944	5,944	0
Georgia	17,541	17,228	313
Total	23,485	23,172	313
Imports from			
Alabama	26,303	26,296	7
Georgia	5,431	5,323	108
Total	31,734	31,619	115

**Table A.10—Pulpwood volume by destination, source, and species group, Florida, 2007<sup>a</sup>**

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Florida (retained)	189,953	179,789	10,164
Exports to			
Alabama	7,567	6,560	1,007
Georgia	38,967	34,605	4,362
Mississippi	67	67	0
Total	46,601	41,232	5,369
Imports from			
Alabama	16,705	16,693	12
Georgia	41,501	41,501	0
Mississippi	162	162	0
Total	58,368	58,356	12

<sup>a</sup> Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills.

**Table A.9—Veneer volume by destination, source, and species group, Florida, 2007**

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Florida (retained)	20,004	19,088	916
Exports to			
Alabama	935	932	3
Georgia	4,661	4,209	452
Total	5,596	5,141	455
Imports from			
Georgia	8,170	8,170	0
Total	8,170	8,170	0

**Table A.11—Other industrial and composite panel volume by destination, source, and species group, Florida, 2007<sup>a</sup>**

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Florida (retained)	42,511	41,847	664
Exports to			
Alabama	869	869	0
Georgia	7,090	5,870	1,220
Ohio	1,006	1,006	0
Total	8,965	7,745	1,220
Imports from			
Georgia	1,413	1,413	0
Total	1,413	1,413	0

<sup>a</sup> Includes poles, posts, composite panels, mulch, firewood, log homes, charcoal, and all other industrial products.

**Table A.12—Primary mill residue volume by roundwood type, species group, and residue type, Florida, 2007**

Roundwood type and species group	All types	Residue type			
		Bark	Coarse	Sawdust	Shavings
<i>thousand cubic feet</i>					
Saw logs					
Softwood	105,614	15,121	49,795	25,164	15,534
Hardwood	2,209	424	1,001	778	6
Total	107,823	15,545	50,796	25,942	15,540
Veneer logs					
Softwood	15,607	2,516	6,234	6,857	0
Hardwood	668	110	274	284	0
Total	16,275	2,626	6,508	7,141	0
Pulpwood					
Softwood	23,900	23,900	0	0	0
Hardwood	1,292	1,292	0	0	0
Total	25,192	25,192	0	0	0
Other industrial <sup>a</sup>					
Softwood	17,342	9,957	5,869	1,516	0
Hardwood	373	82	209	82	0
Total	17,715	10,039	6,078	1,598	0
Total					
Softwood	162,463	51,494	61,898	33,537	15,534
Hardwood	4,542	1,908	1,484	1,144	6
Total	167,005	53,402	63,382	34,681	15,540

<sup>a</sup> Includes poles, pilings, posts, composite panels, and other industrial products.

**Table A.13—Disposal of residue at primary wood-using plants by product, species group, and type of residue, Florida, 2005 and 2007**

Product and species group	All types		Bark		Coarse		Sawdust		Shavings	
	2005	2007	2005	2007	2005	2007	2005	2007	2005	2007
	<i>thousand cubic feet</i>									
Fiber products										
Softwood	34,818	53,201	0	0	33,645	53,201	50	0	1,123	0
Hardwood	1,282	978	0	0	1,282	978	0	0	0	0
Total	36,100	54,179	0	0	34,927	54,179	50	0	1,123	0
Particleboard										
Softwood	4,473	7,122	0	0	0	241	689	21	3,784	6,860
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	4,473	7,122	0	0	0	241	689	21	3,784	6,860
Charcoal/ chemical wood										
Softwood	0	0	0	0	0	0	0	0	0	0
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Sawn products										
Softwood	7,076	0	0	0	7,076	0	0	0	0	0
Hardwood	0	0	0	0	0	0	0	0	0	0
Total	7,076	0	0	0	7,076	0	0	0	0	0
Industrial fuel										
Softwood	66,352	68,202	32,834	34,638	2,057	1,242	25,109	26,624	6,352	5,698
Hardwood	3,209	2,886	2,201	1,802	60	95	946	989	2	0
Total	69,561	71,088	35,035	36,440	2,117	1,337	26,055	27,613	6,354	5,698
Miscellaneous										
Softwood	28,202	33,881	13,856	16,845	8,130	7,178	4,670	6,882	1,546	2,976
Hardwood	859	673	249	105	371	408	239	154	0	6
Total	29,061	34,554	14,105	16,950	8,501	7,586	4,909	7,036	1,546	2,982
Not used										
Softwood	75	57	14	11	47	36	14	10	0	0
Hardwood	57	5	0	1	57	3	0	1	0	0
Total	132	62	14	12	104	39	14	11	0	0
All products										
Softwood	140,996	162,463	46,704	51,494	50,955	61,898	30,532	33,537	12,805	15,534
Hardwood	5,407	4,542	2,450	1,908	1,770	1,484	1,185	1,144	2	6
Total	146,403	167,005	49,154	53,402	52,725	63,382	31,717	34,681	12,807	15,540

**Table A.14—Roundwood timber product output by county, product, and species group, Florida, 2007**

County	All products		Saw logs		Veneer logs		Pulpwood <sup>a</sup>		Composite panels		Other industrial	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
<i>thousand cubic feet</i>												
Alachua	10,475	357	4,652	0	312	0	4,751	259	0	0	760	98
Baker	15,070	342	4,518	0	936	0	9,261	342	0	0	355	0
Bay	15,373	1,141	3,985	191	0	0	11,074	950	0	0	314	0
Bradford	10,150	451	3,725	0	312	0	5,943	451	0	0	170	0
Brevard	419	0	3	0	312	0	104	0	0	0	0	0
Calhoun	17,004	1,384	5,962	766	0	162	6,428	456	4,206	0	408	0
Charlotte	719	1	0	0	0	0	14	1	0	0	705	0
Citrus	313	3	176	0	0	0	66	3	0	0	71	0
Clay	11,117	252	3,221	2	780	0	6,999	250	0	0	117	0
Collier	19	0	19	0	0	0	0	0	0	0	0	0
Columbia	16,966	643	6,453	0	156	92	9,838	551	0	0	519	0
De Soto	705	0	0	0	0	0	0	0	0	0	705	0
Dixie	13,140	611	5,143	187	624	156	5,613	110	532	158	1,228	0
Duval	8,237	287	2,965	8	312	0	4,852	279	0	0	108	0
Escambia	7,015	374	4,067	0	0	0	2,650	374	0	0	298	0
Flagler	5,777	790	1,489	0	624	0	3,633	790	0	0	31	0
Franklin	7,330	21	2,305	0	0	0	1,480	21	3,463	0	82	0
Gadsden	15,274	1,480	6,148	269	3,031	81	2,857	1,130	2,968	0	270	0
Gilchrist	4,448	172	2,348	0	0	73	1,040	15	0	0	1,060	84
Glades	1,193	0	0	0	312	0	0	0	0	0	881	0
Gulf	14,502	913	4,485	385	0	0	9,342	528	494	0	181	0
Hamilton	16,412	412	5,929	0	841	110	8,848	180	409	122	385	0
Hardee	156	0	0	0	156	0	0	0	0	0	0	0
Hernando	410	1	296	0	0	0	43	1	0	0	71	0
Highlands	979	0	150	0	0	0	0	0	0	0	829	0
Hillsborough	386	31	184	0	156	0	3	31	0	0	43	0
Holmes	10,406	194	6,546	2	0	0	2,915	192	0	0	945	0
Jackson	19,982	897	9,168	273	1,166	3	7,728	621	1,237	0	683	0
Jefferson	14,566	618	4,223	0	1,361	81	5,405	98	3,453	439	124	0
Lafayette	14,022	274	3,386	111	0	73	10,281	90	0	0	355	0
Lake	1,605	529	529	0	156	0	733	529	0	0	187	0
Leon	4,256	154	1,578	2	272	0	1,143	152	989	0	274	0
Levy	18,883	822	6,986	276	2,654	64	7,757	426	0	0	1,486	56
Liberty	7,107	786	1,797	574	0	0	671	212	4,453	0	186	0
Madison	20,056	1,289	6,685	67	841	183	9,680	698	2,136	341	714	0
Marion	4,930	177	1,558	16	468	0	2,689	120	0	0	215	41
Nassau	26,064	1,157	13,096	315	624	0	11,906	842	0	0	438	0
Okaloosa	6,405	316	3,309	0	130	0	2,806	316	0	0	160	0
Orange	457	36	379	0	0	0	60	36	0	0	18	0
Osceola	792	25	440	25	0	0	0	0	0	0	352	0
Pasco	2,353	115	1,359	0	156	0	79	115	0	0	759	0
Polk	1,537	0	733	0	156	0	48	0	0	0	600	0
Putnam	12,166	1,975	1,489	0	1,717	0	8,790	1,975	0	0	170	0
St. Johns	8,441	523	4,223	1	468	0	3,724	522	0	0	26	0

*continued*

**Table A.14—Roundwood timber product output by county, product, and species group, Florida, 2007 (continued)**

County	All products		Saw logs		Veneer logs		Pulpwood <sup>a</sup>		Composite panels		Other industrial	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
	<i>thousand cubic feet</i>											
Santa Rosa	10,135	161	6,184	6	0	0	3,766	155	0	0	185	0
Sarasota	1,071	0	70	0	983	0	0	0	0	0	18	0
Seminole	198	60	0	0	0	0	24	2	0	0	174	58
Sumter	912	78	728	0	0	0	1	78	0	0	183	0
Suwannee	10,595	662	3,914	0	841	92	5,663	570	0	0	177	0
Taylor	29,764	703	8,440	223	1,840	201	16,093	121	2,511	158	880	0
Union	8,567	57	6,624	0	468	0	1,361	57	0	0	114	0
Volusia	4,448	535	1,545	6	468	0	1,304	200	0	0	1,131	329
Wakulla	6,677	7	2,722	0	0	0	2,675	7	1,237	0	43	0
Walton	13,123	158	3,114	0	130	0	9,673	158	0	0	206	0
Washington	15,267	713	4,484	194	466	0	9,207	519	247	0	863	0
All counties	468,374	22,687	173,532	3,899	24,229	1,371	221,021	15,533	28,335	1,218	21,257	666

<sup>a</sup> Includes roundwood delivered to nonpulp mills, then chipped and sold to pulpmills (1,403,000 cubic feet in 2007).

**Table A.15—Total roundwood output by product, species group, and source of material, Florida, 2007**

Product and species group	All sources	Total	Growing-stock trees		Other sources
			Sawtimber	Poletimber	
<i>thousand cubic feet</i>					
Saw logs					
Softwood	173,532	167,084	154,001	13,083	6,448
Hardwood	3,899	3,882	3,568	314	17
Total	177,431	170,966	157,569	13,397	6,465
Veneer logs and bolts					
Softwood	24,229	23,850	23,543	307	379
Hardwood	1,371	1,366	1,366	0	5
Total	25,600	25,216	24,909	307	384
Pulpwood					
Softwood	221,021	184,216	54,700	129,516	36,805
Hardwood	15,533	13,644	9,090	4,553	1,889
Total	236,554	197,860	63,790	134,070	38,694
Composite panels					
Softwood	28,335	23,616	7,012	16,604	4,719
Hardwood	1,218	965	643	322	253
Total	29,553	24,581	7,655	16,926	4,972
Poles and posts					
Softwood	7,447	6,982	5,362	1,619	465
Hardwood	0	0	0	0	0
Total	7,447	6,982	5,362	1,619	465
Other miscellaneous					
Softwood	13,810	7,179	6,048	1,131	6,631
Hardwood	666	631	75	556	35
Total	14,476	7,810	6,122	1,688	6,666
Total industrial products					
Softwood	468,374	412,926	250,665	162,261	55,448
Hardwood	22,687	20,487	14,742	5,746	2,200
Total	491,061	433,414	265,407	168,007	57,647
Domestic fuelwood					
Softwood	1,308	1,122	997	125	186
Hardwood	16,506	14,059	9,529	4,530	2,447
Total	17,814	15,180	10,526	4,655	2,634
All products					
Softwood	469,682	414,048	251,662	162,386	55,634
Hardwood	39,193	34,546	24,271	10,275	4,647
Total	508,875	448,594	275,933	172,662	60,281

Numbers in rows and columns may not sum to totals due to rounding.

**Table A.16—Total roundwood output by species group, survey region, and ownership class, Florida, 2007**

Species group and survey region	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
<i>thousand cubic feet</i>				
Softwoods				
Northeast	270,481	11,584	68,872	190,025
Northwest	184,938	15,113	28,485	141,340
Central and South	14,263	3,232	0	11,031
Total softwoods	469,682	29,928	97,357	342,397
Hardwoods				
Northeast	21,578	2,088	4,422	15,068
Northwest	16,095	725	862	14,508
Central and South	1,520	452	0	1,068
Total hardwoods	39,193	3,266	5,284	30,644
All species	508,875	33,194	102,640	373,041

Numbers in rows and columns may not sum to totals due to rounding.

**Table A.17—Total roundwood output by species group, detailed species group, and product, Florida, 2007**

Species group and detailed species group	Total	Product						Domestic fuelwood
		Saw logs	Veneer logs	Pulpwood	Composite panels	Poles and posts	Other miscellaneous	
<i>thousand cubic feet</i>								
Softwood								
Cedar	498	197	23	179	84	10	3	1
Longleaf-slash pine	366,953	136,603	16,924	176,174	20,657	5,672	9,902	1,022
Loblolly-shortleaf pine	49,803	18,947	3,750	20,543	4,780	615	1,029	139
Other yellow pines	29,862	9,416	1,888	14,666	2,121	433	1,254	83
Cypress	22,567	8,370	1,644	9,460	692	716	1,623	62
Total softwoods	469,682	173,532	24,229	221,021	28,335	7,447	13,810	1,308
Hardwood								
Soft maple	1,400	63	52	656	35	0	5	590
Hard maple	102	8	9	28	13	0	0	43
Other birch	15	0	0	6	0	0	2	6
Hickory	837	106	29	319	18	0	12	352
Beech	620	199	42	118	0	0	0	261
Ash	573	97	12	208	4	0	10	241
Sweetgum	3,744	327	118	1,554	133	0	36	1,577
Yellow-poplar	909	155	30	341	0	0	0	383
Blackgum-tupelo	5,351	367	268	2,122	287	0	54	2,254
Black cherry	188	11	12	79	7	0	0	79
Select white oaks	513	124	21	148	4	0	0	216
Other white oaks	2,609	60	60	1,295	70	0	26	1,099
Select red oaks	179	16	8	79	1	0	0	76
Other red oaks	11,737	1,346	439	4,372	484	0	153	4,943
Basswood	45	9	3	12	1	0	1	19
Elm	320	37	20	118	7	0	4	135
Other eastern hardwoods	10,050	974	251	4,076	154	0	363	4,232
Total hardwoods	39,193	3,899	1,371	15,533	1,218	0	666	16,506
All species	508,875	177,431	25,600	236,554	29,553	7,447	14,476	17,814

Numbers in rows and columns may not sum to totals due to rounding.

**Table A.18—Total roundwood output by species group, detailed species group, and ownership class, Florida, 2007**

Species group and detailed species group	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
<i>thousand cubic feet</i>				
Softwood				
Cedar	498	47	41	410
Longleaf-slash pine	366,953	22,574	78,396	265,984
Loblolly-shortleaf pine	49,803	3,283	9,432	37,088
Other yellow pines	29,862	2,747	4,619	22,496
Cypress	22,567	1,278	4,869	16,419
Total softwoods	469,682	29,928	97,357	342,397
Hardwood				
Soft maple	1,400	151	289	959
Hard maple	102	2	14	86
Other birch	15	7	1	7
Hickory	837	140	119	578
Beech	620	0	53	567
Ash	573	124	90	358
Sweetgum	3,744	230	603	2,912
Yellow-poplar	909	14	121	774
Blackgum-tupelo	5,351	227	1,034	4,090
Black cherry	188	25	19	144
Select white oaks	513	15	90	407
Other white oaks	2,609	375	210	2,024
Select red oaks	179	22	8	148
Other red oaks	11,737	1,264	1,771	8,703
Basswood	45	10	12	24
Elm	320	50	48	223
Other eastern hardwoods	10,050	609	802	8,638
Total hardwoods	39,193	3,266	5,284	30,644
All species	508,875	33,194	102,640	373,041

Numbers in rows and columns may not sum to totals due to rounding.



**Johnson, Tony G.; Nowak, Jarek; Mathison, Rhonda M.** 2009. Florida's timber industry—an assessment of timber product output and use, 2007. Resour. Bull. SRS-153. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 31 p.

In 2007, volume of industrial roundwood output from Florida's forests totaled 491 million cubic feet, 10 percent more than in 2005. Mill byproducts generated from primary manufacturers increased to 167 million cubic feet. Almost all plant residues were used primarily for fuel and fiber products. Pulpwood was the leading roundwood product at 237 million cubic feet; saw logs ranked second at 177 million cubic feet; composite panel production was third at 30 million cubic feet. Total receipts were up 10 percent to 506 million cubic feet. The number of primary processing plants totaled 69 in 2007 compared to 93 in 2005.

**Keywords:** FIA, pulpwood, residues, roundwood, saw logs, veneer logs, wood movement.

United States  
Department of  
Agriculture

Forest Service

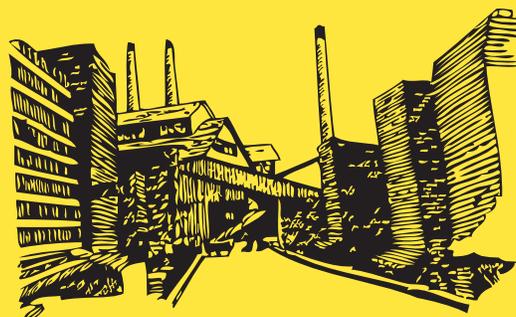


Southern  
Research Station

Resource Bulletin  
SRS-161

# Georgia's Timber Industry— An Assessment of Timber Product Output and Use, 2007

James R. Schiller,  
Nathan McClure,  
and Risher A. Willard

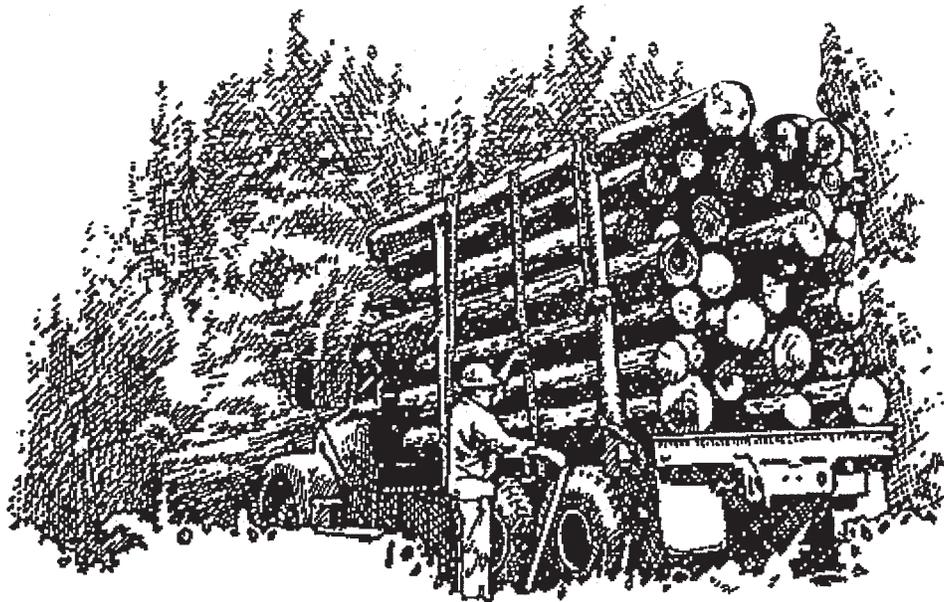


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July 2009

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## Foreword

This report contains the findings of a 2007 canvass of all primary wood-using plants in Georgia, and presents changes in product output and residue use since 2005. It complements the Forest Inventory and Analysis (FIA) periodic inventory of volume and removals from the State's timberland. The canvass was conducted to determine the amount and source of wood receipts and annual timber product drain, by county, in 2007 and to determine interstate and cross-regional movement of industrial roundwood. Only primary wood-using mills were canvassed. Primary mills are those that process roundwood in log or bolt form or as chipped roundwood. Examples of industrial roundwood products are saw logs, pulpwood, veneer logs, poles, and logs used for composite board products. Mills producing products from residues generated at primary and secondary processors were not canvassed. Trees chipped in the woods were included in the estimate of timber drain only if they were delivered to a primary domestic manufacturer.

A 100-percent canvass of all wood processors in Georgia was conducted in 2008 to obtain information for 2007. In addition, roundwood from out-of-State mills known to be using logs or bolts harvested from Georgia timberland was incorporated into Georgia production estimates. Each mill was canvassed by mail or through personal contact at plant locations. Telephone contacts followed mailed questionnaire responses when additional information or clarification of a response was necessary. In the event of a nonresponse,

data collected in previous surveys were updated using current data collected for mills of similar size, product type, and location. Surveys for all timber products other than pulpwood began in 1961, and are currently conducted every 2 years.

Pulpwood production data were taken from an annual canvass of all southern pulpmills. Medium density fiberboard, insulating board, and hardboard plants were included in this survey.

## Acknowledgments

The authors thank Dru Preston and Frank Green for review and comments; Carolyn Steppleton and Michael Howell for their tireless efforts in processing and accuracy of the data; Helen Beresford for timber product output database maintenance and support; Anne Jenkins, Janet Griffin, Sharon Johnson, and Charlene Walker for tables, graphs, and the Southern Research Station (SRS) Technical Publications Team for editorial review, styling, and publication of this report.

The SRS gratefully acknowledges the cooperation and assistance provided by the Georgia Forestry Commission in collecting mill data. Appreciation is also extended to forest industry and mill managers for providing timber products information.



## Timber Product Output Database Retrieval System

The Forest Inventory and Analysis (FIA) Research Work Unit of the USDA Forest Service developed the Timber Product Output (TPO) Database Retrieval System to help customers answer questions about timber harvesting and use in the Southern Region. This system acts as an interface to a standard set of consistently coded TPO data for each State and county in the region and Nation. This regional and national set of TPO data consists of 11 variables that describe for each county the roundwood products harvested, logging residues left in the woods, other timber removals (i.e. land clearing and reserved timber removals), and wood and bark residues generated by the county's primary wood-using mills. The system is available through the FIA Web site: <http://srsfia2.fs.fed.us/>.

The database is well documented and easy to use. The retrieval system allows the user to select the TPO variables of interest and generate a standard set of timber products, removals, and mill residue tables for the specified resource area, State, or region. The system has been logically divided into two sections to assist the user in making specific data requests. In section 1, the user will be asked to define the resource area, and section 2 generates tables for the specified area. In each section, the user is asked to supply specific options that will serve to customize the database retrieval.

There are four options available for defining the geographic area of interest. Each option provides an increasing level of detail. The region, subregion, State, or county defines an area. The user selects the option that best suits the level of detail required. Users who select county as an option should be aware that some counties have been combined due to data sensitivity. These combined counties are identified with asterisks in the output tables.

The TPO contacts are listed for each region to provide additional explanation or clarification.

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<sup>a</sup> All tables in this report are available in Microsoft® Excel workbook files. Upon request, these files will be supplied in the format the customer requests. The use of trade or firm names in this publication is for reader information and does not imply endorsement by the U.S. Department of Agriculture of any product or service.

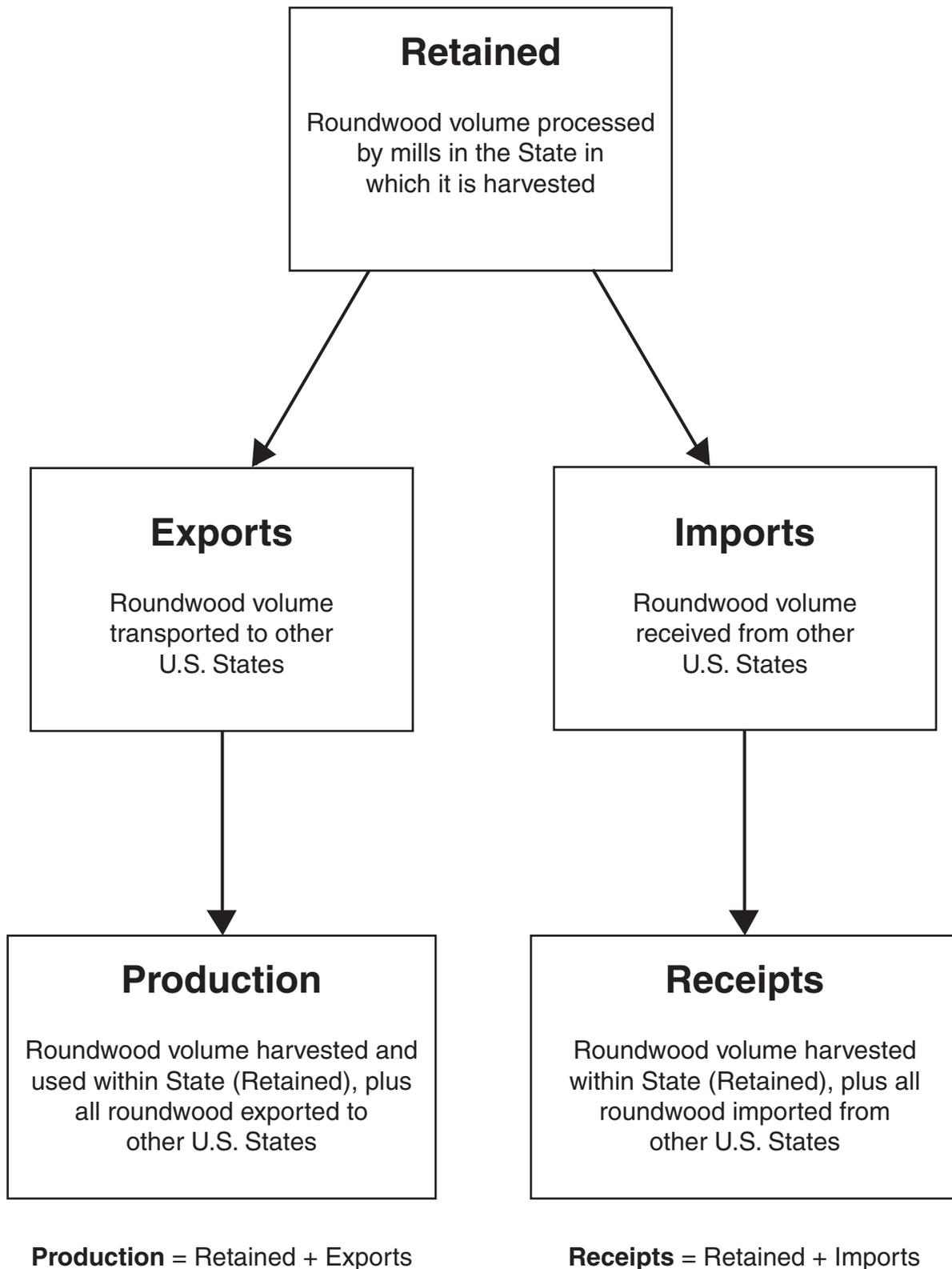


Figure 1—Movement of roundwood exports and imports within the United States.

# Georgia's Timber Industry— An Assessment of Timber Product Output and Use, 2007

James R. Schiller, Nathan McClure, and Risher A. Willard

## Output of Industrial Timber Products

Note: Certain terms used in this report—retained, export, import, production, and receipts—have specialized meanings and relationships unique to the Forest Inventory and Analysis Work Units across the country that deal with timber product output (TPO) (fig. 1).

### All Products

- TPO from roundwood increased 44.5 million cubic feet, or 3.8 percent, to 1.21 billion cubic feet, while output of utilized plant byproducts was down 25 million cubic feet, or 5.6 percent, to 413 million cubic feet.
- Output of softwood roundwood products increased 3.9 percent, totaling 1.04 billion cubic feet, while output of hardwood roundwood products was up 3.4 percent to 172 million cubic feet (fig. 2).
- Pulpwood and saw logs were the principal roundwood products in 2007. Combined output of these two products totaled 1.02 billion cubic feet and accounted for 85 percent of the State's total industrial roundwood output (fig. 3).
- Total receipts at Georgia mills, which included roundwood harvested and retained in the State and roundwood imported from other States, increased slightly (<1 percent) from 1.21 billion cubic feet to 1.22 billion cubic feet. At the same time, the number of primary roundwood-using plants in Georgia declined from 181 in 2005 to 168 in 2007 (fig. 4). The number of sawmills declined by 10, veneer mills declined by 1 and other miscellaneous mills declined by 2.
- Across all products, 85 percent of roundwood harvested was retained for processing at Georgia mills. Exports of roundwood to other States amounted to 180 million

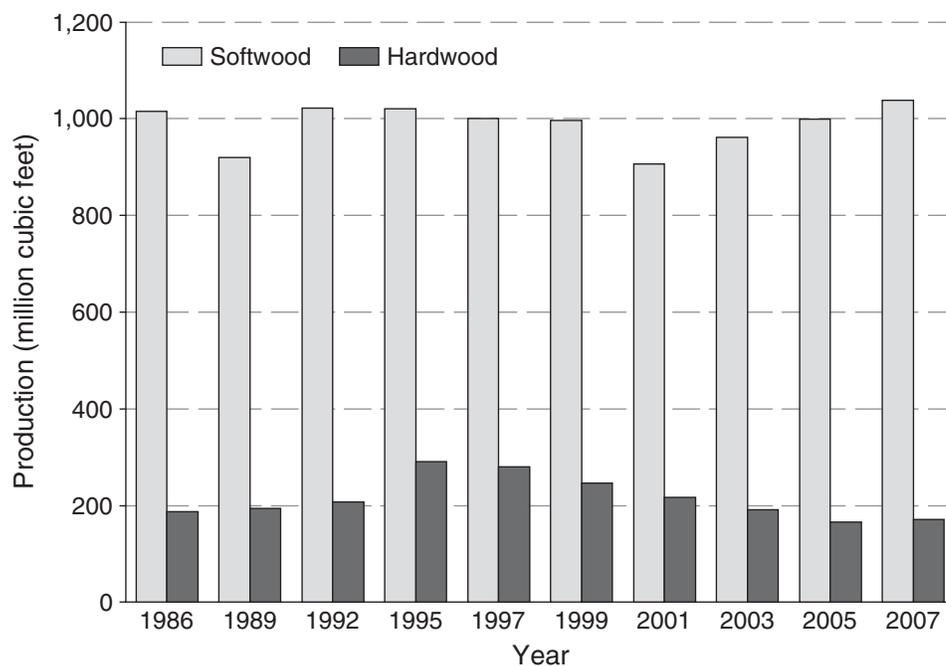


Figure 2—Roundwood production for all products by species group and year (see page 8 for references for individual years), Georgia.

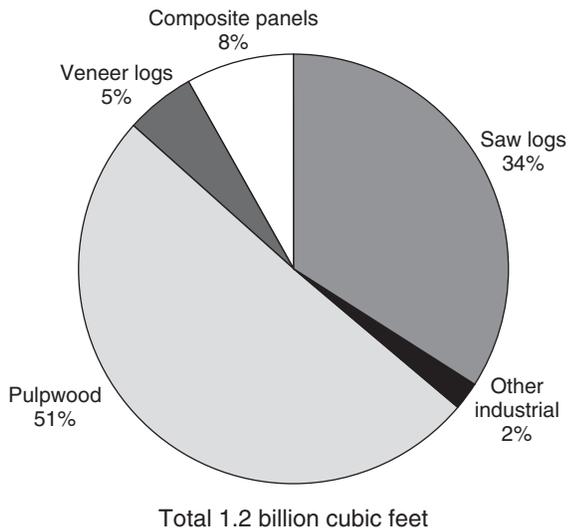


Figure 3—Roundwood production by type of product, Georgia, 2007.

cubic feet, while imports of roundwood amounted to 186 million cubic feet making the State a net importer of roundwood. Tables A.8 to A.12 show exports to and imports from other States by individual product type.

### Pulpwood

- Total pulpwood production, including chipped roundwood, increased almost 13 percent to 611 million cubic feet and accounted for almost 51 percent of the State's total roundwood TPO compared to 47 percent of total TPO in 2005. Softwood output increased to 508 million cubic feet (7.0 million cords); hardwood output increased as well to 103 million cubic feet (1.4 million cords) (fig. 5). These were increases from 2005 numbers of 12 percent and 18 percent, respectively.
- Twelve pulpmill facilities were operating and receiving roundwood in Georgia in 2007, the same as in 2005. Total pulpwood receipts for these mills increased to 606 million cubic feet, accounting for 50 percent of total receipts for all mills.
- Eighty percent of roundwood cut for pulpwood was retained for processing at Georgia pulpmills. Roundwood pulpwood accounted for 68 percent of total known

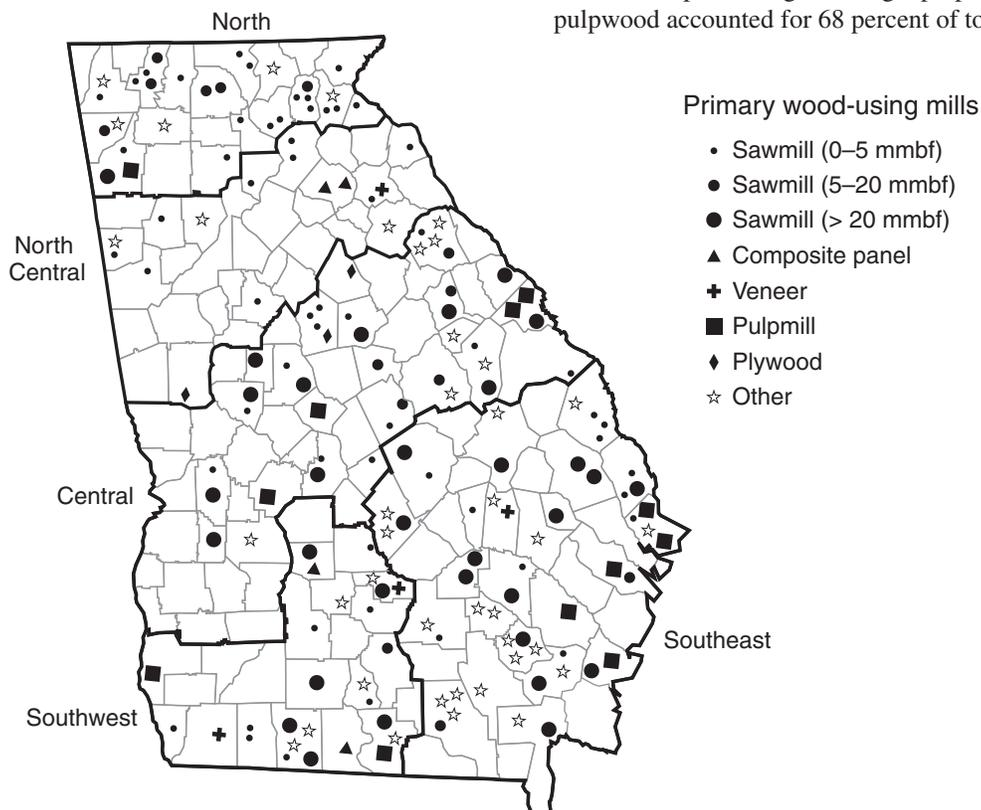


Figure 4—Primary wood-using mills by region, Georgia, 2007.

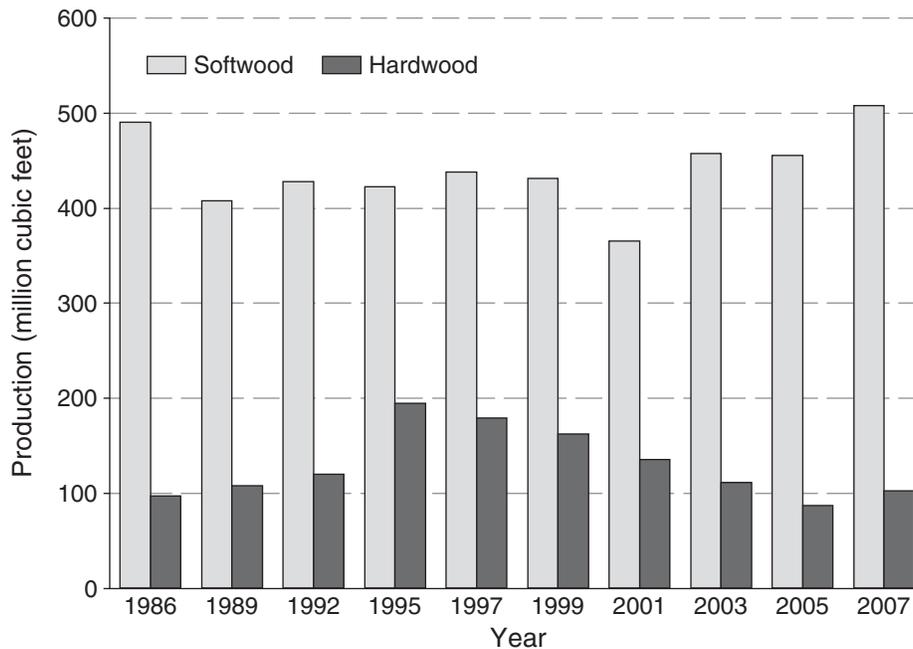


Figure 5—Roundwood pulpwood production by species group and year (see page 8 for references for individual years), Georgia.

exports and 63 percent of total imports. Roundwood pulpwood exports exceeded imports by 5 million cubic feet, making the State a net exporter of pulpwood for processing.

### Saw Logs

- Saw logs accounted for 34 percent of the State's total roundwood products. Output of softwood saw logs decreased 11 percent to 352 million cubic feet (1.9 billion board feet, International ¼-inch rule), while that of hardwood saw logs was down 6 percent to 60 million cubic feet (355 million board feet, International ¼-inch rule) (fig. 6).
- In 2007, Georgia had 105 sawmills, 10 fewer mills than in 2005. The total number of sawmills does not include the several single operator sawmills in the State. Total saw-log receipts were down more than 47 million cubic feet to 430 million cubic feet. Softwood saw-log receipts decreased 11 percent to 368 million cubic feet, while those of hardwoods declined 6 percent to 62 million cubic feet. Of the operating mills in 2007, 31 percent had receipts of <1 million board feet, while 38 percent had receipts >10 million board feet. Those 40 mills, however, accounted for 95 percent of total saw-log receipts.

- Georgia retained 93 percent of its saw-log production for within State manufacture, with saw-log imports exceeding exports by 18 million cubic feet in 2007.

### Veneer Logs

- Output of veneer logs in 2007 totaled 63 million cubic feet and accounted for 5 percent of the State's total roundwood TPO volume. Softwood veneer production was down 14 percent to 58 million cubic feet (338 million board feet, International ¼-inch rule); output of hardwood veneer logs declined 24 percent to 6 million cubic feet (36 million board feet, International ¼-inch rule) (fig. 7).
- The number of veneer mills operating in Georgia declined from 8 to 7 for 2007. Receipts of veneer logs decreased 17 percent to 65 million cubic feet. Softwood veneer receipts were down 9 million cubic feet to 52 million cubic feet, while hardwood veneer receipts declined 26 percent to 12 million cubic feet.
- Georgia retained 81 percent of its veneer-log production for processing at veneer mills within the State. Imports amounted to 13 million cubic feet, and exports totaled 12 million cubic feet, making the State a net importer of roundwood veneer logs.

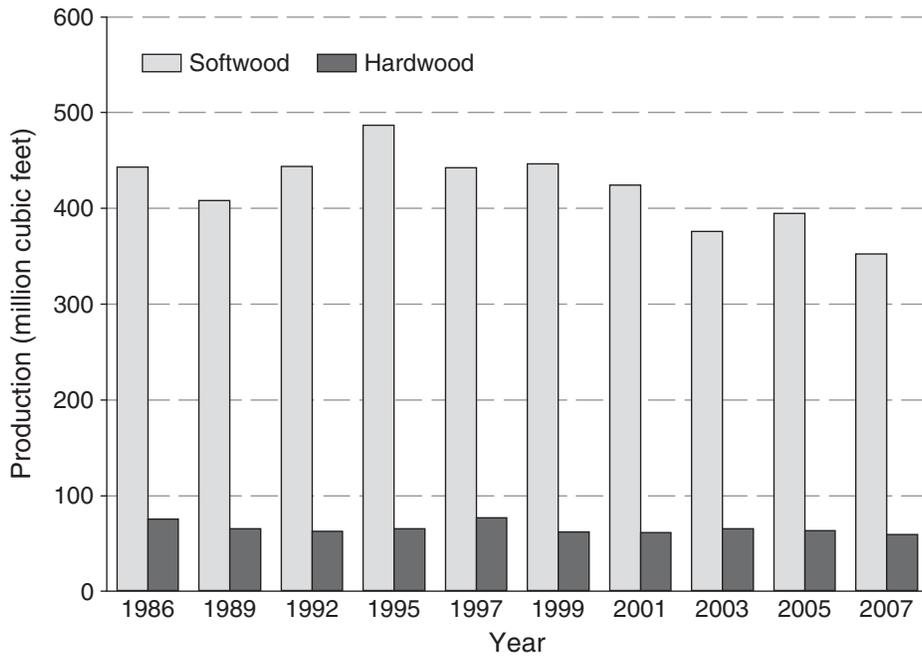


Figure 6—Roundwood saw-log production by species group and year (see page 8 for references for individual years), Georgia.

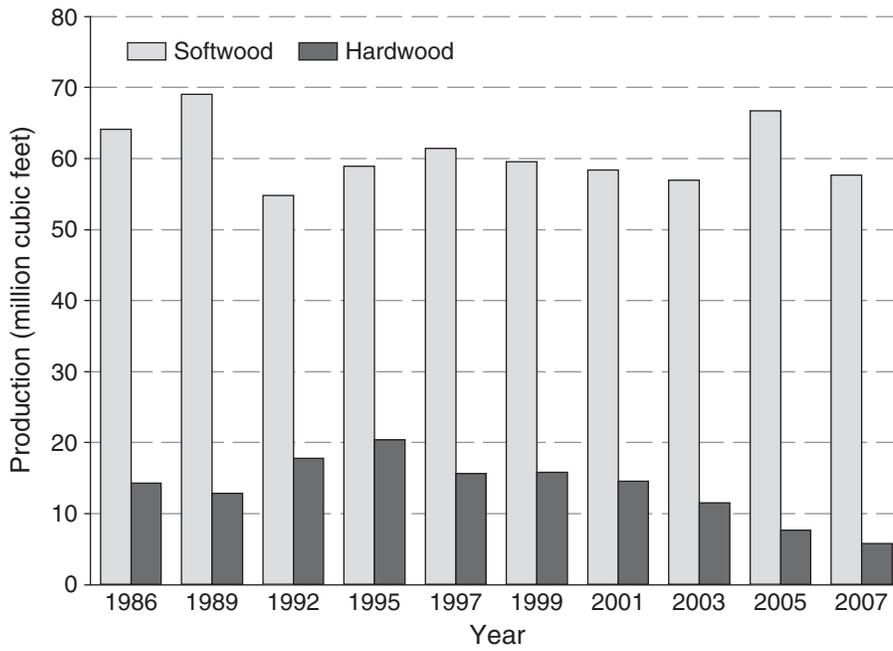


Figure 7—Roundwood veneer-log production by species group and year (see page 8 for references for individual years), Georgia.

## Composite Panels

- Roundwood harvested from Georgia’s forests for composite panels increased 56 percent and totaled 98 million cubic feet. Softwood output was up 69 percent to 95 million cubic feet (1,315,000 cords); hardwood production decreased 58 percent to 3 million cubic feet (37,000 cords) (fig. 8).
- Four composite panel, or oriented strand board, mills were operating in Georgia in 2007. Total receipts for these mills increased 39 percent to 90 million cubic feet, and accounted for 7 percent of the State’s total receipts.
- Eighty-five percent of the roundwood production harvested for composite panels was retained for processing at Georgia’s mills. Imports amounted to 7 million cubic feet, and exports totaled 14 million cubic feet, making the State a net exporter of roundwood used for composite panels.

## Other Industrial Products

- Roundwood harvested for other industrial uses such as poles, posts, mulch, firewood, logs for log homes, and all other industrial products totaled 26 million cubic feet, a 4 percent decrease from 2005. Softwood made up 98 percent of the other industrial products volume.
- The number of plants producing other industrial products totaled 40 in 2007. Combined receipts of other industrial products from softwood and hardwood declined to 26 million cubic feet.
- Georgia was a net importer of roundwood used for other industrial products, but only by a small margin; nearly all of the 1.8 million cubic feet exported and 1.8 million cubic feet imported were softwood.

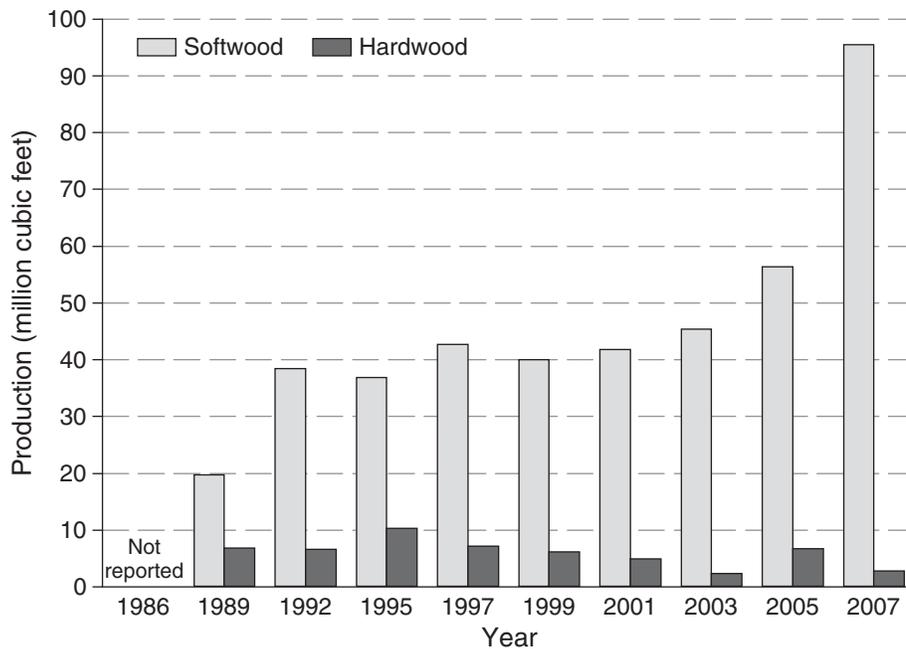


Figure 8—Roundwood production for composite panels by species group and year (see page 8 for references for individual years), Georgia.

## Plant Byproducts

- In 2007, processing of primary products in Georgia mills generated 413 million cubic feet of wood and bark residues. Coarse residues from all primary products amounted to 148 million cubic feet, while bark volume totaled 147 million cubic feet. Collectively, sawdust and shavings made up 29 percent of total residues, or 118 million cubic feet (fig. 9).
- The processing of saw logs generated 261 million cubic feet of mill residues, accounting for 63 percent of the total residues produced (fig. 10).
- Nearly 413 million cubic feet, or 100 percent, of the wood and bark residues were used for a product. While <1 percent of the residues were not used for a product, 49 percent of the residues were used for industrial fuel and 28 percent were used for fiber products (fig. 11). More than 114 million cubic feet, or 77 percent, of the coarse residues were used for fiber products. Most of the bark was used for industrial fuel or other miscellaneous products, while 63 percent of the sawdust and shavings were used for industrial fuel.

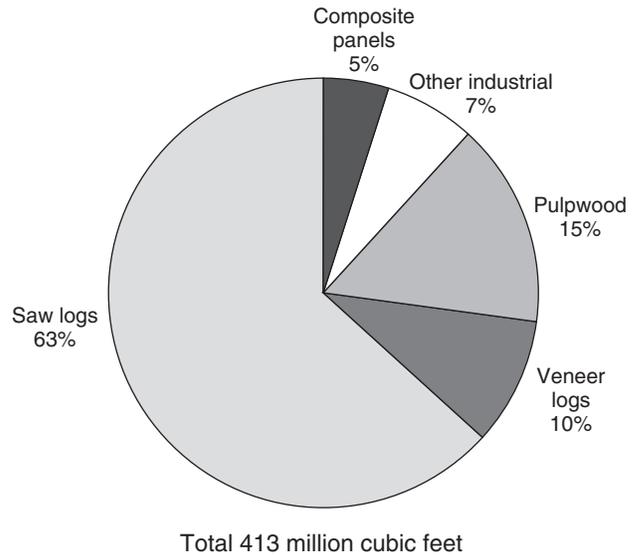


Figure 10—Primary mill residue produced by roundwood type, Georgia, 2007.

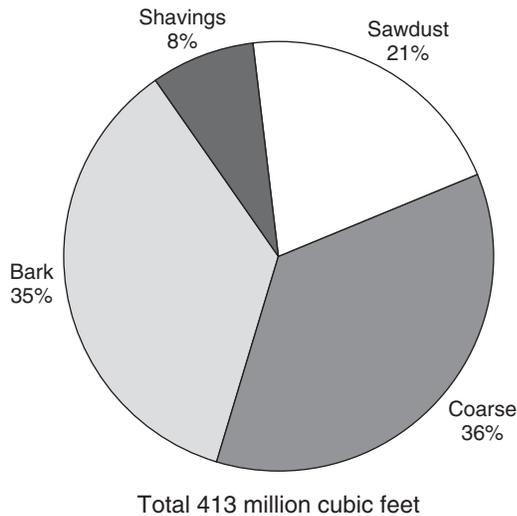


Figure 9—Primary mill residue by residue type, Georgia, 2007.

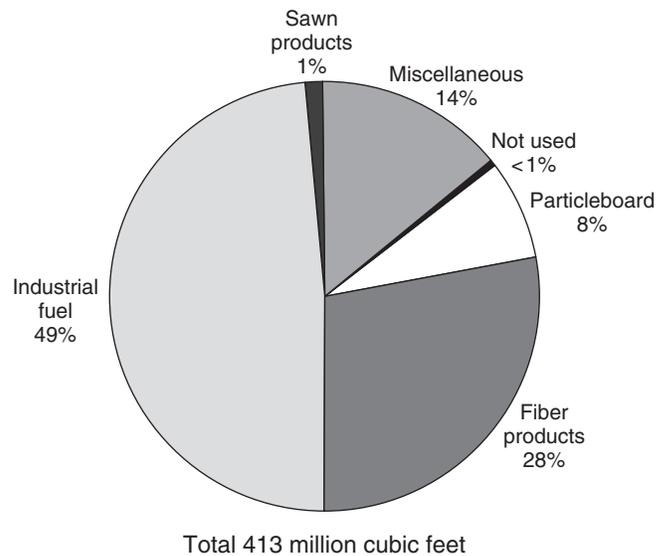


Figure 11—Disposal of residue by product, Georgia, 2007.

## County Data

- Table A.15 shows softwood and hardwood product output by county and individual product type. All 159 counties in Georgia had softwood and hardwood output. Twenty-two counties (Appling, Brantley, Burke, Camden, Charlton, Clinch, Dodge, Effingham, Emanuel, Hancock, Laurens, Long, McIntosh, Screven, Telfair, Toombs, Ware, Washington, Wayne, Wilcox, Wilkes, and Wilkinson) had combined softwood and hardwood product output of >15 million cubic feet each. The total product output of these 22 counties amounted to 436 million cubic feet and accounted for 36 percent of the State’s total product output.

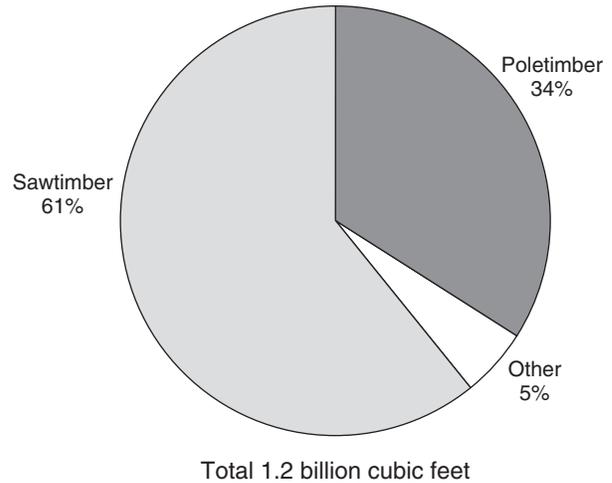


Figure 12—Roundwood output by source, Georgia, 2007.

## Total Roundwood Output

Using the most recent inventory data for Georgia, product output by source, ownership, and detailed species group was estimated.

### Source

- In addition to the 1.21 billion cubic feet of roundwood output for industrial roundwood, an estimated 42 million cubic feet were harvested for domestic fuelwood, bringing Georgia’s total roundwood output to 1.25 billion cubic feet.
- Ninety-five percent of total roundwood output was considered growing-stock volume (sawtimber and poletimber) from timberland sources. Other sources (such as saplings; stumps, tops, and limbs of trees on timberland; and trees on nonforest land) contributed an estimated 65 million cubic feet, or 5 percent of total roundwood output (fig. 12).

### Ownership

- An estimated 844 million cubic feet, or 68 percent, of the total roundwood output came from nonindustrial private forest lands. Forest industry lands contributed 378 million cubic feet, or 30 percent of the output. Public lands made up the remaining 2 percent, or 29 million cubic feet (fig. 13).

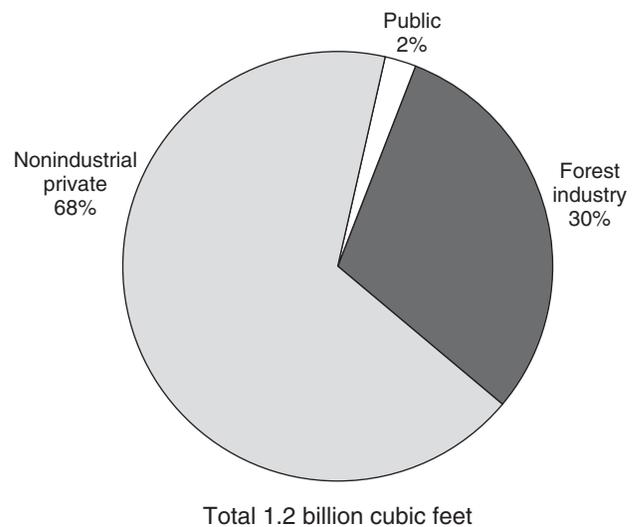


Figure 13—Roundwood output by ownership, Georgia, 2007.

## Species

- The loblolly and shortleaf pine group provided the most volume of any softwood species group, accounting for 62 percent of the total softwood output (fig. 14). The longleaf-slash pine type accounted for 33 percent of the softwood output. In hardwoods, the red oak and white oak groups combined accounted for 85 million cubic feet, or 40 percent of total hardwood output (fig. 15).

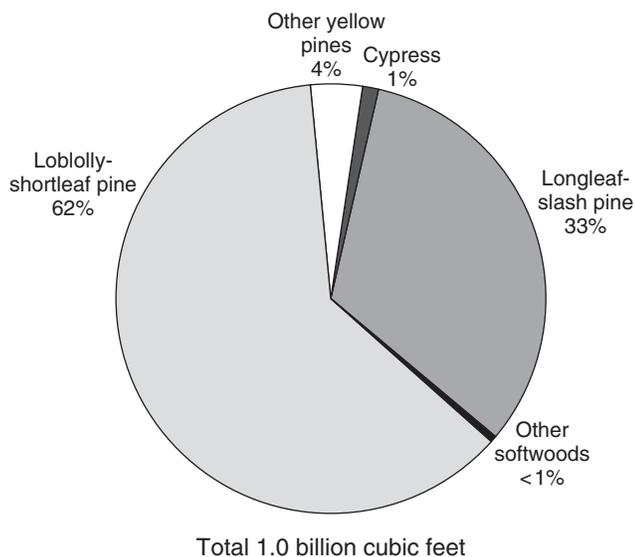


Figure 14—Roundwood output by softwood species group, Georgia, 2007.

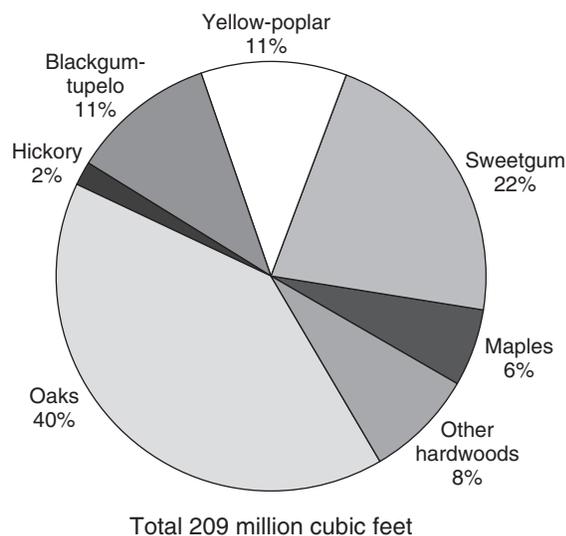


Figure 15—Roundwood output by hardwood species group, Georgia, 2007.

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## Glossary

**Board foot.** A unit of measure applied to lumber that is 1-foot long, 1-foot wide, and 1-inch thick (or its equivalent) and also associated with roundwood as to its potential yield of such products.

**Byproducts.** Primary wood products, e.g., pulp chips, animal bedding, and fuelwood, recycled from mill residues.

**Composite panels.** Roundwood products manufactured into chips, wafers, strands, flakes, shavings, or sawdust and then reconstituted into a variety of panel and engineered lumber products.

**Consumption.** The quantity of a commodity, such as pulpwood, utilized by a particular mill or group of mills.

**Domestic fuelwood.** The volume of roundwood harvested to produce heat for residential settings.

**Drain.** The volume of roundwood removed from any geographic area where timber is grown.

**Exports.** The volume of domestic roundwood utilized by mills outside the State where timber was cut.

**Fiber products.** Byproducts used in the manufacture of pulp, paper, paperboard, and composite products, such as chipboard.

**Growing-stock removals.** The growing-stock volume removed from poletimber and sawtimber trees in the timberland inventory. (Note: Includes volume removed for roundwood products, logging residues, and other removals.)

**Growing-stock trees.** Living trees of commercial species classified as sawtimber, poletimber, saplings, and seedlings. Growing-stock trees must contain at least one 12-foot or two 8-foot logs in the saw-log portion, currently or potentially (if too small to qualify). The log(s) must meet dimension and merchantability standards and have, currently or potentially, one-third of the gross board-foot volume in sound wood.

**Growing-stock volume.** The cubic-foot volume of sound wood in growing-stock trees at least 5.0 inches d.b.h. from a 1-foot stump to a minimum 4.0-inch top d.o.b. of the central stem.

**Hardwoods.** Dicotyledonous trees, usually broadleaf and deciduous.

*Soft hardwoods.* Hardwood species with an average specific gravity of 0.50 or less, such as gums, yellow-poplar, cottonwoods, red maple, basswoods, and willows.

*Hard hardwoods.* Hardwood species with an average specific gravity >0.50, such as oaks, hard maples, hickories, and beech.

**Imports.** The volume of domestic roundwood delivered to a mill or group of mills in a specific State but harvested outside that State.

**Industrial fuelwood.** A roundwood product, with or without bark, used to generate energy at a manufacturing facility such as a wood-using mill.

**Industrial roundwood products.** Any primary use of the main stem of a tree, such as saw logs, pulpwood, veneer logs, intended to be processed into primary wood products such as lumber, wood pulp, sheathing, at primary wood-using mills.

**International 1/4-inch rule.** A log rule or formula for estimating the board-foot volume of logs, allowing 1/2-inch of taper for each 4-foot length. The rule appears in a number of forms that allow for kerf. In the form used by FIA, a 1/4-inch of kerf is assumed. This rule is used as the USDA Forest Service standard log rule in the Eastern United States.

**Log.** A primary forest product harvested in long, primarily 8-, 12-, and 16-foot lengths.

**Logging residues.** The unused merchantable portion of growing-stock trees cut or destroyed during logging operations.

**Merchantable portion.** That portion of live trees 5.0 inches d.b.h. and larger between a 1-foot stump and a minimum 4.0-inch top d.o.b. on the central stem. That portion of primary forks from the point of occurrence to a minimum 4.0-inch top d.o.b. is included.

**Merchantable volume.** Solid-wood volume in the merchantable portion of live trees.

**Noncommercial species.** Tree species of typically small size, poor form, or inferior quality that normally do not develop into trees suitable for industrial wood products.

**Nonforest land.** Land that has never supported forests and land formerly forested where timber production is precluded by development for other uses.

**Nongrowing-stock sources.** The net volume removed from the nongrowing-stock portions of poletimber and sawtimber trees (stumps, tops, limbs, cull sections of central stem) and from any portion of a rough, rotten, sapling, dead, or nonforest tree.

**Other forest land.** Forest land other than timberland and productive reserved forest land. It includes available and reserved forest land that is incapable of producing annually 20 cubic feet per acre of industrial wood under natural conditions because of adverse site conditions such as sterile soils, dry climate, poor drainage, high elevation, steepness, or rockiness.

**Other products.** A miscellaneous category of roundwood products, e.g., cooperage, excelsior, shingles, and mill residue byproducts (charcoal, bedding, mulch, etc.).

**Other removals.** The growing-stock volume of trees removed from the inventory by cultural operations such as timber stand improvement, land clearing, and other changes in land use, resulting in the removal of the trees from timberland.

**Other sources.** (See: Nongrowing-stock sources.)

**Ownership.** The property owned by one ownership unit, including all parcels of land in the United States.

*National forest land.* Federal land that has been legally designated as national forests or purchase units, and other land under the administration of the Forest Service, including experimental areas and Bankhead-Jones Title III land.

*Forest industry land.* Land owned by companies or individuals operating primary wood-using plants.

*Nonindustrial private forest (NIPF) land.* Privately owned land excluding forest industry land.

Corporate. Owned by corporations, including incorporated farm ownerships.

Individual. All lands owned by individuals, including farm operators.

*Other public.* An ownership class that includes all public lands except national forests.

Miscellaneous Federal land. Federal land other than national forests.

State, county, and municipal land. Land owned by States, counties, and local public agencies or municipalities, or land leased to these governmental units for 50 years or more.

**Plant residues.** Wood material generated in the production of timber products at primary manufacturing plants.

*Coarse residues.* Material, such as slabs, edgings, trim, veneer cores and ends, which is suitable for chipping.

*Fine residues.* Material, such as sawdust, shavings, and veneer residue, which is not suitable for chipping.

*Plant byproducts.* Residues (coarse or fine) used in the further manufacture of industrial products for consumer use, or as fuel.

*Unused plant residues.* Residues (coarse or fine) that are not used for any product, including fuel.

**Poletimber-size trees.** Softwoods 5.0 to 8.9 inches d.b.h. and hardwoods 5.0 to 10.9 inches d.b.h.

**Posts, poles, and pilings.** Roundwood products milled (cut or peeled) into standard sizes (lengths and circumferences) to be put in the ground to provide vertical and lateral support in buildings, foundations, utility lines, and fences. May also include nonindustrial (unmilled) products.

**Primary wood-using plants.** Industries that convert roundwood products (saw logs, veneer logs, pulpwood, etc.) into primary wood products, such as lumber, veneer or sheathing, wood pulp.

**Production.** The total volume of known roundwood harvested from land within a State, regardless of where it is consumed. Production is the sum of timber harvested and used within a State, and all roundwood exported to other States.

**Pulpwood.** A roundwood product that will be reduced to individual wood fibers by chemical or mechanical means.

The fibers are used to make a broad generic group of pulp products that includes paper products, as well as fiberboard, insulating board, and paperboard.

**Receipts.** The quantity or volume of industrial roundwood received at a mill or by a group of mills in a State, regardless of the geographic source. Volume of roundwood receipts is equal to the volume of roundwood retained in a State plus roundwood imported from other States.

**Retained.** Roundwood volume harvested from and processed by mills within the same State.

**Rotten trees.** Live trees of commercial species not containing at least one 12-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, primarily because of rot or missing sections, and with less than one-third of the gross board-foot tree volume in sound material.

**Rough trees.** Live trees of commercial species not containing at least one 12-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, primarily because of roughness, poor form, splits, and cracks, and with less than one-third of the gross board-foot tree volume in sound material; and live trees of noncommercial species.

**Roundwood (roundwood logs).** Logs, bolts, or other round sections cut from trees for industrial manufacture or consumer uses.

**Roundwood chipped.** Any timber cut primarily for industrial manufacture, delivered to nonpulpmills, chipped, and then sold to pulpmills for use as fiber. Includes tops, jump sections, whole trees, and pulpwood sticks.

**Roundwood product drain.** That portion of total drain used for a product.

**Roundwood products.** Any primary product, such as lumber, veneer, composite panels, poles, pilings, pulp, or fuelwood that is produced from roundwood.

**Salvable dead trees.** Standing or downed dead trees that were formerly growing stock and considered merchantable. Trees must be at least 5.0 inches d.b.h. to qualify.

**Saplings.** Live trees 1.0 to 5.0 inches d.b.h.

**Saw log.** A roundwood product, usually 8 feet in length or longer, processed into a variety of sawn products such as lumber, cants, pallets, railroad ties, and timbers.

**Saw-log portion.** The part of the bole of sawtimber trees between a 1-foot stump and the saw-log top.

**Saw-log top.** The point on the bole of sawtimber trees above which a conventional saw log cannot be produced. The minimum saw-log top is 7.0 inches d.o.b. for softwoods and 9.0 inches d.o.b. for hardwoods for FIA standards.

**Sawtimber-size trees.** Softwoods 9.0 inches d.b.h. and larger and hardwoods 11.0 inches d.b.h. and larger.

**Sawtimber volume.** Growing-stock volume in the saw-log portion of sawtimber-sized trees in board feet (International ¼-inch rule).

**Seedlings.** Trees <1.0 inch d.b.h. and >1 foot tall for hardwoods, >6 inches tall for softwoods, and >0.5 inch in diameter at ground level for longleaf pine.

**Select red oaks.** A group of several red oak species composed of cherrybark, Shumard, and northern red oaks. Other red oak species are included in the "other red oaks" group.

**Select white oaks.** A group of several white oak species composed of white, swamp chestnut, swamp white, chinkapin, Durand, and bur oaks. Other white oak species are included in the "other white oaks" group.

**Softwoods.** Coniferous trees, usually evergreen, having leaves that are needles or scale like.

**Standard cord.** A unit of measure applied to roundwood, usually bolts or split wood. It is a stack of wood 4 feet high, 4 feet wide, and 8 feet long encompassing 128 cubic feet of wood, bark, and air space. This usually translates to approximately 75.0 to 81.0 cubic feet of solid wood for pulpwood, because pulpwood is more uniform.

**Standard unit.** A unit measure applied to roundwood timber products. Board feet (International ¼-inch rule) is the standard unit used for saw logs and veneer; cords are used for pulpwood, composite panel, and fuelwood; hundred pieces for poles; thousand pieces for posts; and thousand cubic feet for all other miscellaneous forest products.

**Timberland.** Forest land capable of producing 20 cubic feet of industrial wood per acre per year and not withdrawn from timber utilization.

**Timber product output.** The total volume of roundwood products from all sources plus the volume of byproducts recovered from mill residues (equals roundwood product drain).

**Timber products.** Roundwood products and byproducts.

**Timber removals.** The total volume of trees removed from the timberland inventory by harvesting, cultural operations such as stand improvement, land clearing, or changes in land use. (Note: Includes roundwood products, logging residues, and other removals.)

**Tree.** Woody plants having one erect perennial stem or trunk at least 3 inches d.b.h., a more or less definitely formed crown of foliage, and a height of at least 13 feet (at maturity).

**Upper-stem portion.** The part of the main stem of sawtimber trees above the saw-log top and the minimum top diameter of 4.0 inches outside bark, or to the point where the main stem breaks into limbs.

**Utilization studies.** Studies conducted on active logging operations to develop factors for merchantable portions of trees left in the woods (logging residues), logging damage, and utilization of the unmerchantable portion of growing-stock trees and nongrowing-stock trees.

**Veneer log.** A roundwood product either rotary cut, sliced, stamped, or sawn into a variety of veneer products such as plywood, finished panels, veneer sheets, or sheathing.

**Weight.** A unit of measure for mill residues, expressed as oven-dry tons (2,000 oven-dry pounds).

### Conversion Factors<sup>a</sup>

Saw logs	
Softwood	0.18349 cubic foot = 1 board foot 5.45 board feet = 1 cubic foot
Hardwood	0.16807 cubic foot = 1 board foot 5.95 board feet = 1 cubic foot
Veneer logs	
Softwood	0.17094 cubic foot = 1 board foot 5.85 board feet = 1 cubic foot
Hardwood	0.16260 cubic foot = 1 board foot 6.15 board feet = 1 cubic foot
Pulpwood <sup>b</sup>	
Softwood	72.6 cubic feet per cord
Hardwood	75.0 cubic feet per cord

<sup>a</sup> Conversion factors vary with stem size (d.b.h.) and species. The factors shown are for trees of average diameters removed in Georgia during the most recent survey period.

<sup>b</sup> Cubic feet of solid wood per cord.

## Species List<sup>a</sup>

Common name	Scientific name <sup>b</sup>	Common name	Scientific name <sup>b</sup>
<b>Softwoods</b>		<b>Hardwoods (continued)</b>	
Atlantic white-cedar	<i>Chamaecyparis thyoides</i> (L.) B.S.P.	Sweetgum	<i>Liquidambar styraciflua</i> L.
Southern redcedar	<i>Juniperus silicicola</i> (Small) Bailey	Yellow-poplar	<i>Liriodendron tulipifera</i> L.
Eastern redcedar	<i>J. virginiana</i> L.	Osage-orange	<i>Maclura pomifera</i> (Raf.) Schneid.
Shortleaf pine	<i>Pinus echinata</i> Mill.	Cucumbertree	<i>Magnolia acuminata</i> L.
Slash pine	<i>P. elliottii</i> Engelm.	Southern magnolia	<i>M. grandiflora</i> L.
Spruce pine	<i>P. glabra</i> Walt.	Bigleaf magnolia	<i>M. macrophylla</i> Michx.
Longleaf pine	<i>P. palustris</i> Mill.	Sweetbay	<i>M. virginiana</i> L.
Loblolly pine	<i>P. taeda</i> L.	Apple	<i>Malus</i> spp. Mill.
Virginia pine	<i>P. virginiana</i> Mill.	Chinaberry	<i>Melia azedarach</i> L.
Baldcypress	<i>Taxodium distichum</i> (L.) Rich.	White mulberry	<i>Morus alba</i> L.
<b>Hardwoods</b>		Red mulberry	<i>M. rubra</i> L.
Florida maple	<i>Acer barbatum</i> Michx.	Water tupelo	<i>Nyssa aquatica</i> L.
Boxelder	<i>A. negundo</i> L.	Blackgum	<i>N. sylvatica</i> Marsh.
Red maple	<i>A. rubrum</i> L.	Swamp tupelo	<i>N. sylvatica</i> var. <i>biflora</i> (Walt.) Sarg.
Silver maple	<i>A. saccharinum</i> L.	Eastern hophornbeam	<i>Ostrya virginiana</i> (Mill.) K. Koch
Sugar maple	<i>A. saccharum</i> Marsh.	Sourwood	<i>Oxydendrum arboreum</i> (L.) DC.
Buckeye	<i>Aesculus</i> spp. L.	Redbay	<i>Persea borbonia</i> (L.) Spreng.
Ailanthus	<i>Ailanthus altissima</i> (Mill.) Swingle	American sycamore	<i>Platanus occidentalis</i> L.
Tung-oil tree	<i>Aleurites fordii</i> Hemsl.	Cottonwood	<i>Populus</i> spp. L.
Serviceberry	<i>Amelanchier</i> spp. Medic.	Black cherry	<i>Prunus serotina</i> Ehrh.
River birch	<i>Betula nigra</i> L.	White oak	<i>Quercus alba</i> L.
American hornbeam	<i>Carpinus caroliniana</i> Walt.	Scarlet oak	<i>Q. coccinea</i> Muenchh.
Hickory	<i>Carya</i> spp. Nutt.	Southern red oak	<i>Q. falcata</i> Michx.
Water hickory	<i>C. aquatica</i> (Michx. f.) Nutt.	Cherrybark oak	<i>Q. falcata</i> var. <i>pagodifolia</i> Ell.
Bitternut hickory	<i>C. cordiformis</i> (Wangenh.) K. Koch	Bluejack oak	<i>Q. incana</i> Bartr.
Pignut hickory	<i>C. glabra</i> (Mill.) Sweet	Turkey oak	<i>Q. laevis</i> Walt.
Pecan	<i>C. illinoensis</i> (Wangenh.) K. Koch	Laurel oak	<i>Q. laurifolia</i> Michx.
Shellbark hickory	<i>C. laciniosa</i> (Michx. f.) Loud.	Overcup oak	<i>Q. lyrata</i> Walt.
Nutmeg hickory	<i>C. myristiciformis</i> (Michx. f.) Nutt.	Swamp chestnut oak	<i>Q. michauxii</i> Nutt.
Shagbark hickory	<i>C. ovata</i> (Mill.) K. Koch	Chinkapin oak	<i>Q. muehlenbergii</i> Engelm.
Black hickory	<i>C. texana</i> Buckl.	Water oak	<i>Q. nigra</i> L.
Mockernut hickory	<i>C. tomentosa</i> (Poir.) Nutt.	Nuttall oak	<i>Q. nuttallii</i> Palmer
Allegheny chinkapin	<i>Castanea pumila</i> Mill.	Oglethorpe oak	<i>Q. oglethorpensis</i> Duncan
Chinkapin	<i>Castanopsis</i> (D. Don) Spach	Pin oak	<i>Q. palustris</i> Muenchh.
Catalpa	<i>Catalpa</i> spp. Scop.	Willow oak	<i>Q. phellos</i> L.
Sugarberry	<i>Celtis laevigata</i> Willd.	Chestnut oak	<i>Q. prinus</i> L.
Hackberry	<i>C. occidentalis</i> L.	Northern red oak	<i>Q. rubra</i> L.
Eastern redbud	<i>Cercis canadensis</i> L.	Shumard oak	<i>Q. shumardii</i> Buckl.
Flowering dogwood	<i>Cornus florida</i> L.	Post oak	<i>Q. stellata</i> Wangenh.
Hawthorn	<i>Crataegus</i> spp. L.	Black oak	<i>Q. velutina</i> Lam.
Common persimmon	<i>Diospyros virginiana</i> L.	Live oak	<i>Q. virginiana</i> Mill.
American beech	<i>Fagus grandifolia</i> Ehrh.	Black locust	<i>Robinia pseudoacacia</i> L.
White ash	<i>Fraxinus americana</i> L.	Willow	<i>Salix</i> spp. L.
Pumpkin ash	<i>F. profunda</i> (Bush) Bush	Sassafras	<i>Sassafras albidum</i> (Nutt.) Nees
Blue ash	<i>F. quadrangulata</i> Michx.	American basswood	<i>Tilia americana</i> L.
Waterlocust	<i>Gleditsia aquatica</i> Marsh.	White basswood	<i>T. heterophylla</i> Vent.
Honeylocust	<i>G. triacanthos</i> L.	Winged elm	<i>Ulmus alata</i> Michx.
Loblolly-bay	<i>Gordonia lasianthus</i> (L.) Ellis	American elm	<i>U. americana</i> L.
American holly	<i>Ilex opaca</i> Ait.	Slippery elm	<i>U. rubra</i> Muhl.
Black walnut	<i>Juglans nigra</i> L.	September elm	<i>U. serotina</i> Sarg.

<sup>a</sup> Common and scientific names of tree species  $\geq 1.0$  inch d.b.h. occurring in the FIA sample.

<sup>b</sup> Little (1979).

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**Table A.1—Output of industrial products by product and species group, Georgia, 2005 and 2007**

Product and species group	Year		Change	Change
	2005	2007		
	<i>----- thousand cubic feet -----</i>			<i>percent</i>
Saw logs				
Softwood	394,723	352,142	-42,581	-10.8
Hardwood	63,480	59,543	-3,937	-6.2
Total	458,203	411,685	-46,518	-10.2
Veneer logs				
Softwood	66,742	57,684	-9,058	-13.6
Hardwood	7,660	5,804	-1,856	-24.2
Total	74,402	63,488	-10,914	-14.7
Pulpwood <sup>a</sup>				
Softwood	455,654	507,960	52,306	11.5
Hardwood	87,174	102,767	15,593	17.9
Total	542,828	610,727	67,899	12.5
Composite panels				
Softwood	56,350	95,415	39,065	69.3
Hardwood	6,658	2,786	-3,872	-58.2
Total	63,008	98,201	35,193	55.9
Other industrial				
Softwood	25,926	25,106	-820	-3.2
Hardwood	904	609	-295	-32.6
Total	26,830	25,715	-1,115	-4.2
All industrial				
Softwood	999,395	1,038,307	38,912	3.9
Hardwood	165,876	171,509	5,633	3.4
Total	1,165,271	1,209,816	44,545	3.8

<sup>a</sup> Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (14,673,000 cubic feet in 2005 and 10,131,000 cubic feet in 2007).

**Table A.2—Roundwood receipts by product and species group, Georgia, 2005 and 2007**

Product and species group	Year		Change	Change
	2005	2007		
	<i>----- thousand cubic feet -----</i>			<i>percent</i>
Saw logs				
Softwood	410,456	367,556	-42,900	-10.5
Hardwood	66,253	62,066	-4,187	-6.3
Total	476,709	429,622	-47,087	-9.9
Veneer logs				
Softwood	61,420	52,242	-9,178	-14.9
Hardwood	16,484	12,272	-4,212	-25.6
Total	77,904	64,514	-13,390	-17.2
Pulpwood <sup>a</sup>				
Softwood	471,513	506,337	34,824	7.4
Hardwood	90,679	99,702	9,023	10.0
Total	562,192	606,039	43,847	7.8
Composite panels				
Softwood	57,815	87,360	29,545	51.1
Hardwood	7,090	3,122	-3,968	-56.0
Total	64,905	90,482	25,577	39.4
Other industrial				
Softwood	25,881	25,062	-819	-3.2
Hardwood	912	664	-248	-27.2
Total	26,793	25,726	-1,067	-4.0
Total output				
Softwood	1,027,085	1,038,557	11,472	1.1
Hardwood	181,418	177,826	-3,592	-2.0
Total	1,208,503	1,216,383	7,880	0.7

<sup>a</sup> Includes roundwood delivered to nonpulp mills, then chipped and sold to pulp mills (16,583,000 cubic feet in 2005 and 11,274,000 cubic feet in 2007).

**Table A.3—Number of primary wood-using plants by type of mill, Georgia, 1986 to 2007**

Type of mill	Year									
	1986	1989	1992	1995	1997	1999	2001	2003	2005	2007
	<i>number</i>									
Sawmills	239	172	178	144	129	129	118	122	115	105
Veneer mills	18	16	14	12	11	12	10	8	8	7
Pulpmills	15	14	13	14	13	12	13	12	12	12
Composite panel mills	0	3	4	5	5	4	4	4	4	4
Other mills	29	26	41	32	28	31	25	41	42	40
All plants	301	231	250	207	186	188	170	187	181	168

**Table A.4—Roundwood receipts by sawmill size, Georgia, 2005 and 2007**

Sawmill size class <sup>a</sup>	2005			2007		
	Mills	Volume		Mills	Volume	
<i>mmbf</i>	<i>number</i>	<i>mbf</i>	<i>percent</i>	<i>number</i>	<i>mbf</i>	<i>percent</i>
< 1.0	37	11,917	0	33	9,763	0
1.0–4.99	24	62,798	2	26	74,696	3
5.0–9.99	10	70,266	3	6	49,160	2
10.0–49.99	18	363,519	14	21	653,666	28
> 50	26	2,129,425	81	19	1,591,266	67
Total	115	2,637,925	100	105	2,378,551	100

<sup>a</sup> Based on volume received as opposed to actual capacity.

**Table A.5—Roundwood receipts by species and type of mill, Georgia, 2007**

Species	Type of mill						
	All mills	Sawmills	Veneer mills		OSB and panels	Pulpmills <sup>a</sup>	Other mills
			Pine plywood	Other veneer			
<i>thousand cubic feet</i>							
<b>Softwood</b>							
Yellow pine	521,526	358,520	39,376	12,866	87,360	NA	23,404
Eastern white pine	1,764	1,764	0	0	0	NA	0
Cedar	6	6	0	0	0	NA	0
Cypress	8,924	7,266	0	0	0	NA	1,658
Other softwood	0	0	0	0	0	NA	0
Unclassified	506,337	0	0	0	0	506,337	0
<b>Total softwoods</b>	<b>1,038,557</b>	<b>367,556</b>	<b>39,376</b>	<b>12,866</b>	<b>87,360</b>	<b>506,337</b>	<b>25,062</b>
<b>Hardwood</b>							
Blackgum-tupelo	2,867	2,433	0	434	0	NA	0
Soft maple	1,830	1,708	0	118	0	NA	4
Sweetgum	9,858	8,072	1,137	649	0	NA	0
Yellow-poplar	17,861	8,052	9,075	729	0	NA	5
Other soft hardwood	3,720	468	0	130	3,122	NA	0
Hickory	2,517	2,404	0	0	0	NA	113
Red oak	26,084	25,649	0	0	0	NA	435
White oak	10,297	10,193	0	0	0	NA	104
Other hard hardwood	3,090	3,087	0	0	0	NA	3
Unclassified	99,702	0	0	0	0	99,702	0
<b>Total hardwoods</b>	<b>177,826</b>	<b>62,066</b>	<b>10,212</b>	<b>2,060</b>	<b>3,122</b>	<b>99,702</b>	<b>664</b>
<b>All species</b>	<b>1,216,383</b>	<b>429,622</b>	<b>49,588</b>	<b>14,926</b>	<b>90,482</b>	<b>606,039</b>	<b>25,726</b>

NA = not applicable; OSB = oriented strand board.

<sup>a</sup> Collected only by softwood and hardwood and includes roundwood chipped.

**Table A.6—Industrial roundwood movement by year and species group, Georgia, 2005 and 2007**

Year	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>thousand cubic feet</i>					
<b>Softwood</b>					
2005	999,395	124,248	875,147	151,938	1,027,085
2007	1,038,307	155,374	882,933	155,624	1,038,557
<b>Hardwood</b>					
2005	165,876	26,526	139,350	42,068	181,418
2007	171,509	24,207	147,302	30,524	177,826
<b>All species</b>					
2005	1,165,271	150,774	1,014,497	194,006	1,208,503
2007	1,209,816	179,581	1,030,235	186,148	1,216,383

**Table A.7—Industrial roundwood movement by product and species group, Georgia, 2007**

Product and species group	Production	Exported to other States	Retained	Imported from other States	Receipts
<i>thousand cubic feet</i>					
Saw logs					
Softwood	352,142	27,005	325,137	42,419	367,556
Hardwood	59,543	1,988	57,555	4,511	62,066
Total	411,685	28,993	382,692	46,930	429,622
Veneer logs					
Softwood	57,684	11,681	46,003	6,239	52,242
Hardwood	5,804	642	5,162	7,110	12,272
Total	63,488	12,323	51,165	13,349	64,514
Pulpwood <sup>a</sup>					
Softwood	507,960	101,540	406,420	99,917	506,337
Hardwood	102,767	20,694	82,073	17,629	99,702
Total	610,727	122,234	488,493	117,546	606,039
Composite panels					
Softwood	95,415	13,388	82,027	5,333	87,360
Hardwood	2,786	883	1,903	1,219	3,122
Total	98,201	14,271	83,930	6,552	90,482
Other industrial					
Softwood	25,106	1,760	23,346	1,716	25,062
Hardwood	609	0	609	55	664
Total	25,715	1,760	23,955	1,771	25,726
All products					
Softwood	1,038,307	155,374	882,933	155,624	1,038,557
Hardwood	171,509	24,207	147,302	30,524	177,826
Total	1,209,816	179,581	1,030,235	186,148	1,216,383

<sup>a</sup> Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills.

**Table A.8—Saw-log volume by destination, source, and species group, Georgia, 2007**

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Georgia (retained)	382,692	325,137	57,555
Exports to			
Alabama	16,057	15,816	241
Florida	5,210	5,103	107
North Carolina	1,152	39	1,113
South Carolina	6,402	6,000	402
Tennessee	172	47	125
Total	28,993	27,005	1,988
Imports from			
Alabama	14,239	13,341	898
Florida	16,820	16,508	312
North Carolina	142	129	13
South Carolina	14,632	11,879	2,753
Tennessee	1,097	562	535
Total	46,930	42,419	4,511

**Table A.9—Veneer volume by destination, source, and species group, Georgia, 2007**

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Georgia (retained)	51,165	46,003	5,162
Exports to			
Alabama	3,626	3,544	82
Florida	8,123	8,123	0
North Carolina	189	14	175
South Carolina	385	0	385
Total	12,323	11,681	642
Imports from			
Alabama	1,447	666	781
Florida	4,642	4,185	457
Kentucky	3,428	0	3,428
North Carolina	512	327	185
Ohio	91	0	91
South Carolina	1,176	1,061	115
Tennessee	886	0	886
Virginia	1,167	0	1,167
Total	13,349	6,239	7,110

**Table A.10—Pulpwood volume by destination, source, and species group, Georgia, 2007<sup>a</sup>**

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Georgia (retained)	488,493	406,420	82,073
Exports to			
Alabama	46,312	33,559	12,753
Florida	42,404	42,404	0
Kentucky	712	502	210
North Carolina	461	142	319
Oklahoma	2,178	2,178	0
South Carolina	3,081	2,429	652
Tennessee	26,712	20,326	6,386
Virginia	374	0	374
Total	122,234	101,540	20,694
Imports from			
Alabama	38,591	34,841	3,750
Florida	40,361	35,952	4,409
North Carolina	36	0	36
South Carolina	38,447	29,124	9,323
Virginia	111	0	111
Total	117,546	99,917	17,629

<sup>a</sup> Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills.

**Table A.11—Composite panel volume by destination, source, and species group, Georgia, 2007**

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Georgia (retained)	83,930	82,027	1,903
Exports to			
Alabama	6,399	6,399	0
Florida	506	506	0
South Carolina	4,284	4,284	0
Tennessee	3,082	2,199	883
Total	14,271	13,388	883
Imports from			
Florida	5,408	4,189	1,219
South Carolina	1,144	1,144	0
Total	6,552	5,333	1,219

**Table A.12—Other industrial volume by destination, source, and species group, Georgia, 2007<sup>a</sup>**

Destination and source	All species	Species group	
		Softwood	Hardwood
<i>thousand cubic feet</i>			
Georgia (retained)	23,955	23,346	609
Exports to			
Alabama	132	132	0
Florida	923	923	0
Ohio	431	431	0
South Carolina	274	274	0
Total	1,760	1,760	0
Imports from			
Alabama	55	0	55
Florida	1,710	1,710	0
Tennessee	6	6	0
Total	1,771	1,716	55

<sup>a</sup> Includes poles, posts, mulch, firewood, log homes, charcoal, and all other industrial mills.

**Table A.13—Primary mill residue volume by roundwood type, species group, and residue type, Georgia, 2007**

Roundwood type and species group	All types	Residue type			
		Bark	Coarse	Sawdust	Shavings
<i>thousand cubic feet</i>					
Saw logs					
Softwood	222,885	32,572	104,032	54,205	32,076
Hardwood	38,556	7,093	18,200	13,027	236
Total	261,441	39,665	122,232	67,232	32,312
Veneer logs					
Softwood	31,632	4,956	13,167	13,509	0
Hardwood	8,076	1,447	2,889	3,740	0
Total	39,708	6,403	16,056	17,249	0
Pulpwood					
Softwood	51,528	51,528	0	0	0
Hardwood	12,088	12,088	0	0	0
Total	63,616	63,616	0	0	0
Composite panels					
Softwood	19,516	19,516	0	0	0
Hardwood	800	800	0	0	0
Total	20,316	20,316	0	0	0
Other industrial <sup>a</sup>					
Softwood	27,886	17,159	9,783	944	0
Hardwood	369	82	206	81	0
Total	28,255	17,241	9,989	1,025	0
Total					
Softwood	353,447	125,731	126,982	68,658	32,076
Hardwood	59,889	21,510	21,295	16,848	236
Total	413,336	147,241	148,277	85,506	32,312

<sup>a</sup> Includes poles, pilings, posts, and all other industrial products.

**Table A.14—Disposal of residue at primary wood-using plants by product, species group, and type of residue, Georgia, 2005 and 2007**

Product and species group	All types		Bark		Coarse		Sawdust		Shavings	
	2005	2007	2005	2007	2005	2007	2005	2007	2005	2007
<i>thousand cubic feet</i>										
Fiber products										
Softwood	125,522	104,363	0	0	117,749	102,556	2,502	0	5,271	1,807
Hardwood	16,455	11,489	0	0	16,455	11,489	0	0	0	0
Total	141,977	115,852	0	0	134,204	114,045	2,502	0	5,271	1,807
Particleboard										
Softwood	36,175	31,131	143	0	7,584	1,957	6,452	7,003	21,996	22,171
Hardwood	110	0	91	0	0	0	0	0	19	0
Total	36,285	31,131	234	0	7,584	1,957	6,452	7,003	22,015	22,171
Sawn products										
Softwood	7,406	5,404	0	14	7,406	5,390	0	0	0	0
Hardwood	146	33	0	0	146	33	0	0	0	0
Total	7,552	5,437	0	14	7,552	5,423	0	0	0	0
Industrial fuel										
Softwood	150,970	165,710	88,953	96,328	2,420	9,845	55,313	53,453	4,284	6,084
Hardwood	40,414	35,613	19,677	18,690	3,982	2,195	16,684	14,507	71	221
Total	191,384	201,323	108,630	115,018	6,402	12,040	71,997	67,960	4,355	6,305
Miscellaneous										
Softwood	49,820	46,729	28,092	29,373	7,371	7,190	11,247	8,152	3,110	2,014
Hardwood	5,751	12,279	2,747	2,800	814	7,528	2,180	1,936	10	15
Total	55,571	59,008	30,839	32,173	8,185	14,718	13,427	10,088	3,120	2,029
Not used										
Softwood	4,929	110	1,371	16	40	44	2,200	50	1,318	0
Hardwood	224	475	14	20	38	50	172	405	0	0
Total	5,153	585	1,385	36	78	94	2,372	455	1,318	0
All products										
Softwood	374,822	353,447	118,559	125,731	142,570	126,982	77,714	68,658	35,979	32,076
Hardwood	63,100	59,889	22,529	21,510	21,435	21,295	19,036	16,848	100	236
Total	437,922	413,336	141,088	147,241	164,005	148,277	96,750	85,506	36,079	32,312

**Table A.15—Roundwood timber product output by county, product, and species group, Georgia, 2007**

County	All products		Saw logs		Veneer logs		Pulpwood <sup>a</sup>		Composite panels		Other industrial	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
	<i>thousand cubic feet</i>											
Appling	14,187	1,676	4,024	522	0	0	9,925	1,154	0	0	238	0
Atkinson	3,861	1,256	1,376	456	0	0	2,220	769	107	31	158	0
Bacon	9,033	1,027	2,639	522	0	0	6,050	505	0	0	344	0
Baker	2,101	114	0	0	231	0	1,678	114	0	0	192	0
Baldwin	3,504	744	1,163	146	942	3	1,399	595	0	0	0	0
Banks	1,224	2,117	287	1,538	395	6	220	573	322	0	0	0
Barrow	1,197	97	131	0	498	3	84	94	484	0	0	0
Bartow	6,939	759	1,541	175	801	0	4,597	584	0	0	0	0
Ben Hill	10,274	394	2,412	360	837	0	261	34	6,453	0	311	0
Berrien	7,472	1,123	4,849	353	163	0	1,056	583	644	187	760	0
Bibb	1,600	1,508	351	464	157	0	1,092	1,044	0	0	0	0
Bleckley	4,589	1,134	1,775	802	0	0	2,794	332	0	0	20	0
Brantley	18,620	557	5,852	313	163	0	11,810	244	0	0	795	0
Brooks	7,102	187	3,613	0	0	0	2,055	0	644	187	790	0
Bryan	7,217	1,041	3,842	313	0	0	3,309	728	0	0	66	0
Bulloch	11,643	1,955	6,376	525	0	190	5,058	1,240	0	0	209	0
Burke	18,022	4,422	5,173	129	0	50	11,402	4,243	1,341	0	106	0
Butts	2,171	979	1,097	886	471	3	603	90	0	0	0	0
Calhoun	1,792	259	0	0	0	130	1,792	129	0	0	0	0
Camden	22,234	921	6,866	313	628	21	14,662	587	0	0	78	0
Candler	5,109	354	1,247	0	0	0	3,801	354	0	0	61	0
Carroll	4,765	721	1,185	361	636	187	2,944	173	0	0	0	0
Catoosa	704	386	243	34	0	0	449	352	0	0	12	0
Charlton	25,384	241	5,279	0	163	0	19,419	241	0	0	523	0
Chatham	3,712	1,083	1,903	51	0	0	1,806	1,032	0	0	3	0
Chattahoochee	3,012	778	2,114	346	0	0	898	432	0	0	0	0
Chattooga	2,944	578	872	395	0	0	2,015	183	0	0	57	0
Cherokee	3,609	901	423	133	684	97	2,502	671	0	0	0	0
Clarke	208	1,376	22	1,190	177	0	9	186	0	0	0	0
Clay	3,843	216	264	0	0	0	3,579	216	0	0	0	0
Clayton	279	880	97	730	157	0	25	150	0	0	0	0
Clinch	19,912	3,134	8,092	313	0	0	7,947	2,415	1,396	406	2,477	0
Cobb	504	54	97	25	237	11	170	8	0	0	0	10
Coffee	11,143	882	5,941	561	837	0	3,782	321	0	0	583	0
Colquitt	8,736	599	5,074	69	139	196	2,693	178	537	156	293	0
Columbia	6,002	578	4,833	89	341	0	792	489	0	0	36	0
Cook	3,971	260	2,895	0	0	0	438	167	322	93	316	0
Coweta	5,856	539	1,464	0	998	289	2,498	250	896	0	0	0
Crawford	7,279	782	2,344	350	314	3	4,621	429	0	0	0	0
Crisp	4,274	380	2,239	108	0	0	1,218	272	430	0	387	0
Dade	34	83	28	4	0	0	0	79	0	0	6	0
Dawson	850	251	349	217	0	6	501	28	0	0	0	0
Decatur	7,664	806	2,030	177	1,043	163	4,102	466	253	0	236	0
De Kalb	760	78	97	42	170	12	332	24	161	0	0	0

*continued*

**Table A.15—Roundwood timber product output by county, product, and species group, Georgia, 2007 (continued)**

County	All products		Saw logs		Veneer logs		Pulpwood <sup>a</sup>		Composite panels		Other industrial	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
	<i>thousand cubic feet</i>											
Dodge	14,704	2,131	5,948	981	0	0	7,279	1,150	1,290	0	187	0
Dooly	5,229	854	1,156	343	0	0	3,213	511	860	0	0	0
Dougherty	1,310	531	250	69	0	0	1,060	411	0	0	0	51
Douglas	580	336	8	207	66	11	506	118	0	0	0	0
Early	4,191	754	739	0	233	259	3,099	495	0	0	120	0
Echols	6,193	547	2,063	0	0	0	2,810	266	966	281	354	0
Effingham	13,646	3,790	5,908	321	0	42	7,615	3,427	0	0	123	0
Elbert	6,189	1,478	1,003	557	565	3	156	918	4,465	0	0	0
Emanuel	19,601	1,403	7,195	57	0	21	12,074	1,325	0	0	332	0
Evans	4,471	935	1,919	587	0	21	2,468	327	0	0	84	0
Fannin	964	418	564	216	0	6	400	168	0	0	0	28
Fayette	1,072	1,300	0	730	133	22	38	186	901	362	0	0
Floyd	6,351	3,074	1,668	325	985	87	3,687	2,662	0	0	11	0
Forsyth	986	484	120	104	498	100	207	270	161	0	0	10
Franklin	1,285	1,081	171	197	224	72	13	812	877	0	0	0
Fulton	1,619	925	945	428	370	110	304	380	0	0	0	7
Gilmer	1,272	681	704	479	0	0	568	202	0	0	0	0
Glascocok	2,120	775	728	326	327	0	907	449	0	0	158	0
Glynn	12,280	159	5,738	0	302	0	6,240	159	0	0	0	0
Gordon	3,783	692	834	307	0	0	2,939	385	0	0	10	0
Grady	6,314	2,054	2,046	0	1,901	196	1,880	1,858	253	0	234	0
Greene	9,646	714	2,962	153	3,069	0	1,213	561	2,367	0	35	0
Gwinnett	2,570	1,230	4	653	1,578	106	666	471	322	0	0	0
Habersham	3,239	1,488	906	489	385	3	1,304	740	637	256	7	0
Hall	1,504	404	426	131	239	0	342	273	497	0	0	0
Hancock	14,171	1,394	5,863	646	2,552	0	4,817	748	806	0	133	0
Haralson	4,025	659	1,006	118	407	87	2,612	445	0	0	0	9
Harris	5,945	1,244	1,506	279	466	156	3,973	809	0	0	0	0
Hart	1,246	394	3	188	224	0	361	206	658	0	0	0
Heard	6,014	192	1,381	0	332	133	3,405	59	896	0	0	0
Henry	1,827	2,248	778	1,513	447	0	441	735	161	0	0	0
Houston	3,665	1,411	1,304	820	0	0	2,361	591	0	0	0	0
Irwin	10,460	530	4,007	70	837	0	401	335	4,731	125	484	0
Jackson	3,080	976	64	11	565	18	219	947	2,232	0	0	0
Jasper	6,856	2,585	2,174	679	1,269	1,011	2,929	895	484	0	0	0
Jeff Davis	8,771	1,061	2,181	313	837	0	5,643	748	0	0	110	0
Jefferson	9,451	1,054	2,756	372	327	0	5,916	682	0	0	452	0
Jenkins	11,532	1,449	3,110	314	0	0	7,706	1,135	691	0	25	0
Johnson	6,251	1,841	2,190	685	0	0	3,902	1,156	0	0	159	0
Jones	10,170	1,557	2,900	410	2,198	6	5,072	1,141	0	0	0	0
Lamar	1,393	1,612	965	347	0	0	428	1,265	0	0	0	0
Lanier	2,004	1,815	506	1,410	0	0	730	280	429	125	339	0
Laurens	17,113	4,292	7,378	1,902	0	0	9,612	2,390	0	0	123	0
Lee	2,315	558	1,023	0	0	11	1,292	446	0	0	0	101

*continued*

**Table A.15—Roundwood timber product output by county, product, and species group, Georgia, 2007 (continued)**

County	All products		Saw logs		Veneer logs		Pulpwood <sup>a</sup>		Composite panels		Other industrial	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
<i>thousand cubic feet</i>												
Liberty	9,720	1,837	4,573	530	0	0	4,800	1,307	0	0	347	0
Lincoln	5,604	521	2,484	32	430	0	1,622	489	968	0	100	0
Long	14,927	1,730	5,463	922	0	42	9,019	766	0	0	445	0
Lowndes	8,060	586	2,955	0	302	0	3,607	367	751	219	445	0
Lumpkin	1,076	292	471	257	0	0	605	35	0	0	0	0
Macon	5,079	846	0	277	0	11	3,789	558	1,290	0	0	0
Madison	1,936	2,969	218	42	530	3	469	2,924	645	0	74	0
Marion	9,806	1,190	4,894	542	0	11	4,912	586	0	0	0	51
McDuffie	4,819	621	1,743	354	1,520	0	826	267	645	0	85	0
McIntosh	19,323	776	5,505	0	0	0	13,336	776	0	0	482	0
Meriwether	9,317	911	2,578	0	665	179	2,363	732	3,711	0	0	0
Miller	1,466	257	0	0	394	0	908	257	0	0	164	0
Mitchell	7,214	223	2,264	69	579	0	1,691	61	2,473	93	207	0
Monroe	7,861	1,375	3,451	467	628	6	3,782	902	0	0	0	0
Montgomery	6,976	2,440	2,139	1,549	0	42	4,631	849	0	0	206	0
Morgan	3,357	1,384	866	336	1,722	263	447	785	322	0	0	0
Murray	2,530	1,717	519	297	0	0	2,001	1,420	0	0	10	0
Muscogee	2,641	172	2,396	0	66	11	179	161	0	0	0	0
Newton	2,328	393	423	95	798	0	785	298	322	0	0	0
Oconee	1,415	1,266	142	991	601	0	27	275	645	0	0	0
Oglethorpe	9,561	1,218	2,885	902	1,562	0	246	316	4,626	0	242	0
Paulding	6,775	1,647	1,000	110	1,459	187	3,657	1,059	659	265	0	26
Peach	1,106	46	97	0	0	0	1,009	46	0	0	0	0
Pickens	2,633	350	227	141	157	0	2,249	209	0	0	0	0
Pierce	9,871	1,572	4,934	522	0	0	3,897	1,050	0	0	1,040	0
Pike	1,417	619	737	480	66	0	614	139	0	0	0	0
Polk	4,477	506	1,455	64	170	0	2,841	442	0	0	11	0
Pulaski	3,326	1,721	896	1,293	0	0	2,000	428	430	0	0	0
Putnam	7,087	725	2,803	76	1,767	3	1,872	646	645	0	0	0
Quitman	2,434	130	264	0	0	0	2,170	130	0	0	0	0
Rabun	268	628	181	548	0	0	87	80	0	0	0	0
Randolph	13,481	902	5,130	0	0	130	8,351	772	0	0	0	0
Richmond	5,294	847	2,562	34	0	0	2,696	813	0	0	36	0
Rockdale	498	36	97	30	314	6	87	0	0	0	0	0
Schley	6,471	202	2,939	177	0	0	3,532	25	0	0	0	0
Screven	19,958	2,595	6,681	27	0	208	11,067	2,360	2,032	0	178	0
Seminole	1,942	151	1,182	72	0	0	532	79	0	0	228	0
Spalding	738	41	97	3	513	14	128	24	0	0	0	0
Stephens	772	615	386	261	89	72	116	282	174	0	7	0
Stewart	12,780	1,694	5,051	438	0	19	7,729	1,237	0	0	0	0
Sumter	9,399	823	1,347	276	0	11	7,622	334	430	0	0	202
Talbot	8,581	1,600	2,731	351	199	45	5,651	1,204	0	0	0	0
Taliaferro	6,488	565	1,598	329	691	0	1,281	236	2,905	0	13	0
Tattnall	9,747	2,239	3,483	1,462	0	21	6,098	756	0	0	166	0

*continued*

**Table A.15—Roundwood timber product output by county, product, and species group, Georgia, 2007 (continued)**

County	All products		Saw logs		Veneer logs		Pulpwood <sup>a</sup>		Composite panels		Other industrial	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
	<i>thousand cubic feet</i>											
Taylor	6,366	1,711	870	1,035	0	11	5,496	665	0	0	0	0
Telfair	24,807	2,355	4,641	1,596	837	0	3,862	759	15,057	0	410	0
Terrell	3,072	164	4	0	0	0	3,068	113	0	0	0	51
Thomas	12,553	217	4,766	69	1,878	0	4,219	148	0	0	1,690	0
Tift	4,729	767	3,216	383	0	0	148	384	1,290	0	75	0
Toombs	13,300	2,104	3,388	922	0	106	9,669	1,076	0	0	243	0
Towns	70	311	0	257	0	0	70	54	0	0	0	0
Treutlen	6,081	599	1,645	0	0	21	4,063	578	0	0	373	0
Troup	4,956	2,804	1,368	0	998	301	1,694	2,503	896	0	0	0
Turner	2,304	195	1,233	30	0	0	849	165	0	0	222	0
Twiggs	6,131	2,109	2,118	1,013	157	0	3,843	1,096	0	0	13	0
Union	961	364	330	181	0	30	631	141	0	0	0	12
Upson	5,269	1,028	1,739	333	0	11	3,530	684	0	0	0	0
Walker	1,463	802	174	324	170	0	990	478	0	0	129	0
Walton	2,354	210	492	102	1,494	6	46	102	322	0	0	0
Ware	27,707	1,276	7,691	313	0	0	16,649	963	0	0	3,367	0
Warren	6,614	1,051	2,005	294	668	0	2,778	757	968	0	195	0
Washington	12,724	3,572	5,705	1,411	628	3	6,126	2,158	0	0	265	0
Wayne	15,396	1,288	3,959	0	0	0	11,104	1,288	0	0	333	0
Webster	7,511	1,232	2,754	279	0	11	4,327	891	430	0	0	51
Wheeler	5,601	2,730	2,825	2,067	0	0	2,667	663	0	0	109	0
White	986	164	894	155	45	6	47	3	0	0	0	0
Whitfield	3,420	1,036	646	438	0	0	2,774	598	0	0	0	0
Wilcox	14,696	1,345	3,731	969	0	0	2,105	376	8,604	0	256	0
Wilkes	17,639	1,544	6,720	549	2,912	0	2,414	995	5,501	0	92	0
Wilkinson	11,834	3,611	5,911	1,320	157	0	5,766	2,291	0	0	0	0
Worth	6,460	622	3,871	398	0	163	2,278	61	0	0	311	0
All counties	1,038,307	171,509	352,142	59,543	57,684	5,804	507,960	102,767	95,415	2,786	25,106	609

<sup>a</sup> Includes roundwood delivered to nonpulp mills, then chipped and sold to pulpmills (10,131,000 cubic feet in 2007).

**Table A.16—Total roundwood output by product, species group, and source of material, Georgia, 2007**

Product and species group	All sources	Total	Growing-stock trees		Other sources
			Sawtimber	Poletimber	
<i>thousand cubic feet</i>					
Saw logs					
Softwood	352,142	344,744	324,818	19,926	7,398
Hardwood	59,543	58,233	54,848	3,385	1,310
Total	411,685	402,978	379,666	23,312	8,707
Veneer logs and bolts					
Softwood	57,684	56,531	55,909	622	1,153
Hardwood	5,804	5,729	5,672	56	75
Total	63,488	62,260	61,581	678	1,228
Pulpwood					
Softwood	507,960	480,873	204,617	276,255	27,087
Hardwood	102,767	93,491	34,531	58,960	9,276
Total	610,727	574,364	239,149	335,215	36,363
Composite panels					
Softwood	95,415	88,388	36,238	52,150	7,027
Hardwood	2,786	2,551	1,020	1,530	235
Total	98,201	90,938	37,258	53,680	7,263
Poles and posts					
Softwood	16,001	15,632	14,751	881	369
Hardwood	0	0	0	0	0
Total	16,001	15,632	14,751	881	369
Other miscellaneous					
Softwood	9,105	8,895	5,193	3,701	210
Hardwood	609	518	302	216	91
Total	9,714	9,412	5,495	3,917	302
Total industrial products					
Softwood	1,038,307	995,062	641,527	353,535	43,245
Hardwood	171,509	160,521	96,373	64,148	10,988
Total	1,209,816	1,155,583	737,900	417,683	54,233
Domestic fuelwood					
Softwood	4,389	3,160	2,214	946	1,229
Hardwood	37,632	28,236	21,667	6,569	9,396
Total	42,021	31,396	23,882	7,514	10,625
All products					
Softwood	1,042,696	998,222	643,741	354,481	44,474
Hardwood	209,141	188,757	118,041	70,716	20,384
Total	1,251,837	1,186,979	761,782	425,197	64,858

Numbers in rows and columns may not sum to totals due to rounding.

**Table A.17—Total roundwood output by species group, survey region, and ownership class, Georgia, 2007**

Species group and survey region	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
<i>thousand cubic feet</i>				
<b>Softwoods</b>				
Southeast	451,935	10,438	214,516	226,981
Southwest	139,805	1,342	14,544	123,919
Central	314,372	9,147	94,175	211,050
North Central	91,528	43	18,863	72,623
North	45,056	605	12,835	31,616
Total softwoods	1,042,696	21,575	354,933	666,188
<b>Hardwoods</b>				
Southeast	67,406	5,203	9,122	53,081
Southwest	17,353	1,016	337	16,001
Central	69,316	1,202	11,497	56,617
North Central	36,055	75	1,250	34,730
North	19,011	418	921	17,673
Total hardwoods	209,141	7,913	23,126	178,102
All species	1,251,837	29,488	378,059	844,290

Numbers in rows and columns may not sum to totals due to rounding.

**Table A.18—Total roundwood output by species group, detailed species group, and product, Georgia, 2007**

Species group and detailed species group	Total	Product						
		Saw logs	Veneer logs	Pulpwood	Composite panels	Poles and posts	Other miscellaneous	Domestic fuelwood
<i>thousand cubic feet</i>								
<b>Softwood</b>								
Cedar	563	167	60	281	48	4	2	2
Longleaf-slash pine	339,367	118,811	5,957	175,486	23,976	8,758	4,950	1,428
Eastern white pine	4,441	1,648	340	1,867	561	6	0	19
Loblolly-shortleaf pine	645,351	215,920	48,771	299,203	68,508	6,692	3,542	2,717
Other yellow pines	40,530	11,516	2,472	23,633	1,939	295	505	171
Cypress	12,433	4,076	84	7,487	382	246	107	52
Hemlock	11	4	1	5	2	0	0	0
<b>Total softwoods</b>	<b>1,042,696</b>	<b>352,142</b>	<b>57,684</b>	<b>507,960</b>	<b>95,415</b>	<b>16,001</b>	<b>9,105</b>	<b>4,389</b>
<b>Hardwood</b>								
Soft maple	11,499	2,969	153	6,031	225	0	51	2,069
Hard maple	649	191	4	337	0	0	0	117
Hickory	3,757	1,032	101	1,910	28	0	10	676
Beech	84	7	3	56	3	0	0	15
Ash	2,066	653	66	975	0	0	0	372
Black walnut	237	27	6	161	0	0	0	43
Sweetgum	45,655	13,228	1,928	21,836	356	0	91	8,216
Yellow-poplar	22,934	7,508	831	9,967	429	0	72	4,126
Blackgum-tupelo	22,787	6,516	258	11,417	448	0	47	4,101
Sycamore	64	9	2	42	0	0	0	11
Black cherry	2,880	829	67	1,432	30	0	3	518
Select white oaks	11,712	3,269	312	5,874	138	0	11	2,108
Other white oaks	10,218	4,145	206	3,731	282	0	15	1,838
Select red oaks	1,717	505	86	816	0	0	0	309
Other red oaks	61,050	15,680	1,526	32,014	657	0	190	10,983
Basswood	685	169	29	363	0	0	0	123
Elm	3,363	917	12	1,807	22	0	0	605
Other eastern hardwoods	7,783	1,888	213	3,997	167	0	117	1,401
<b>Total hardwoods</b>	<b>209,141</b>	<b>59,543</b>	<b>5,804</b>	<b>102,767</b>	<b>2,786</b>	<b>0</b>	<b>609</b>	<b>37,632</b>
<b>All species</b>	<b>1,251,837</b>	<b>411,685</b>	<b>63,488</b>	<b>610,727</b>	<b>98,201</b>	<b>16,001</b>	<b>9,714</b>	<b>42,021</b>

Numbers in rows and columns may not sum to totals due to rounding.

**Table A.19—Total roundwood output by species group, detailed species group, and ownership class, Georgia, 2007**

Species group and detailed species group	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
<i>thousand cubic feet</i>				
Softwood				
Cedar	563	1	56	506
Longleaf-slash pine	339,367	5,250	133,464	200,653
Eastern white pine	4,441	117	16	4,308
Loblolly-shortleaf pine	645,351	15,311	203,216	426,824
Other yellow pines	40,530	743	12,033	27,754
Cypress	12,433	152	6,148	6,133
Hemlock	11	0	0	11
Total softwoods	1,042,696	21,575	354,933	666,188
Hardwood				
Soft maple	11,499	847	674	9,978
Hard maple	649	0	60	589
Hickory	3,757	99	216	3,442
Beech	84	1	0	82
Ash	2,066	1	501	1,565
Black walnut	237	0	26	212
Sweetgum	45,655	1,264	5,327	39,065
Yellow-poplar	22,934	281	2,185	20,468
Blackgum-tupelo	22,787	1,695	3,499	17,594
Sycamore	64	0	37	27
Black cherry	2,880	69	450	2,361
Select white oaks	11,712	136	1,670	9,906
Other white oaks	10,218	148	890	9,181
Select red oaks	1,717	1	10	1,706
Other red oaks	61,050	2,854	5,721	52,475
Basswood	685	0	169	516
Elm	3,363	136	599	2,629
Other eastern hardwoods	7,783	382	1,093	6,308
Total hardwoods	209,141	7,913	23,126	178,102
All species	1,251,837	29,488	378,059	844,290

Numbers in rows and columns may not sum to totals due to rounding.

**Schiller, James R.; McClure, Nathan; Willard, Risher A.** 2009. Georgia's timber industry—an assessment of timber product output and use, 2007. Resour. Bull. SRS-161. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 35 p.

In 2007, industrial roundwood output from Georgia's forests totaled 1.21 billion cubic feet, 4 percent more than in 2005. Mill byproducts generated from primary manufacturers decreased 5.6 percent to 413 million cubic feet. Almost all plant residues were used primarily for fuel and fiber products. Pulpwood was the leading roundwood product at 611 million cubic feet; saw logs ranked second at 412 million cubic feet; composite panel third at 98 million cubic feet. The number of primary processing plants was down from 181 in 2005 to 168 in 2007. Total receipts increased slightly from 1.21 billion cubic feet in 2005 to 1.22 billion cubic feet in 2007.

**Keywords:** FIA, pulpwood, residues, roundwood, saw logs, veneer logs, wood movement.



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GAINESVILLE REGIONAL UTILITIES

2005 TEN-YEAR SITE PLAN



Submitted to:

The Florida Public Service Commission

April 2005

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## **1. INTRODUCTION**

The 2005 Ten-Year Site Plan for Gainesville Regional Utilities (GRU) is submitted to the Florida Public Service Commission pursuant to Section 186.801, Florida Statutes. The contents of this report conform to information requirements listed in Form PSC/EAG 43, as specified by Rule 25-22.072, Florida Administrative Code. The five sections of the 2005 Ten-Year Site Plan are:

Introduction

Description of Existing Facilities

Forecast of Electric Energy and Demand Requirements

Forecast of Facilities Requirements

Environmental and Land Use Information

Gainesville Regional Utilities is a municipal electric, natural gas, water, wastewater, and telecommunications utility system, owned and operated by the City of Gainesville, Florida. The GRU retail electric system service area includes the City of Gainesville and the surrounding urban area. The highest net integrated peak demand recorded to date on GRU's electrical system was 433 megawatts on July 17, 2002.

## 2. DESCRIPTION OF EXISTING FACILITIES

The City of Gainesville owns a fully vertically integrated electric power production, transmission, and distribution system (herein referred to as "the System"). GRU is the City of Gainesville enterprise arm that has the responsibility to operate and maintain the System. In addition to retail electric service, GRU also provides wholesale electric service to the City of Alachua (Alachua); Clay Electric Cooperative (Clay); and the City of Starke (Starke). GRU's distribution system serves approximately 127 square miles and 86,264 customers (2004 average). The general locations of GRU electric facilities and the electric system service area are shown in Figure 2.1.

### 2.1 GENERATION

The existing generating facilities operated by GRU are tabulated in Schedule 1, found at the end of this chapter. The present summer net capability is 611 MW and the winter net capability is 630 MW<sup>1</sup>. Currently, the System's energy is produced by three fossil fuel steam turbines, six simple-cycle combustion turbines, one combined-cycle unit, a 1.4% ownership share of the Crystal River 3 nuclear unit operated by Progress Energy Florida (PEF), and two internal combustion engines that run on landfill gas.

The System has two generating plant sites, Deerhaven and John R. Kelly (JRK). Each site utilizes both steam turbine and gas turbine generating units. The JRK station also utilizes a combined cycle unit. Additionally, two internal combustion engines located at the Alachua County Southwest Landfill provide 1.3 MW of generating capacity.

#### 2.1.1 Generating Units

**2.1.1.1 Steam Turbines.** The System's three operational simple-cycle steam turbines are powered by fossil fuels and Crystal River 3 is nuclear powered. The fossil

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<sup>1</sup> Net capability is that specified by the "SERC Guideline Number Two for Uniform Generator Ratings for Reporting." The winter rating will normally exceed the summer rating because generating plant efficiencies are increased by lower ambient air temperatures and lower cooling water temperatures.

fueled steam turbines comprise 54.7% of the System's net summer capability and produced 74.2% of the electric energy supplied by the System in 2004. These units range in size from 23.2 MW to 228.4 MW. The recently installed combined-cycle unit, which includes a heat recovery steam generator/turbine set, comprises 18.3% of the System's net summer capability and produced 18.9% of the electric energy supplied by the System in 2004. The System's 11.0 MW share of Crystal River 3 nuclear unit comprises 1.8% of the System's net summer capability and produced 5.6% of total electric energy in 2004. Deerhaven 2, and Crystal River 3 are used for base load purposes; while Kelly 7, Kelly CC1, and Deerhaven 1 are used for intermediate loading.

**2.1.1.2 Gas Turbines.** The System's seven industrial gas turbines make up 25.0% of the System's summer generating capability and produced 1.1% of the electric energy supplied by the System in 2004. Except for the turbine associated with the System's combined cycle unit, these units are utilized for peaking purposes only because their energy conversion efficiencies are considerably lower than steam units. As a result, they yield higher operating costs and are consequently unsuitable for base load operation. Gas turbines are advantageous in that they can be started and placed on line in thirty minutes or less. The System's gas turbines are most economically used as peaking units during high demand periods when base and intermediate units cannot serve all of the System loads.

**2.1.1.3 Internal Combustion (Piston/Diesel).** The System operates two internal combustion engines at the Southwest Landfill. Fueled by gas produced by the landfill, these units represent 0.2% of the System's summer capability and produced 0.2% of total energy in 2004. They are operated as continuously as possible.

**2.1.1.4 Environmental Considerations.** All of the System's steam turbines, except for Crystal River 3, utilize recirculating cooling towers with a mechanical draft for the cooling of condensed steam. Crystal River 3 uses a once-through cooling system aided by helper towers. Only Deerhaven 2 has flue gas cleaning equipment.

## **2.1.2 Generating Plant Sites**

The locations of the System's generating plant sites are shown on Figure 2.1.

**2.1.2.1 John R. Kelly Plant.** The Kelly Station is located in southeast Gainesville near the downtown business district and consists of one combined cycle, one steam turbine, three gas turbines, and the associated cooling facilities, fuel storage, pumping equipment, transmission and distribution equipment.

**2.1.2.2 Deerhaven Plant.** The Deerhaven Station is located six miles northwest of Gainesville. The original site, which was certified pursuant to the Power Plant Siting Act, included an 1146 acre parcel of partially forested land. The facility consists of two steam turbines, three gas turbines, and the associated cooling facilities, fuel storage, pumping equipment and transmission equipment. As amended to include the addition of Deerhaven 2 in 1981, the certified site now includes coal unloading and storage facilities and a zero discharge water treatment plant, which treats water effluent from both steam units. A buffer and potential expansion area, owned by the System and adjacent to the certified Deerhaven plant site, was subsequently acquired, consisting of an additional 2318 acres, for a total of 3464 acres.

**2.1.2.3 Southwest Landfill.** The Southwest Landfill is located west of the town of Archer on SR 24 near the Alachua county / Levy county line. The landfill is owned by Alachua County. An inter-local agreement between the City of Gainesville and Alachua County approved the concept of using landfill gas to power two internal combustion engine generators. The County granted a special use permit and an easement for GRU to operate and access the generators. The landfill gas to energy project (LFGTE) at the Alachua County Southwest Landfill was commissioned in December of 2003 and is wheeling power over the Progress Energy Florida's (PEF) distribution network to GRU's 230 kV transmission intertie with PEF. The LFGTE facility presently operates two internal combustion generating sets with a combined capacity of 1.3 MW of renewable energy. The generation capacity of the LFGTE system will diminish through time as the landfill gas production rate slows, and generating sets are taken off-line.

## **2.2 TRANSMISSION**

### **2.2.1 The Transmission Network**

GRU's bulk power transmission network consists of a 138 kV loop connecting the following:

- 1) GRU's two generating stations,
- 2) GRU's nine distribution substations,
- 3) Three interties with Progress Energy Florida,
- 4) An intertie with Florida Power and Light Company,
- 5) An interconnection with Clay at Farnsworth Substation, and
- 6) An interconnection with the City of Alachua at Alachua No. 1 Substation

Refer to Figure 2.1 for line geographical locations and Figure 2.2 for electrical connectivity and line numbers.

### **2.2.2 Transmission Lines**

The ratings for all of GRU's transmission lines are given in Table 2.1. The load ratings for GRU's transmission lines were developed in Appendix 6.1 of GRU's Long-Range Transmission Planning Study, March 1991. Refer to Figure 2.2 for a one-line diagram of GRU's electric system. The criteria for normal and emergency loading are taken to be:

Normal loading: conductor temperature not to exceed 100° C (212° F).

Emergency 8 hour loading: conductor temperature not to exceed 125° C (257° F).

The present transmission network consists of the following:

<u>Line</u>	<u>Circuit Miles</u>	<u>Conductor</u>
138 KV double circuit	100.20	795 MCM ACSR
138 KV single circuit	16.47	1192 MCM ACSR
138 KV single circuit	20.74	795 MCM ACSR
230 KV single circuit	<u>2.60</u>	795 MCM ACSR
Total	140.01	

As part of a study in September and October of 2002 the transmission system was subjected to scenario analysis. Each scenario represents a system configuration with different contingencies modeled. A contingency is an occurrence that depends on chance or uncertain conditions and, as used here, represents various equipment failures that may occur. The following conclusions were drawn from this analysis:

Reliability contingencies:

- (a) Single contingency transmission line and generator outages (the failure of any one generator or any one transmission line) -- No identifiable problems.
- (b) All right-of-way double contingency outages (two lines - common pole) -- No problems with GRU's 138 kV/24 MVAR capacitor on line.
- (c) Meeting future load and interchange requirements -- No identifiable problems through 2014, including the proposed capacity addition described in Section 4.

### **2.2.3 State Interconnections**

The System is currently interconnected with PEF and Florida Power and Light (FPL) at a total of four separate points. The System interconnects with PEF's Archer Substation via a 230 kV transmission line to the System's Parker Substation with 224 MVA of transformation capacity from 230 kV to 138 kV. The System also interconnects with PEF's Idylwild Substation with two separate circuits via a 168 MVA 138/69 kV transformer at the Idylwild Substation. The System interconnects with FPL via a 138 kV

tie between FPL's Bradford Substation and the System's Deerhaven Substation. This interconnection has a thermal capacity of 224 MVA.

## **2.3 DISTRIBUTION**

The System has six major and three minor distribution substations connected to the transmission network: Ft. Clarke, Kelly, McMichen, Millhopper, Serenola, Sugarfoot, Ironwood, Kanapaha, and Rocky Point substations, respectively. In addition, GRU has two transmission level voltage substations, Parker and Depot. The locations of these substations are shown on Figure 2.1.

Six of GRU's distribution substations are connected to the 138 kV bulk power transmission network with dual feeds, while Ironwood, Kanapaha, and Rocky Point are served by a single tap to the 138 kV network. This prevents the outage of a single transmission line from causing major outages in the distribution system. GRU serves its retail customers through a 12.47 kV distribution network. The distribution substations, their present rated transformer capabilities and present number of circuits are listed in Table 2.2.

The last substation added by GRU, Ironwood, was brought on-line in 2003 to serve the growing load in the area of State Road 24 and NE 31<sup>st</sup> Avenue and to provide backup support for the Kelly and McMichen substations. Ft. Clarke, Kelly, McMichen, and Serenola substations currently consist of two transformers of equal size allowing these stations to be loaded under normal conditions to 80 percent of the capabilities shown in Table 2.2. Millhopper and Sugarfoot Substations currently consist of three transformers of equal size allowing both of these substations to be loaded under normal conditions to 100 percent of the capability shown in Table 2.2.

## **2.4 WHOLESALE ENERGY**

The System provides full requirements wholesale electric service to Clay Electric Cooperative (Clay) through a contract between GRU and Seminole Electric Cooperative

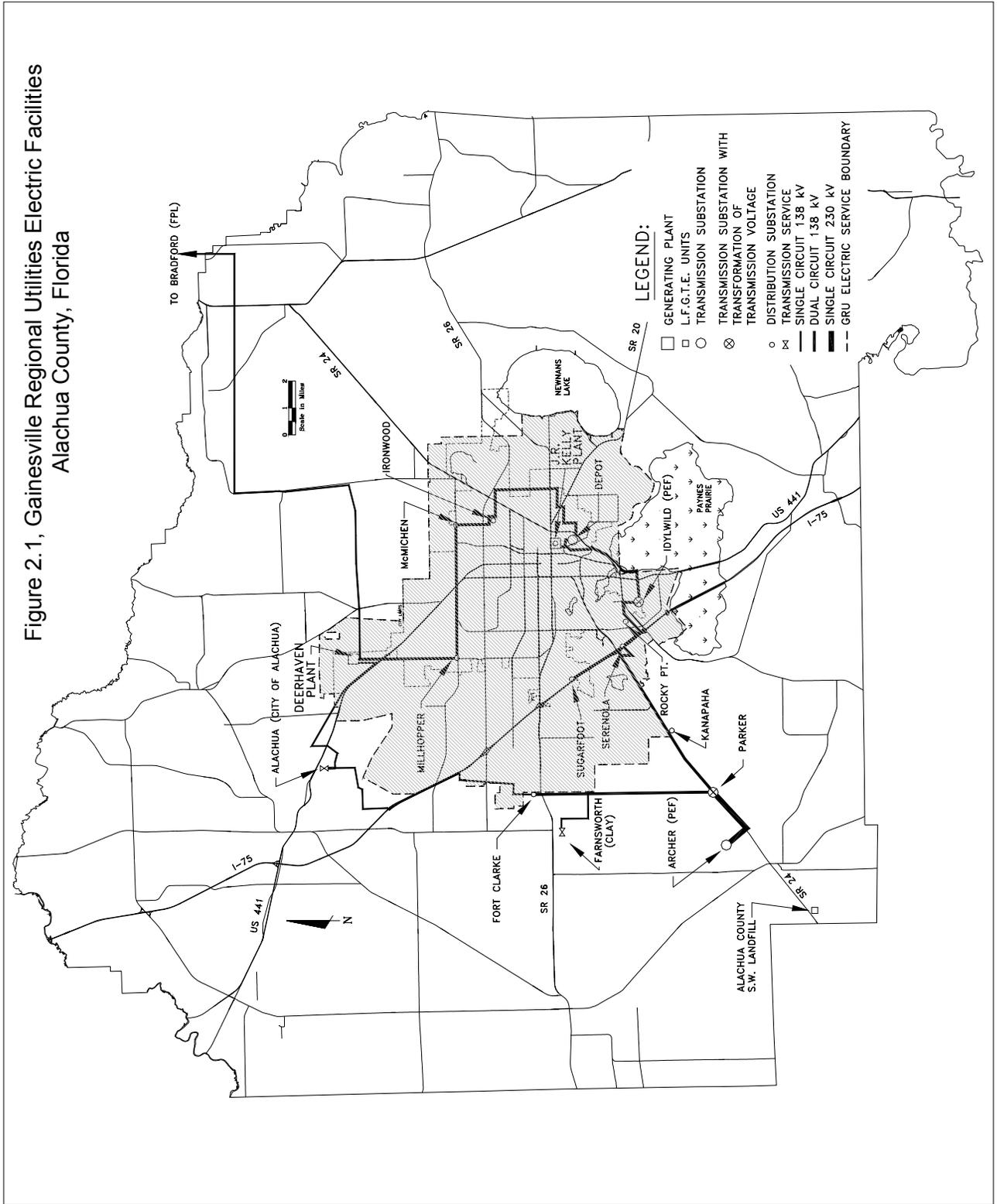
(Seminole), of which Clay is a member. The System began the 138 kV service at Clay's Farnsworth Substation in February 1975. This substation is supplied through a 2.4 mile radial line connected to the System's transmission facilities.

The System also provides full requirements wholesale electric service to the City of Alachua at two points of service. The Alachua No. 1 Substation is supplied with GRU's looped 138 kV transmission system. Two small residential neighborhoods and a few commercial customers within Alachua's city limits are served by a 12.47 kV distribution circuit, known as the Hague point of service. The System provides approximately 92% of Alachua's energy requirements with the remainder being supplied by Alachua's generation entitlements from the Crystal River 3 and St. Lucie 2 nuclear units. Energy supplied to Alachua by these nuclear units is wheeled over GRU's transmission network, with GRU providing generation backup in the event of outages of these nuclear units.

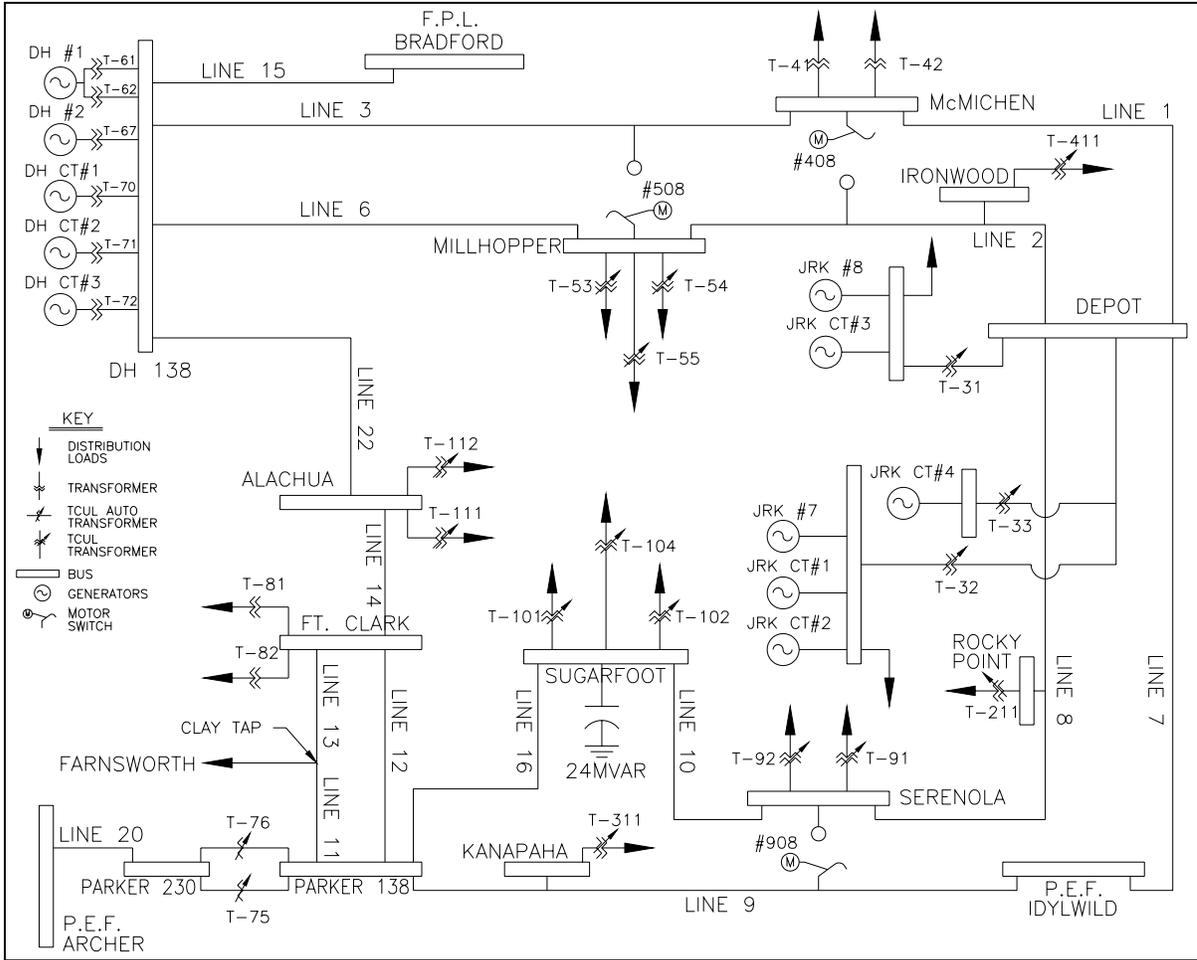
GRU has a partial requirements firm interchange service commitment with the City of Starke (Starke). The agreement with Starke is non-unit specific and provides for the sale of System capacity (including reserves). This agreement was renewed January 1, 1994 and continues through 2006, with optional three year extensions available indefinitely and allows Starke the option to expand the capacity commitment. This agreement was assigned to the FMPA in 1998 when Starke became an "All Requirements" member of FMPA.

Wholesale sales to Clay and Alachua are included as native load for purposes of projecting GRU's needs for generating capacity and associated reserve margins. Schedules 7.1 and 7.2 at the end of Section 4 summarize GRU's reserve margins.

Figure 2.1, Gainesville Regional Utilities Electric Facilities  
 Alachua County, Florida



**FIGURE 2.2 Gainesville Regional Utilities Electric System One-Line Diagram.**



**Schedule 1  
EXISTING GENERATING FACILITIES**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Plant Name	Unit No.	Location	Unit Type	Primary Fuel		Alternate Fuel		Fuel Storage (Days)	Commercial In-Service Month/Year	Expected Retirement Month/Year	Gross Capability		Net Capability		Status
				Type	Trans.	Type	Trans.				Summer MW	Winter MW	Summer MW	Winter MW	
J. R. Kelly		Alachua County Section 4									180	189	177	186	
	FS08	Township 10 S	CA	WH	PL				[ 4/65 ; 5/01 ]	2051	38	38	37	37	OP
	FS07	Range 20 E	ST	NG	PL	RFO	TK		8/61	8/11	24	24	23	23	OP
	GT04	(GRU)	CT	NG	PL	DFO	TK		5/01	2051	76	82	75	81	OP
	GT03		GT	NG	PL	DFO	TK		5/69	2019	14	15	14	15	OP
	GT02		GT	NG	PL	DFO	TK		9/68	2018	14	15	14	15	OP
	GT01		GT	NG	PL	DFO	TK		2/68	2018	14	15	14	15	OP
Deerhaven		Alachua County Sections 26,27,35									451	461	422	432	
	FS02	Township 8 S	ST	BIT	RR				10/81	2031	249	249	228	228	OP
	FS01	Range 19 E	ST	NG	PL	RFO	TK		8/72	2023	88	88	83	83	OP
	GT03	(GRU)	GT	NG	PL	DFO	TK		1/96	2046	76	82	75	81	OP
	GT02		GT	NG	PL	DFO	TK		8/76	2026	19	21	18	20	OP
	GT01		GT	NG	PL	DFO	TK		7/76	2026	19	21	18	20	OP
Crystal River (818/815)	3	Citrus County Section 33 Township 17 S Range 16 E (FPC)	ST	NUC	TK				3/77	2037	11	11	11	11	OP
SW Landfill		Alachua County Section 19									1.64	1.64	1.3	1.3	
	SW-1	Township 11 S	IC	LFG	PL				12/03	12/09	0.82	0.82	0.65	0.65	OP
	SW-2	Range 18 E	IC	LFG	PL				12/03	12/15	0.82	0.82	0.65	0.65	OP
System Total													611	630	

<u>Unit Type</u>	<u>Fuel Type</u>	<u>Transportation Method</u>	<u>Status</u>
CA = Combined Cycle Steam Part	NG = Natural Gas	PL = Pipe Line	OP = Operational
CT = Combined Cycle Combustion Turbine Part	BIT = Bituminous Coal	RR = Railroad	
GT = Gas Turbine	NUC = Uranium	TK = Truck	
ST = Steam Turbine	RFO = Residual Fuel Oil		
IC = Internal Combustion (diesel, piston) Engine	DFO = Distillate Fuel Oil		
	WH = Waste Heat		
	LFG = Landfill Gas		

**TABLE 2.1**

**SUMMER POWER FLOW LIMITS**

Transmission Line Number	Description	Normal 100° C (MVA)	Limiting Device	8-Hour Emergency 125° C (MVA)	Limiting Device
1	McMichen - Depot East	236.2	Conductor	282.0	Conductor
2	Millhopper - Depot West	236.2	Conductor	282.0	Conductor
3	Deerhaven - McMichen	236.2	Conductor	282.0	Conductor
6	Deerhaven - Millhopper	236.2	Conductor	282.0	Conductor
7	Depot East - Idylwild	191.2 <sup>1</sup>	Line Trap	191.2 <sup>1</sup>	Line Trap
8	Depot West - Serenola	236.2	Conductor	282.0	Conductor
9	Idylwild - Parker	191.2 <sup>1</sup>	Line Trap	191.2 <sup>1</sup>	Line Trap
10	Serenola - Sugarfoot	236.2	Conductor	282.0	Conductor
11	Parker - Clay Tap	236.2	Conductor	282.0	Conductor
12	Parker - Ft. Clarke	236.2	Conductor	282.0	Conductor
13	Clay Tap - Ft. Clarke	236.2	Conductor	282.0	Conductor
14	Ft. Clarke - Alachua	299.7	Conductor	356.0	Conductor
15	Deerhaven - Bradford	224.0	Transformer	224.0	Transformer
16	Sugarfoot - Parker	236.2	Conductor	282.0	Conductor
20	Parker - Archer	224.0	Transformer	224.0	Transformer
22	Alachua - Deerhaven	299.7	Conductor	356.0	Conductor
xx	Clay Tap - Farnsworth	236.2	Conductor	282.0	Conductor
xx	Idylwild - FPC	168.0	Transformer	168.0	Transformer

<sup>1</sup> –Rating effective through Spring, 2005 (estimate). At this point in time, the 800 ampere wave traps on the Depot E – Idylwild 138 KV and Parker – Idylwild 138 KV circuit at Idylwild will be removed. Thereafter, the normal and emergency rating will be 236.2 MVA and 282.0 MVA, respectively.

Assumptions:

- 100 °C for normal conductor operation
- 125 °C for emergency 8 hour conductor operation
- 40 °C ambient air temperature
- 2 ft/sec wind speed
- T-75 & T-76 are based on a 65 °C oil temperature rise

**TABLE 2.2**  
**SUBSTATION TRANSFORMATION AND CIRCUITS**

<u>DISTRIBUTION SUBSTATION</u>	<u>TRANSFORMER RATED CAPABILITY</u>	<u>NUMBER OF CIRCUITS</u>
Ft. Clarke	44.8 MVA	4
J. R. Kelly <sup>1</sup>	112.0 MVA	18 (3 de-energized)
McMichen	44.8 MVA	6 (1 de-energized)
Millhopper	100.8 MVA	10
Serenola	67.2 MVA	8
Sugarfoot	100.8 MVA	9
Ironwood	33.6 MVA	3
Kanapaha	33.6 MVA	2
Rocky Point	33.6 MVA	3
<u>TRANSMISSION SUBSTATION</u>	<u>TRANSFORMER RATED CAPABILITY</u>	<u>NUMBER OF CIRCUITS</u>
Parker	224 MVA	5
Depot	0 MVA	6

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<sup>1</sup> J. R. Kelly is a generating station as well as a distribution substation. The CT portion (75 MW) of JRK CC 1 is connected directly to the 138 kV transmission line from Depot Transmission Substation to J. R. Kelly Distribution Substation/Generation Station and the steam portion is connected to the 12.47 kV substation bus along with the remaining generation capacity at J. R. Kelly Station (102 MW).

### **3. FORECAST OF ELECTRIC ENERGY AND DEMAND REQUIREMENTS**

Section 3 includes documentation of GRU's forecast of number of customers, energy sales and seasonal peak demands; a forecast of energy sources and fuel requirements; and an overview of GRU's involvement in demand-side management programs.

The accompanying tables provide historical and forecast information for calendar years 1995-2014. Energy sales and number of customers are tabulated in Schedules 2.1, 2.2 and 2.3. Schedule 3.1 gives summer peak demand for the base case forecast by reporting category. Schedule 3.2 presents winter peak demand for the base case forecast by reporting category. Schedule 3.3 similarly presents net energy for load for the base case forecast by reporting category. Short-term monthly load data is presented in Schedule 4. Projected net energy requirements for the System, by method of generation, are shown in Schedule 6.1. The percentage breakdowns of energy shown in Schedule 6.1 are given in Schedule 6.2. The quantities of fuel expected to be used to generate the energy requirements shown in Schedule 6.1 are given by fuel type in Schedule 5.

#### **3.1 FORECAST ASSUMPTIONS AND DATA SOURCES**

- (1) All regression analyses were based on annual data. Historical data was compiled for calendar years 1970 through 2004. System data, such as net energy for load, seasonal peak demands, customer counts and energy sales, was obtained from GRU records and sources.
- (2) Estimates and projections of Alachua County population were obtained from the Florida Population Studies, February 2005 (Bulletin No. 141), published by the Bureau of Economic and Business Research (BEBR) at the University of Florida.
- (3) Historical weather data was used to fit regression models. Forecast values of heating degree days and cooling degree days equal the mean (rounded to the nearest hundred) of data reported to NOAA by the Gainesville Municipal Airport station from 1984-2004, representing "normal" weather conditions.

- (4) All income and price figures were adjusted for inflation, and indexed to a base year of 2004, using the U.S. Consumer Price Index for All Urban Consumers from the U.S. Department of Labor, Bureau of Labor Statistics. Inflation is assumed to average approximately 2.7% per year for each year of the forecast.
- (5) The U. S. Department of Commerce provided historical estimates of total income and per capita income for Alachua County. Forecast values of total personal income for Alachua County were obtained from Economy.com.
- (6) Historical estimates of household size were obtained from BEBR, and projected levels were derived from a forecast provided by Global Insight.
- (7) The Florida Agency for Workforce Innovation and the U.S. Department of Labor provided historical estimates of non-agricultural employment in Alachua County. A forecast of non-agricultural employment was developed by Global Insight.
- (8) GRU's corporate model was the basis for projections of the average price of 1,000 kWh of electricity for all customer classes. GRU's corporate model evaluates projected revenue and revenue requirements for the forecast horizon and determines revenue sufficiency under prevailing prices. If revenue from present pricing is insufficient, pricing changes are programmed in and become GRU's official pricing program plan. Programmed price increases from the model for all retail customer classes are projected to be less than the rate of inflation, yielding declining real prices of electricity over the forecast horizon.
- (9) Estimates of energy and demand reductions resulting from planned demand-side management programs were subtracted from all retail forecasts. Energy and demand reductions are removed from the forecast of DSM impacts as each conservation measure installed reaches the end of its useful life. GRU's involvement with DSM is described in more detail later in this section.
- (10) The City of Alachua will generate (via generation entitlement shares of Progress Energy and Florida Power and Light nuclear units) approximately 8,077 MWh (8%) of its annual energy requirements.

## 3.2 FORECASTS OF NUMBER OF CUSTOMERS, ENERGY SALES AND SEASONAL PEAK DEMANDS

Number of customers, energy sales and seasonal peak demands were forecast from 2005 through 2014. Separate energy sales forecasts were developed for each of the following customer segments: residential, general service non-demand, general service demand, large power, outdoor lighting, sales to Clay, and sales to Alachua. Separate forecasts of number of customers were developed for residential, general service non-demand, general service demand and large power retail rate classifications.

The basis for these independent forecasts originated with the development of least-squares regression models. All modeling was performed in-house using the Statistical Analysis System (SAS)<sup>3</sup>. The following text describes the regression equations utilized to forecast energy sales and number of customers.

### 3.2.1 Residential Sector

The equation of the model developed to project residential average annual energy use (kilowatt-hours per year) specifies average use as a function of household income in Alachua County, residential price of electricity and weather variation, measured by heating degree days and cooling degree days. The form of this equation is as follows:

$$\begin{aligned} \text{RESAVUSE} = & 4202.2 + 0.078 (\text{HHY04}) - 11.44 (\text{RESPR04}) \\ & + 0.73 (\text{HDD}) + 0.89 (\text{CDD}) \end{aligned}$$

Where:

RESAVUSE	=	Average Annual Residential Energy Use Per Customer
HHY04	=	Average Household Income
RESPR04	=	Residential Price, Dollars per 1000 kWh
HDD	=	Annual Heating Degree Days
CDD	=	Annual Cooling Degree Days

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<sup>3</sup> SAS is the registered trademark of SAS Institute, Inc., Cary, NC.

Adjusted R<sup>2</sup> = 0.9047  
 DF (error) = 28 (period of study, 1971-2004)  
 t - statistics:  
 Intercept = 3.09  
 HHY04 = 5.74  
 RESPR04 = -3.09  
 HDD = 4.28  
 CDD = 4.62

Projections of the average annual number of residential customers were developed from a linear regression model stating the number of customers as a function of Alachua County population. The model was fit to an historical time series that accounted for the history of Clay customer transfers. The residential customer model specifications are:

*RESCUS* = -25822 + 424.24 (*POP*)  
 Where:  
*RESCUS* = Number of Residential Customers  
*POP* = Alachua County Population (thousands)  
 Adjusted R<sup>2</sup> = 0.9941  
 DF (error) = 24 (period of study, 1978-2004)  
 t - statistics:  
 Intercept = -20.88  
*POP* = 64.77

The product of forecasted values of average use and number of customers yielded the projected energy sales for the residential sector.

### 3.2.2 General Service Non-Demand Sector

The general service non-demand (GSN) customer class includes non-residential customers with maximum annual demands less than 50 kilowatts (kW). In 1990, GRU began offering GSN customers the option to elect the General Service Demand (GSD) rate classification. This option offers potential benefit to GSN customers that use high amounts of energy and have good load factors. Since 1990, 273 customers have elected to transfer to the GSD rate class. The forecast assumes that additional GSN customers will voluntarily elect the GSD classification at a rate comparable to the historical annual median. A regression model was developed to project average annual energy use by GSN customers. The model includes as independent variables, the cumulative number of optional demand customers and cooling degree days. The specifications of this model are as follows:

$$GSNAVUSE = 23.9 - 0.01(OPTDCUST) + 0.001(CDD)$$

Where:

GSNAVUSE = Average annual energy usage by GSN customers

OPTDCUST = Cumulative number of Optional Demand Customers

CDD = Annual Cooling Degree Days

Adjusted  $R^2$  = 0.7325

DF (error) = 22 (period of study, 1979-2004)

t - statistics:

Intercept = 11.97

OPTDCUST = -7.95

CDD = 2.02

The number of general service non-demand customers was projected using an equation specifying customers as a function of Alachua County population. The specifications of the general service non-demand customer model are as follows:

$$GSNCUS = -4559.5 + 55.7 (POP)$$

Where:

GSNCUS = Number of General Service Non-Demand Customers

POP = Alachua County Population (thousands)

Adjusted  $R^2$  = 0.9851

DF (error) = 24 (period of study, 1978-2004)

t - statistics:

Intercept = -17.6

POP = 40.6

Forecasted energy sales to general service non-demand customers were derived from the product of projected number of customers and the projected average annual use per customer.

### 3.2.3 General Service Demand Sector

The general service demand customer class includes non-residential customers with established annual maximum demands generally of at least 50 kW but less than 1,000 kW. Average annual energy use per customer was projected using an equation specifying average use as a function of per capita income (Alachua County) and the number of optional demand customers. A significant portion of the energy load in this sector is from large retailers such as department stores and grocery stores, whose business activity is related to income levels of area residents. Average energy use projections for general service demand customers result from the following model:

$$GSDAVUSE = 332.7 + 0.0088 (PCY04) - 0.15 (OPTDCUST)$$

Where:

GSDAVUSE = Average annual energy use by GSD Customers

PCY04 = Per Capita Income in Alachua County

OPTDCUST = Cumulative number of Optional Demand Customers

Adjusted  $R^2$  = 0.7458

DF (error) = 22 (period of study, 1979-2004)

t - statistics:

Intercept = 14.3  
PCY04 = 8.4  
OPTDCUST = -4.4

The annual average number of customers was projected based on the results of a regression model in which Alachua County population was the independent variable. The specifications of the general service demand customer model are as follows:

$$GSDCUS = -376.2 + 5.06 (POP)$$

Where:

GSDCUS = Number of General Service Demand Customers  
POP = Alachua County Population (thousands)

$$\text{Adjusted } R^2 = 0.9614$$

$$\text{DF (error)} = 24 \text{ (period of study, 1978-2004)}$$

t - statistics:

Intercept = -9.8  
POP = 25.0

The forecast of energy sales to general service demand customers was the resultant product of projected number of customers and projected average annual use per customer.

### 3.2.4 Large Power Sector

The large power customer class currently includes approximately 18 customers with billing demands of at least 1,000 kW. Analyses of average annual energy use were based on historical observations from 1976 through 2004. The model developed to project average use by large power customers includes Alachua County nonagricultural employment and large power price of electricity as independent variables. Energy use per customer has been observed to increase over time, presumably due to the periodic

expansion or increased utilization of existing facilities. This growth is measured in the model by local employment levels. The specifications of the large power average use model are as follows:

$$LPAVUSE = 11376 + 10.1 (NONAG) - 38.5 (LPPR04)$$

Where:

LPAVUSE = Average Annual Energy Consumption (MWh per Year)

NONAG = Alachua County Nonagricultural Employment (000's)

LPPR04 = Average Price for 1,000 kWh in the Large Power Sector

Adjusted R<sup>2</sup> = 0.9141

DF (error) = 26 (period of study, 1976-2004)

t - statistics:

INTERCEPT = 7.28

NONAG = 1.19

LPPR04 = -4.01

The forecast of energy sales to the large power sector was derived from the product of projected average use per customer and the projected number of large power customers, which are projected to remain constant at eighteen.

### 3.2.5 Outdoor Lighting Sector

The outdoor lighting sector consists of streetlight, traffic light, and rental light accounts. Outdoor lighting energy sales account for approximately 1.25% of total energy sales. Outdoor lighting energy sales were forecast using a model which specified lighting energy as a function of the number of residential customers. The specifications of this model are as follows:

$$LGTMWH = -9060 + 0.47 (RESCUS)$$

Where:

LGTMWH = Outdoor Lighting Energy Sales

RESCUS = Number of Residential Customers

Adjusted R <sup>2</sup>	=	0.9803
DF (error)	=	10 (period of study, 1993-2004)
t - statistics:		
Intercept	=	-6.99
RESCUS	=	23.39

### 3.2.6 Wholesale Energy Sales

As previously described, the System provides control area services to two wholesale customers: Clay Electric Cooperative (Clay) at the Farnsworth Substation; and the City of Alachua (Alachua) at the Alachua No. 1 Substation, and at the Hague Point of Service. Approximately 8% of Alachua's 2004 energy requirements were met through generation entitlements of nuclear generating units operated by PEF and FPL. These wholesale delivery points serve an urban area that is either included in, or adjacent to the Gainesville urban area. These loads are considered part of the System's native load for facilities planning through the forecast horizon. GRU provides other utilities services in the same geographic areas served by Clay and Alachua, and continued electrical service will avoid duplicating facilities. Furthermore, the populations served by Clay and Alachua benefit from services provided by the City of Gainesville, which are in part supported by transfers from the System.

Clay-Farnsworth net energy requirements were modeled with an equation in which Alachua County population was the independent variable. Output from this model was adjusted to account for the history of load that has been transferred between GRU and Clay-Farnsworth, yielding energy sales to Clay. Historical boundary adjustments between Clay and GRU have reduced the duplication of facilities in both companies' service areas. The form of the Clay-Farnsworth net energy requirements equation is as follows:

$$CLYNEL = -29719 + 457.7 (POP)$$

Where:

CLYNEL = Farnsworth Substation Net Energy (MWh)

POP = Alachua County Population (000's)

Adjusted R<sup>2</sup> = 0.9573

DF (error) = 13 (period of study, 1990-2004)

t - statistics:

Intercept = -5.57

POP = 17.74

Net energy requirements for Alachua were estimated using a model in which City of Alachua population was the independent variable. BEBR provided historical estimates of City of Alachua Population. This variable was projected from a trend analysis of the component populations within Alachua County. The model used to develop projections of sales to the City of Alachua is of the following form:

$ALANEL = -66321 + 23683 (ALAPOP)$

Where:

ALANEL = City of Alachua Net Energy (MWh)

ALAPOP = City of Alachua Population (000's)

Adjusted R<sup>2</sup> = 0.9788

DF (error) = 21 (period of study, 1982-2004)

t - statistics:

Intercept = -17.0

ALAPOP = 31.9

To obtain a final forecast of the System's sales to Alachua, projected net energy requirements were reduced by 8,077 MWh reflecting the City of Alachua's nuclear generation entitlements.

### **3.2.7 Total System Sales, Net Energy for Load, Seasonal Peak Demands and DSM Impacts**

The forecast of total system energy sales was derived by summing energy sales projections for each customer class; residential, general service non-demand, general service demand, large power, outdoor lighting, sales to Clay, and sales to Alachua. Net energy for load was then forecast by applying a delivered efficiency factor for the System to total energy sales. The projected delivered efficiency factor (0.95088) is the median of observed historical values from 1984 through 2004. The impact of energy savings from conservation programs was accounted for in energy sales to each customer class, prior to calculating net energy for load.

The forecasts of seasonal peak demands were derived from forecasts of annual net energy for load. Winter peak demands are projected to occur in January of each year, and summer peak demands are projected to occur in July of each year, although historical data suggests the summer peak is nearly as likely to occur in August. The average ratio of the most recent 21 years' monthly net energy for load for January and July, as a portion of annual net energy for load, was applied to projected annual net energy for load to obtain estimates of January and July net energy for load over the forecast horizon. The medians of the past 21 years' load factors for January and July were applied to January and July net energy for load projections, yielding seasonal peak demand projections. Forecast seasonal peak demands include the net impacts from planned demand-side management programs.

## **3.3 ENERGY SOURCES AND FUEL REQUIREMENTS**

### **3.3.1 Fuels Used by System**

Presently, the system is capable of using coal, residual oil, distillate oil, natural gas, and a small percentage of nuclear fuel to satisfy its fuel requirements. Since the completion of the Deerhaven 2 coal-fired unit, the System has relied upon coal to fulfill much of its fuel requirements. To the extent that the System participates in interchange sales and purchases, actual consumption of these fuels will likely differ from the base

case requirements indicated in Schedule 5. These projections are based on a fuel price forecast prepared in May 2004.

### **3.3.2 Methodology for Projecting Fuel Use**

The fuel use projections were produced using the Electric Generation Expansion Analysis System (EGEAS) developed under Electric Power Research Institute guidance and maintained by EPRI Solutions. This is the same software the System uses to perform long-range integrated resource planning. EGEAS has the ability to model each of the System's generating units as well as optimize the selection of new capacity and technologies (see Section 4), and include the effects of environmental limits, dual fuel units, reliability constraints, and maintenance schedules. The production modeling process uses a load-duration curve convolution and conjoint probability model to simulate optimal hourly dispatch of the System's generating resources.

The input data to this model includes:

- (1) Long-term forecast of System electric energy and power demand needs;
- (2) Projected fuel prices, outage parameters, nuclear refueling cycle (as needed), and maintenance schedules for each generating unit in the System;
- (3) Similar data for the new plants that will be added to the system to maintain system reliability.

The output of this model includes:

- (1) Monthly and yearly operating fuel expenses by fuel type and unit; and
- (2) Monthly and yearly capacity factors, energy production, hours of operation, fuel utilization, and heat rates for each unit in the system.

### **3.4 DEMAND-SIDE MANAGEMENT**

#### **3.4.1 Demand-Side Management Program History and Current Status**

Demand and energy forecasts and generation expansion plans outlined in this Ten Year Site Plan include impacts from GRU's planned Demand-Side Management (DSM) programs. The System forecast reflects the residual cumulative effects of program implementations recorded from 1980 through 2004, as well as projected program implementations scheduled through 2014. Included in the total annual effects of DSM measures on energy and demand, is the life cycle of each measure's impact. As each implementation of each measure reaches the end of its useful life, the demand and energy reductions associated with that implementation are removed from the estimated total annual effects. GRU's DSM programs were designed for the purpose of conserving the resources utilized by the System in a manner most cost effective to the customers of GRU. DSM programs are available for all retail customers, including commercial and industrial customers, and are designed to effectively reduce and control the growth rates of electric consumption and weather sensitive peak demands.

GRU is currently active in the following residential conservation efforts: conservation surveys; energy efficient (green) building consultations; programs for low income households including weatherization and natural gas service; rebates for natural gas in residential construction; rebates for natural gas for displacement of electric water heating, space heating and space cooling in existing structures; rebates for solar water heating; rebates for heat recovery water heating; high-efficiency central and room air conditioning rebates; rebates for duct repairs; heat pipe rebates; reflective roof coating rebates; a/c maintenance rebates; promotion of customer-owned photovoltaic systems through a standardized interconnection and buyback agreement; and an increasing block rate structure. GRU offers the following conservation services to its non-residential customers: conservation surveys; lighting efficiency and maintenance services; rebates for natural gas water heating, space cooling and dehumidification; rebates for heat recovery water heating; and promotion of customer-owned photovoltaic systems through a standardized interconnection and buyback agreement.

GRU secured grant funding through the Department of Community Affairs' PV for Schools Educational Enhancement Program for PV systems that were installed at two middle schools in 2003. GRU began offering green energy (i.e., GRUGreen<sup>sm</sup>) to its customers when the LFGTE project became operational in 2003. The majority of the energy available under this program comes from landfill gas, but also includes some solar and wind energy credits. GRUGreen<sup>sm</sup> is available to all GRU customers at a cost equivalent to two cents per kWh. A combination of customer contributions and State and Federal grants allowed GRU to add its 10 kW photovoltaic array at the Electric System Control Center in 1996.

GRU has also produced numerous *factsheets*, publications and videos which are available at no charge to customers to assist them in making informed decisions effecting their energy utilization patterns. Examples include: Passive Solar Design-Factors for North Central Florida, a booklet which provides detailed solar and environmental data for passive solar designs in this area; Solar Guidebook, a brochure which explains common applications of solar energy in Gainesville; and The Energy Book, a guide to saving home energy dollars.

### **3.4.2 Future Demand-Side Management Programs**

In addition to the new programs that GRU added in 2005, a new commercial program providing incentives for innovative energy designs is planned for implementation in 2006. GRU has budgeted funds to proceed with installing a new 10 kW PV system at the Gainesville Regional Airport. This project will be supported by voluntary customer contributions and avoided utility costs.

GRU has recently evaluated Requests for Proposals for Innovative Demand-Side Management programs in an effort to identify and capture all the cost-effective energy conservation and power demand reduction potential in the community. The RFP was issued to private companies, individuals and public sector agencies to provide an opportunity to service providers and interested parties to encourage additional energy

conservation and power demand reductions in the community. Two entities have begun developing business plans for implementing new programs as a result of this process.

### **3.4.3 Demand-Side Management Methodology and Results**

The expected effect of DSM program participation was derived from a comparative analysis of historical energy usage of DSM program participants and non-participants. The methodology upon which existing DSM programs is based includes consideration of what would happen anyway, the fact that the conservation induced by utility involvement tends to "buy" conservation at the margin, adjustment for behavioral rebound and price elasticity effects and effects of abnormal weather. Known interactions between measures and programs were accounted for when possible. At the end of each measure's useful life, the energy and demand savings assumed to have been induced by GRU are removed to represent the retirement of the given measure. Projected penetration rates were based on historical levels of program implementations and tied to escalation rates paralleling service area population growth.

The implementation of DSM programs planned for 2005-2014 is expected to provide an incremental impact of 5 MW of summer peak reduction, 7 MW of winter peak reduction, and 28 GWh of annual energy savings by the year 2014, as shown in Table 3.1. Total DSM program achievements are shown in Table 3.2.1. DSM impacts that have been retired from total program achievements are shown in Table 3.2.2, and the net DSM reductions included in the System's energy and demand forecasts are shown in Table 3.2.3. These tables are located at the end of Section 3.

### **3.4.4 Gainesville Energy Advisory Committee**

The Gainesville Energy Advisory Committee (GEAC) is a nine-member citizen group that is charged with formulating recommendations concerning national, state and local energy-related issues. The GEAC offers advice and guidance on energy management studies and consumer awareness programs. The GEAC's efforts have resulted in numerous contributions, accomplishments, and achievements for the City of

Gainesville. Specifically, the GEAC helped establish a residential energy audit program in 1979. The GEAC was initially involved in the ratemaking process in 1980 which ultimately lead to the approval of an inverted block residential rate and a voluntary residential time-of-use rate. The GEAC promoted *Solar Month* in October of 1991 by sponsoring a seminar to foster the viability of solar energy as an alternative to conventional means of energy supply. Representatives from Sandia National Laboratories, the Florida Solar Energy Center, PEF, and GRU gave presentations on various solar projects and technologies. A recommendation from GEAC followed the Solar Day Seminars for GRU to investigate offering its citizen-ratepayers the option of contributing to photovoltaic power production through monthly donations on their utility bills. The interest generated by the seminars along with grant money from the State of Florida Department of Community Affairs and the Utility PhotoVoltaic Group and donations from GRU customers and friends of solar energy resulted in the 10 kilowatt PV system at the System Control Center. GRU solicited public input on its solar water heater rebate program through the GEAC, and the committee in turn formally supported the program. The GEAC sponsored a Biomass Seminar for a joint meeting of the Gainesville City Commission and the Alachua County Commission. The GEAC has strongly supported the EPA's Energy Star program, and helped GRU earn EPA's 1998 Utility Ally of the Year award. GEAC contributed to the development of a Green Builder program for existing multi-family dwellings as a long-range load reduction strategy. Multi-family dwellings represent approximately 35% of GRU's total residential load. GEAC has also supported GRU's current IRP through their sponsorship of community workshops and review of the IRP.

#### **3.4.5 Supply Side Programs**

Deerhaven 2 is also contributing to reduced oil use by other utilities through the Florida energy market. Prior to the addition of Deerhaven Unit 2 in 1982, the System was relying on oil and natural gas for over 90% of native load energy requirements. In 2004, oil-fired generation comprised 5.5% of total net generation, natural gas-fired generation contributed 27.6%, nuclear fuel contributed 5.6%, and coal-fired generation

provided 61.3% of total net generation. The PV system at the System Control Center provides slightly more than 10 kilowatts of capacity at solar noon on clear days. The landfill gas to energy (LFGTE) project is capable of providing 1.3 MW of capacity on a continuous basis.

The System has several programs to improve the adequacy and reliability of the transmission and distribution systems, which will also result in decreased energy losses.

Periodically, the major distribution feeders are evaluated to determine whether the costs of reconductoring will produce an internal rate of return sufficient to justify expenses when compared to the savings realized from reduced distribution losses, and if so, reconductoring is recommended. Generating units are continually evaluated to ensure that they are maintaining design efficiencies. Transmission facilities are also studied to determine the potential savings from loss reductions achieved by the installation of capacitor banks. System losses have stabilized near 5% of net generation as reflected in the forecasted relationship of total energy sales to net energy for load.

### **3.5 FUEL PRICE FORECAST ASSUMPTIONS**

The sources for projected oil and natural gas prices were the Annual Energy Outlook 2005 (AEO2005), published in February 2005 by the U.S. Department of Energy's Energy Information Administration (EIA), and EIA's Short-Term Energy Outlook (STEO), March 2005. The source for projected coal prices was Hill & Associates, Inc., 2005 Outlook for U.S. Steam Coal Long-Term Forecast to 2024. Projected prices for nuclear fuel were provided by PEF. Typically, these forecasts are provided in constant-year (real) dollars, and GRU translates these prices to nominal dollars using the projected Gross Domestic Product – Implicit Price Deflator from AEO2005. Fuel prices are analyzed in two parts: the cost of the fuel (commodity), and the cost of transporting the fuel to GRU's generating stations. A summary of historical and projected fuel prices is provided in Table 3.3.

### **3.5.1 Oil**

GRU relies on No. 6 Oil (residual) and No. 2 Oil (distillate or diesel) as back-up fuels for natural gas fired generation. These fuels are delivered to GRU generating stations by truck. Forecast prices for these two types of oil are derived directly from AEO2005.

During calendar year 2004, distillate fuel oil was used to produce 0.06% of GRU's total net generation. The price of distillate fuel oil delivered to GRU is expected to decrease through 2009, and then begin a gradual increase through the long-term forecast horizon. Distillate fuel oil is expected to be the most expensive fuel available to GRU. During calendar year 2004, Residual fuel oil was used to produce 5.4% of GRU's total net generation. The price of residual fuel oil delivered to GRU is also expected to decrease through 2009 and then increase through the long-term forecast horizon. AEO2005 projects prices for residual fuel oil to be slightly lower than prices for natural gas. The quantity of fuel oils used by GRU is expected to remain low.

### **3.5.2 Coal**

Coal is the primary fuel used by GRU to generate electricity, comprising 61.3% of total net generation during calendar year 2004. GRU purchases low-sulfur (0.7%) , high Btu eastern coal for use in Deerhaven Unit 2. Coal markets are experiencing increased prices for 2005 and 2006, but are expected to stabilize beginning 2007. Consequently, prices for coal are expected to be higher in the future than in previous forecasts. In addition to low sulfur compliance coal, GRU projects prices for 1.7% sulfur coal and 3.0% sulfur coal for evaluation in the proposed circulating fluidized bed unit.

Prices for compliance coal for 2005 and 2006 were based on GRU's contractual options with its coal suppliers. Projected prices for compliance coal for 2007 and beyond are based on Hill & Associates, Inc. forecast for a low sulfur coal from the central Appalachian region. GRU has a contract with CSXT for delivery of coal to the

Deerhaven plant site through 2019. The rate of change in coal transportation rates from AEO2005 was applied to GRU's current freight rates to develop delivered prices of coal through 2025. Prices for the alternate grades of coal were also derived from Hill & Associates, Inc. forecast.

The long-term growth rate of delivered compliance coal prices is expected to average approximately 3.6% per year, while the alternate grades of coal are expected to see price increases of approximately 3.0% per year through 2025.

### **3.5.3 Natural Gas**

GRU procures natural gas for power generation and for distribution by a Local Distribution Company (LDC). In 2004, GRU purchased approximately 7.5 million MMBtu for use by both systems. GRU power plants used 69% of the total purchased for GRU during 2004, while the LDC used the remaining 31%.

GRU purchases natural gas via arrangements with producers and marketers connected with the Florida Gas Transmission (FGT) interstate pipeline. GRU's delivered cost of natural gas includes the commodity component, Florida Gas Transmission's (FGT) fuel charge, FGT's usage (transportation) charge, and FGT's reservation (capacity) charge.

Prices for the remainder of 2005 were projected in-house based on current market conditions. Prices for 2006 were derived from EIA's Short-Term Energy Outlook, March 2005. Prices from 2007 through 2025 follow the pattern of price changes outlined in AEO2005, converging to the absolute prices specified in AEO2005 by 2025. GRU's forecast of delivered gas prices are presented in Table 3.3.

GRU's delivered natural gas prices are projected to decrease from about \$7.18/MMBtu in 2005 to a low of \$5.57/MMBtu in 2010, and then increase at a rate of approximately 3.5% per year through 2025.

### **3.5.4 Nuclear Fuel**

GRU's nuclear fuel price forecast includes a component for fuel and a component for fuel disposal. The projection for the price of the fuel component is based on Progress Energy Florida's (PEF) forecast of nuclear fuel prices. The projection for the cost of fuel disposal is based on a trend analysis of actual costs to GRU. Overall nuclear fuel price is projected to increase at a rate of approximately 0.5% per year through the forecast horizon.

### **3.5.5 Petroleum Coke**

Petroleum coke, or "pet coke", is a by-product of the process of refining crude oil into higher value light products. GRU is evaluating pet coke as a fuel that can be blended with coal and wood biomass for use in the proposed CFB unit. To develop a forecast of pet coke prices, GRU determined the average price paid by Florida utilities during 2004, added a transportation component for a short haul by rail, and escalated this price annually at the same rate of change as coal delivered to electric utilities in AEO2005. This forecast results in prices that range from \$1.14/MMBtu in 2005 to \$1.33/MMBtu in 2014.

**Schedule 2.1  
History and Forecast of Energy Consumption and  
Number of Customers by Customer Class**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Year</u>	<u>Service Area Population</u>	<u>Persons per Household</u>	<u>RESIDENTIAL</u>			<u>COMMERCIAL *</u>		
			<u>GWh</u>	<u>Average Number of Customers</u>	<u>Average kWh per Customer</u>	<u>GWh</u>	<u>Average Number of Customers</u>	<u>Average kWh per Customer</u>
1995	147,248	2.37	704	62,130	11,329	590	7,305	80,767
1996	150,322	2.37	718	63,427	11,313	594	7,539	78,813
1997	153,759	2.36	705	65,152	10,817	598	7,750	77,193
1998	156,797	2.35	777	66,722	11,649	640	7,868	81,363
1999	161,076	2.35	763	68,543	11,137	648	8,095	80,036
2000	164,584	2.34	788	70,335	11,202	674	8,368	80,490
2001	169,395	2.34	803	72,391	11,092	697	8,603	80,986
2002	172,755	2.34	851	73,827	11,527	721	8,778	82,112
2003	174,227	2.34	854	74,456	11,467	726	8,959	81,090
2004	179,459	2.33	878	77,021	11,398	739	9,225	80,143
2005	183,126	2.33	884	78,676	11,236	762	9,462	80,534
2006	186,685	2.33	907	80,288	11,297	784	9,693	80,887
2007	190,237	2.32	931	81,900	11,368	808	9,923	81,424
2008	193,683	2.32	956	83,470	11,453	831	10,148	81,888
2009	197,122	2.32	982	85,039	11,548	854	10,373	82,331
2010	200,455	2.32	1,007	86,567	11,633	877	10,591	82,803
2011	203,781	2.31	1,030	88,094	11,692	899	10,810	83,164
2012	207,002	2.31	1,053	89,579	11,755	921	11,023	83,556
2013	210,216	2.31	1,077	91,064	11,827	943	11,235	83,934
2014	213,325	2.31	1,102	92,506	11,913	966	11,442	84,429

\* Commercial includes General Service Non-Demand and General Service Demand Rate Classes

**Schedule 2.2**  
**History and Forecast of Energy Consumption and**  
**Number of Customers by Customer Class**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Year	<u>GWh</u>	<u>Average Number of Customers</u>	<u>Average MWh per Customer</u>	<u>Railroads and Railways GWh</u>	<u>Street and Highway Lighting GWh</u>	<u>Other Sales to Public Authorities GWh</u>	<u>Total Sales to Ultimate Consumers GWh</u>
	INDUSTRIAL **						
1995	137	13	10,521	0	18	0	1,449
1996	148	15	9,893	0	19	0	1,479
1997	151	15	10,059	0	21	0	1,475
1998	157	15	10,443	0	21	0	1,595
1999	173	17	10,188	0	22	0	1,606
2000	172	17	10,114	0	22	0	1,656
2001	173	17	10,162	0	23	0	1,696
2002	178	18	10,178	0	24	0	1,774
2003	181	19	9,591	0	24	0	1,786
2004	188	18	10,444	0	25	0	1,830
2005	191	18	10,437	0	26	0	1,863
2006	191	18	10,437	0	26	0	1,909
2007	192	18	10,492	0	27	0	1,958
2008	192	18	10,492	0	28	0	2,008
2009	193	18	10,546	0	29	0	2,057
2010	193	18	10,546	0	29	0	2,107
2011	194	18	10,601	0	30	0	2,152
2012	195	18	10,656	0	31	0	2,198
2013	195	18	10,656	0	31	0	2,247
2014	196	18	10,710	0	32	0	2,296

\*\* Industrial includes Large Power Rate Class

**Schedule 2.3**  
**History and Forecast of Energy Consumption and**  
**Number of Customers by Customer Class**

(1)	(2)	(3)	(4)	(5)	(6)
<u>Year</u>	<u>Sales For Resale GWh</u>	<u>Utility Use and Losses GWh</u>	<u>Net Energy for Load GWh</u>	<u>Other Customers</u>	<u>Total Number of Customers</u>
1995	101	97	1,648	0	69,448
1996	105	75	1,659	0	70,981
1997	104	82	1,661	0	72,917
1998	108	76	1,779	0	74,605
1999	109	83	1,798	0	76,655
2000	120	93	1,868	0	78,720
2001	125	62	1,882	0	81,011
2002	142	92	2,008	0	82,623
2003	146	83	2,015	0	83,434
2004	149	70	2,049	0	86,264
2005	155	104	2,122	0	88,156
2006	160	107	2,177	0	89,999
2007	166	110	2,233	0	91,842
2008	171	113	2,291	0	93,636
2009	176	115	2,349	0	95,430
2010	182	118	2,407	0	97,176
2011	187	121	2,460	0	98,922
2012	192	123	2,514	0	100,620
2013	197	126	2,570	0	102,317
2014	202	129	2,627	0	103,966

**Schedule 3.1**  
**History and Forecast of Summer Peak Demand - MW**  
**Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Year</u>	<u>Total</u>	<u>Wholesale</u>	<u>Retail</u>	<u>Interruptible</u>	Residential Load <u>Management</u>	Residential Conservation	Comm./Ind. Load <u>Management</u>	Comm./Ind. Conservation	<u>Net Firm Demand</u>
1995	377	24	337	0	0	9	0	7	361
1996	380	24	341	0	0	8	0	7	365
1997	388	24	349	0	0	8	0	7	373
1998	411	26	370	0	0	8	0	7	396
1999	434	26	393	0	0	8	0	7	419
2000	440	28	397	0	0	8	0	7	425
2001	423	28	381	0	0	7	0	7	409
2002	446	32	401	0	0	7	0	7	433
2003	429	33	384	0	0	6	0	6	417
2004	444	33	399	0	0	6	0	6	432
2005	469	35	423	0	0	6	0	5	458
2006	481	36	434	0	0	6	0	5	470
2007	493	38	445	0	0	6	0	4	483
2008	504	39	456	0	0	6	0	3	495
2009	517	40	468	0	0	6	0	3	508
2010	528	41	479	0	0	6	0	2	520
2011	540	42	490	0	0	6	0	2	532
2012	552	44	500	0	0	6	0	2	544
2013	566	45	511	0	0	7	0	3	556
2014	579	46	523	0	0	7	0	3	569

**Schedule 3.2**  
**History and Forecast of Winter Peak Demand - MW**  
**Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Winter</u>	<u>Total</u>	<u>Wholesale</u>	<u>Retail</u>	<u>Interruptible</u>	<u>Residential Load Management</u>	<u>Residential Conservation</u>	<u>Comm./Ind. Load Management</u>	<u>Comm./Ind. Conservation</u>	<u>Net Firm Demand</u>
1995 / 1996	381	28	317	0	0	29	0	7	345
1996 / 1997	343	26	280	0	0	30	0	7	306
1997 / 1998	319	23	259	0	0	30	0	7	282
1998 / 1999	389	28	323	0	0	31	0	7	351
1999 / 2000	373	27	310	0	0	29	0	7	337
2000 / 2001	398	33	331	0	0	28	0	6	364
2001 / 2002	402	33	336	0	0	27	0	6	369
2002 / 2003	425	37	357	0	0	26	0	5	394
2003 / 2004	380	31	319	0	0	25	0	5	350
2004 / 2005	404	36	341	0	0	24	0	4	377
2005 / 2006	415	37	353	0	0	22	0	3	390
2006 / 2007	424	39	363	0	0	20	0	2	402
2007 / 2008	434	40	374	0	0	18	0	2	414
2008 / 2009	444	41	386	0	0	16	0	1	427
2009 / 2010	454	42	397	0	0	14	0	1	439
2010 / 2011	464	44	405	0	0	14	0	1	449
2011 / 2012	474	45	413	0	0	15	0	1	458
2012 / 2013	484	46	422	0	0	15	0	1	468
2013 / 2014	494	47	430	0	0	16	0	1	477
2014 / 2015	505	48	439	0	0	17	0	1	487

**Schedule 3.3**  
**History and Forecast of Net Energy for Load - GWH**  
**Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Year</u>	<u>Total</u>	<u>Residential Conservation</u>	<u>Comm./Ind. Conservation</u>	<u>Retail</u>	<u>Wholesale</u>	<u>Utility Use &amp; Losses</u>	<u>Net Energy for Load</u>	<u>Load Factor %</u>
1995	1,711	43	20	1,449	101	97	1,648	52.10%
1996	1,721	42	21	1,479	105	75	1,659	51.89%
1997	1,726	44	21	1,475	104	82	1,661	50.84%
1998	1,847	47	21	1,595	108	76	1,779	51.28%
1999	1,869	50	21	1,606	109	83	1,798	48.97%
2000	1,939	50	21	1,656	120	93	1,868	50.19%
2001	1,953	50	20	1,696	125	62	1,882	52.54%
2002	2,079	52	19	1,774	142	92	2,008	52.95%
2003	2,085	53	18	1,786	146	83	2,015	55.15%
2004	2,118	53	16	1,830	149	70	2,049	54.14%
2005	2,190	53	15	1,863	155	104	2,122	52.89%
2006	2,243	52	14	1,910	160	107	2,177	52.88%
2007	2,296	51	12	1,957	166	110	2,233	52.78%
2008	2,350	49	10	2,007	171	113	2,291	52.83%
2009	2,406	48	9	2,058	176	115	2,349	52.79%
2010	2,462	47	8	2,107	182	118	2,407	52.84%
2011	2,518	50	8	2,152	187	121	2,460	52.79%
2012	2,574	52	8	2,199	192	123	2,514	52.75%
2013	2,632	54	8	2,247	197	126	2,570	52.77%
2014	2,691	56	8	2,296	202	129	2,627	52.70%

**Schedule 4**

**Previous Year and 2-Year Forecast of Peak Demand and Net Energy for Load**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	ACTUAL		FORECAST			
	2004		2005		2006	
	Peak Demand	NEL	Peak Demand	NEL	Peak Demand	NEL
<u>Month</u>	<u>(MW)</u>	<u>(GWh)</u>	<u>(MW)</u>	<u>(GWh)</u>	<u>(MW)</u>	<u>(GWh)</u>
JAN	350	158	378	165	390	169
FEB	316	143	348	142	357	146
MAR	259	141	311	149	319	153
APR	304	144	339	152	348	156
MAY	420	188	405	184	416	189
JUN	432	201	440	201	452	206
JUL	427	209	458	218	470	223
AUG	427	205	457	221	469	227
SEP	422	185	434	203	446	208
OCT	375	174	373	173	382	177
NOV	329	143	329	151	338	155
DEC	340	158	354	163	363	168

**Schedule 5  
FUEL REQUIREMENTS  
As of January 1, 2005**

(1)	(2)	(3)	(4)	(5) ACTUAL	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
FUEL REQUIREMENTS			UNITS	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
(1)	NUCLEAR		TRILLION Btu	1.000	0.909	1.004	0.909	1.004	0.791	1.004	0.909	1.004	0.909	1.004
(2)	COAL		1000 tons	479.000	501.410	601.077	623.710	630.609	651.200	665.315	637.456	646.099	658.443	667.380
	RESIDUAL													
(3)		STEAM	1000 bbl	194.969	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(4)		CC	1000 bbl	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(5)		CT	1000 bbl	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(6)		TOTAL:	1000 bbl	194.969	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	DISTILLATE													
(7)		STEAM	1000 bbl	0.678	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(8)		CC	1000 bbl	1.820	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(9)		CT	1000 bbl	0.925	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(10)		TOTAL:	1000 bbl	3.423	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	NATURAL GAS													
(11)		STEAM	1000 Mcf	1,644.662	1,010.739	548.315	626.305	606.446	855.126	1,233.198	71.557	60.328	117.937	104.728
(12)		CC	1000 Mcf	2,933.156	4,463.475	3,982.392	3,723.715	4,108.410	4,184.180	4,467.390	763.719	935.081	925.675	1,185.842
(13)		CT	1000 Mcf	299.169	2,843.298	1,811.373	1,995.209	1,838.585	1,720.285	2,379.315	376.366	289.777	474.311	331.494
(14)		TOTAL:	1000 Mcf	4,876.987	8,317.512	6,342.080	6,345.229	6,553.441	6,759.591	8,079.903	1,211.642	1,285.186	1,517.923	1,622.064
(15)	Landfill Gas		TRILLION Btu	0.057	0.127	0.127	0.127	0.127	0.127	0.063	0.063	0.063	0.063	0.063
(16)	Petroleum Coke		1000 tons	0.000	0.000	0.000	0.000	0.000	0.000	0.000	234.189	237.565	241.519	243.639
(17)	Woody Biomass		1000 tons	0.000	0.000	0.000	0.000	0.000	0.000	0.000	172.748	175.238	178.155	179.719

**Schedule 6.1**  
**ENERGY SOURCES (GWH)**  
As of January 1, 2005

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
ENERGY SOURCES			UNITS	ACTUAL 2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
(1)	ANNUAL FIRM INTER-REGION INTERCHANGE		GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(2)	NUCLEAR		GWH	102.823	86.538	95.658	86.538	95.658	75.369	95.658	86.538	95.658	86.538	95.658
(3)	COAL		GWH	1,130.125	1,232.524	1,476.656	1,534.934	1,553.758	1,613.417	1,517.565	1,401.086	1,423.309	1,454.935	1,477.802
	RESIDUAL													
(4)		STEAM	GWH	99.932	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(5)		CC	GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(6)		CT	GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(7)		TOTAL:	GWH	99.932	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	DISTILLATE													
(8)		STEAM	GWH	0.220	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(9)		CC	GWH	0.722	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(10)		CT	GWH	0.227	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(11)		TOTAL:	GWH	1.169	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	NATURAL GAS													
(12)		STEAM	GWH	137.172	84.708	45.897	52.443	50.773	72.220	103.787	5.871	5.036	9.865	8.837
(13)		CC	GWH	347.276	504.932	432.385	410.160	446.349	445.035	500.111	75.710	91.333	91.147	115.018
(14)		CT	GWH	19.961	208.494	126.181	135.342	131.048	129.039	178.823	26.585	19.845	31.285	24.125
(15)		TOTAL:	GWH	504.409	798.134	604.463	597.945	628.170	646.294	782.721	108.166	116.214	132.297	147.980
(16)	NUG		GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(17)	HYDRO		GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(18)	Landfill Gas		GWH	4.214	10.582	10.582	10.582	10.582	10.582	5.291	5.291	5.291	5.291	5.291
(19)	Petroleum Coke		GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	674.832	686.083	699.264	706.417
(20)	Woody Biomass		GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	184.040	187.108	190.703	192.654
(21)	Starke Contract		GWH	43.446	13.110	13.110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(22)	Purchased Energy		GWH	261.627	6.867	2.414	3.012	3.064	3.660	5.321	0.051	0.174	0.767	1.205
(23)	Energy Sales		GWH	12.299	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(24)	NET ENERGY FOR LOAD		GWH	2,048.554	2,121.535	2,176.663	2,233.011	2,291.232	2,349.322	2,406.556	2,460.004	2,513.837	2,569.795	2,627.006

**Schedule 6.2**  
**ENERGY SOURCES (%)**  
As of January 1, 2005

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
ENERGY SOURCES			UNITS	ACTUAL 2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
(1)	ANNUAL FIRM INTER-REGION INTERCHANGE		%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(2)	NUCLEAR		%	5.02%	4.08%	4.39%	3.88%	4.17%	3.21%	3.97%	3.52%	3.81%	3.37%	3.64%
(3)	COAL		%	55.17%	58.10%	67.84%	68.74%	67.81%	68.68%	63.06%	56.95%	56.62%	56.62%	56.25%
	RESIDUAL													
(4)		STEAM	%	4.88%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(5)		CC	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(6)		CT	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(7)		TOTAL:	%	4.88%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	DISTILLATE													
(8)		STEAM	%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(9)		CC	%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(10)		CT	%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(11)		TOTAL:	%	0.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	NATURAL GAS													
(12)		STEAM	%	6.70%	3.99%	2.11%	2.35%	2.22%	3.07%	4.31%	0.24%	0.20%	0.38%	0.34%
(13)		CC	%	16.95%	23.80%	19.86%	18.37%	19.48%	18.94%	20.78%	3.08%	3.63%	3.55%	4.38%
(14)		CT	%	0.97%	9.83%	5.80%	6.06%	5.72%	5.49%	7.43%	1.08%	0.79%	1.22%	0.92%
(15)		TOTAL:	%	24.62%	37.62%	27.77%	26.78%	27.42%	27.51%	32.52%	4.40%	4.62%	5.15%	5.63%
(16)	NUG		%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(17)	HYDRO		%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(18)	Landfill Gas		%	0.21%	0.50%	0.49%	0.47%	0.46%	0.45%	0.22%	0.22%	0.21%	0.21%	0.20%
(19)	Petroleum Coke		%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	27.43%	27.29%	27.21%	26.89%
(20)	Woody Biomass		%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.48%	7.44%	7.42%	7.33%
(21)	Starke Contract		%	2.12%	0.62%	0.60%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(22)	Purchased Energy		%	12.77%	0.32%	0.11%	0.13%	0.13%	0.16%	0.22%	0.00%	0.01%	0.03%	0.05%
(23)	Energy Sales		%	0.60%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(24)	NET ENERGY FOR LOAD		%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

**TABLE 3.1**

**DEMAND-SIDE MANAGEMENT IMPACTS  
INCREMENTAL EFFECT OF PLANNED PROGRAMS**

---

<u>Year</u>	<u>MWh</u>	<u>Winter</u> <u>kW</u>	<u>Summer</u> <u>kW</u>
2005	2,938	705	550
2006	5,946	1,415	1,120
2007	8,973	2,128	1,704
2008	12,020	2,848	2,294
2009	15,103	3,577	2,895
2010	18,149	4,301	3,490
2011	20,493	4,914	3,818
2012	23,120	5,545	4,246
2013	25,408	6,162	4,515
2014	27,696	6,783	4,790

---

Notes: Projected impacts from programs planned for 2005-2014.  
Net of 2004 estimated cumulative historical program results.

**TABLE 3.2.1**

**DEMAND-SIDE MANAGEMENT IMPACTS  
Total Program Achievements**

---

<u>Year</u>	<u>MWh</u>	<u>Winter kW</u>	<u>Summer kW</u>
1980	254	168	168
1981	575	370	370
1982	1,054	687	674
1983	2,356	1,339	1,212
1984	8,024	3,074	2,801
1985	16,315	6,719	4,619
1986	25,416	10,470	7,018
1987	30,279	13,287	8,318
1988	34,922	15,918	9,539
1989	38,824	18,251	10,554
1990	43,661	21,033	11,753
1991	48,997	24,204	12,936
1992	54,898	27,574	14,317
1993	61,356	31,434	15,752
1994	66,725	34,803	16,871
1995	72,057	38,117	18,022
1996	75,894	39,121	18,577
1997	79,998	40,256	19,066
1998	84,017	41,351	19,541
1999	88,631	42,599	20,055
2000	93,132	43,742	20,654
2001	97,312	44,852	21,163
2002	101,941	46,080	21,679
2003	105,942	47,150	22,159
2004	108,982	47,939	22,590
2005	111,920	48,644	23,140
2006	114,924	49,354	23,707
2007	117,943	50,067	24,286
2008	120,989	50,786	24,877
2009	124,072	51,516	25,477
2010	127,227	52,261	26,094
2011	130,286	52,992	26,696
2012	133,345	53,723	27,297
2013	136,114	54,439	27,744
2014	138,884	55,155	28,191

---

Note: Total cumulative impacts from 1990 Conservation Plan and 1995 DSM Plan.

**TABLE 3.2.2**

**DEMAND-SIDE MANAGEMENT IMPACTS  
Program Retirements**

---

<u>Year</u>	<u>MWh</u>	<u>Winter kW</u>	<u>Summer kW</u>
1980	0	0	0
1981	0	0	0
1982	0	0	0
1983	0	0	0
1984	0	0	0
1985	0	0	0
1986	0	0	0
1987	0	0	0
1988	0	0	0
1989	0	0	0
1990	0	0	0
1991	0	0	0
1992	0	0	0
1993	(422)	(75)	(75)
1994	(4,769)	(957)	(957)
1995	(8,891)	(1,778)	(1,786)
1996	(13,746)	(2,795)	(2,815)
1997	(14,813)	(3,276)	(3,271)
1998	(15,952)	(3,945)	(3,815)
1999	(17,460)	(4,838)	(4,563)
2000	(22,160)	(7,899)	(5,787)
2001	(26,886)	(10,871)	(7,395)
2002	(31,335)	(13,564)	(8,586)
2003	(35,834)	(16,129)	(9,750)
2004	(39,588)	(18,433)	(10,730)
2005	(44,156)	(21,149)	(11,864)
2006	(49,330)	(24,285)	(13,008)
2007	(55,047)	(27,612)	(14,342)
2008	(61,391)	(31,446)	(15,752)
2009	(66,739)	(34,811)	(16,867)
2010	(72,171)	(38,145)	(18,036)
2011	(72,886)	(38,263)	(18,310)
2012	(73,318)	(38,363)	(18,484)
2013	(73,799)	(38,461)	(18,662)
2014	(74,282)	(38,556)	(18,834)

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Note: Conservation savings that have been retired from total program achievements corresponding to individual program life cycles.

**TABLE 3.2.3**

**DEMAND-SIDE MANAGEMENT IMPACTS  
Total Annual Net Effects**

---

<u>Year</u>	<u>MWh</u>	<u>Winter kW</u>	<u>Summer kW</u>
1980	254	168	168
1981	575	370	370
1982	1,054	687	674
1983	2,356	1,339	1,212
1984	8,024	3,074	2,801
1985	16,315	6,719	4,619
1986	25,416	10,470	7,018
1987	30,279	13,287	8,318
1988	34,922	15,918	9,539
1989	38,824	18,251	10,554
1990	43,661	21,033	11,753
1991	48,997	24,204	12,936
1992	54,898	27,574	14,317
1993	60,934	31,358	15,677
1994	61,955	33,845	15,913
1995	63,167	36,339	16,235
1996	62,148	36,325	15,761
1997	65,185	36,979	15,795
1998	68,065	37,406	15,726
1999	71,172	37,761	15,492
2000	70,972	35,843	14,867
2001	70,426	33,981	13,768
2002	70,606	32,516	13,093
2003	70,108	31,021	12,409
2004	69,394	29,506	11,860
2005	67,763	27,496	11,276
2006	65,594	25,069	10,699
2007	62,896	22,455	9,944
2008	59,599	19,340	9,125
2009	57,333	16,705	8,610
2010	55,055	14,116	8,058
2011	57,400	14,729	8,386
2012	60,026	15,360	8,814
2013	62,315	15,977	9,082
2014	64,603	16,599	9,357

---

Note: Cumulative impacts from 1990 Conservation Plan and 1995 DSM Plan, net of program retirements.

**TABLE 3.3**  
**DELIVERED FUEL PRICES**  
**\$/MMBtu**

---

<u>Year</u>	<u>Residual Fuel Oil</u>	<u>Distillate Fuel Oil</u>	<u>Natural Gas</u>	<u>0.7% Sulfur Coal (1)</u>	<u>1.7% Sulfur Coal (2)</u>	<u>3.0% Sulfur Coal (3)</u>	<u>Petroleum Coke (4)</u>	<u>Nuclear</u>
1995	3.79	4.60	2.33	1.73				0.45
1996	2.75	4.89	3.37	1.66				0.42
1997	3.26	4.46	3.30	1.66				0.41
1998	2.73	3.97	2.87	1.66				0.41
1999	2.79	3.47	2.86	1.66				0.44
2000	4.52	5.99	4.53	1.62				0.38
2001	4.15	6.53	4.91	1.88				0.38
2002	4.58	5.69	3.82	2.06				0.38
2003	4.87	6.59	5.80	2.04				0.43
2004	5.06	7.24	6.15	2.03				0.41
2005	5.61	7.17	7.18	2.27	2.79	2.59	1.14	0.43
2006	5.29	6.64	6.50	2.95	3.00	2.79	1.16	0.42
2007	4.94	6.33	6.08	2.58	2.23	2.34	1.17	0.42
2008	4.82	6.21	5.70	2.62	2.46	2.46	1.19	0.44
2009	4.76	6.13	5.64	2.67	2.50	2.51	1.20	0.42
2010	4.81	6.16	5.57	2.61	2.64	2.54	1.22	0.47
2011	4.99	6.27	5.70	2.68	2.69	2.62	1.24	0.46
2012	5.17	6.48	5.94	2.77	2.77	2.68	1.27	0.45
2013	5.36	6.69	6.20	2.88	2.86	2.77	1.30	0.44
2014	5.54	6.93	6.53	2.96	2.90	2.81	1.33	0.45

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- (1) Approximate heat content of 0.7% sulfur coal is 12,200 Btu/lb.  
(2) Approximate heat content of 1.7% sulfur coal is 11,550 Btu/lb.  
(3) Approximate heat content of 3.0% sulfur coal is 11,150 Btu/lb.  
(4) Approximate heat content of pet coke is 14,200 Btu/lb.

## **4. FORECAST OF FACILITIES REQUIREMENTS**

### **4.1 GENERATION RETIREMENTS**

The System plans to retire two of its currently operating generating units prior to 2012 (see Schedule 8). In December of 2003 GRU commissioned its newest units at the Southwest Landfill. Engines installed at the landfill gas to electric energy project will be retired as the gas production decreases through time. The first engine is expected to be removed in 2009. The John R. Kelly steam unit #7 (23 MW) will be 50 years old in 2011 and is tentatively scheduled for retirement in August 2011.

### **4.2 RESERVE MARGIN AND SCHEDULED MAINTENANCE**

GRU uses a planning criteria of 15% capacity reserve margin (suggested for emergency power pricing purposes by Florida Public Service Commission Rule 25-6.035). Available generating capacities are compared with System summer peak demands in Schedule 7.1 (and Figure 4.1) and System winter peak demands in Schedule 7.2 (and Figure 4.2). Higher peak demands in summer and lower unit operating capacities in summer result in lower reserve margins during the summer season than in winter. Summer reserve margins without capacity additions are forecast to fall below 15% in 2011. The Gainesville community is discussing the ramifications of adding additional resources by summer 2011 to address its reserve margin requirements.

### **4.3 GENERATION ADDITIONS**

GRU is in the midst of an integrated resource planning process to determine the best plan for our customers' long-term electrical energy needs. The process has proceeded to the point where the alternatives have been screened down to a conceptual plan for public discussion. The facility portion of the proposed plan has not been finalized or approved. A key aspect of the aforementioned integrated resource plan involves hiring

an engineering firm to perform a detailed design of the proposed self-build unit to provide a target for the purpose of issuing a Request For Proposals to Provide Capacity and Energy to offset the need for the proposed unit. Without a proper target there will be no competitive bidding. Schedule 9, included at the end of this section, identifies key parameters for the additional generating capacity currently under discussion.

The lead alternative currently under discussion is a 220 net MW coal/petroleum coke/biomass unit at the Deerhaven plant site. This circulating fluidized bed combustion unit would include selective non-catalytic NO<sub>x</sub> reduction, flue gas or flash dryer absorber for desulphurization, and a fabric filter for particulate control. Due to new regulations, Deerhaven Unit 2 is expected to be retrofitted with selective catalytic NO<sub>x</sub> reduction, flue-gas desulphurization, and fabric filter bag house for particulate control. The retrofit of Deerhaven Unit 2 is expected to be effective by 2010. The combination of new capacity and retrofitting of existing coal capacity would result in substantially lower total emissions from combined solid fuel combustion than the existing coal unit. The tentative schedule for construction is yet to be determined. A nominal in-service date of June 2011 has been used for this report. This date is the basis of the reserve margin forecast in Schedule 7.1 and Schedule 7.2. Characteristics of the proposed solid fuel facility are summarized in Schedule 9 at the end of this section.

#### **4.4 DISTRIBUTION SYSTEM ADDITIONS**

Up to five new, identical, mini-power delivery substations (PDS) were planned for the GRU system in 1999. The first, Rocky Point, located near the intersection of SW Williston Road and SW 23<sup>rd</sup> Terrace, was installed in 2000. The second, Kanapaha, located at 8500 SW Archer Road, was installed in 2002. The third, Ironwood, located at 1800 NE 31<sup>st</sup> Avenue, was most recently connected in 2003. A fourth PDS is planned for 2007. The location for PDS #4 will be a parcel owned by GRU in the Springhill area west of Interstate 75 and north of 39<sup>th</sup> Avenue. A fifth PDS is being considered for addition to the System no earlier than 2010. The location of this proposed fifth PDS would be near NW 43<sup>rd</sup> Street

and U.S. Highway 441. These new mini-power delivery substations have been planned to redistribute the load from the existing substations as new load centers grow and develop within the System.

Each PDS will consist of one (or more) 138-12.47 KV, 33.6 MVA, wye-wye substation transformer with a maximum of eight distribution circuits. The proximity of these new PDSs to other, existing adjacent area substations will allow for backup in the event of a substation transformer failure.

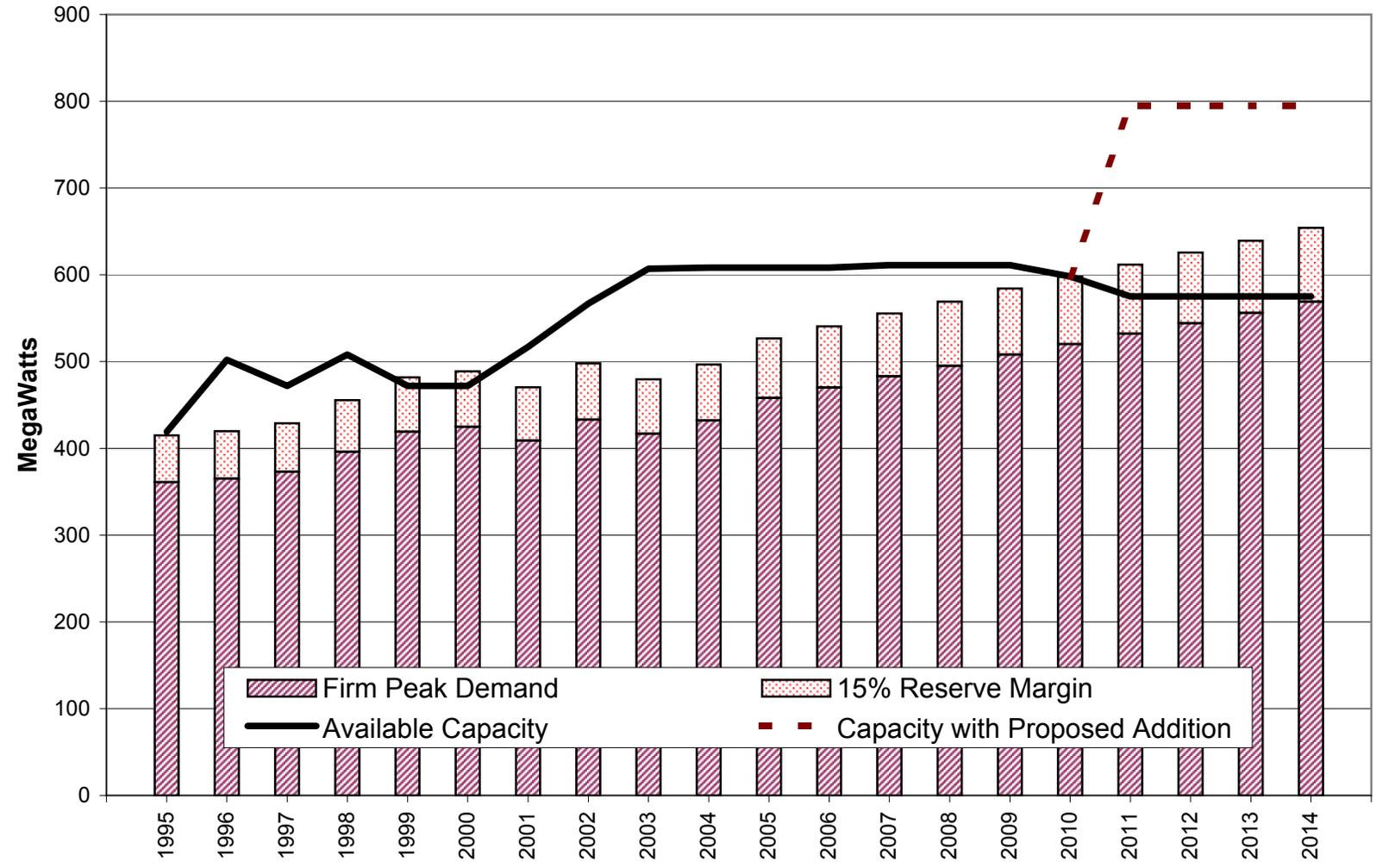
GRU is also planning to add a substation transformer to its Depot transmission substation in 2006. This expansion of the Depot substation to a distribution and transmission substation will enhance reliability by relocating some distribution circuits currently connected to the Kelly substation, while allowing for load growth in Gainesville's downtown area.

**Schedule 7.1  
Forecast of Capacity, Demand, and Scheduled Maintenance at Time of Summer Peak**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Year	Total Installed Capacity MW	Firm Capacity Import MW	Firm Capacity Export MW	QF MW	Total Capacity Available MW	System Firm Summer Peak Demand MW	Reserve Margin (1) before Maintenance MW	% of Peak	Scheduled Maintenance MW	Reserve Margin (1) after Maintenance MW	% of Peak
1995	452	0	33	0	419	361	58	16.1%	0	58	16.1%
1996	527	18	43	0	502	365	137	37.5%	0	137	37.5%
1997	527	30	85	0	472	373	99	26.5%	0	99	26.5%
1998	550	31	73	0	508	396	112	28.3%	0	112	28.3%
1999	550	32	110	0	472	419	53	12.6%	14	39	9.3%
2000	550	0	78	0	472	425	47	11.1%	0	47	11.1%
2001	610	0	93	0	517	409	108	26.4%	0	108	26.4%
2002	610	0	43	0	567	433	134	30.9%	0	134	30.9%
2003	610	0	3	0	607	417	190	45.6%	0	190	45.6%
2004	611	0	3	0	608	432	176	40.7%	0	176	40.7%
2005	611	0	3	0	608	458	150	32.8%	0	150	32.8%
2006	611	0	3	0	608	470	138	29.4%	0	138	29.4%
2007	611	0	0	0	611	483	128	26.6%	0	128	26.6%
2008	611	0	0	0	611	495	116	23.5%	0	116	23.5%
2009	611	0	0	0	611	508	103	20.3%	0	103	20.3%
2010	598	0	0	0	598	520	78	15.0%	0	78	15.0%
2011	795	0	0	0	795	532	263	49.4%	0	263	49.4%
2012	795	0	0	0	795	544	251	46.1%	0	251	46.1%
2013	795	0	0	0	795	556	239	43.0%	0	239	43.0%
2014	795	0	0	0	795	569	226	39.7%	0	226	39.7%

(1) GRU provides reserve margin backup for 3 MW Schedule D contract with the City of Starke.

**Figure 4.1**  
**Summer Peak Demand and Generation Capacity**



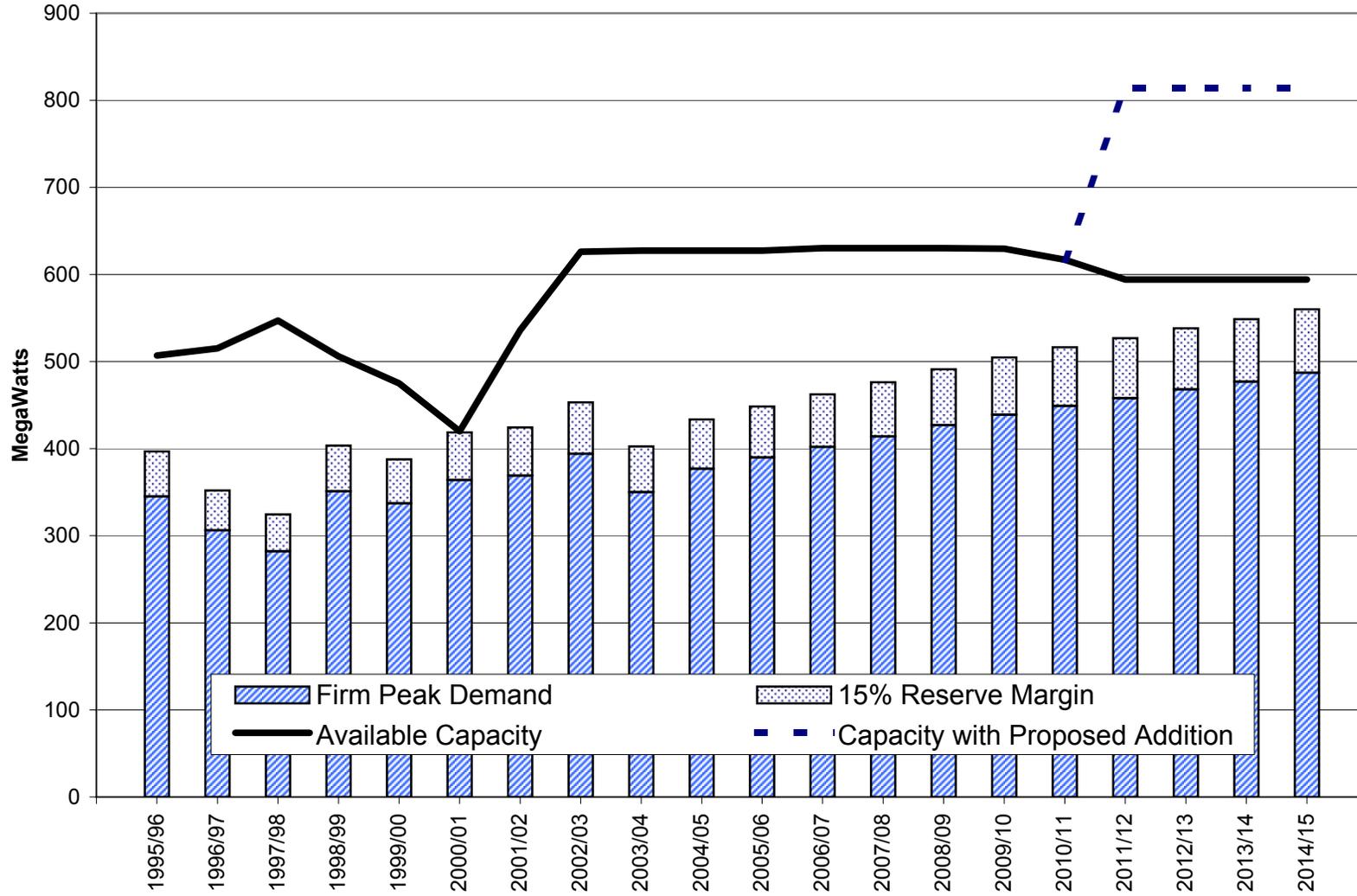
53

**Schedule 7.2**  
**Forecast of Capacity, Demand, and Scheduled Maintenance at Time of Winter Peak**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Year	Total Installed Capacity MW	Firm Capacity Import MW	Firm Capacity Export MW	QF MW	Total Capacity Available MW	System Firm Winter Peak Demand MW	Reserve Margin (1) before Maintenance MW	% of Peak	Scheduled Maintenance MW	Reserve Margin (1) after Maintenance MW	% of Peak
1995/96	540	0	33	0	507	345	162	47.0%	0	162	47.0%
1996/97	540	18	43	0	515	306	209	68.3%	0	209	68.3%
1997/98	540	30	23	0	547	282	265	94.0%	0	265	94.0%
1998/99	563	31	88	0	506	351	155	44.2%	0	155	44.2%
1999/00	563	0	88	0	475	337	138	40.9%	15	123	36.5%
2000/01	513	0	93	0	420	364	56	15.4%	0	56	15.4%
2001/02	629	0	93	0	536	369	167	45.3%	0	167	45.3%
2002/03	629	0	3	0	626	394	232	58.9%	0	232	58.9%
2003/04	630	0	3	0	627	350	277	79.1%	0	277	79.1%
2004/05	630	0	3	0	627	377	250	66.3%	0	250	66.3%
2005/06	630	0	3	0	627	390	237	60.8%	0	237	60.8%
2006/07	630	0	0	0	630	402	228	56.8%	0	228	56.8%
2007/08	630	0	0	0	630	414	216	52.2%	0	216	52.2%
2008/09	630	0	0	0	630	427	203	47.6%	0	203	47.6%
2009/10	630	0	0	0	630	439	191	43.4%	0	191	43.4%
2010/11	617	0	0	0	617	449	168	37.4%	0	168	37.4%
2011/12	814	0	0	0	814	458	356	77.7%	0	356	77.7%
2012/13	814	0	0	0	814	468	346	73.9%	0	346	73.9%
2013/14	814	0	0	0	814	477	337	70.7%	0	337	70.7%
2014/15	814	0	0	0	814	487	327	67.2%	0	327	67.2%

(1) GRU provides reserve margin backup for 3 MW Schedule D contract with the City of Starke.

**Figure 4.2**  
**Winter Peak Demand and Generation Capacity**



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Schedule 8

PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHANGES

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Plant Name	Unit No.	Location	Unit Type	Fuel		Fuel Transport		Const. Start Mo/Yr	Commercial In-Service Mo/Yr	Expected Retirement Mo/Yr	Gross Capability		Net Capability		Status
				Pri.	Alt.	Pri.	Alt.				Summer (MW)	Winter (MW)	Summer (MW)	Winter (MW)	
Deerhaven	2	12-001 (Alachua Co., Sections 26,27,35, Township 8 S, Range 19 E) (GRU)	ST	BIT	-	RR	-	-	10/1981	4/2010	(249)	(249)	(228)	(228)	P
Deerhaven	2	12-001 (Alachua Co., Sections 26,27,35, Township 8 S, Range 19 E) (GRU)	ST	BIT	-	RR	-	1/2010	6/2010	Unknown	249	249	215	215	P
Deerhaven	3	12-001 (Alachua Co., Sections 26,27,35, Township 8 S, Range 19 E) (GRU)	ST	BIT/PC/WDS	BIT	RR/TK	RR	6/2006	6/2011	Unknown	244	244	220	220	P
J. R. Kelly	7	Alachua County Section 4 Township 10 S Range 20 E (GRU)	ST	NG	RFO	PL	TK	-	8/1961	8/2011	(24)	(24)	(23)	(23)	P
SW Landfill	1	Alachua County Section 19 Township 11 S Range 18 E (GRU)	IC	LFG	-	PL	-	-	12/2003	12/2009	(0.82)	(0.82)	(0.65)	(0.65)	P

**Unit Type**  
 ST = Steam Turbine  
 IC = Internal Combustion Engine (diesel, piston)

**Transportation Method**  
 RR = Railroad  
 TK = Truck  
 PL = Pipeline

**Fuel Type**  
 BIT = Bituminous Coal  
 PC = Petroleum Coke  
 WDS = Wood/Wood Waste Solids (Wood Trimming, Logging Residue, Forest Restoration)  
 NG = Natural Gas  
 DFO = Distillate Fuel Oil

**Status**  
 P = Proposed for Installation but not City Commission authorized. Not under construction.

**Schedule 9**  
**Description of Proposed Facility Under Discussion**

(1)	Plant Name and Unit Number:	Deerhaven 3
(2)	Net Capacity	
	a. Summer	220 MW
	b. Winter	220 MW
(3)	Technology Type:	Circulating-Fluidized Bed
(4)	Anticipated Construction Timing	
	a. Field construction start-date:	6/1/2006
	b. Commercial in-service date:	6/1/2011
(5)	Fuel	
	a. Primary Fuel (by Heat Input)	36.36% Coal / 50% Pet Coke / 13.64% Wood Biomass
	b. Alternate Fuel	Bituminous Coal
(6)	Air Pollution Control Strategy:	Circulating Fluidized Bed Flue Gas Desulphurization or Flash Dryer Absorber SNCR if needed Fabric Filter Retrofit of Deerhaven 2 with FGD, SCR and Fabric Filter
(7)	Cooling Method:	Forced Draft Cooling Tower
(8)	Total Site Area (ft <sup>2</sup> ):	To be determined. (Deerhaven)
(9)	Construction Status:	Proposed, Not Approved by City Commission
(10)	Certification Status:	Proposed, Application Not Filed.
(11)	Status with Federal Agencies:	Not Applicable
(12)	Projected Unit Performance Data	
	Planned Outage Factor (POF):	1.0%
	Forced Outage Factor (FOF):	4.0%
	Equivalent Availability Factor (EAF):	95.0%
	Resulting Capacity Factor (CF)	85.0%
	Average Net Operating Heat Rate (ANOHR):	9,910
(13)	Projected Unit Financial Data <sup>(1)</sup>	
	Book Life (Years)	35
	Direct Construction Cost (\$2003/kW):	1831.91
	Escalation:	3.00%
	Fixed O&M (\$2003/kW-Yr):	27.68
	Variable O&M (\$2003/MWh):	3.51

Notes: (1) Proposal Includes capital cost of upgrading Deerhaven Unit 2 with selective catalytic reduction, flue-gas desulfurization, and fabric filter bag house.

## **5. ENVIRONMENTAL AND LAND USE INFORMATION**

### **5.1 DESCRIPTION OF POTENTIAL SITES FOR NEW GENERATING FACILITIES**

Not applicable.

### **5.2 DESCRIPTION OF PREFERRED SITES FOR NEW GENERATING FACILITIES**

GRU's current preferred alternative is a 244/220 MW (gross/net) circulating fluidized bed (CFB) unit to be located at the Deerhaven plant site, shown in Figure 2.1 and Figure 5.1, located north of Gainesville off U.S. Highway 441. The proposed CFB will be fired with biomass, coal, and petroleum coke (pet coke). The Deerhaven site is preferred for the proposed project for several major reasons as follows. It is an existing power generation site, thereby allowing future development while minimizing impacts to the greenfield (undeveloped) areas. It also has established: 1) access to fuel supply and power delivery; 2) fuel, water and combustion product management facilities; and 3) access to reclaimed water.

#### **5.2.1 Land Use and Environmental Features**

The location of the Deerhaven Generating Station ("Site") is indicated on Figure 2.1 and Figure 5.1, overlain on USGS maps that were originally at a scale of 1 inch : 24,000 feet. Figure 5.2 provides a photographic depiction of the land use and cover of the existing site and adjacent areas. The existing land use of the certified portion of the site is industrial (i.e., electric power generation and transmission and ancillary uses such as fuel storage and conveyance; water, combustion product, and forest management). The recently acquired portion of the site is zoned agricultural (silviculture). Surrounding land uses are primarily rural or agricultural with some low-density residential development. The Deerhaven site encompasses approximately 3464 acres, much of which is a natural buffer.

The Site is located in the Suwannee River Water Management District. A small increase in water quantities for potable uses is projected. It is estimated that industrial water usage associated with the new unit will be approximately 3 million gallons per day (MGD). This amount includes a water allocation for a flue gas desulfurization system(s) at the Site. The groundwater allocation in the existing Site Certification may be sufficient to accommodate the requirements of the Site in the future with the proposed new unit, if reclaimed water is used. Water for potable use will be supplied via the City's potable water system. Groundwater will continue to be extracted from the Floridan aquifer. A significant amount of reclaimed water from GRU's Main St. and/or Kanapaha wastewater treatment plants is expected to be made available to the Site to supply industrial process and cooling water needs. Process wastewater is currently collected, treated and reused on-site. The Site has zero discharge of process wastewater to surface waters, with a brine concentrator and on-site storage of water treatment and solid by-products. It is expected that this practice will continue with the addition of the new unit. Other water conservation measures may be identified during the design of the project.

Coal is currently delivered to the Site via rail. It is expected that fuel for the new unit will also be supplied by rail and that the existing coal storage area will be used for storage of fuels (biomass, coal, and pet coke). This area is lined with natural clay and is equipped with a stormwater runoff collection trench and pond.

### **5.2.2 Air Emissions**

The CFB technology itself minimizes the formation of nitrogen oxides (i.e., NO<sub>x</sub>) through lower combustion temperatures, and controls SO<sub>2</sub> emissions via limestone injection. CFB technology also results in substantial metals removal. A polishing scrubber or a flash dryer absorber may be utilized, if needed, to further reduce SO<sub>2</sub> and trace metal emissions. NO<sub>x</sub> emissions may be further reduced, if needed, using a selective non-catalytic reduction system. Particulate matter emissions will be controlled utilizing a fabric filter.

### **5.3 STATUS OF APPLICATION FOR SITE CERTIFICATION**

Not applicable.

Figure 5.1

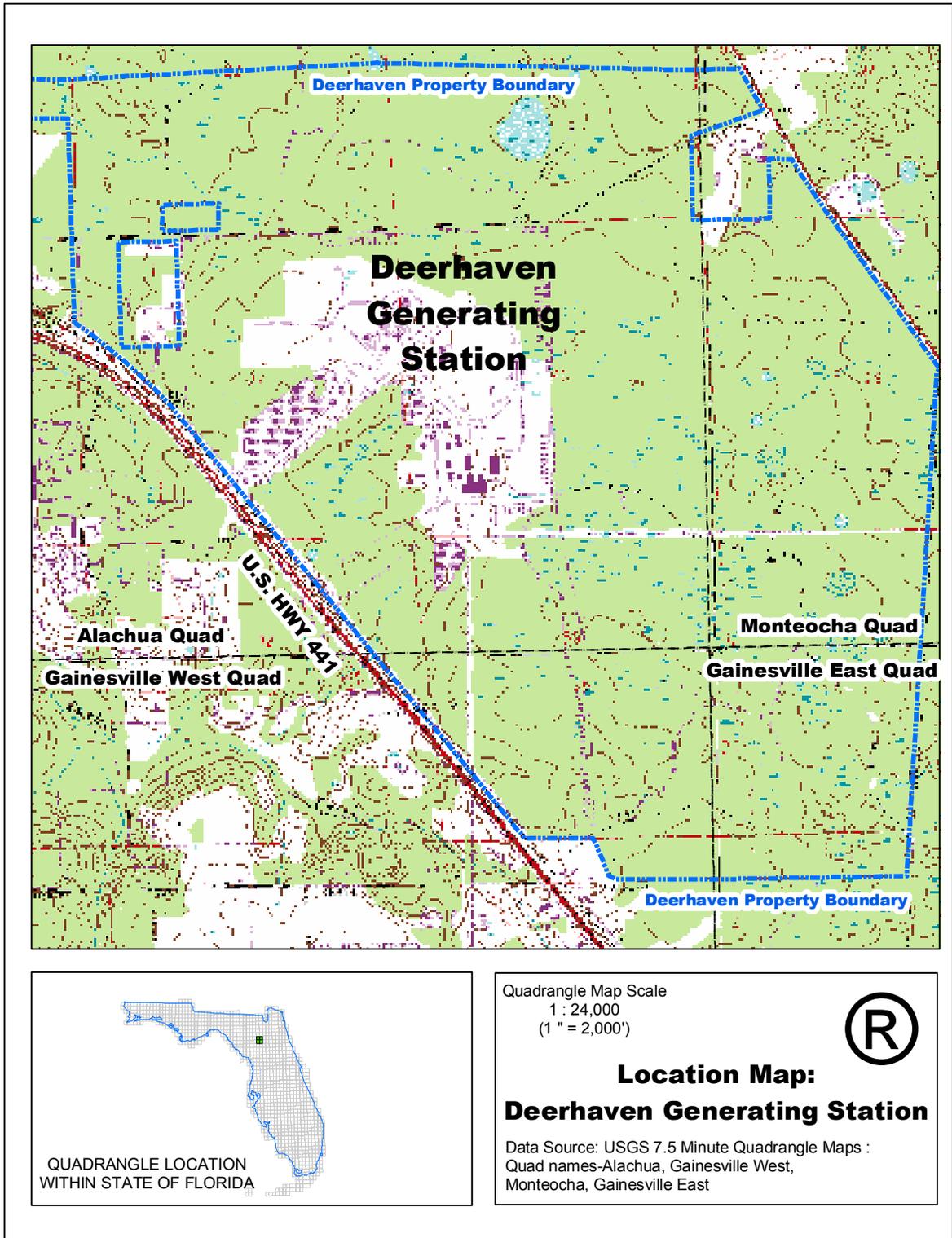
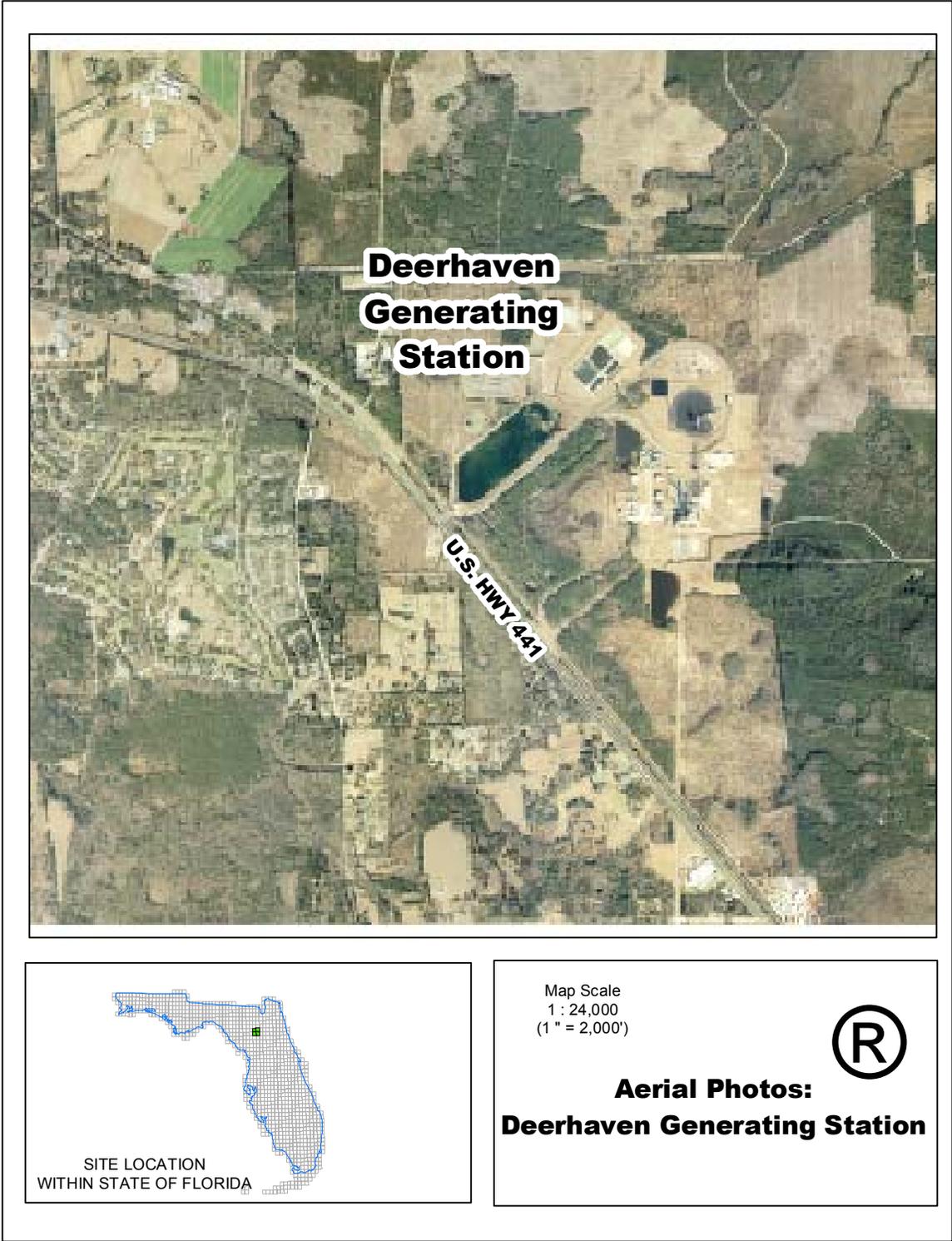


Figure 5.2



GAINESVILLE REGIONAL UTILITIES

2006 TEN-YEAR SITE PLAN



Submitted to:

The Florida Public Service Commission

April 2006

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## **1. INTRODUCTION**

The 2006 Ten-Year Site Plan for Gainesville Regional Utilities (GRU) is submitted to the Florida Public Service Commission pursuant to Section 186.801, Florida Statutes. The contents of this report conform to information requirements listed in Form PSC/EAG 43, as specified by Rule 25-22.072, Florida Administrative Code. The five sections of the 2006 Ten-Year Site Plan are:

Introduction

Description of Existing Facilities

Forecast of Electric Energy and Demand Requirements

Forecast of Facilities Requirements

Environmental and Land Use Information

Gainesville Regional Utilities is a municipal electric, natural gas, water, wastewater, and telecommunications utility system, owned and operated by the City of Gainesville, Florida. The GRU retail electric system service area includes the City of Gainesville and the surrounding urban area. The highest net integrated peak demand recorded to date on GRU's electrical system was 465 megawatts on August 18, 2005.

## 2. DESCRIPTION OF EXISTING FACILITIES

The City of Gainesville owns a fully vertically integrated electric power production, transmission, and distribution system (herein referred to as "the System"). GRU is the City of Gainesville enterprise arm that has the responsibility to operate and maintain the System. In addition to retail electric service, GRU also provides wholesale electric service to the City of Alachua (Alachua); Clay Electric Cooperative (Clay); and the City of Starke (Starke). GRU's distribution system serves approximately 124 square miles and 87,560 customers (2005 average). The general locations of GRU electric facilities and the electric system service area are shown in Figure 2.1.

### 2.1 GENERATION

The existing generating facilities operated by GRU are tabulated in Schedule 1, found at the end of this chapter. The present summer net capability is 611 MW and the winter net capability is 632 MW<sup>1</sup>. Currently, the System's energy is produced by three fossil fuel steam turbines, six simple-cycle combustion turbines, one combined-cycle unit, a 1.4% ownership share of the Crystal River 3 nuclear unit operated by Progress Energy Florida (PEF), and two internal combustion engines that run on landfill gas.

The System has two generating plant sites, Deerhaven and John R. Kelly (JRK). Each site utilizes both steam turbine and gas turbine generating units. The JRK station also utilizes a combined cycle unit. Additionally, two internal combustion engines located at the Alachua County Southwest Landfill provide 1.3 MW of generating capacity.

#### 2.1.1 Generating Units

**2.1.1.1 Steam Turbines.** The System's three operational simple-cycle steam turbines are powered by fossil fuels and Crystal River 3 is nuclear powered. The fossil

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<sup>1</sup> Net capability is that specified by the "SERC Guideline Number Two for Uniform Generator Ratings for Reporting." The winter rating will normally exceed the summer rating because generating plant efficiencies are increased by lower ambient air temperatures and lower cooling water temperatures.

fueled steam turbines comprise 54.7% of the System's net summer capability and produced 87.4% of the electric energy supplied by the System in 2005. These units range in size from 23.2 MW to 228.4 MW. The combined-cycle unit, which includes a heat recovery steam generator/turbine and combustion turbine set, comprises 18.3% of the System's net summer capability and produced 6.1% of the electric energy supplied by the System in 2005. The System's 11.43 MW share of Crystal River 3 nuclear unit comprises 1.9% of the System's net summer capability and produced 4.5% of total electric energy in 2005. Deerhaven Unit 2, and Crystal River 3 are used for base load purposes; while JRK Unit 7, JRK CC1, and Deerhaven Unit 1 are used for intermediate loading.

**2.1.1.2 Gas Turbines.** The System's six industrial gas turbines make up 24.9% of the System's summer generating capability and produced 1.7% of the electric energy supplied by the System in 2005. These simple-cycle combustion turbines are utilized for peaking purposes only because their energy conversion efficiencies are considerably lower than steam units. As a result, they yield higher operating costs and are consequently unsuitable for base load operation. Gas turbines are advantageous in that they can be started and placed on line in thirty minutes or less. The System's gas turbines are most economically used as peaking units during high demand periods when base and intermediate units cannot serve all of the System loads.

**2.1.1.3 Internal Combustion (Piston/Diesel).** The System operates two internal combustion engines at the Southwest Landfill. Fueled by gas produced by the landfill, these units represent 0.2% of the System's summer capability and produced 0.3% of total energy in 2005. They are operated as continuously as possible.

**2.1.1.4 Environmental Considerations.** All of the System's steam turbines, except for Crystal River 3, utilize recirculating cooling towers with a mechanical draft for the cooling of condensed steam. Crystal River 3 uses a once-through cooling system aided by helper towers. Only Deerhaven 2 has flue gas cleaning equipment.

## **2.1.2 Generating Plant Sites**

The locations of the System's generating plant sites are shown on Figure 2.1.

**2.1.2.1 John R. Kelly Plant.** The Kelly Station is located in southeast Gainesville near the downtown business district and consists of one combined cycle, one steam turbine, three gas turbines, and the associated cooling facilities, fuel storage, pumping equipment, transmission and distribution equipment.

**2.1.2.2 Deerhaven Plant.** The Deerhaven Station is located six miles northwest of Gainesville. The original site, which was certified pursuant to the Power Plant Siting Act, included an 1146 acre parcel of partially forested land. The facility consists of two steam turbines, three gas turbines, and the associated cooling facilities, fuel storage, pumping equipment and transmission equipment. As amended to include the addition of Deerhaven Unit 2 in 1981, the certified site now includes coal unloading and storage facilities and a zero discharge water treatment plant, which treats water effluent from both steam units. A buffer and potential expansion area, owned by the System and adjacent to the certified Deerhaven plant site, was subsequently acquired, consisting of an additional 2328 acres, for a total of 3474 acres.

**2.1.2.3 Southwest Landfill.** The Southwest Landfill is located west of the town of Archer on SR 24 near the Alachua county / Levy county line. The landfill is owned by Alachua County. An inter-local agreement between the City of Gainesville and Alachua County approved the concept of using landfill gas to power two internal combustion engine generators. The County granted a special use permit and an easement for GRU to operate and access the generators. The landfill gas to energy project (LFGTE) at the Alachua County Southwest Landfill was commissioned in December of 2003 and is wheeling power over the Progress Energy Florida's (PEF) distribution network to GRU's 230 kV transmission intertie with PEF. The LFGTE facility presently operates two internal combustion generating sets with a combined capacity of 1.3 MW of renewable energy. The generation capacity of the LFGTE system will diminish through time as the landfill gas production rate slows, and generating sets are taken off-line.

## **2.2 TRANSMISSION**

### **2.2.1 The Transmission Network**

GRU's bulk power transmission network consists of a 138 kV loop connecting the following:

- 1) GRU's two generating stations,
- 2) GRU's nine distribution substations,
- 3) Three interties with Progress Energy Florida,
- 4) An intertie with Florida Power and Light Company,
- 5) An interconnection with Clay at Farnsworth Substation, and
- 6) An interconnection with the City of Alachua at Alachua No. 1 Substation

Refer to Figure 2.1 for line geographical locations and Figure 2.2 for electrical connectivity and line numbers.

### **2.2.2 Transmission Lines**

The ratings for all of GRU's transmission lines are given in Table 2.1. The load ratings for GRU's transmission lines were developed in Appendix 6.1 of GRU's Long-Range Transmission Planning Study, March 1991. Refer to Figure 2.2 for a one-line diagram of GRU's electric system. The criteria for normal and emergency loading are taken to be:

Normal loading: conductor temperature not to exceed 100° C (212° F).

Emergency 8 hour loading: conductor temperature not to exceed 125° C (257° F).

The present transmission network consists of the following:

<u>Line</u>	<u>Circuit Miles</u>	<u>Conductor</u>
138 KV double circuit	80.01	795 MCM ACSR
138 KV single circuit	16.30	1192 MCM ACSR
138 KV single circuit	20.91	795 MCM ACSR
230 KV single circuit	<u>2.53</u>	795 MCM ACSR
Total	119.75	

Annually, GRU participates in Florida Reliability Coordinating Council (FRCC) studies to analyze multi-level contingencies. Contingencies are occurrences that depend on changes or uncertain conditions and, as used here, represent various equipment failures that may occur. All single and two circuits-common pole contingencies have no identifiable problems.

A scenario at peak summer load with Deerhaven Unit 2 and Archer 230 kV tie out of service was studied and identified GRU bus voltages that would fall below acceptable levels. A 138kV 48 MVAR capacitor bank located at our Parker Substation is the preferred solution being considered.

The state system security coordinator is responsible for the integrity and stability of the entire Florida transmission grid. In reviewing our system import capability, it has been indicated that GRU could plan to import about 150-170 MW. This limit is based on not exceeding the bus voltage standard for reliability with the given import. The proposed capacitor bank above would benefit GRU by allowing additional import capacity.

### **2.2.3 State Interconnections**

The System is currently interconnected with PEF and Florida Power and Light (FPL) at a total of four separate points. The System interconnects with PEF's Archer Substation via a 230 kV transmission line to the System's Parker Substation with 224 MVA of transformation capacity from 230 kV to 138 kV. The System also interconnects

with PEF's Idylwild Substation with two separate circuits via a 150 MVA 138/69 kV transformer at the Idylwild Substation. The System interconnects with FPL via a 138 kV tie between FPL's Hampton Substation and the System's Deerhaven Substation. This interconnection has a thermal capacity of 224 MVA. All listed capacities are based on normal (Rating A) capacities.

## **2.3 DISTRIBUTION**

The System has six major and three minor distribution substations connected to the transmission network: Ft. Clarke, Kelly, McMichen, Millhopper, Serenola, Sugarfoot, Ironwood, Kanapaha, and Rocky Point substations, respectively. Parker is GRU's only transmission level voltage substation. The locations of these substations are shown on Figure 2.1.

The six major distribution substations are connected to the 138 kV bulk power transmission network with looped feeds which prevent the outage of a single transmission line from causing major outages in the distribution system. Ironwood, Kanapaha and Rocky Point are served by a single tap to the 138 kV network which would require distribution switching to restore customer power if the single transmission line tapped is outaged. GRU serves its retail customers through a 12.47 kV distribution network. The distribution substations, their present and future rated transformer capabilities and number of circuits are listed in Table 2.2.

The last substation added by GRU, Ironwood, was brought on-line in 2003 to serve the growing load in the area of State Road 24 and NE 31<sup>st</sup> Avenue and to provide backup support for the Kelly and McMichen substations. Ft. Clarke, Kelly, McMichen, and Serenola substations currently consist of two transformers of equal size allowing these stations to be loaded under normal conditions to 80 percent of the capabilities shown in Table 2.2. Millhopper and Sugarfoot Substations currently consist of three transformers of equal size allowing both of these substations to be loaded under normal conditions to 100 percent of the capability shown in Table 2.2. One of the two 22.4 MVA transformers at Ft. Clarke is being repaired and rewound to a 28.0 MVA rating.

This will make the normal rating for the substation 50.4 MVA.

## **2.4 WHOLESALE ENERGY**

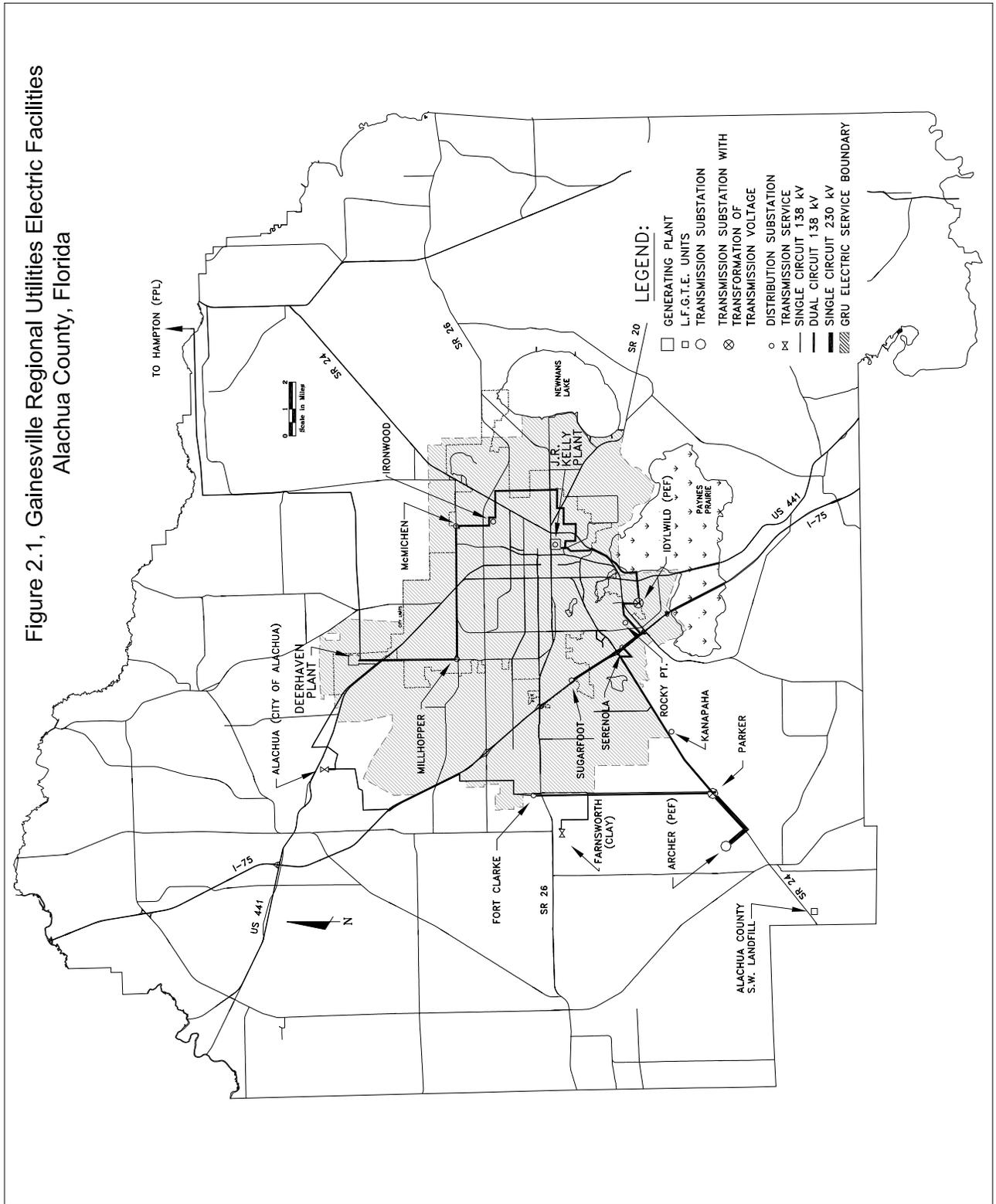
The System provides full requirements wholesale electric service to Clay Electric Cooperative (Clay) through a contract between GRU and Seminole Electric Cooperative (Seminole), of which Clay is a member. The System began the 138 kV service at Clay's Farnsworth Substation in February 1975. This substation is supplied through a 2.32 mile radial line connected to the System's transmission facilities at Parker Road near NW 24<sup>th</sup> Avenue.

The System also provides full requirements wholesale electric service to the City of Alachua at two points of service. The Alachua No. 1 Substation is supplied by GRU's looped 138 kV transmission system. Two small residential neighborhoods and a few commercial customers within Alachua's city limits are served from a GRU 12.47 kV distribution circuit, known as the Hague point of service. The System provides approximately 92% of Alachua's energy requirements with the remainder being supplied by Alachua's generation entitlements from the Crystal River 3 and St. Lucie 2 nuclear units. Energy supplied to Alachua by these nuclear units is wheeled over GRU's transmission network, with GRU providing generation backup in the event of outages of these nuclear units.

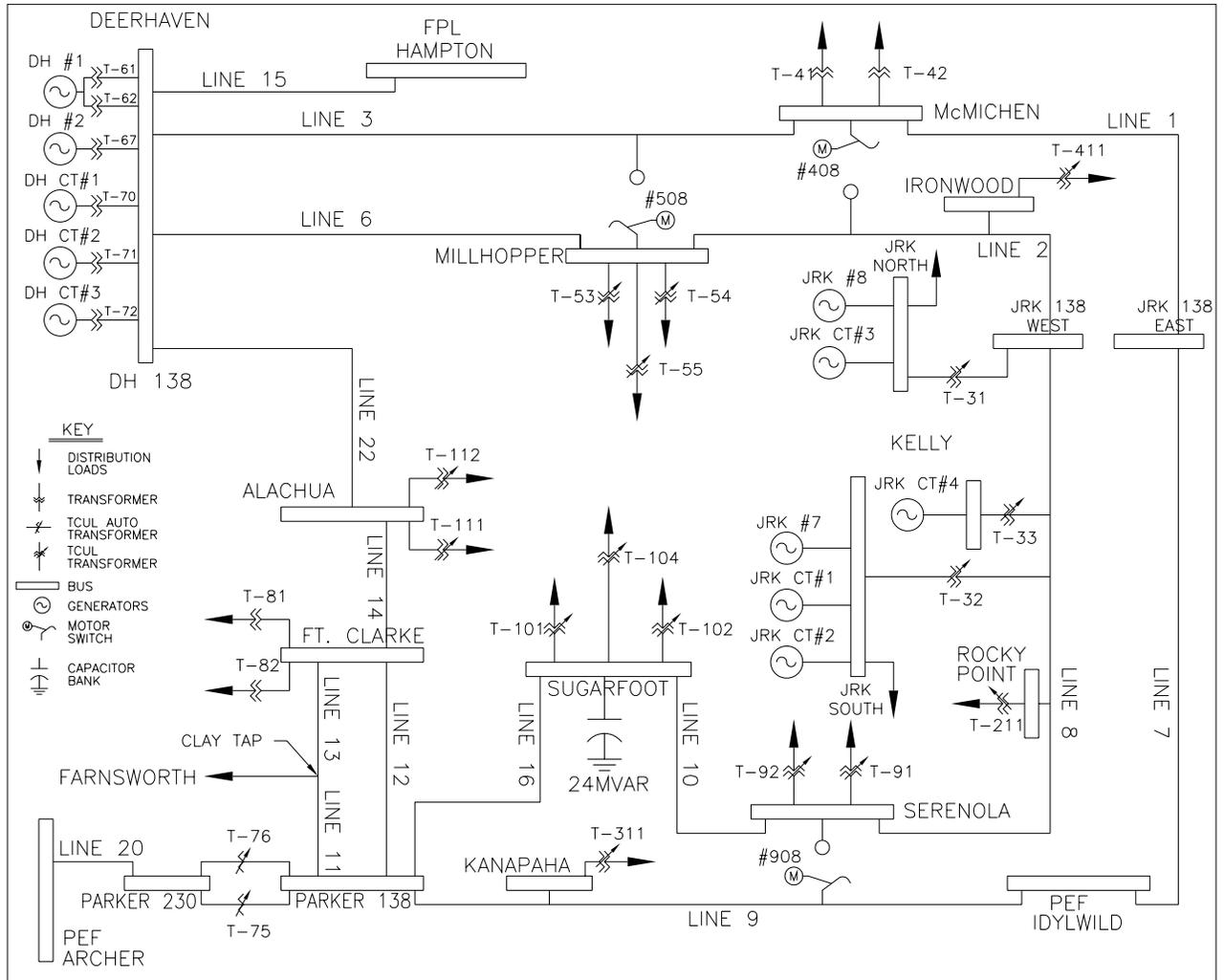
GRU has a partial requirements firm interchange service commitment with the City of Starke (Starke). The agreement with Starke is non-unit specific and provides for the sale of System capacity (including reserves). This agreement was renewed January 1, 1994 and ends December 31, 2006. This agreement was assigned to the FMPA in 1998 when Starke became an "All Requirements" member of FMPA.

Wholesale sales to Clay and Alachua are included as native load for purposes of projecting GRU's needs for generating capacity and associated reserve margins. Schedules 7.1 and 7.2 at the end of Section 4 summarize GRU's reserve margins.

Figure 2.1, Gainesville Regional Utilities Electric Facilities  
 Alachua County, Florida



**FIGURE 2.2 Gainesville Regional Utilities Electric System One-Line Diagram.**



**Schedule 1  
EXISTING GENERATING FACILITIES**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Plant Name	Unit No.	Location	Unit Type	Primary Fuel		Alternate Fuel		Alt. Fuel Storage (Days)	Commercial In-Service Month/Year	Expected Retirement Month/Year	Gross Capability		Net Capability		Status
				Type	Trans.	Type	Trans.				Summer MW	Winter MW	Summer MW	Winter MW	
<b>J. R. Kelly</b>		Alachua County									<b>180.00</b>	<b>189.00</b>	<b>177.20</b>	<b>186.20</b>	
	FS08	Sec. 4, T10S, R20E	CA	WH	PL				[ 4/65 ; 5/01 ]	2051	38.00	38.00	37.00	37.00	OP
	FS07	(GRU)	ST	NG	PL	RFO	TK		8/61	8/11	24.00	24.00	23.20	23.20	OP
	GT04		CT	NG	PL	DFO	TK		5/01	2051	76.00	82.00	75.00	81.00	OP
	GT03		GT	NG	PL	DFO	TK		5/69	05/19	14.00	15.00	14.00	15.00	OP
	GT02		GT	NG	PL	DFO	TK		9/68	09/18	14.00	15.00	14.00	15.00	OP
	GT01		GT	NG	PL	DFO	TK		2/68	02/18	14.00	15.00	14.00	15.00	OP
<b>Deerhaven</b>		Alachua County									<b>451.00</b>	<b>461.00</b>	<b>421.40</b>	<b>432.40</b>	
	FS02	Secs. 26,27,35	ST	BIT	RR				10/81	2031	249.00	249.00	228.40	228.40	OP
	FS01	T8S, R19E	ST	NG	PL	RFO	TK		8/72	08/22	88.00	88.00	83.00	83.00	OP
	GT03	(GRU)	GT	NG	PL	DFO	TK		1/96	2046	76.00	82.00	75.00	81.00	OP
	GT02		GT	NG	PL	DFO	TK		8/76	2026	19.00	21.00	17.50	20.00	OP
	GT01		GT	NG	PL	DFO	TK		7/76	2026	19.00	21.00	17.50	20.00	OP
<b>Crystal River (818/815)</b>	3	Citrus County Sec. 33, T17S, R16E (FPC)	ST	NUC	TK				3/77	2037	<b>12.07</b>	<b>12.24</b>	<b>11.43</b>	<b>11.71</b>	OP
<b>SW Landfill</b>		Alachua County									<b>1.64</b>	<b>1.64</b>	<b>1.30</b>	<b>1.30</b>	
	SW-1	Sec. 19, T11S, R18E	IC	LFG	PL				12/03	12/09	0.82	0.82	0.65	0.65	OP
	SW-2		IC	LFG	PL				12/03	12/15	0.82	0.82	0.65	0.65	OP
<b>System Total</b>												<b>611.33</b>	<b>631.61</b>		

Unit Type  
CA = Combined Cycle Steam Part  
CT = Combined Cycle Combustion Turbine Part  
GT = Gas Turbine  
ST = Steam Turbine  
IC = Internal Combustion (diesel, piston) Engine

Fuel Type  
NG = Natural Gas  
BIT = Bituminous Coal  
NUC = Uranium  
RFO = Residual Fuel Oil  
DFO = Distillate Fuel Oil  
WH = Waste Heat  
LFG = Landfill Gas

Transportation Method  
PL = Pipe Line  
RR = Railroad  
TK = Truck

Status  
OP = Operational

**TABLE 2.1**

**SUMMER POWER FLOW LIMITS**

<u>Transmission Line Number</u>	<u>Description</u>	<u>Normal 100° C (MVA)</u>	<u>Limiting Device</u>	<u>8-Hour Emergency 125° C (MVA)</u>	<u>Limiting Device</u>
1	McMichen - Depot East	236.2	Conductor	282.0	Conductor
2	Millhopper - Depot West	236.2	Conductor	282.0	Conductor
3	Deerhaven - McMichen	236.2	Conductor	282.0	Conductor
6	Deerhaven - Millhopper	236.2	Conductor	282.0	Conductor
7	Depot East - Idylwild	191.2 <sup>1</sup>	Line Trap	191.2 <sup>1</sup>	Line Trap
8	Depot West - Serenola	236.2	Conductor	282.0	Conductor
9	Idylwild - Parker	191.2 <sup>1</sup>	Line Trap	191.2 <sup>1</sup>	Line Trap
10	Serenola - Sugarfoot	236.2	Conductor	282.0	Conductor
11	Parker - Clay Tap	236.2	Conductor	282.0	Conductor
12	Parker - Ft. Clarke	236.2	Conductor	282.0	Conductor
13	Clay Tap - Ft. Clarke	236.2	Conductor	282.0	Conductor
14	Ft. Clarke - Alachua	299.7	Conductor	356.0	Conductor
15	Deerhaven - Hampton	224.0 <sup>2</sup>	Transformers	291.2 <sup>2</sup>	Transformers
16	Sugarfoot - Parker	236.2	Conductor	282.0	Conductor
20	Parker - Archer (T75, T76)	224.0	Transformers	300.0	Transformers
22	Alachua - Deerhaven	299.7	Conductor	356.0	Conductor
xx	Clay Tap - Farnsworth	236.2	Conductor	282.0	Conductor
xx	Idylwild - FPC	150.0	Transformer	168.0	Transformer

<sup>1</sup> –Rating effective through Spring, 2007 (estimate). At this point in time, the 800 ampere wave traps on the Depot E – Idylwild 138 KV and Parker – Idylwild 138 KV circuit at Idylwild will be removed. Thereafter, the normal and emergency rating will be 236.2 MVA and 282.0 MVA, respectively.

<sup>2</sup> –These two transformers are located at the FPL Bradford Substation and are the limiting elements in this intertie.

Assumptions:

- 100 °C for normal conductor operation
- 125 °C for emergency 8 hour conductor operation
- 40 °C ambient air temperature
- 2 ft/sec wind speed
- Transformers T75 & T76 normal limits are based on a 65 °C oil temperature rise

**TABLE 2.2****SUBSTATION TRANSFORMATION AND CIRCUITS**

Distribution Substation	Normal Transformer Rated Capability	Current Number of Circuits
Ft. Clarke	50.4 MVA	4
J.R. Kelly <sup>2</sup>	112.0 MVA	15
McMichen	44.8 MVA	5
Millhopper	100.8 MVA	10
Serenola	67.2 MVA	8
Sugarfoot	100.8 MVA	9
Ironwood	33.6 MVA	3
Kanapaha	33.6 MVA	2
Rocky Point	33.6 MVA	3

Transmission Substation	Normal Transformer Rated Capability	Number of Circuits
Parker	224 MVA	5

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2 J.R. Kelly is a generating station as well as a distribution substation. The CT portion (75 MW) of JRK CC1 is connected directly to the 138 kV transmission line from Depot Transmission Substation to J.R. Kelly Distribution Substation/Generation Station and the steam portion is connected to the 12.47 kV substation bus along with the remaining generation capacity at J.R. Kelly Station (102 MW).

### **3. FORECAST OF ELECTRIC ENERGY AND DEMAND REQUIREMENTS**

Section 3 includes documentation of GRU's forecast of number of customers, energy sales and seasonal peak demands; a forecast of energy sources and fuel requirements; and an overview of GRU's involvement in demand-side management programs.

The accompanying tables provide historical and forecast information for calendar years 1996-2015. Energy sales and number of customers are tabulated in Schedules 2.1, 2.2 and 2.3. Schedule 3.1 gives summer peak demand for the base case forecast by reporting category. Schedule 3.2 presents winter peak demand for the base case forecast by reporting category. Schedule 3.3 similarly presents net energy for load for the base case forecast by reporting category. Short-term monthly load data is presented in Schedule 4. Projected net energy requirements for the System, by method of generation, are shown in Schedule 6.1. The percentage breakdowns of energy shown in Schedule 6.1 are given in Schedule 6.2. The quantities of fuel expected to be used to generate the energy requirements shown in Schedule 6.1 are given by fuel type in Schedule 5.

#### **3.1 FORECAST ASSUMPTIONS AND DATA SOURCES**

- (1) All regression analyses were based on annual data. Historical data was compiled for calendar years 1970 through 2005. System data, such as net energy for load, seasonal peak demands, customer counts and energy sales, was obtained from GRU records and sources.
- (2) Estimates and projections of Alachua County population were obtained from the Florida Population Studies, February 2006 (Bulletin No. 144), published by the Bureau of Economic and Business Research (BEBR) at the University of Florida.
- (3) Historical weather data was used to fit regression models. The forecast assumes normal weather conditions. Normal heating degree days and cooling degree days equal the mean of data reported to NOAA by the Gainesville Municipal Airport station from 1984-2005.

- (4) All income and price figures were adjusted for inflation, and indexed to a base year of 2005, using the U.S. Consumer Price Index for All Urban Consumers from the U.S. Department of Labor, Bureau of Labor Statistics. Inflation is assumed to average approximately 2.7% per year for each year of the forecast.
- (5) The U. S. Department of Commerce provided historical estimates of total income and per capita income for Alachua County. Forecast values of per capita income for Alachua County were obtained from Global Insight.
- (6) Historical estimates of household size were obtained from BEBR, and projected levels were derived from a forecast provided by Global Insight.
- (7) The Florida Agency for Workforce Innovation and the U.S. Department of Labor provided historical estimates of non-agricultural employment in Alachua County. A forecast of non-agricultural employment was developed by Global Insight.
- (8) GRU's corporate model was the basis for projections of the average price of 1,000 kWh of electricity for all customer classes. GRU's corporate model evaluates projected revenue and revenue requirements for the forecast horizon and determines revenue sufficiency under prevailing prices. If revenue from present pricing is insufficient, pricing changes are programmed and become GRU's official pricing program plan. The price of electricity is expected to slightly outpace inflation over the forecast horizon.
- (9) Estimates of energy and demand reductions resulting from planned demand-side management programs were subtracted from all retail forecasts. Energy and demand reductions are removed from the forecast of DSM impacts as each conservation measure installed reaches the end of its useful life. GRU's involvement with DSM is described in more detail later in this section.
- (10) The City of Alachua will generate (via generation entitlement shares of Progress Energy and Florida Power and Light nuclear units) approximately 8,077 MWh (8%) of its annual energy requirements.

## 3.2 FORECASTS OF NUMBER OF CUSTOMERS, ENERGY SALES AND SEASONAL PEAK DEMANDS

Number of customers, energy sales and seasonal peak demands were forecast from 2006 through 2015. Separate energy sales forecasts were developed for each of the following customer segments: residential, general service non-demand, general service demand, large power, outdoor lighting, sales to Clay, and sales to Alachua. Separate forecasts of number of customers were developed for residential, general service non-demand, general service demand and large power retail rate classifications. The basis for these independent forecasts originated with the development of least-squares regression models. All modeling was performed in-house using the Statistical Analysis System (SAS)<sup>3</sup>. The following text describes the regression equations utilized to forecast energy sales and number of customers.

### 3.2.1 Residential Sector

The equation of the model developed to project residential average annual energy use (kilowatt-hours per year) specifies average use as a function of household income in Alachua County, residential price of electricity, and weather variation as measured by heating degree days and cooling degree days. The form of this equation is as follows:

$$\begin{aligned} \text{RESAVUSE} = & 5140.7 + 0.065 (\text{HHY05}) - 12.08 (\text{RESPR05}) \\ & + 0.67 (\text{HDD}) + 0.82 (\text{CDD}) \end{aligned}$$

Where:

RESAVUSE	=	Average Annual Residential Energy Use Per Customer
HHY05	=	Average Household Income
RESPR05	=	Residential Price, Dollars per 1000 kWh
HDD	=	Annual Heating Degree Days
CDD	=	Annual Cooling Degree Days

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<sup>3</sup> SAS is the registered trademark of SAS Institute, Inc., Cary, NC.

Adjusted R<sup>2</sup> = 0.9024  
 DF (error) = 29 (period of study, 1971-2005)  
 t - statistics:  
 Intercept = 4.07  
 HHY05 = 5.55  
 RESPR05 = -3.38  
 HDD = 3.84  
 CDD = 4.20

Projections of the average annual number of residential customers were developed from a linear regression model stating the number of customers as a function of Alachua County population, the number of persons per household, the historical series of Clay customer transfers, and an indicator variable for customer counts recorded under the previous billing system. The residential customer model specifications are:

$$RESCUS = 44207 + 336.8 (POP) - 21387 (HHSIZE) + 0.71 (CLYRCUS) - 1716 (OldSys)$$

Where:

RESCUS = Number of Residential Customers  
 POP = Alachua County Population (thousands)  
 HHSIZE = Number of Persons per Household  
 CLYRCUS = Clay Customer Transfers  
 OldSys = Previous Billing System (1978-1991)

Adjusted R<sup>2</sup> = 0.9992  
 DF (error) = 22 (period of study, 1978-2005)  
 t - statistics:  
 Intercept = 7.65  
 POP = 42.81  
 HHSIZE = -11.06  
 CLYRCUS = 4.13

$$\text{OldSys} = -4.22$$

The product of forecasted values of average use and number of customers yielded the projected energy sales for the residential sector.

### 3.2.2 General Service Non-Demand Sector

The general service non-demand (GSN) customer class includes non-residential customers with maximum annual demands less than 50 kilowatts (kW). In 1990, GRU began offering GSN customers the option to elect the General Service Demand (GSD) rate classification. This option offers potential benefit to GSN customers that use high amounts of energy and have good load factors. Since 1990, 331 customers have elected to transfer to the GSD rate class. The forecast assumes that additional GSN customers will voluntarily elect the GSD classification at a rate comparable to the historical annual median. A regression model was developed to project average annual energy use by GSN customers. The model includes as independent variables, the cumulative number of optional demand customers and cooling degree days. The specifications of this model are as follows:

$$GSNAVUSE = 23.89 - 0.012 (OPTDCus) + 0.0014 (CDD)$$

Where:

GSNAVUSE	=	Average annual energy usage by GSN customers
OPTDCus	=	Cumulative number of Optional Demand Customers
CDD	=	Annual Cooling Degree Days

$$\text{Adjusted } R^2 = 0.7743$$

$$\text{DF (error)} = 23 \text{ (period of study, 1979-2005)}$$

t - statistics:

Intercept	=	12.19
OPTDCus	=	-9.07
CDD	=	2.03

The number of general service non-demand customers was projected using an equation specifying customers as a function of Alachua County population, Clay non-demand transfer customers, and the number of optional demand customers. The specifications of the general service non-demand customer model are as follows:

$$GSNCUS = -6094.9 + 64.7(POP) + 2.27(CLYNCus) - 4.63(OptDCus)$$

Where:

GSNCUS = Number of General Service Non-Demand Customers

POP = Alachua County Population (thousands)

CLYNCus = Clay Non-Demand Transfer Customers

OptDCus = Optional Demand Customers

Adjusted R<sup>2</sup> = 0.9966

DF (error) = 23 (period of study, 1978-2005)

t - statistics:

Intercept = -12.6

POP = 21.3

CLYNCus = 2.49

OptDCus = -8.04

Forecasted energy sales to general service non-demand customers were derived from the product of projected number of customers and the projected average annual use per customer.

### 3.2.3 General Service Demand Sector

The general service demand customer class includes non-residential customers with established annual maximum demands generally of at least 50 kW but less than 1,000 kW. Average annual energy use per customer was projected using an equation specifying average use as a function of per capita income (Alachua County) and the number of optional demand customers. A significant portion of the energy load in this sector is from large retailers such as department stores and grocery stores, whose

business activity is related to income levels of area residents. Average energy use projections for general service demand customers result from the following model:

$$GSDAVUSE = 327.5 + 0.0088(PCY05) - 0.21(OPTDCust)$$

Where:

GSDAVUSE = Average annual energy use by GSD Customers  
 PCY05 = Per Capita Income in Alachua County  
 OPTDCust = Cumulative number of Optional Demand Customers

$$\text{Adjusted } R^2 = 0.6980$$

$$DF \text{ (error)} = 23 \text{ (period of study, 1979-2005)}$$

t - statistics:

$$\text{Intercept} = 12.6$$

$$PCY05 = 7.72$$

$$OPTDCust = -5.57$$

The annual average number of customers was projected using a regression model that includes Alachua County population, Clay demand customer transfers, and the number of optional demand customers as independent variables. The specifications of the general service demand customer model are as follows:

$$GSDCUS = -421.7 + 5.27(POP) + 18.27(CLYDCus) + 0.56(OptDCus)$$

Where:

GSDCUS = Number of General Service Demand Customers  
 POP = Alachua County Population (thousands)  
 CLYDCus = Clay Demand Transfer Customers  
 OptDCus = Optional Demand Customers

$$\text{Adjusted } R^2 = 0.9947$$

$$DF \text{ (error)} = 23 \text{ (period of study, 1978-2005)}$$

t - statistics:

Intercept	=	-5.46
POP	=	11.1
CLYDCus	=	4.06
OptDCus	=	6.19

The forecast of energy sales to general service demand customers was the resultant product of projected number of customers and projected average annual use per customer.

### 3.2.4 Large Power Sector

The large power customer class currently includes approximately 18 customers with billing demands of at least 1,000 kW. Analyses of average annual energy use were based on historical observations from 1976 through 2005. The model developed to project average use by large power customers includes Alachua County nonagricultural employment and large power price of electricity as independent variables. Energy use per customer has been observed to increase over time, presumably due to the periodic expansion or increased utilization of existing facilities. This growth is measured in the model by local employment levels. The specifications of the large power average use model are as follows:

$$LPAVUSE = 10319 + 16.2 (NONAG) - 31.2 (LPPR05)$$

Where:

LPAVUSE	=	Average Annual Energy Consumption (MWh per Year)
NONAG	=	Alachua County Nonagricultural Employment (000's)
LPPR05	=	Average Price for 1,000 kWh in the Large Power Sector
Adjusted R <sup>2</sup>	=	0.9188
DF (error)	=	27 (period of study, 1976-2005)

t - statistics:

INTERCEPT = 7.32  
NONAG = 2.14  
LPPR04 = -3.65

The forecast of energy sales to the large power sector was derived from the product of projected average use per customer and the projected number of large power customers, which are projected to remain constant at eighteen.

### 3.2.5 Outdoor Lighting Sector

The outdoor lighting sector consists of streetlight, traffic light, and rental light accounts. Outdoor lighting energy sales account for approximately 1.25% of total energy sales. Outdoor lighting energy sales were forecast using a model which specified lighting energy as a function of the number of residential customers. The specifications of this model are as follows:

$$LGTMWH = -8522 + 0.46 (RESCUS)$$

Where:

LGTMWH = Outdoor Lighting Energy Sales  
RESCUS = Number of Residential Customers

$$\text{Adjusted } R^2 = 0.9817$$

DF (error) = 11 (period of study, 1993-2005)

t - statistics:

Intercept = -7.18  
RESCUS = 25.4

### 3.2.6 Wholesale Energy Sales

As previously described, the System provides control area services to two wholesale customers: Clay Electric Cooperative (Clay) at the Farnsworth Substation; and the City of Alachua (Alachua) at the Alachua No. 1 Substation, and at the Hague Point of Service. Approximately 8% of Alachua's 2005 energy requirements were met through generation entitlements of nuclear generating units operated by PEF and FPL. These wholesale delivery points serve an urban area that is either included in, or adjacent to the Gainesville urban area. These loads are considered part of the System's native load for facilities planning through the forecast horizon. GRU provides other utilities services in the same geographic areas served by Clay and Alachua, and continued electrical service will avoid duplicating facilities. Furthermore, the populations served by Clay and Alachua benefit from services provided by the City of Gainesville, which are in part supported by transfers from the System.

Clay-Farnsworth net energy requirements were modeled with an equation in which Alachua County population was the independent variable. Output from this model was adjusted to account for the history of load that has been transferred between GRU and Clay-Farnsworth, yielding energy sales to Clay. Historical boundary adjustments between Clay and GRU have reduced the duplication of facilities in both companies' service areas. The form of the Clay-Farnsworth net energy requirements equation is as follows:

$$CLYNEL = -34537 + 482.14 (POP)$$

Where:

$$CLYNEL = \text{Farnsworth Substation Net Energy (MWh)}$$

$$POP = \text{Alachua County Population (000's)}$$

$$\text{Adjusted } R^2 = 0.9586$$

$$DF (\text{error}) = 14 (\text{period of study, 1990-2005})$$

t - statistics:

Intercept = -6.39  
 POP = 18.67

Net energy requirements for Alachua were estimated using a model in which City of Alachua population was the independent variable. BEBR provided historical estimates of City of Alachua Population. This variable was projected from a trend analysis of the component populations within Alachua County. The model used to develop projections of sales to the City of Alachua is of the following form:

$$ALANEL = -64924 + 23392 (ALAPOP)$$

Where:

ALANEL = City of Alachua Net Energy (MWh)

ALAPOP = City of Alachua Population (000's)

Adjusted R<sup>2</sup> = 0.9819

DF (error) = 22 (period of study, 1982-2005)

t - statistics:

Intercept = -18.3

ALAPOP = 35.3

To obtain a final forecast of the System's sales to Alachua, projected net energy requirements were reduced by 8,077 MWh reflecting the City of Alachua's nuclear generation entitlements.

### **3.2.7 Total System Sales, Net Energy for Load, Seasonal Peak Demands and DSM Impacts**

The forecast of total system energy sales was derived by summing energy sales projections for each customer class; residential, general service non-demand, general service demand, large power, outdoor lighting, sales to Clay, and sales to Alachua. Net energy for load was then forecast by applying a delivered efficiency factor for the System to total energy sales. The projected delivered efficiency factor (0.95478) is the median of observed historical values from 1995 through 2005. The impact of energy

savings from conservation programs was accounted for in energy sales to each customer class, prior to calculating net energy for load.

The forecasts of seasonal peak demands were derived from forecasts of annual net energy for load. Winter peak demands are projected to occur in January of each year, and summer peak demands are projected to occur in July of each year, although historical data suggests the summer peak is nearly as likely to occur in August. The average ratio of the most recent 23 years' monthly net energy for load for January and July, as a portion of annual net energy for load, was applied to projected annual net energy for load to obtain estimates of January and July net energy for load over the forecast horizon. The medians of the past 23 years' load factors for January and July were applied to January and July net energy for load projections, yielding seasonal peak demand projections. Forecast seasonal peak demands include the net impacts from planned demand-side management programs.

### **3.3 ENERGY SOURCES AND FUEL REQUIREMENTS**

#### **3.3.1 Fuels Used by System**

Presently, the system is capable of using coal, residual oil, distillate oil, natural gas, and a small percentage of nuclear fuel to satisfy its fuel requirements. Since the completion of the Deerhaven 2 coal-fired unit, the System has relied upon coal to fulfill much of its fuel requirements. To the extent that the System participates in interchange sales and purchases, actual consumption of these fuels will likely differ from the base case requirements indicated in Schedule 5. These projections are based on a fuel price forecast prepared in March 2005.

#### **3.3.2 Methodology for Projecting Fuel Use**

The fuel use projections were produced using the Electric Generation Expansion Analysis System (EGEAS) developed under Electric Power Research Institute guidance. Ng Engineering provides support, maintenance, and training for the EGEAS software. This is the same software the System uses to perform long-range integrated

resource planning. EGEAS has the ability to model each of the System's generating units as well as optimize the selection of new capacity and technologies (see Section 4), and include the effects of environmental limits, dual fuel units, reliability constraints, and maintenance schedules. The production modeling process uses a load-duration curve convolution and conjoint probability model to simulate optimal hourly dispatch of the System's generating resources.

The input data to this model includes:

- (1) Long-term forecast of System electric energy and power demand needs;
- (2) Projected fuel prices, outage parameters, nuclear refueling cycle (as needed), and maintenance schedules for each generating unit in the System;
- (3) Similar data for the new plants that will be added to the system to maintain system reliability.

The output of this model includes:

- (1) Monthly and yearly operating fuel expenses by fuel type and unit; and
- (2) Monthly and yearly capacity factors, energy production, hours of operation, fuel utilization, and heat rates for each unit in the system.

### **3.4 DEMAND-SIDE MANAGEMENT**

#### **3.4.1 Demand-Side Management Program History and Current Status**

Demand and energy forecasts and generation expansion plans outlined in this Ten Year Site Plan include impacts from GRU's planned Demand-Side Management (DSM) programs. The System forecast reflects the residual cumulative effects of program implementations recorded from 1980 through 2005, as well as projected program implementations scheduled through 2015. Included in the total annual effects of DSM measures on energy and demand, is the life cycle of each measure's impact. As each implementation of each measure reaches the end of its useful life, the demand and energy reductions associated with that implementation are removed from the

estimated total annual effects. GRU's DSM programs were designed for the purpose of conserving the resources utilized by the System in a manner most cost effective to the customers of GRU. DSM programs are available for all retail customers, including commercial and industrial customers, and are designed to effectively reduce and control the growth rates of electric consumption and weather sensitive peak demands.

GRU is currently active in the following residential conservation efforts: conservation surveys; programs for low income households including weatherization and natural gas service; rebates for natural gas in residential construction; rebates for natural gas for displacement of electric water heating, space heating and space cooling in existing structures; rebates for solar water heating; rebates for heat recovery water heating; HVAC sizing calculations; high-efficiency central and room air conditioning rebates; rebates for duct repairs; heat pipe rebates; reflective roof coating rebates; a/c maintenance rebates; promotion of customer-owned photovoltaic systems through a standardized interconnection and buyback agreement; and an increasing block rate structure. GRU offers the following conservation services to its non-residential customers: conservation surveys; lighting efficiency and maintenance services; rebates for natural gas water heating, space cooling and dehumidification; rebates for heat recovery water heating; and promotion of customer-owned photovoltaic systems through a standardized interconnection and buyback agreement.

GRU secured grant funding through the Department of Community Affairs' PV for Schools Educational Enhancement Program for PV systems that were installed at two middle schools in 2003. GRU began offering green energy (i.e., GRUGreen<sup>sm</sup>) to its customers when the LFGTE project became operational in 2003. The majority of the energy available under this program comes from landfill gas, but also includes some solar and wind energy credits. GRUGreen<sup>sm</sup> is available to all GRU customers at a cost equivalent to two cents per kWh. A combination of customer contributions and State and Federal grants allowed GRU to add its 10 kW photovoltaic array at the Electric System Control Center in 1996.

GRU has also produced numerous *factsheets*, publications and videos which are available at no charge to customers to assist them in making informed decisions effecting their energy utilization patterns. Examples include: Passive Solar Design-Factors for North Central Florida, a booklet which provides detailed solar and environmental data for passive solar designs in this area; Solar Guidebook, a brochure which explains common applications of solar energy in Gainesville; and The Energy Book, a guide to saving home energy dollars.

### **3.4.2 Future Demand-Side Management Programs**

In addition to the new programs that GRU added in 2005, a new commercial program providing incentives for innovative energy designs is planned for implementation in 2006. GRU has budgeted funds to proceed with installing a new 10 kW PV system at the Gainesville Regional Airport. This project will be supported by voluntary customer contributions and avoided utility costs.

### **3.4.3 Demand-Side Management Methodology and Results**

The expected effect of DSM program participation was derived from a comparative analysis of historical energy usage of DSM program participants and non-participants. The methodology upon which existing DSM programs is based includes consideration of what would happen anyway, the fact that the conservation induced by utility involvement tends to "buy" conservation at the margin, adjustment for behavioral rebound and price elasticity effects and effects of abnormal weather. Known interactions between measures and programs were accounted for when possible. At the end of each measure's useful life, the energy and demand savings assumed to have been induced by GRU are removed to represent the retirement of the given measure. Projected penetration rates were based on historical levels of program implementations and tied to escalation rates paralleling service area population growth.

The implementation of DSM programs planned for 2006-2015 is expected to provide an incremental impact of 5 MW of summer peak reduction, 7 MW of winter peak reduction, and 29 GWh of annual energy savings by the year 2015, as shown in Table 3.1. Total DSM program achievements are shown in Table 3.2.1. DSM impacts that have been retired from total program achievements are shown in Table 3.2.2, and the net DSM reductions included in the System's energy and demand forecasts are shown in Table 3.2.3. These tables are located at the end of Section 3.

#### **3.4.4 Gainesville Energy Advisory Committee**

The Gainesville Energy Advisory Committee (GEAC) is a nine-member citizen group that is charged with formulating recommendations concerning national, state and local energy-related issues. The GEAC offers advice and guidance on energy management studies and consumer awareness programs. The GEAC's efforts have resulted in numerous contributions, accomplishments, and achievements for the City of Gainesville. Specifically, the GEAC helped establish a residential energy audit program in 1979. The GEAC was initially involved in the ratemaking process in 1980 which ultimately lead to the approval of an inverted block residential rate and a voluntary residential time-of-use rate. The GEAC promoted *Solar Month* in October of 1991 by sponsoring a seminar to foster the viability of solar energy as an alternative to conventional means of energy supply. Representatives from Sandia National Laboratories, the Florida Solar Energy Center, PEF, and GRU gave presentations on various solar projects and technologies. A recommendation from GEAC followed the Solar Day Seminars for GRU to investigate offering its citizen-ratepayers the option of contributing to photovoltaic power production through monthly donations on their utility bills. The interest generated by the seminars along with grant money from the State of Florida Department of Community Affairs and the Utility PhotoVoltaic Group and donations from GRU customers and friends of solar energy resulted in the 10 kilowatt PV system at the System Control Center. GRU solicited public input on its solar water heater rebate program through the GEAC, and the committee in turn formally supported the program. The GEAC sponsored a Biomass Seminar for a joint meeting of the

Gainesville City Commission and the Alachua County Commission. The GEAC has strongly supported the EPA's Energy Star program, and helped GRU earn EPA's 1998 Utility Ally of the Year award. GEAC contributed to the development of a Green Builder program for existing multi-family dwellings as a long-range load reduction strategy. Multi-family dwellings represent approximately 35% of GRU's total residential load. GEAC has also supported GRU's current IRP through their sponsorship of community workshops and review of the IRP.

### **3.4.5 Supply Side Programs**

Deerhaven 2 is also contributing to reduced oil use by other utilities through the Florida energy market. Prior to the addition of Deerhaven Unit 2 in 1982, the System was relying on oil and natural gas for over 90% of native load energy requirements. In 2005, oil-fired generation comprised 4.0% of total net generation, natural gas-fired generation contributed 16.9%, nuclear fuel contributed 4.5%, and coal-fired generation provided 74.6% of total net generation. The PV system at the System Control Center provides slightly more than 10 kilowatts of capacity at solar noon on clear days. The landfill gas to energy (LFGTE) project is capable of providing 1.3 MW of capacity on a continuous basis.

The System has several programs to improve the adequacy and reliability of the transmission and distribution systems, which will also result in decreased energy losses. Periodically, the major distribution feeders are evaluated to determine whether the costs of reconductoring will produce an internal rate of return sufficient to justify expenses when compared to the savings realized from reduced distribution losses, and if so, reconductoring is recommended. Generating units are continually evaluated to ensure that they are maintaining design efficiencies. Transmission facilities are also studied to determine the potential savings from loss reductions achieved by the installation of capacitor banks. System losses have stabilized near 4.5% of net generation as reflected in the forecasted relationship of total energy sales to net energy for load.

### **3.5 FUEL PRICE FORECAST ASSUMPTIONS**

The sources for projected oil and natural gas prices were the Annual Energy Outlook 2006 (AEO2006), published in February 2006 by the U.S. Department of Energy's Energy Information Administration (EIA), and EIA's Short-Term Energy Outlook (STEO), March 2006. The source for projected coal prices was Hill & Associates, Inc., 2005 Outlook for U.S. Steam Coal Long-Term Forecast to 2024. Projected prices for nuclear fuel were provided by PEF. Typically, these forecasts are provided in constant-year (real) dollars, and GRU translates these prices to nominal dollars using the projected Gross Domestic Product – Implicit Price Deflator from AEO2006. Fuel prices are analyzed in two parts: the cost of the fuel (commodity), and the cost of transporting the fuel to GRU's generating stations. A summary of historical and projected fuel prices is provided in Table 3.3.

#### **3.5.1 Oil**

GRU relies on No. 6 Oil (residual) and No. 2 Oil (distillate or diesel) as back-up fuels for natural gas fired generation. These fuels are delivered to GRU generating stations by truck. Forecast prices for these two types of oil are derived directly from AEO2006.

During calendar year 2005, distillate fuel oil was used to produce 0.02% of GRU's total net generation. The price of distillate fuel oil delivered to GRU is expected to decrease from 2006 to 2010, and then increase through the long-term forecast horizon. Distillate fuel oil is expected to be the most expensive fuel available to GRU. During calendar year 2005, residual fuel oil was used to produce 4.0% of GRU's total net generation. The price of residual fuel oil delivered to GRU is also expected to decrease through 2010 and then increase through the long-term forecast horizon. The quantity of fuel oils used by GRU is expected to remain low.

### **3.5.2 Coal**

Coal is the primary fuel used by GRU to generate electricity, comprising 74.6% of total net generation during calendar year 2005. GRU purchases low-sulfur (0.7%), high Btu eastern coal for use in Deerhaven Unit 2. In addition to low sulfur compliance coal, GRU projects prices for medium (1.7%) sulfur coal and high (3.6%) sulfur coal for evaluation in the proposed circulating fluidized bed unit. In 2010, Deerhaven Unit 2 will begin operating following the retrofit of an air quality control system, which is being added as a means of complying with new environmental regulations. Deerhaven Unit 2 will be designed to operate with medium sulfur coal following the retrofit.

Prices for compliance coal for 2006 were based on GRU's contractual options with its coal suppliers. Projected prices for compliance coal for 2007 and beyond are based on Hill & Associates, Inc. forecast for a low sulfur coal from the central Appalachian region. GRU has a contract with CSXT for delivery of coal to the Deerhaven plant site through 2019. The rate of change in coal transportation rates from AEO2006 was applied to GRU's current freight rates to develop delivered prices of coal through 2025. Prices for the alternate grades of coal were also derived from the Hill & Associates, Inc. forecast.

The long-term growth rate of the price of coal delivered to GRU is expected to average approximately 3.5% per year from 2010 through 2025.

### **3.5.3 Natural Gas**

GRU procures natural gas for power generation and for distribution by a Local Distribution Company (LDC). In 2005, GRU purchased approximately 6.1 million MMBtu for use by both systems. GRU power plants used 62% of the total purchased for GRU during 2005, while the LDC used the remaining 38%.

GRU purchases natural gas via arrangements with producers and marketers connected with the Florida Gas Transmission (FGT) interstate pipeline. GRU's

delivered cost of natural gas includes the commodity component, Florida Gas Transmission's (FGT) fuel charge, FGT's usage (transportation) charge, and FGT's reservation (capacity) charge.

Prices for 2006 through 2007 were derived from EIA's Short-Term Energy Outlook, March 2006, as reported for the Henry Hub, with a transportation component added. Prices from 2008 through 2025 follow the pattern of price changes outlined in AEO2006, calibrated to reflect prices for the Henry Hub region, which are typically slightly higher than U.S. Wellhead average prices. GRU's forecast of delivered gas prices is presented in Table 3.3.

GRU's delivered natural gas prices are projected to decrease from about \$8.54/MMBtu in 2006 to a low of \$7.71/MMBtu in 2011, and then increase at a rate of approximately 2.7% per year through the end of the forecast horizon.

#### **3.5.4 Nuclear Fuel**

GRU's nuclear fuel price forecast includes a component for fuel and a component for fuel disposal. The projection for the price of the fuel component is based on Progress Energy Florida's (PEF) forecast of nuclear fuel prices. The projection for the cost of fuel disposal is based on a trend analysis of actual costs to GRU. The price of nuclear fuel is projected to increase at a rate of 2.3% from 2006 through 2015.

### **3.5.5 Petroleum Coke**

Petroleum coke, or “pet coke”, is a by-product of the process of refining crude oil into higher value light products. GRU is evaluating pet coke as a fuel that can be blended with coal and wood biomass for use in the proposed CFB unit. To develop a forecast of pet coke prices, GRU determined the average price paid by Florida utilities during 2004, then added a transportation component for a short haul by rail. The short haul transportation cost was escalated based on the rate of change in coal transportation costs from AEO2006, and the cost of the pet coke was escalated based on the rate of change in commodity coal prices from AEO2006. This forecast results in prices that range from \$1.28/MMBtu in 2006 to \$1.47/MMBtu in 2015.

**Schedule 2.1  
History and Forecast of Energy Consumption and  
Number of Customers by Customer Class**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Year	Service Area Population	Persons per Household	RESIDENTIAL			COMMERCIAL *		
			<u>GWh</u>	<u>Average Number of Customers</u>	<u>Average kWh per Customer</u>	<u>GWh</u>	<u>Average Number of Customers</u>	<u>Average kWh per Customer</u>
1996	150,322	2.37	718	63,427	11,313	594	7,539	78,813
1997	153,759	2.36	705	65,152	10,817	598	7,750	77,193
1998	156,797	2.35	777	66,722	11,649	640	7,868	81,363
1999	161,076	2.35	763	68,543	11,137	648	8,095	80,036
2000	164,584	2.34	788	70,335	11,202	674	8,368	80,490
2001	169,395	2.34	803	72,391	11,092	697	8,603	80,986
2002	172,755	2.34	851	73,827	11,527	721	8,778	82,112
2003	174,227	2.34	854	74,456	11,467	726	8,959	81,090
2004	179,459	2.33	878	77,021	11,398	739	9,225	80,143
2005	182,904	2.34	888	78,164	11,358	752	9,378	80,199
2006	185,929	2.33	913	79,696	11,454	775	9,600	80,743
2007	188,932	2.33	937	81,227	11,540	798	9,822	81,294
2008	191,836	2.32	962	82,723	11,631	821	10,036	81,850
2009	194,641	2.31	985	84,186	11,704	842	10,244	82,214
2010	197,428	2.31	1,007	85,648	11,760	861	10,452	82,426
2011	200,040	2.30	1,029	87,042	11,827	881	10,645	82,734
2012	202,633	2.29	1,048	88,436	11,849	898	10,839	82,891
2013	205,131	2.28	1,066	89,795	11,872	916	11,026	83,034
2014	207,611	2.28	1,086	91,155	11,917	934	11,213	83,311
2015	209,921	2.27	1,107	92,446	11,980	953	11,385	83,733

\* Commercial includes General Service Non-Demand and General Service Demand Rate Classes

**Schedule 2.2**  
**History and Forecast of Energy Consumption and**  
**Number of Customers by Customer Class**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Year	<u>GWh</u>	<u>Average Number of Customers</u>	<u>Average MWh per Customer</u>	<u>Railroads and Railways GWh</u>	<u>Street and Highway Lighting GWh</u>	<u>Other Sales to Public Authorities GWh</u>	<u>Total Sales to Ultimate Consumers GWh</u>
	INDUSTRIAL **						
1996	148	15	9,893	0	19	0	1,479
1997	151	15	10,059	0	21	0	1,475
1998	157	15	10,443	0	21	0	1,595
1999	173	17	10,188	0	22	0	1,606
2000	172	17	10,114	0	22	0	1,656
2001	173	17	10,162	0	23	0	1,696
2002	178	18	10,178	0	24	0	1,774
2003	181	19	9,591	0	24	0	1,786
2004	188	18	10,444	0	25	0	1,830
2005	189	18	10,477	0	25	0	1,854
2006	190	18	10,580	0	26	0	1,904
2007	191	18	10,602	0	27	0	1,953
2008	191	18	10,626	0	27	0	2,002
2009	191	18	10,639	0	28	0	2,047
2010	192	18	10,646	0	29	0	2,089
2011	192	18	10,657	0	29	0	2,131
2012	192	18	10,664	0	30	0	2,168
2013	192	18	10,681	0	30	0	2,204
2014	193	18	10,697	0	31	0	2,244
2015	193	18	10,716	0	32	0	2,285

\*\* Industrial includes Large Power Rate Class

**Schedule 2.3**  
**History and Forecast of Energy Consumption and**  
**Number of Customers by Customer Class**

(1)	(2)	(3)	(4)	(5)	(6)
<u>Year</u>	<u>Sales For Resale GWh</u>	<u>Utility Use and Losses GWh</u>	<u>Net Energy for Load GWh</u>	<u>Other Customers</u>	<u>Total Number of Customers</u>
1996	105	75	1,659	0	70,981
1997	104	82	1,661	0	72,917
1998	108	76	1,779	0	74,605
1999	109	83	1,798	0	76,655
2000	120	93	1,868	0	78,720
2001	125	62	1,882	0	81,011
2002	142	92	2,008	0	82,623
2003	146	83	2,015	0	83,434
2004	149	70	2,049	0	86,264
2005	163	66	2,082	0	87,560
2006	168	98	2,170	0	89,314
2007	173	101	2,227	0	91,066
2008	178	103	2,283	0	92,778
2009	182	106	2,335	0	94,448
2010	187	108	2,384	0	96,117
2011	192	110	2,433	0	97,705
2012	196	112	2,476	0	99,293
2013	200	114	2,518	0	100,839
2014	205	116	2,565	0	102,385
2015	209	118	2,612	0	103,849

**Schedule 3.1**  
**History and Forecast of Summer Peak Demand - MW**  
**Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Year</u>	<u>Total</u>	<u>Wholesale</u>	<u>Retail</u>	<u>Interruptible</u>	<u>Residential Load Management</u>	<u>Residential Conservation</u>	<u>Comm./Ind. Load Management</u>	<u>Comm./Ind. Conservation</u>	<u>Net Firm Demand</u>
1996	380	24	341	0	0	8	0	7	365
1997	388	24	349	0	0	8	0	7	373
1998	411	26	370	0	0	8	0	7	396
1999	434	26	393	0	0	8	0	7	419
2000	440	28	397	0	0	8	0	7	425
2001	423	28	381	0	0	7	0	7	409
2002	446	32	401	0	0	7	0	7	433
2003	429	33	384	0	0	6	0	6	417
2004	444	33	399	0	0	6	0	6	432
2005	476	37	428	0	0	6	0	5	465
2006	481	38	432	0	0	6	0	5	470
2007	493	40	443	0	0	6	0	4	483
2008	504	41	454	0	0	6	0	3	495
2009	515	42	464	0	0	6	0	3	506
2010	526	43	474	0	0	6	0	3	517
2011	535	44	482	0	0	6	0	3	526
2012	546	45	491	0	0	7	0	3	536
2013	555	46	499	0	0	7	0	3	545
2014	566	47	509	0	0	7	0	3	556
2015	576	48	518	0	0	7	0	3	566

**Schedule 3.2**  
**History and Forecast of Winter Peak Demand - MW**  
**Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Winter</u>	<u>Total</u>	<u>Wholesale</u>	<u>Retail</u>	<u>Interruptible</u>	<u>Residential Load Management</u>	<u>Residential Conservation</u>	<u>Comm./Ind. Load Management</u>	<u>Comm./Ind. Conservation</u>	<u>Net Firm Demand</u>
1996 / 1997	343	26	280	0	0	30	0	7	306
1997 / 1998	319	23	259	0	0	30	0	7	282
1998 / 1999	389	28	323	0	0	31	0	7	351
1999 / 2000	373	27	310	0	0	29	0	7	337
2000 / 2001	398	33	331	0	0	28	0	6	364
2001 / 2002	402	33	336	0	0	27	0	6	369
2002 / 2003	425	37	357	0	0	26	0	5	394
2003 / 2004	380	31	319	0	0	25	0	5	350
2004 / 2005	405	36	341	0	0	24	0	4	377
2005 / 2006	411	40	346	0	0	22	0	3	386
2006 / 2007	425	40	363	0	0	20	0	2	403
2007 / 2008	435	41	374	0	0	18	0	2	415
2008 / 2009	444	42	385	0	0	16	0	1	427
2009 / 2010	451	43	394	0	0	14	0	0	437
2010 / 2011	460	45	400	0	0	15	0	0	445
2011 / 2012	468	46	407	0	0	15	0	0	453
2012 / 2013	476	47	413	0	0	16	0	0	460
2013 / 2014	485	48	420	0	0	17	0	0	468
2014 / 2015	494	49	428	0	0	17	0	0	477
2015 / 2016	503	49	436	0	0	18	0	0	485

**Schedule 3.3**  
**History and Forecast of Net Energy for Load - GWH**  
**Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Year</u>	<u>Total</u>	<u>Residential Conservation</u>	<u>Comm./Ind. Conservation</u>	<u>Retail</u>	<u>Wholesale</u>	<u>Utility Use &amp; Losses</u>	<u>Net Energy for Load</u>	<u>Load Factor %</u>
1996	1,721	42	21	1,479	105	75	1,659	51.89%
1997	1,726	44	21	1,475	104	82	1,661	50.84%
1998	1,847	47	21	1,595	108	76	1,779	51.28%
1999	1,869	50	21	1,606	109	83	1,798	48.97%
2000	1,939	50	21	1,656	120	93	1,868	50.19%
2001	1,953	50	20	1,696	125	62	1,882	52.54%
2002	2,079	52	19	1,774	142	92	2,008	52.95%
2003	2,085	53	18	1,786	146	83	2,015	55.15%
2004	2,118	53	16	1,830	149	70	2,049	54.14%
2005	2,151	53	15	1,854	163	66	2,082	51.12%
2006	2,237	53	14	1,904	168	98	2,170	52.71%
2007	2,291	52	12	1,953	173	101	2,227	52.63%
2008	2,344	51	10	2,002	178	103	2,283	52.65%
2009	2,394	50	9	2,047	182	106	2,335	52.68%
2010	2,441	49	8	2,089	187	108	2,384	52.64%
2011	2,493	52	8	2,131	192	110	2,433	52.80%
2012	2,539	54	9	2,168	196	112	2,476	52.73%
2013	2,584	57	9	2,204	200	114	2,518	52.74%
2014	2,633	59	9	2,244	205	116	2,565	52.66%
2015	2,682	61	9	2,285	209	118	2,612	52.68%

**Schedule 4**

**Previous Year and 2-Year Forecast of Peak Demand and Net Energy for Load**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Month</u>	ACTUAL		FORECAST			
	2005		2006		2007	
	Peak Demand	NEL	Peak Demand	NEL	Peak Demand	NEL
	(MW)	(GWh)	(MW)	(GWh)	(MW)	(GWh)
JAN	377	156	340	169	403	173
FEB	286	137	386	146	366	149
MAR	287	149	319	153	327	157
APR	285	140	344	155	352	159
MAY	376	169	412	187	422	192
JUN	405	193	448	204	460	210
JUL	454	225	470	223	482	229
AUG	465	226	470	227	483	233
SEP	425	207	445	207	456	213
OCT	387	176	383	177	393	182
NOV	292	144	336	154	345	158
DEC	321	160	361	168	371	172

**Schedule 5**  
**FUEL REQUIREMENTS**  
As of January 1, 2006

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
				ACTUAL											
FUEL REQUIREMENTS				UNITS	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
(1)	NUCLEAR		TRILLION BTU	0.921	1.004404	0.908646	1.004404	0.791370	1.004404	0.908646	1.004404	0.908646	1.004404	0.908646	
(2)	0.7% COAL		1000 TON	624.832	617.839	638.037	661.566	638.920							
(2.1)	1.7% COAL		1000 TON						642.574	660.860	680.662	436.443	432.410	432.255	
RESIDUAL															
(3)	STEAM		1000 BBL	156.057	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
(4)	CC		1000 BBL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
(5)	CT		1000 BBL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
(6)	TOTAL:		1000 BBL	156.057	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
DISTILLATE															
(7)	STEAM		1000 BBL	0.609	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
(8)	CC		1000 BBL	0.311	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
(9)	CT		1000 BBL	0.147	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
(10)	TOTAL:		1000 BBL	1.068	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
NATURAL GAS															
(11)	STEAM		1000 MCF	2,030.498	770.175	666.942	724.847	1,108.519	1,225.431	1,119.056	1,057.303	53.226	130.963	130.275	
(12)	CC		1000 MCF	1,116.532	3,864.836	3,982.666	3,731.966	4,257.619	4,390.327	4,475.210	4,135.954	784.049	853.899	1,211.973	
(13)	CT		1000 MCF	470.682	1,952.352	1,993.695	2,136.053	2,384.968	2,554.911	2,657.813	3,061.505	288.777	488.375	363.890	
(14)	TOTAL:		1000 MCF	3,617.712	6,587.363	6,643.303	6,592.866	7,751.106	8,170.669	8,252.079	8,254.762	1,126.052	1,473.237	1,706.138	
(15)	Landfill Gas		TRILLION BTU	0.069	0.127	0.127	0.127	0.127	0.063	0.063	0.063	0.063	0.063	0.063	
(16)	Solid Fuel (proposed DH3)		1000 TON	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	601.608	608.023	616.969	
(17)	2.7% Coal: 32.7858% by wt, 36.3623% by Btu		1000 TON	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	197.242	199.345	202.278	
(18)	Petroleum Coke: 38.6793% by wt, 50.0% by Btu		1000 TON	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	232.697	235.179	238.639	
(19)	Woody Biomass: 28.535% by wt, 13.6377% by Btu		1000 TON	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	171.669	173.499	176.052	

**Schedule 6.1**  
**ENERGY SOURCES (GWH)**  
As of January 1, 2006

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
ENERGY SOURCES			UNITS	ACTUAL 2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
(1)	ANNUAL FIRM INTER-REGION INTERCHANGE		GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(2)	NUCLEAR		GWH	89.415	95.658	86.538	95.658	75.369	95.658	86.538	95.658	86.538	95.658	86.538
(3)	COAL		GWH	1,467.267	1,444.026	1,492.983	1,550.589	1,499.118	1,490.362	1,533.834	1,581.194	954.823	947.908	950.939
	RESIDUAL													
(4)		STEAM	GWH	78.909	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(5)		CC	GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(6)		CT	GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(7)		TOTAL:	GWH	78.909	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	DISTILLATE													
(8)		STEAM	GWH	0.065	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(9)		CC	GWH	0.236	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(10)		CT	GWH	0.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(11)		TOTAL:	GWH	0.328	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	NATURAL GAS													
(12)		STEAM	GWH	172.683	64.775	55.726	60.823	93.303	103.203	94.971	89.642	4.446	11.098	11.077
(13)		CC	GWH	120.166	422.338	436.024	415.341	473.290	493.352	507.159	474.643	77.119	84.648	119.494
(14)		CT	GWH	33.341	142.770	142.111	146.603	178.014	190.116	196.188	220.744	19.515	31.690	26.204
(15)		TOTAL:	GWH	326.189	629.883	633.861	622.767	744.607	786.671	798.318	785.029	101.080	127.436	156.775
(16)	NUG		GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(17)	HYDRO		GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(18)	Landfill Gas		GWH	5.356	10.582	10.582	10.582	10.582	5.291	5.291	5.291	5.291	5.291	5.291
(19)	Solid Fuel (Proposed DH3)		GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,370.379	1,387.395	1,411.089
(20)	2.7% Coal: 32.7858% by wt, 36.3623% by Btu		GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	498.301	504.489	513.104
(21)	Petroleum Coke: 38.6793% by wt, 50.0% by Btu		GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	685.190	693.698	705.545
(22)	Woody Biomass: 28.535% by wt, 13.6377% by Btu		GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	186.888	189.209	192.440
(23)	Starke Contract		GWH	16.755	13.110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(24)	Purchased Energy		GWH	165.307	3.425	2.879	3.538	5.218	5.809	8.837	8.897	0.945	1.358	1.572
(25)	Energy Sales		GWH	33.614	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.612	0.438	0.050
(26)	NET ENERGY FOR LOAD		GWH	2,082.401	2,170.464	2,226.843	2,283.134	2,334.894	2,383.791	2,432.818	2,476.069	2,518.444	2,564.608	2,612.154

**Schedule 6.2**  
**ENERGY SOURCES (%)**  
As of January 1, 2006

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
ENERGY SOURCES			UNITS	ACTUAL 2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
(1)	ANNUAL FIRM INTER-REGION INTERCHANGE		GWH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(2)	NUCLEAR		GWH	4.29%	4.41%	3.89%	4.19%	3.23%	4.01%	3.56%	3.86%	3.44%	3.73%	3.31%
(3)	COAL		GWH	70.46%	66.53%	67.04%	67.91%	64.20%	62.52%	63.05%	63.86%	37.91%	36.96%	36.40%
	RESIDUAL													
(4)		STEAM	GWH	3.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(5)		CC	GWH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(6)		CT	GWH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(7)		TOTAL:	GWH	3.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	DISTILLATE													
(8)		STEAM	GWH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(9)		CC	GWH	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(10)		CT	GWH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(11)		TOTAL:	GWH	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	NATURAL GAS													
(12)		STEAM	GWH	8.29%	2.98%	2.50%	2.66%	4.00%	4.33%	3.90%	3.62%	0.18%	0.43%	0.42%
(13)		CC	GWH	5.77%	19.46%	19.58%	18.19%	20.27%	20.70%	20.85%	19.17%	3.06%	3.30%	4.57%
(14)		CT	GWH	1.60%	6.58%	6.38%	6.42%	7.62%	7.98%	8.06%	8.92%	0.77%	1.24%	1.00%
(15)		TOTAL:	GWH	15.66%	29.02%	28.46%	27.28%	31.89%	33.00%	32.81%	31.70%	4.01%	4.97%	6.00%
(16)	NUG		GWH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(17)	HYDRO		GWH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(18)	Landfill Gas		GWH	0.26%	0.49%	0.48%	0.46%	0.45%	0.22%	0.22%	0.21%	0.21%	0.21%	0.20%
(19)	Solid Fuel (Proposed DH3)		GWH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	54.41%	54.10%	54.02%
(20)	2.7% Coal: 32.7858% by wt, 36.3623% by Btu		GWH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.79%	19.67%	19.64%
(21)	Petroleum Coke: 38.6793% by wt, 50.0% by Btu		GWH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	27.21%	27.05%	27.01%
(22)	Woody Biomass: 28.535% by wt, 13.6377% by Btu		GWH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.42%	7.38%	7.37%
(23)	Starke Contract		GWH	0.80%	0.60%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(24)	Purchased Energy		GWH	7.94%	0.16%	0.13%	0.15%	0.22%	0.24%	0.36%	0.36%	0.04%	0.05%	0.06%
(25)	Energy Sales		GWH	1.61%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.02%	0.00%
(26)	NET ENERGY FOR LOAD		GWH	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

**TABLE 3.1**

**DEMAND-SIDE MANAGEMENT IMPACTS  
INCREMENTAL EFFECT OF PLANNED PROGRAMS**

---

<u>Year</u>	<u>MWh</u>	<u>Winter</u> <u>kW</u>	<u>Summer</u> <u>kW</u>
2006	3,428	789	663
2007	6,825	1,572	1,325
2008	10,218	2,350	1,993
2009	13,617	3,127	2,665
2010	16,971	3,893	3,331
2011	19,590	4,535	3,722
2012	22,467	5,188	4,212
2013	24,915	5,817	4,522
2014	27,337	6,442	4,837
2015	29,414	7,035	5,033

---

Notes: Projected impacts from programs planned for 2006-2015.  
Net of 2005 estimated cumulative historical program results.

**TABLE 3.2.1**

**DEMAND-SIDE MANAGEMENT IMPACTS  
Total Program Achievements**

---

<u>Year</u>	<u>MWh</u>	<u>Winter kW</u>	<u>Summer kW</u>
1980	254	168	168
1981	575	370	370
1982	1,054	687	674
1983	2,356	1,339	1,212
1984	8,024	3,074	2,801
1985	16,315	6,719	4,619
1986	25,416	10,470	7,018
1987	30,279	13,287	8,318
1988	34,922	15,918	9,539
1989	38,824	18,251	10,554
1990	43,661	21,033	11,753
1991	48,997	24,204	12,936
1992	54,898	27,574	14,317
1993	61,356	31,434	15,752
1994	66,725	34,803	16,871
1995	72,057	38,117	18,022
1996	75,894	39,121	18,577
1997	79,998	40,256	19,066
1998	84,017	41,351	19,541
1999	88,631	42,599	20,055
2000	93,132	43,742	20,654
2001	97,428	44,873	21,185
2002	102,159	46,121	21,720
2003	106,277	47,213	22,222
2004	109,441	48,028	22,676
2005	113,182	48,893	23,405
2006	116,720	49,702	24,089
2007	120,235	50,506	24,778
2008	123,725	51,302	25,464
2009	127,191	52,091	26,149
2010	130,631	52,874	26,831
2011	134,046	53,649	27,511
2012	137,435	54,418	28,190
2013	140,434	55,160	28,686
2014	143,408	55,895	29,180
2015	146,356	56,624	29,673

---

Note: Total cumulative impacts from 1990 Conservation Plan and 1995 DSM Plan.

TABLE 3.2.2

**DEMAND-SIDE MANAGEMENT IMPACTS**  
**Program Retirements**

---

<u>Year</u>	<u>MWh</u>	<u>Winter</u> <u>kW</u>	<u>Summer</u> <u>kW</u>
1980	0	0	0
1981	0	0	0
1982	0	0	0
1983	0	0	0
1984	0	0	0
1985	0	0	0
1986	0	0	0
1987	0	0	0
1988	0	0	0
1989	0	0	0
1990	0	0	0
1991	0	0	0
1992	0	0	0
1993	(422)	(75)	(75)
1994	(4,769)	(957)	(957)
1995	(8,891)	(1,778)	(1,786)
1996	(13,746)	(2,795)	(2,815)
1997	(14,813)	(3,276)	(3,271)
1998	(15,952)	(3,945)	(3,815)
1999	(17,460)	(4,838)	(4,563)
2000	(22,159)	(7,898)	(5,787)
2001	(27,002)	(10,892)	(7,417)
2002	(31,553)	(13,604)	(8,626)
2003	(36,169)	(16,192)	(9,813)
2004	(40,019)	(18,510)	(10,812)
2005	(44,764)	(21,259)	(11,979)
2006	(50,050)	(24,415)	(13,148)
2007	(55,895)	(27,763)	(14,514)
2008	(62,335)	(31,615)	(15,941)
2009	(67,750)	(34,992)	(17,069)
2010	(73,160)	(38,322)	(18,234)
2011	(73,955)	(38,455)	(18,523)
2012	(74,469)	(38,570)	(18,712)
2013	(75,019)	(38,684)	(18,898)
2014	(75,571)	(38,794)	(19,077)
2015	(76,442)	(38,930)	(19,373)

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Note: Conservation savings that have been retired from total program achievements corresponding to individual program life cycles.

**TABLE 3.2.3**

**DEMAND-SIDE MANAGEMENT IMPACTS**  
**Total Annual Net Effects**

---

<u>Year</u>	<u>MWh</u>	<u>Winter</u> <u>kW</u>	<u>Summer</u> <u>kW</u>
1980	254	168	168
1981	575	370	370
1982	1,054	687	674
1983	2,356	1,339	1,212
1984	8,024	3,074	2,801
1985	16,315	6,719	4,619
1986	25,416	10,470	7,018
1987	30,279	13,287	8,318
1988	34,922	15,918	9,539
1989	38,824	18,251	10,554
1990	43,661	21,033	11,753
1991	48,997	24,204	12,936
1992	54,898	27,574	14,317
1993	60,934	31,358	15,677
1994	61,955	33,845	15,913
1995	63,167	36,339	16,235
1996	62,148	36,325	15,761
1997	65,185	36,979	15,795
1998	68,065	37,406	15,726
1999	71,172	37,761	15,492
2000	70,972	35,843	14,867
2001	70,426	33,981	13,768
2002	70,606	32,516	13,093
2003	70,108	31,021	12,409
2004	69,422	29,518	11,864
2005	68,419	27,634	11,426
2006	66,669	25,288	10,942
2007	64,340	22,743	10,264
2008	61,390	19,687	9,523
2009	59,441	17,099	9,080
2010	57,471	14,552	8,597
2011	60,090	15,194	8,988
2012	62,967	15,847	9,478
2013	65,415	16,476	9,788
2014	67,837	17,102	10,103
2015	69,914	17,694	10,299

---

Note: Cumulative impacts from 1990 Conservation Plan and 1995 DSM Plan, net of program retirements.

**TABLE 3.3**  
**DELIVERED FUEL PRICES**  
**\$/MMBtu**

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<u>Year</u>	<u>Residual Fuel Oil</u>	<u>Distillate Fuel Oil</u>	<u>Natural Gas</u>	<u>0.7% Sulfur Coal (1)</u>	<u>1.7% Sulfur Coal (2)</u>	<u>3.6% Sulfur Coal (3)</u>	<u>Petroleum Coke (4)</u>	<u>Nuclear</u>
1996	2.75	4.89	3.37	1.66				0.45
1997	3.26	4.46	3.30	1.66				0.42
1998	2.73	3.97	2.87	1.66				0.41
1999	2.79	3.47	2.86	1.66				0.40
2000	4.52	5.99	4.53	1.62				0.44
2001	4.15	6.53	4.94	1.88				0.38
2002	4.58	5.69	3.95	2.06				0.38
2003	4.87	6.59	5.97	2.04				0.38
2004	5.17	9.23	6.40	2.03				0.43
2005	7.15	9.96	9.15	2.38				0.41
2006	6.85	11.10	8.54	2.95	2.37	2.30	1.28	0.45
2007	6.99	10.71	9.11	2.59	2.36	2.26	1.31	0.42
2008	6.89	10.65	8.76	2.59	2.39	2.31	1.33	0.42
2009	6.64	10.40	8.23	2.61	2.42	2.31	1.34	0.44
2010	6.45	10.23	7.88	2.53	2.45	2.36	1.38	0.43
2011	6.63	10.47	7.71	2.60	2.52	2.49	1.38	0.50
2012	6.79	10.89	7.80	2.68	2.62	2.58	1.40	0.49
2013	6.88	10.79	8.11	2.79	2.73	2.68	1.42	0.49
2014	7.08	11.22	8.13	2.87	2.82	2.72	1.44	0.48
2015	7.32	11.56	7.96	2.92	2.85	2.71	1.47	0.50

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- (1) Approximate heat content of 0.7% sulfur coal is 12,200 Btu/lb.
- (2) Approximate heat content of 1.7% sulfur coal is 12,500 Btu/lb.
- (3) Approximate heat content of 3.6% sulfur coal is 12,350 Btu/lb.
- (4) Approximate heat content of pet coke is 14,200 Btu/lb.

## **4. FORECAST OF FACILITIES REQUIREMENTS**

### **4.1 GENERATION RETIREMENTS**

The System plans to retire three of its currently operating generating units prior to the end of 2015 (see Schedule 8). In December of 2003 GRU commissioned its newest units at the Southwest Landfill. Engines installed at the landfill gas to electric energy project will be retired as the gas production decreases through time. The first engine is expected to be removed in December 2009, and the second in December 2015. The John R. Kelly steam unit #7 (23 MW) will be 50 years old in 2011 and is tentatively scheduled for retirement in August 2011.

### **4.2 RESERVE MARGIN AND SCHEDULED MAINTENANCE**

GRU uses a planning criteria of 15% capacity reserve margin (suggested for emergency power pricing purposes by Florida Public Service Commission Rule 25-6.035). Available generating capacities are compared with System summer peak demands in Schedule 7.1 (and Figure 4.1) and System winter peak demands in Schedule 7.2 (and Figure 4.2). Higher peak demands in summer and lower unit operating capacities in summer result in lower reserve margins during the summer season than in winter. Summer reserve margins without capacity additions are forecast to fall below 15% starting in 2011. The Gainesville community is discussing the ramifications of adding additional resources by summer 2013 to address its reserve margin requirements. GRU expects to import firm capacity in 2011 and 2012, and/or possibly implement a direct load control program, to maintain adequate reserves.

### **4.3 GENERATION ADDITIONS**

GRU conducted an integrated resource planning process to propose the best plan for our customers' long-term electrical energy needs. GRU's current proposed

alternative consists of a 220 megawatt (net) circulating fluidized bed combustion (CFB) unit that would be fired with coal, petroleum coke and biomass. The plan also proposed the installation of an air quality control system (AQCS) on the existing Deerhaven Unit 2.

The plan has been publicly discussed but has not been finalized or approved by the Gainesville City Commission. THE CITY COMMISSION MAY CHOOSE DIFFERENT TECHNOLOGIES, SIZES OF CAPACITY, AND STANDARDS FOR ENERGY CONSERVATION PLANNING THAN ARE ASSUMED IN THIS REPORT. While a nominal in-service date of June 2013 has been used for this report, a tentative construction schedule has not been determined. Once a plan or range of plans for meeting the future needs of the customers is approved, GRU will issue a Request For Proposals to Provide Capacity and Energy to offset the need for any proposed new unit. Schedule 9, included at the end of this section, identifies key parameters for the proposed generating capacity currently under discussion.

Due to new EPA regulations promulgated in March 2005, the retrofit of an AQCS on Unit 2 is proceeding as an independent project as one means of complying with the new regulations. The AQCS will consist of a selective catalytic reduction (SCR) system and a dry flue gas desulfurization system (FGD) which will include a baghouse (BH). It is expected that the SCR and the FGD/BH will be operational by 2009 and 2010, respectively. The tentative schedule for construction of any proposed new unit is yet to be determined. A nominal in-service date of June 2013 has been used for this report. This date is the basis of the reserve margin forecast in Schedule 7.1 and Schedule 7.2. Characteristics of the currently proposed solid fuel facility are summarized in Schedule 9 at the end of this section.

#### **4.4 DISTRIBUTION SYSTEM ADDITIONS**

Up to five new, identical, mini-power delivery substations (PDS) were planned for the GRU system in 1999. The first, Rocky Point, located near the intersection of SW Williston Road and SW 23<sup>rd</sup> Terrace, was installed in 2000. The second, Kanapaha, located at 8500 SW Archer Road, was installed in 2002. The third, Ironwood, located at 1800 NE 31<sup>st</sup> Avenue, was connected in 2003. A fourth PDS is planned for 2007. The location for this PDS, which will be known as Springhill, will be a parcel owned by GRU west of Interstate 75 and north of 39<sup>th</sup> Avenue. A fifth PDS is being considered for addition to the System no earlier than 2010. The location of this proposed fifth PDS would be in the northern part of the service territory near U.S. Highway 441. These new mini-power delivery substations have been planned to redistribute the load from the existing substations as new load centers grow and develop within the System.

Each PDS will consist of one (or more) 138-12.47 KV, 33.6 MVA, wye-wye substation transformer with a maximum of eight distribution circuits. The proximity of these new PDSs to other, existing adjacent area substations will allow for backup in the event of a substation transformer failure.

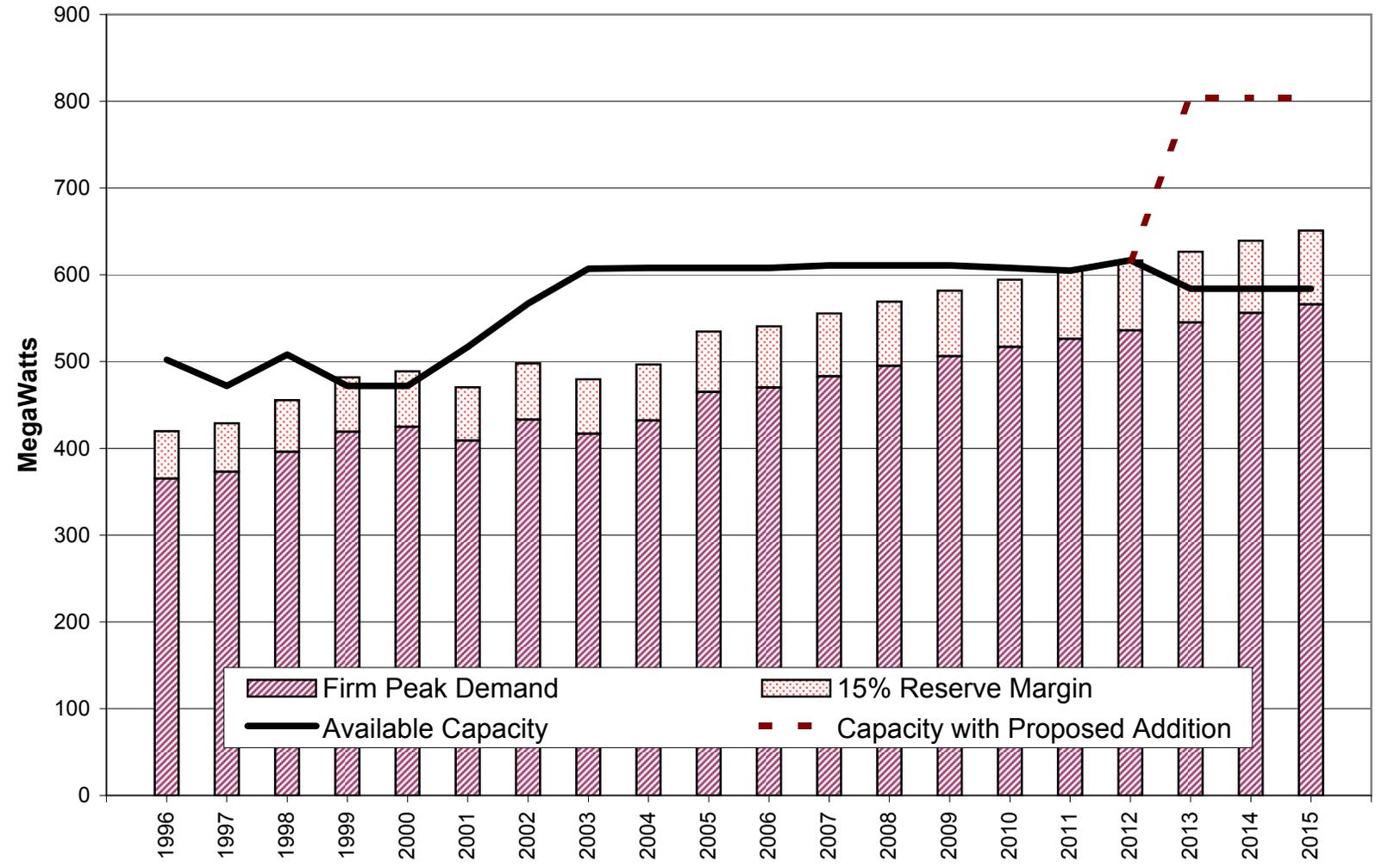
GRU is also planning to expand its John R. Kelly Plant generation-transmission-distribution substation to include a new 56 MVA 138-12.47 kV transformer located on the south side of the plant. This expansion will enhance reliability by reassigning load to a point on the system not directly tied to the generator buses of the plant. The additional transformer capacity will allow for load growth in Gainesville's downtown area.

**Schedule 7.1  
Forecast of Capacity, Demand, and Scheduled Maintenance at Time of Summer Peak**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Year	Total Installed Capacity MW	DSM, DLC and/or Firm Capacity Import MW	Firm Capacity Export MW	QF MW	Total Capacity Available MW	System Firm Summer Peak Demand MW	Reserve Margin (1) before Maintenance MW	% of Peak	Scheduled Maintenance MW	Reserve Margin (1) after Maintenance MW	% of Peak
1996	527	18	43	0	502	365	137	37.5%	0	137	37.5%
1997	527	30	85	0	472	373	99	26.5%	0	99	26.5%
1998	550	31	73	0	508	396	112	28.3%	0	112	28.3%
1999	550	32	110	0	472	419	53	12.6%	14	39	9.3%
2000	550	0	78	0	472	425	47	11.1%	0	47	11.1%
2001	610	0	93	0	517	409	108	26.4%	0	108	26.4%
2002	610	0	43	0	567	433	134	30.9%	0	134	30.9%
2003	610	0	3	0	607	417	190	45.6%	0	190	45.6%
2004	611	0	3	0	608	432	176	40.7%	0	176	40.7%
2005	611	0	3	0	608	465	143	30.8%	0	143	30.8%
2006	611	0	3	0	608	470	138	29.4%	0	138	29.4%
2007	611	0	0	0	611	483	128	26.5%	0	128	26.5%
2008	611	0	0	0	611	495	116	23.4%	0	116	23.4%
2009	611	0	0	0	611	506	105	20.8%	0	105	20.8%
2010	608	0	0	0	608	517	91	17.6%	0	91	17.6%
2011	584	21	0	0	605	526	79	15.0%	0	79	15.0%
2012	584	33	0	0	617	536	81	15.1%	0	81	15.1%
2013	804	0	0	0	804	545	259	47.5%	0	259	47.5%
2014	804	0	0	0	804	556	248	44.6%	0	248	44.6%
2015	804	0	0	0	804	566	238	42.0%	0	238	42.0%

(1) GRU provides reserve margin backup for 3 MW Schedule D contract with the City of Starke.

**Figure 4.1**  
**Summer Peak Demand and Generation Capacity**



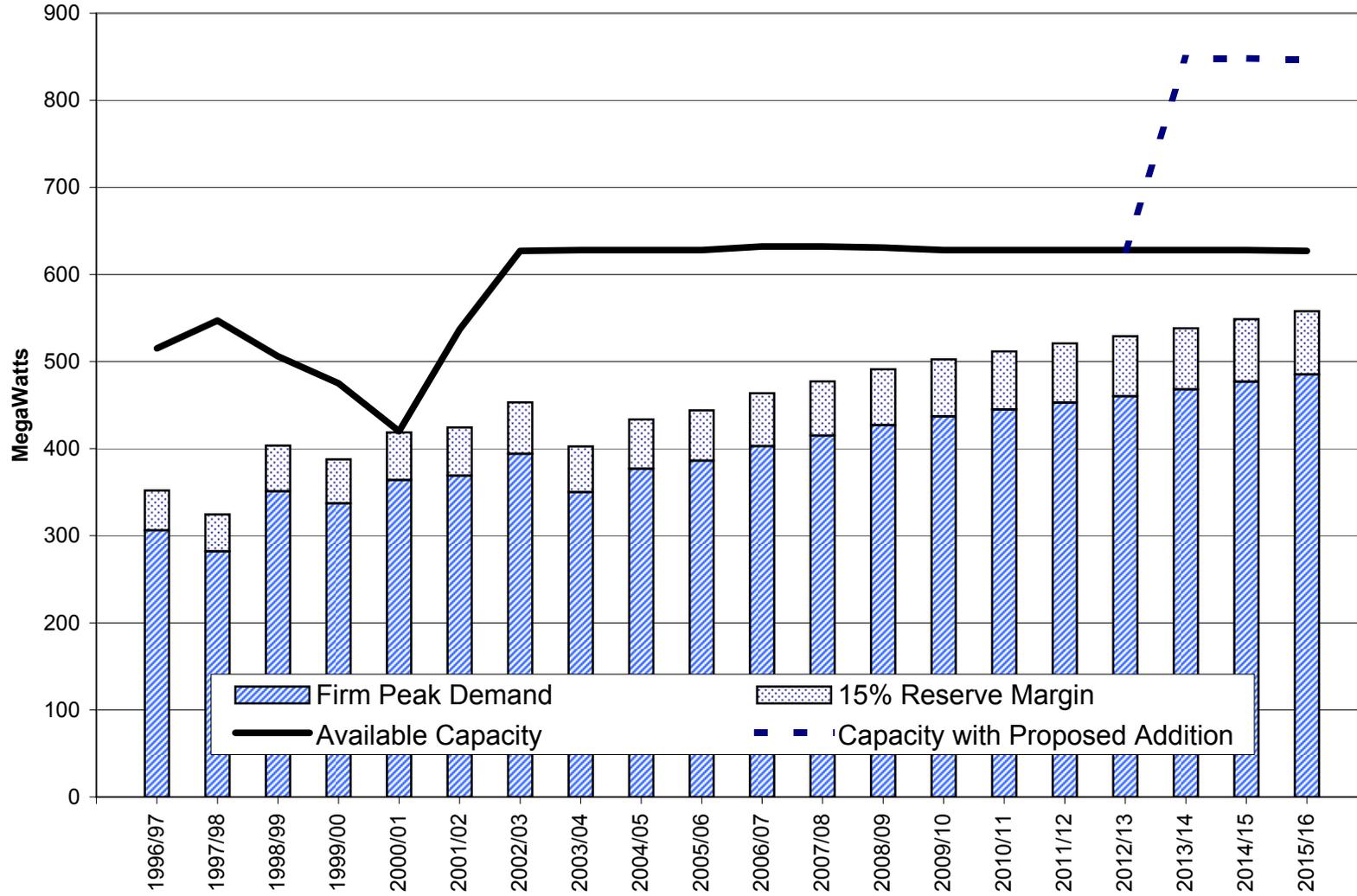
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**Schedule 7.2**  
**Forecast of Capacity, Demand, and Scheduled Maintenance at Time of Winter Peak**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Year	Total Installed Capacity MW	DSM, DLC and/or Firm Capacity Import MW	Firm Capacity Export MW	QF MW	Total Capacity Available MW	System Firm Winter Peak Demand MW	Reserve Margin (1) before Maintenance MW	% of Peak	Scheduled Maintenance MW	Reserve Margin (1) after Maintenance MW	% of Peak
1996/97	540	18	43	0	515	306	209	68.3%	0	209	68.3%
1997/98	540	30	23	0	547	282	265	94.0%	0	265	94.0%
1998/99	563	31	88	0	506	351	155	44.2%	0	155	44.2%
1999/00	563	0	88	0	475	337	138	40.9%	15	123	36.5%
2000/01	513	0	93	0	420	364	56	15.4%	0	56	15.4%
2001/02	630	0	93	0	537	369	168	45.5%	0	168	45.5%
2002/03	630	0	3	0	627	394	233	59.1%	0	233	59.1%
2003/04	631	0	3	0	628	350	278	79.4%	0	278	79.4%
2004/05	631	0	3	0	628	377	251	66.6%	0	251	66.6%
2005/06	631	0	3	0	628	386	242	62.7%	0	242	62.7%
2006/07	632	0	0	0	632	403	229	56.8%	0	229	56.8%
2007/08	632	0	0	0	632	415	217	52.3%	0	217	52.3%
2008/09	631	0	0	0	631	427	204	47.8%	0	204	47.8%
2009/10	628	0	0	0	628	437	191	43.7%	0	191	43.7%
2010/11	628	0	0	0	628	445	183	41.1%	0	183	41.1%
2011/12	628	0	0	0	628	453	175	38.6%	0	175	38.6%
2012/13	628	0	0	0	628	460	168	36.5%	0	168	36.5%
2013/14	848	0	0	0	848	468	380	81.2%	0	380	81.2%
2014/15	848	0	0	0	848	477	371	77.8%	0	371	77.8%
2015/16	847	0	0	0	847	485	362	74.6%	0	362	74.6%

(1) GRU provides reserve margin backup for 3 MW Schedule D contract with the City of Starke.

**Figure 4.2**  
**Winter Peak Demand and Generation Capacity**



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Schedule 8

PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHANGES

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Plant Name	Unit No.	Location	Unit Type	Fuel		Fuel Transport		Const. Start Mo/Yr	Commercial In-Service Mo/Yr	Expected Retirement Mo/Yr	Gross Capability		Net Capability		Status
				Pri.	Alt.	Pri.	Alt.				Summer (MW)	Winter (MW)	Summer (MW)	Winter (MW)	
DEERHAVEN	FS02	Alachua County Secs. 26,27 35 T8S, R19E	ST	BIT		RR		Jan-07	Oct-08		0	0	-0.5	-0.5	D
DEERHAVEN	FS02	Alachua County Secs. 26,27 35 T8S, R19E	ST	BIT		RR		Jan-07	Oct-09		0	0	-2.5	-2.5	D
SOUTHWEST LANDFILL	LFG1	Alachua County Sec. 19, T11S, R18E	IC	LFG		PL				Dec-09	-0.65	-0.65	-0.65	-0.65	RT
J. R. KELLY	FS07	Alachua County Sec. 4, T10S, R20E	ST	NG	RFO	PL	TK			Aug-11	-24	-24	-23.2	-23.2	RT
DEERHAVEN	FSO3	Alachua County Secs. 26,27 35 T8S, R19E	ST	BIT/PC/WDS	BIT	RR/TK	RR	Jun-08	Jun-13		244	244	220	220	P
SOUTHWEST LANDFILL	LFG2	Alachua County Sec. 19, T11S, R18E	IC	LFG		PL				Dec-15	-0.65	-0.65	-0.65	-0.65	RT

**Unit Type**

ST = Steam Turbine  
 IC = Internal Combustion Engine (diesel, piston)

**Transportation Method**

RR = Railroad  
 TK = Truck  
 PL = Pipeline

**Fuel Type**

BIT = Bituminous Coal  
 PC = Petroleum Coke  
 WDS = Wood/Wood Waste Solids (Wood Trimming, Logging Residue, Forest Restoration)  
 NG = Natural Gas  
 RFO = Residual Fuel Oil

**Status**

P = Proposed for Installation but not City Commission authorized. Not under construction.

**Schedule 9**  
**Description of Proposed Facility Under Discussion**

(1)	Plant Name and Unit Number:	Deerhaven 3
(2)	Net Capacity	
	a. Summer	220 MW
	b. Winter	220 MW
(3)	Technology Type:	Circulating-Fluidized Bed
(4)	Anticipated Construction Timing	
	a. Field construction start-date:	6/1/2008
	b. Commercial in-service date:	6/1/2013
(5)	Fuel	
	a. Primary Fuel (by Heat Input)	36.36% Coal / 50% Pet Coke / 13.64% Wood Biomass
	b. Alternate Fuel	Bituminous Coal
(6)	Air Pollution Control Strategy:	Circulating Fluidized Bed Flue Gas Desulphurization or Flash Dryer Absorber SNCR if needed Fabric Filter
(7)	Cooling Method:	Forced Draft Cooling Tower
(8)	Total Site Area (ft <sup>2</sup> ):	To be determined. (Deerhaven)
(9)	Construction Status:	Proposed, Not Approved by City Commission
(10)	Certification Status:	Proposed, Application Not Filed.
(11)	Status with Federal Agencies:	Not Applicable
(12)	Projected Unit Performance Data	
	Planned Outage Factor (POF):	1.0%
	Forced Outage Factor (FOF):	4.0%
	Equivalent Availability Factor (EAF):	95.0%
	Resulting Capacity Factor (CF)	85.0%
	Average Net Operating Heat Rate (ANOHR):	9,465
(13)	Projected Unit Financial Data	
	Book Life (Years)	35
	Total Installed Cost (2013\$/kW)	3091.56
	Direct Construction Cost (\$2013/kW):	2651.75
	Escalation (\$2013/kW)	75.98
	Escalation:	3.00%
	Fixed O&M (\$2013/kW-Yr):	28.99
	Variable O&M (\$2013/MWh):	6.01

## **5. ENVIRONMENTAL AND LAND USE INFORMATION**

### **5.1 DESCRIPTION OF POTENTIAL SITES FOR NEW GENERATING FACILITIES**

Not applicable.

### **5.2 DESCRIPTION OF PREFERRED SITES FOR NEW GENERATING FACILITIES**

GRU's current proposed alternative is a 244/220 MW (gross/net) circulating fluidized bed (CFB) unit to be located at the Deerhaven plant site, shown in Figure 2.1 and Figure 5.1, located north of Gainesville off U.S. Highway 441. The proposed CFB would be fired with biomass, coal, and petroleum coke (pet coke). The Deerhaven site is preferred for the proposed project for several major reasons as follows. It is an existing power generation site, thereby allowing future development while minimizing impacts to the greenfield (undeveloped) areas. It also has established access to fuel supply and power delivery; and fuel, water and combustion product management facilities.

#### **5.2.1 Land Use and Environmental Features**

The location of the Deerhaven Generating Station ("Site") is indicated on Figure 2.1 and Figure 5.1, overlain on USGS maps that were originally at a scale of 1 inch : 24,000 feet. Figure 5.2 provides a photographic depiction of the land use and cover of the existing site and adjacent areas. The existing land use of the certified portion of the site is industrial (i.e., electric power generation and transmission and ancillary uses such as fuel storage and conveyance; water, combustion product, and forest management). The recently acquired portion of the Site is zoned agricultural (silviculture). Surrounding land uses are primarily rural or agricultural with some low-density residential development. The Deerhaven site encompasses approximately 3474 acres, much of which is a natural buffer.

The Site is located in the Suwanee River Water Management District. A small increase in water quantities for potable uses is projected. It is estimated that industrial water usage associated with the new unit will be approximately 3 million gallons per day (MGD). This amount includes a water allocation for a flue gas desulfurization system(s) at the Site. The groundwater allocation in the existing Site Certification may be sufficient to accommodate the requirements of the Site in the future with the proposed new unit, if reclaimed water is used. Water for potable use will be supplied via the City's potable water system. Groundwater will continue to be extracted from the Floridan aquifer. A significant amount of reclaimed water from GRU's Main St. and/or Kanapaha wastewater treatment plants is expected to be made available to the Site to supply industrial process and cooling water needs. Process wastewater is currently collected, treated and reused on-site. The Site has zero discharge of process wastewater to surface waters, with a brine concentrator and on-site storage of water treatment and solid by-products. It is expected that this practice would continue with the addition of a new unit. Other water conservation measures may be identified during the design of the project.

Coal is currently delivered to the Site via rail. It is expected that fuel for a new unit would also be supplied by rail and that the existing coal storage area would be used for storage of fuels (biomass, coal, and pet coke). This area is lined with natural clay and is equipped with a stormwater runoff collection trench and pond.

### **5.2.2 Air Emissions**

The CFB technology itself minimizes the formation of nitrogen oxides (i.e., NO<sub>x</sub>) through lower combustion temperatures, and controls SO<sub>2</sub> emissions via limestone injection. CFB technology also results in substantial metals removal. A polishing scrubber or a flash dryer absorber may be utilized, if needed, to further reduce SO<sub>2</sub> and trace metal emissions. NO<sub>x</sub> emissions may be further reduced, if needed, using a selective non-catalytic reduction system. Particulate matter

emissions would be controlled utilizing a fabric filter.

### **5.3 STATUS OF APPLICATION FOR SITE CERTIFICATION**

Not applicable.

Figure 5.1

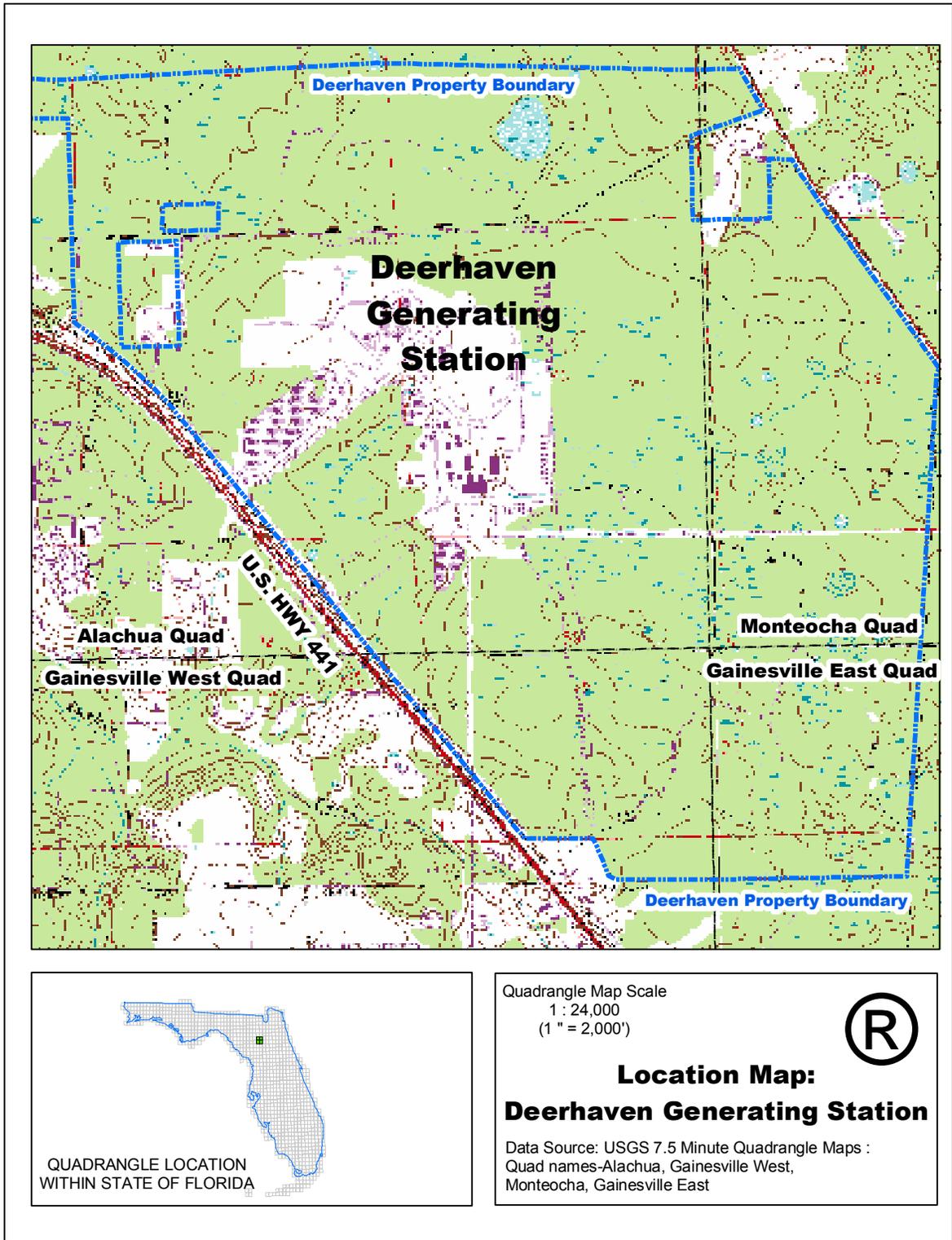
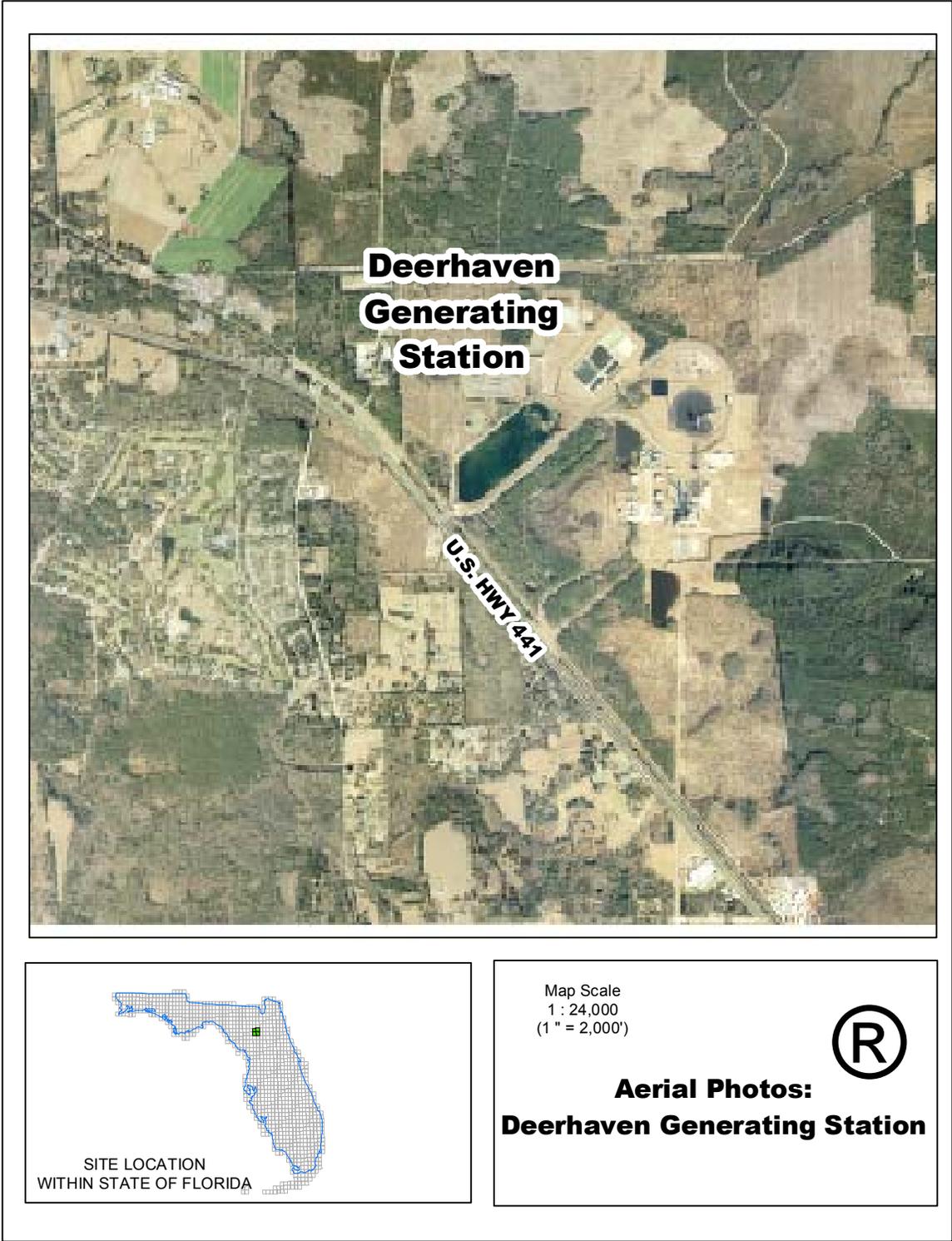


Figure 5.2



GAINESVILLE REGIONAL UTILITIES

2008 TEN-YEAR SITE PLAN



Submitted to:

The Florida Public Service Commission

April 2008

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## 1. INTRODUCTION

The 2008 Ten-Year Site Plan for Gainesville Regional Utilities (GRU) is submitted to the Florida Public Service Commission pursuant to Section 186.801, Florida Statutes. The contents of this report conform to information requirements listed in Form PSC/EAG 43, as specified by Rule 25-22.072, Florida Administrative Code. The five sections of the 2008 Ten-Year Site Plan are:

- Introduction
- Description of Existing Facilities
- Forecast of Electric Energy and Demand Requirements
- Forecast of Facilities Requirements
- Environmental and Land Use Information

Gainesville Regional Utilities (GRU) is a municipal electric, natural gas, water, wastewater, and telecommunications utility system, owned and operated by the City of Gainesville, Florida. The GRU retail electric system service area includes the City of Gainesville and the surrounding urban area. The highest net integrated peak demand recorded to date on GRU's electrical system was 481 Megawatts on August 8, 2007.

## 2. DESCRIPTION OF EXISTING FACILITIES

**Gainesville Regional Utilities** (GRU) operates a fully vertically-integrated electric power production, transmission, and distribution system (herein referred to as "the System"), and is wholly owned by the City of Gainesville. In addition to retail electric service, GRU also provides wholesale electric service to the City of Alachua (Alachua) and Clay Electric Cooperative (Clay). These wholesale contracts will terminate after December 31, 2008 and December 31, 2012 respectively, unless renewed. GRU's distribution system serves its retail territory of approximately 124 square miles and 90,939 customers (2007 average). The general locations of GRU electric facilities and the electric system service area are shown in Figure 2.1.

### 2.1 GENERATION

The existing generating facilities operated by GRU are tabulated in Schedule 1 at the end of this chapter. The present summer net capability is 611 MW and the winter net capability is 632 MW<sup>1</sup>. Currently, the System's energy is produced by three fossil fuel steam turbines, six simple-cycle combustion turbines, one combined-cycle unit, a 1.4079 % ownership share of the Crystal River 3 (CR3) nuclear unit operated by Progress Energy Florida (PEF), and two internal combustion engines that run on landfill gas.

The System has two primary generating plant sites -- Deerhaven and John R. Kelly (JRK). Each site comprises both steam-turbine and gas-turbine generating units. The JRK station also utilizes a combined cycle unit. A small amount of generation capacity is provided by two internal combustion engines located at the Alachua County Southwest Landfill.

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<sup>1</sup> Net capability is that specified by the "SERC Guideline Number Two for Uniform Generator Ratings for Reporting." The winter rating will normally exceed the summer rating because generating plant efficiencies are increased by lower ambient air temperatures and lower cooling water temperatures.

## **2.1.1 Generating Units**

**2.1.1.1 Steam Turbines.** The System's three operational simple-cycle steam turbines are powered by fossil fuels and CR3 is nuclear powered. The fossil fueled steam turbines comprise 54.7% of the System's net summer capability and produced 80.2% of the electric energy supplied by the System in 2007. These units range in size from 23.2 MW to 228.4 MW. The combined-cycle unit, which includes a heat recovery steam generator/turbine and combustion turbine set, comprises 18.3% of the System's net summer capability and produced 12.6% of the electric energy supplied by the System in 2007. The System's 11.43 MW share of CR3 comprises 1.9% of the System's net summer capability and produced 5.0% of total electric energy in 2007. The System's share of CR3 will increase to 11.595 MW in 2008, to 11.981 MW in 2010, and to 13.911 MW in 2012 as the result of capacity upgrades planned by PEF. Deerhaven Unit 2 and CR3 are used for base load purposes, while JRK Unit 7, JRK CC1, and Deerhaven Unit 1 are used for intermediate loading.

**2.1.1.2 Gas Turbines.** The System's six industrial gas turbines make up 24.9% of the System's summer generating capability and produced 2.2% of the electric energy supplied by the System in 2007. These simple-cycle combustion turbines are utilized for peaking purposes only because their energy conversion efficiencies are considerably lower than steam units. As a result, they yield higher operating costs and are consequently unsuitable for base load operation. Gas turbines are advantageous in that they can be started and placed on line quickly. The System's gas turbines are most economically used as peaking units during high demand periods when base and intermediate units cannot serve all of the System loads.

**2.1.1.3 Internal Combustion (Piston/Diesel).** The System operates two reciprocating internal combustion engines at the Southwest Landfill producing 1.3 MW. Fueled by gas produced by the landfill, these units represent 0.2% of the

System's summer capability and produced 0.02% of total energy in 2007. They are operated as continuously as possible.

**2.1.1.4 Environmental Considerations.** All of the System's steam turbines, except for Crystal River 3, utilize recirculating cooling towers with a mechanical draft for the cooling of condensed steam. Crystal River 3 uses a once-through cooling system aided by helper towers. Only Deerhaven 2 currently has flue gas cleaning equipment consisting of a "hot-side" electrostatic precipitator. Construction is currently underway on a selective catalytic reduction system to reduce NO<sub>x</sub>, and a dry flue gas desulfurization unit with fabric filters, which will reduce SO<sub>2</sub>, mercury, and particulates. This equipment will result in a net decrease of 3 MW for Deerhaven 2.

## **2.1.2 Generating Plant Sites**

The locations of the System's generating plant sites are shown on Figure 2.1.

**2.1.2.1 John R. Kelly Plant.** The Kelly Station is located in southeast Gainesville near the downtown business district and consists of one combined cycle, one steam turbine, three gas turbines, and the associated cooling facilities, fuel storage, pumping equipment, transmission and distribution equipment.

**2.1.2.2 Deerhaven Plant.** The Deerhaven Station is located six miles northwest of Gainesville. The original site, which was certified pursuant to the Power Plant Siting Act, includes an 1146 acre parcel of partially forested land. The facility consists of two steam turbines, three gas turbines, and the associated cooling facilities, fuel storage, pumping equipment and transmission equipment. As amended to include the addition of Deerhaven Unit 2 in 1981, the certified site now includes coal unloading and storage facilities and a zero discharge water treatment plant, which treats water effluent from both steam units. A potential expansion area, owned by the System and adjacent to the certified Deerhaven plant site, was

incorporated into the Gainesville City limits February 12, 2007 (ordinance 0-06-130), consists of an additional 2328 acres, for a total of 3474 acres.

**2.1.2.3 Southwest Landfill.** The Southwest Landfill is located west of the Town of Archer on SR 24 near the Alachua county / Levy county line. The landfill is owned by Alachua County. An inter-local agreement between the City of Gainesville and Alachua County approved the concept of using landfill gas to power two internal combustion engine generators. The County granted a special use permit and an easement for GRU to operate and access the generators. The landfill gas to energy project (LFGTE) at the Alachua County Southwest Landfill was commissioned in December of 2003 and is wheeling power over the Progress Energy Florida's (PEF) distribution network to GRU's 230 kV transmission intertie with PEF. The LFGTE facility presently operates two internal combustion generating sets with a combined capacity of 1.3 MW of renewable energy. The generation capacity of the LFGTE system will diminish through time as the landfill gas production rate slows, and generating sets are taken off-line. This Ten Year Site Plan assumes that available capacity from the LFGTE system will fall to 0.5 MW in summer 2008 and zero by summer 2016.

## **2.2 TRANSMISSION**

### **2.2.1 The Transmission Network**

GRU's bulk power transmission network (System) consists of a 138 kV loop connecting the following:

- 1) GRU's two generating stations,
- 2) GRU's nine distribution substations,
- 3) Three interties with Progress Energy of Florida (PEF),
- 4) An intertie with Florida Power and Light Company (FPL),
- 5) A radial interconnection with Clay at Farnsworth Substation, and
- 6) A loop-fed interconnection with the City of Alachua at Alachua No. 1 Substation

Refer to Figure 2.1 for line geographical locations and Figure 2.2 for electrical connectivity and line numbers.

### 2.2.2 Transmission Lines

The ratings for all of GRU's transmission lines are given in Table 2.1. The load ratings for GRU's transmission lines were developed in Appendix 6.1 of GRU's Long-Range Transmission Planning Study, March 1991. Refer to Figure 2.2 for a one-line diagram of GRU's electric system. The criteria for normal and emergency loading are taken to be:

- Normal loading: conductor temperature not to exceed 100° C (212° F).
- Emergency 8 hour loading: conductor temperature not to exceed 125° C (257° F).

The present transmission network consists of the following:

<u>Line</u>	<u>Circuit Miles</u>	<u>Conductor</u>
138 kV double circuit	80.01	795 MCM ACSR
138 kV single circuit	16.30	1192 MCM ACSR
138 kV single circuit	20.91	795 MCM ACSR
230 kV single circuit	<u>2.53</u>	795 MCM ACSR
Total	119.75	

Annually, GRU participates in Florida Reliability Coordinating Council, Inc. (FRCC) studies that analyze multi-level contingencies. Contingencies are occurrences that depend on changes or uncertain conditions and, as used here, represent various equipment failures that may occur. All single and two circuits-common pole contingencies have no identifiable problems.

Contingency simulations revealed the system effects of serving peak summer load with assumed outages of both Deerhaven Unit 2 and the Archer 230 kV tie line.

The results identified GRU bus voltages that would fall below acceptable levels. In an effort to address this issue, two 3-phase, 138kV, 24 MVAR capacitor banks were budgeted - one for Parker Transmission Substation (installation summer 2008) and one for McMichen Substation (installation summer 2009).

According to the state system security coordinator, who is responsible for the integrity and stability of the entire Florida transmission grid, GRU could plan to import about 150-170 MW before exceeding the bus voltage standard for reliability. The budgeted capacitor banks mentioned above will provide additional benefit to GRU by allowing increased reliable import capacity.

### **2.2.3 State Interconnections**

The System is currently interconnected with PEF and FPL at four separate points. The System interconnects with PEF's Archer Substation via a 230 kV transmission line to the System's Parker Substation with 224 MVA of transformation capacity from 230 kV to 138 kV. The System also interconnects with PEF's Idylwild Substation with two separate circuits via a 150 MVA 138/69 kV transformer at the Idylwild Substation. The System interconnects with FPL via a 138 kV tie between FPL's Hampton Substation and the System's Deerhaven Substation. This interconnection has a transformation capacity at Bradford Substation of 224 MVA. All listed capacities are based on normal (Rating A) capacities.

## **2.3 DISTRIBUTION**

The System has six loop-fed and three radial distribution substations connected to the transmission network: Ft. Clarke, Kelly, McMichen, Millhopper, Serenola, Sugarfoot, Ironwood, Kanapaha, and Rocky Point substations, respectively. Parker is GRU's only 230 kV transmission voltage substation. The locations of these substations are shown on Figure 2.1.

The six major distribution substations are connected to the 138 kV bulk power transmission network with looped feeds which prevent the outage of a single transmission line from causing major outages in the distribution system. Ironwood, Kanapaha and Rocky Point are served by a single tap to the 138 kV network which would require distribution switching to restore customer power if the single transmission line tapped experiences an outage. GRU serves its retail customers through a 12.47 kV distribution network. The distribution substations, their present rated transformer capabilities, and the number of circuits for each are listed in Table 2.2.

The System has three Power Delivery Substations (PDS) with single 33.6 MVA transformers that are directly radial-tapped to our looped 138 kV system. PDS's provide service to our growing load as well as providing backup support to our loop served transformers. Ft. Clarke, Kelly, McMichen, and Serenola substations currently consist of two transformers of basically equal size allowing these stations to be loaded under normal conditions to 80 percent of the capabilities shown in Table 2.2. Millhopper and Sugarfoot Substations currently consist of three transformers of equal size allowing both of these substations to be loaded under normal conditions to 100 percent of the capability shown in Table 2.2. One of the two 22.4 MVA transformers at Ft. Clarke has been repaired with rewinding to a 28.0 MVA rating. This makes the normal rating for this substation 50.4 MVA.

In 2007 GRU expanded its John R. Kelly Plant generation-transmission-distribution substation configuration to include a third 56 MVA 138-12.47 kV transformer located on the south side of the plant (referred to as Kelly-West). This expansion has enhanced reliability by reassigning load to a point on the system not directly tied to the generator buses of the plant. The additional transformer capacity will allow for load growth in Gainesville's downtown area.

## **2.4 WHOLESALE ENERGY**

The System provides full requirements wholesale electric service to Clay Electric Cooperative (Clay) through a contract between GRU and Seminole Electric Cooperative (Seminole), of which Clay is a member. The System began the 138 kV service at Clay's Farnsworth Substation in February 1975. This substation is supplied through a 2.37 mile radial line connected to the System's transmission facilities at Parker Road near SW 24<sup>th</sup> Avenue.

The System also provides full requirements wholesale electric service to the City of Alachua. The Alachua No. 1 Substation is supplied by GRU's looped 138 kV transmission system. Two small residential neighborhoods and a few commercial customers within Alachua's city limits are provided backup service from a GRU 12.47 kV distribution circuit, known as the Hague point of service. The System provides approximately 93% of Alachua's energy requirements with the remainder being supplied by Alachua's generation entitlements from the PEF's Crystal River 3 and FPL's St. Lucie 2 nuclear units. Energy supplied to the City of Alachua by these nuclear units is wheeled over GRU's transmission network, with GRU providing generation backup in the event of outages of these nuclear units.

As the result of the City of Alachua's Request for Proposal (RFP) for energy resources, GRU has notified the City of Alachua of its plan to terminate its existing contract effective December 31, 2008. GRU has submitted a response to the City of Alachua's RFP and if GRU prevails will negotiate to provide their energy needs under a new contract configuration.

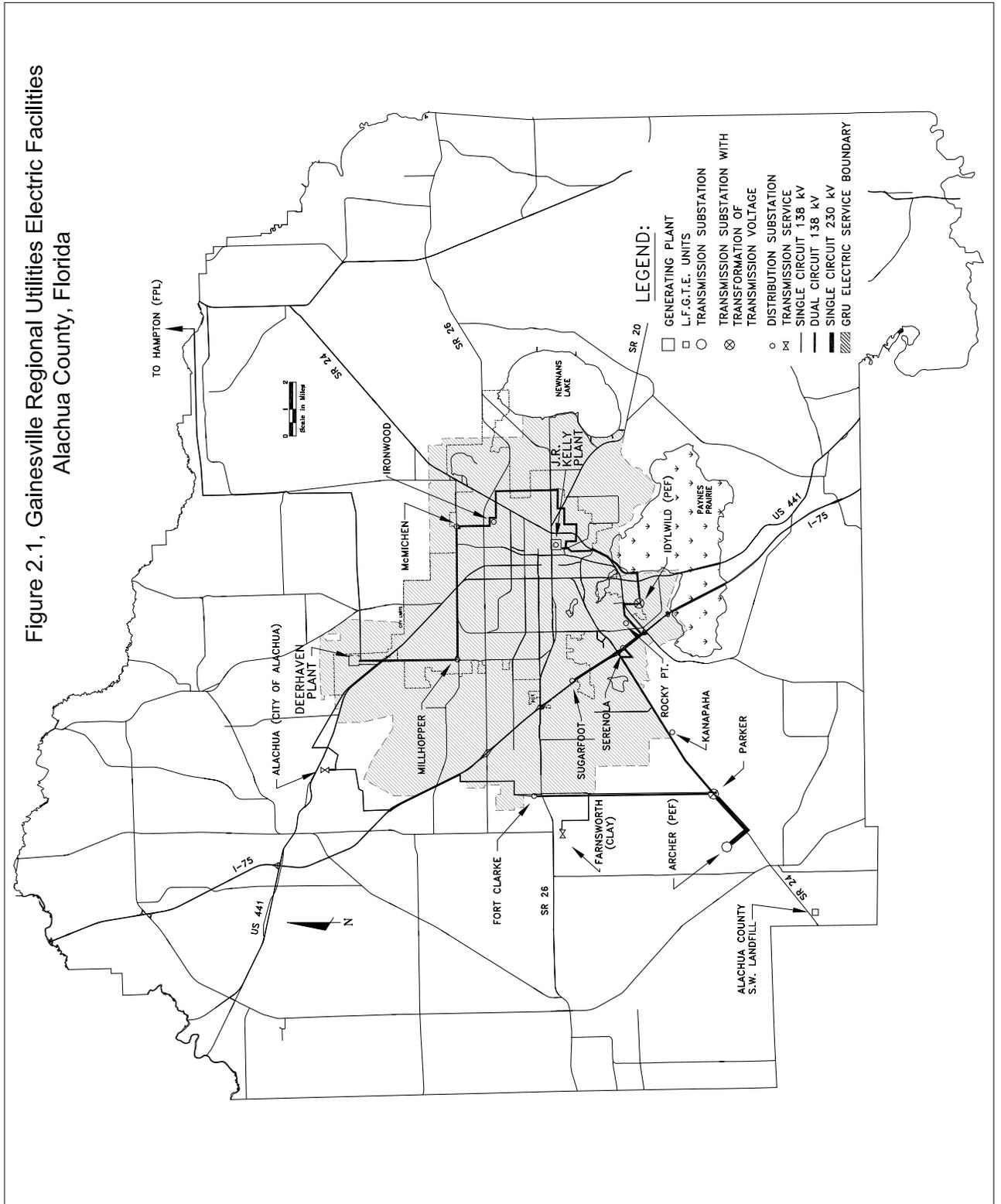
Wholesale sales to Clay and the City of Alachua have been included as native load for purposes of projecting GRU's needs for generating capacity and associated reserve margins. This forms a conservative basis for planning purposes in the event these contracts are renewed. Schedules 7.1 and 7.2 at the end of Section 4 summarize GRU's reserve margins.

## **2.5 DISTRIBUTED GENERATION**

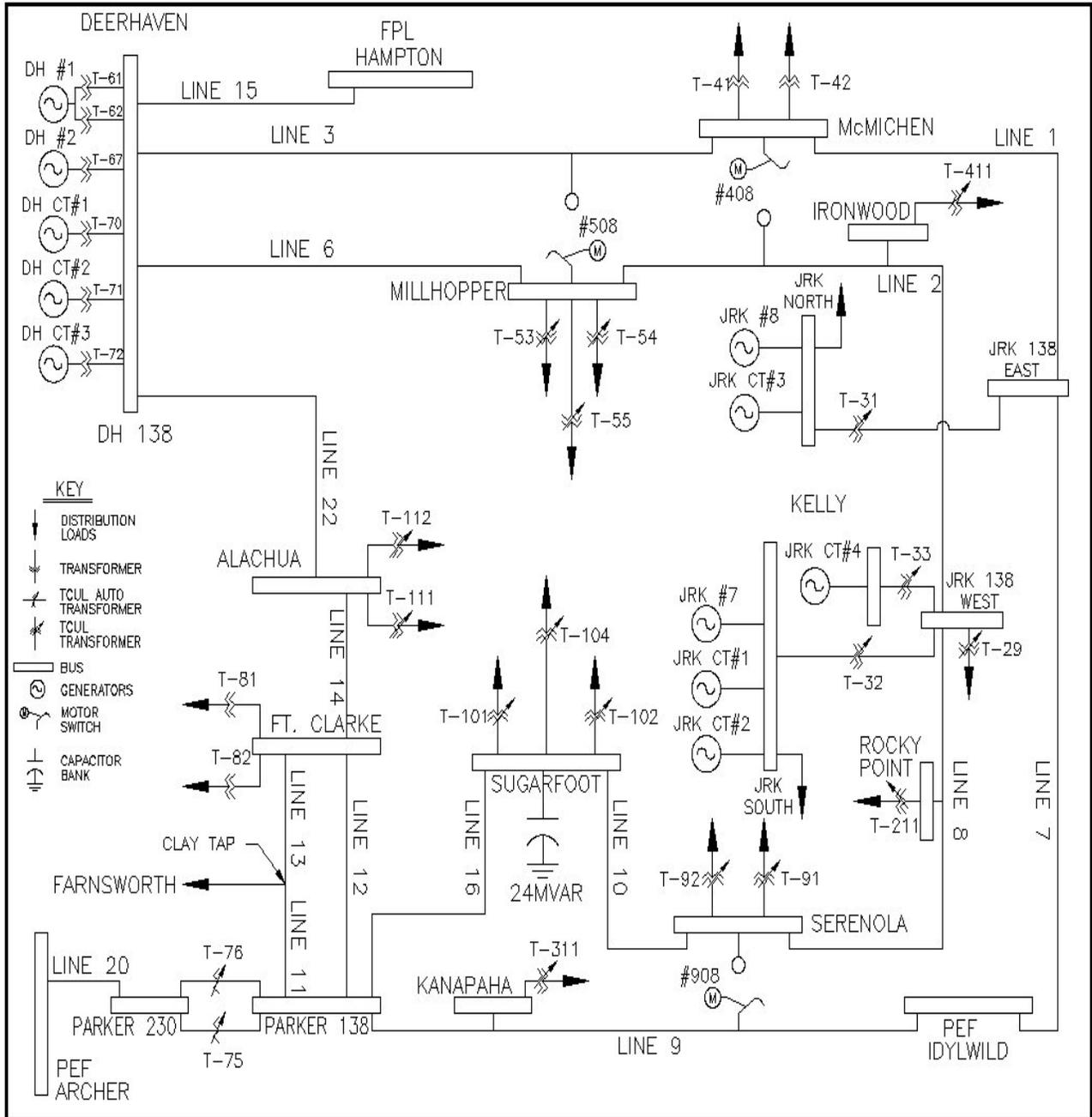
GRU is contracting with the engineering, architecture and construction firm of Burns and McDonnell to design and build the GRU South Energy Center, which will provide multiple onsite utility services to the new Shands at UF Cancer Hospital. The new facility will house a natural-gas-fired combustion turbine providing 4.1 megawatts (summer rating). The Energy Center is expected to be online by 2009.

In addition to providing needed electricity, it will also provide chilled water and steam which will make it one of GRU's most efficient generating units.

Figure 2.1, Gainesville Regional Utilities Electric Facilities  
Alachua County, Florida



**FIGURE 2.2 Gainesville Regional Utilities Electric System One-Line Diagram.**



**Schedule 1  
EXISTING GENERATING FACILITIES**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Plant Name	Unit No.	Location	Unit Type	Primary Fuel		Alternate Fuel		Alt. Fuel Storage (Days)	Commercial In-Service Month/Year	Expected Retirement Month/Year	Gross Capability		Net Capability		Status
				Type	Trans.	Type	Trans.				Summer MW	Winter MW	Summer MW	Winter MW	
<b>J. R. Kelly</b>		Alachua County									<b>180.00</b>	<b>189.00</b>	<b>177.20</b>	<b>186.20</b>	
	FS08	Sec. 4, T10S, R20E	CA	WH	PL				[ 4/65 ; 5/01 ]	2051	38.00	38.00	37.00	37.00	OP
	FS07	(GRU)	ST	NG	PL	RFO	TK			10/13	24.00	24.00	23.20	23.20	OP
	GT04		CT	NG	PL	DFO	TK		5/01	2051	76.00	82.00	75.00	81.00	OP
	GT03		GT	NG	PL	DFO	TK		5/69	05/19	14.00	15.00	14.00	15.00	OP
	GT02		GT	NG	PL	DFO	TK		9/68	09/18	14.00	15.00	14.00	15.00	OP
	GT01		GT	NG	PL	DFO	TK		2/68	02/18	14.00	15.00	14.00	15.00	OP
<b>Deerhaven</b>		Alachua County									<b>441.00</b>	<b>451.00</b>	<b>421.40</b>	<b>432.40</b>	
	FS02	Secs. 26,27,35	ST	BIT	RR				10/81	2031	239.00	239.00	228.40	228.40	OP
	FS01	T8S, R19E	ST	NG	PL	RFO	TK		8/72	08/22	88.00	88.00	83.00	83.00	OP
	GT03	(GRU)	GT	NG	PL	DFO	TK		1/96	2046	76.00	82.00	75.00	81.00	OP
	GT02		GT	NG	PL	DFO	TK		8/76	2026	19.00	21.00	17.50	20.00	OP
	GT01		GT	NG	PL	DFO	TK		7/76	2026	19.00	21.00	17.50	20.00	OP
<b>Crystal River (818/815)</b>	3	Citrus County Sec. 33, T17S, R16E (PEF)	ST	NUC	TK				3/77	2037	<b>12.07</b>	<b>12.24</b>	<b>11.43</b>	<b>11.71</b>	OP
<b>SW Landfill</b>		Alachua County									<b>1.30</b>	<b>1.30</b>	<b>1.30</b>	<b>1.30</b>	
	SW-1	Sec. 19, T11S, R18E	IC	LFG	PL				12/03	12/09	0.65	0.65	0.65	0.65	OP
	SW-2	(GRU)	IC	LFG	PL				12/03	12/15	0.65	0.65	0.65	0.65	OP
<b>System Total</b>													<b>611.33</b>	<b>631.61</b>	

<u>Unit Type</u>	<u>Fuel Type</u>	<u>Transportation Method</u>	<u>Status</u>
CA = Combined Cycle Steam Part	NG = Natural Gas	PL = Pipe Line	OP = Operational
CT = Combined Cycle Combustion Turbine Part	BIT = Bituminous Coal	RR = Railroad	
GT = Gas Turbine	NUC = Uranium	TK = Truck	
ST = Steam Turbine	RFO = Residual Fuel Oil		
IC = Internal Combustion (diesel, piston) Engine	DFO = Distillate Fuel Oil		
	WH = Waste Heat		
	LFG = Landfill Gas		

**TABLE 2.1**

**TRANSMISSION LINE RATINGS  
SUMMER POWER FLOW LIMITS**

<b>Line Number</b>	<b>Description</b>	<b>Normal 100°C (MVA)</b>	<b>Limiting Device</b>	<b>8-Hour Emergency 125°C (MVA)</b>	<b>Limiting Device</b>
1	McMichen - Depot East	236.2	Conductor	282.0	Conductor
2	Millhopper - Depot West	236.2	Conductor	282.0	Conductor
3	Deerhaven - McMichen	236.2	Conductor	282.0	Conductor
6	Deerhaven - Millhopper	236.2	Conductor	282.0	Conductor
7	Depot East - Idylwild	191.2 <sup>1</sup>	Line Tap	191.2 <sup>1</sup>	Line Trap
8	Depot West - Serenola	236.2	Conductor	282.0	Conductor
9	Idylwild - Parker	191.2 <sup>1</sup>	Line Tap	191.2 <sup>1</sup>	Line Trap
10	Serenola - Sugarfoot	236.2	Conductor	282.0	Conductor
11	Parker - Clay Tap	236.2	Conductor	282.0	Conductor
12	Parker - Ft. Clarke	236.2	Conductor	282.0	Conductor
13	Clay Tap - Ft. Clarke	236.2	Conductor	282.0	Conductor
14	Ft. Clarke - Alachua	299.7	Conductor	356.0	Conductor
15	Deerhaven - Hampton	224.0 <sup>2</sup>	Transformers	282.0	Conductor
16	Sugarfoot - Parker	236.2	Conductor	282.0	Conductor
20	Parker-Archer(T75,T76)	224.0	Transformers	300.0	Transformers
22	Alachua - Deerhaven	299.7	Conductor	356.0	Conductor
xx	Clay Tap - Farnsworth	236.2	Conductor	282.0	Conductor
xx	Idylwild – PEF	150.0 <sup>3</sup>	Transformer	168.0 <sup>3</sup>	Transformer

- 1) Rating effective through Spring 2008 (scheduled). At this point in time, the 800 ampere wave traps on the JRK East – Idylwild 138 KV and Parker – Idylwild 138 KV circuit at Idylwild are scheduled to be removed by PEF. Thereafter, the normal and emergency rating will be 236.2 MVA and 282.0 MVA, respectively.
- 2) These two transformers are located at the FPL Bradford Substation and are the limiting elements in the Normal rating for this intertie.
- 3) This transformer is owned and maintained by PEF.

**Assumptions:**

- 100 °C for normal conductor operation
- 125 °C for emergency 8 hour conductor operation
- 40 °C ambient air temperature
- 2 ft/sec wind speed
- Transformers T75 & T76 normal limits are based on a 65 °C oil temperature rise

**TABLE 2.2**  
**SUBSTATION TRANSFORMATION AND CIRCUITS**

Distribution Substation	Normal Transformer Rated Capability	Current Number of Circuits
Ft. Clarke	50.4 MVA	4
J.R. Kelly <sup>2</sup>	168.0 MVA	17
McMichen	44.8 MVA	5
Millhopper	100.8 MVA	10
Serenola	67.2 MVA	8
Sugarfoot	100.8 MVA	9
Ironwood	33.6 MVA	3
Kanapaha	33.6 MVA	3
Rocky Point	33.6 MVA	3

Transmission Substation	Normal Transformer Rated Capability	Number of Circuits
Parker	224 MVA	5
Deerhaven	No transformations- All 138 kV circuits	4

2 J.R. Kelly is a generating station as well as 2 distribution substations. One substation has 12 distribution feeders directly fed from the 2- 12.47 kV generator buses with connection to the 138 kV loop by 2- 56 MVA transformers. The other substation (Kelly West) has 5 distribution feeders fed from a single, loop-fed 56 MVA transformer.

### **3. FORECAST OF ELECTRIC ENERGY AND DEMAND REQUIREMENTS**

Section 3 includes documentation of GRU's forecast of number of customers, energy sales and seasonal peak demands; a forecast of energy sources and fuel requirements; and an overview of GRU's involvement in demand-side management programs.

The accompanying tables provide historical and forecast information for calendar years 1998-2017. Energy sales and number of customers are tabulated in Schedules 2.1, 2.2 and 2.3. Schedule 3.1 gives summer peak demand for the base case forecast by reporting category. Schedule 3.2 presents winter peak demand for the base case forecast by reporting category. Schedule 3.3 presents net energy for load for the base case forecast by reporting category. Short-term monthly load data is presented in Schedule 4. Projected net energy requirements for the System, by method of generation, are shown in Schedule 6.1. The percentage breakdowns of energy shown in Schedule 6.1 are given in Schedule 6.2. The quantities of fuel expected to be used to generate the energy requirements shown in Schedule 6.1 are given by fuel type in Schedule 5.

#### **3.1 FORECAST ASSUMPTIONS AND DATA SOURCES**

- (1) All regression analyses were based on annual data. Historical data was compiled for calendar years 1970 through 2007. System data, such as net energy for load, seasonal peak demands, customer counts and energy sales, was obtained from GRU records and sources.
- (2) Estimates and projections of Alachua County population were obtained from the Florida Population Studies, February 2007 (Bulletin No. 147), published by the Bureau of Economic and Business Research (BEBR) at the University of Florida.
- (3) Historical weather data was used to fit regression models. The forecast assumes normal weather conditions. Normal heating degree days and cooling degree days equal the mean of data reported to NOAA by the Gainesville Municipal Airport station from 1984-2007.

- (4) All income and price figures were adjusted for inflation, and indexed to a base year of 2007, using the U.S. Consumer Price Index for All Urban Consumers from the U.S. Department of Labor, Bureau of Labor Statistics. Inflation is assumed to average approximately 2.5% per year for each year of the forecast.
- (5) The U. S. Department of Commerce provided historical estimates of total income and per capita income for Alachua County. Forecast values of per capita income for Alachua County were obtained from Global Insight.
- (6) Historical estimates of household size were obtained from BEBR, and projected levels were derived from a forecast provided by Global Insight.
- (7) The Florida Agency for Workforce Innovation and the U.S. Department of Labor provided historical estimates of non-agricultural employment in Alachua County. A forecast of non-agricultural employment was developed by Global Insight.
- (8) GRU's corporate model was the basis for projections of the average price of 1,000 kWh of electricity for all customer classes. GRU's corporate model evaluates projected revenue and revenue requirements for the forecast horizon and determines revenue sufficiency under prevailing prices. If revenue from present pricing is insufficient for projected operations, pricing changes are programmed and become GRU's official pricing program plan. The price of electricity is expected to slightly outpace inflation over the forecast horizon.
- (9) Estimates of energy and demand reductions resulting from planned demand-side management programs (DSM) were subtracted from all retail forecasts. GRU's involvement with DSM is described in more detail later in this section.
- (10) The City of Alachua will generate (via generation entitlement shares of Progress Energy and Florida Power and Light nuclear units) approximately 8,077 MWh (7 %) of its annual energy requirements.

### 3.2 FORECASTS OF NUMBER OF CUSTOMERS, ENERGY SALES AND SEASONAL PEAK DEMANDS

Number of customers, energy sales and seasonal peak demands were forecast from 2008 through 2017. Separate energy sales forecasts were developed for each of the following customer segments: residential, general service non-demand, general service demand, large power, outdoor lighting, sales to Clay, and sales to Alachua. Separate forecasts of number of customers were developed for residential, general service non-demand, general service demand and large power retail rate classifications. The basis for these independent forecasts originated with the development of least-squares regression models. All modeling was performed in-house using the Statistical Analysis System (SAS)<sup>3</sup>. The following text describes the regression equations utilized to forecast energy sales and number of customers.

#### 3.2.1 Residential Sector

The equation of the model developed to project residential average annual energy use (kilowatt-hours per year) specifies average use as a function of household income in Alachua County, residential price of electricity, heating degree days, and cooling degree days. The form of this equation is as follows:

$$\begin{aligned} \text{RESAVUSE} = & 5554 + 0.054 (\text{HHY07}) - 14.09 (\text{RESPR07}) \\ & + 0.79 (\text{HDD}) + 0.90 (\text{CDD}) \end{aligned}$$

Where:

RESAVUSE	=	Average Annual Residential Energy Use Per Customer
HHY07	=	Average Household Income
RESPR07	=	Residential Price, Dollars per 1000 kWh
HDD	=	Annual Heating Degree Days
CDD	=	Annual Cooling Degree Days

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<sup>3</sup> SAS is the registered trademark of SAS Institute, Inc., Cary, NC.

Adjusted R<sup>2</sup> = 0.8879  
 DF (error) = 31 (period of study, 1971-2007)  
 t - statistics:  
 Intercept = 4.20  
 HHY07 = 4.96  
 RESPR07 = -4.33  
 HDD = 4.34  
 CDD = 4.38

Projections of the average annual number of residential customers were developed from a linear regression model stating the number of customers as a function of Alachua County population, the number of persons per household, the historical series of Clay customer transfers, and an indicator variable for customer counts recorded under the billing system used prior to 1992. The residential customer model specifications are:

$$\begin{aligned}
 RESCUS &= 48295 + 330.5 (POP) - 22501 (HHSIZE) \\
 &+ 0.66 (CLYRCUS) - 1934 (OldSys)
 \end{aligned}$$

Where:

RESCUS = Number of Residential Customers  
 POP = Alachua County Population (thousands)  
 HHSIZE = Number of Persons per Household  
 CLYRCUS = Clay Customer Transfers  
 OldSys = Older Billing System (1978-1991)

Adjusted R<sup>2</sup> = 0.9993  
 DF (error) = 24 (period of study, 1978-2007)  
 t - statistics:  
 Intercept = 8.75  
 POP = 45.43  
 HHSIZE = -11.80  
 CLYRCUS = 3.74

$$\text{OldSys} = -4.77$$

The product of forecasted values of average use and number of customers yielded the projected energy sales for the residential sector.

### 3.2.2 General Service Non-Demand Sector

The general service non-demand (GSN) customer class includes non-residential customers with maximum annual demands less than 50 kilowatts (kW). In 1990, GRU began offering GSN customers the option to elect the General Service Demand (GSD) rate classification. This option offers potential benefit to GSN customers that use high amounts of energy and have good load factors. Since 1990, 375 customers have elected to transfer to the GSD rate class. The forecast assumes that additional GSN customers will voluntarily elect the GSD classification, but at a more modest pace than has been observed historically. A regression model was developed to project average annual energy use by GSN customers. The model includes as independent variables, the cumulative number of optional demand customers and cooling degree days. The specifications of this model are as follows:

$$GSNAVUSE = 23.96 - 0.011 (OPTDCus) + 0.0014 (CDD)$$

Where:

GSNAVUSE = Average annual energy usage by GSN customers

OPTDCus = Cumulative number of Optional Demand Customers

CDD = Annual Cooling Degree Days

Adjusted  $R^2$  = 0.8320

DF (error) = 25 (period of study, 1979-2007)

t - statistics:

Intercept	=	12.61
OPTDCus	=	-11.21
CDD	=	2.05

The number of general service non-demand customers was projected using an equation specifying customers as a function of Alachua County population, Clay non-demand transfer customers, and the number of optional demand customers. The specifications of the general service non-demand customer model are as follows:

$$GSNCUS = -5843 + 63.2(POP) + 2.35(CLYNCus) - 4.01(OptDCus)$$

Where:

GSNCUS	=	Number of General Service Non-Demand Customers
POP	=	Alachua County Population (thousands)
CLYNCus	=	Clay Non-Demand Transfer Customers
OptDCus	=	Optional Demand Customers

$$\text{Adjusted } R^2 = 0.9965$$

$$DF (\text{error}) = 25 (\text{period of study, 1978-2007})$$

t - statistics:

Intercept	=	-11.48
POP	=	19.73
CLYNCus	=	2.38
OptDCus	=	-7.19

Forecasted energy sales to general service non-demand customers were derived from the product of projected number of customers and the projected average annual use per customer.

### 3.2.3 General Service Demand Sector

The general service demand customer class includes non-residential customers with established annual maximum demands generally of at least 50 kW but less than 1,000 kW. Average annual energy use per customer was projected using an equation specifying average use as a function of per capita income (Alachua County) and the number of optional demand customers. A significant portion of the energy load in this sector is from large retailers such as department stores and grocery stores, whose business activity is related to income levels of area residents. Average energy use projections for general service demand customers result from the following model:

$$GSDAVUSE = 326.8 + 0.0084(PCY07) - 0.20(OPTDCust)$$

Where:

GSDAVUSE = Average annual energy use by GSD Customers

PCY07 = Per Capita Income in Alachua County

OPTDCust = Cumulative number of Optional Demand Customers

Adjusted R<sup>2</sup> = 0.7145

DF (error) = 25 (period of study, 1979-2007)

t - statistics:

Intercept = 13.13

PCY07 = 8.16

OPTDCust = -7.18

The annual average number of customers was projected using a regression model that includes Alachua County population, Clay demand customer transfers, and the number of optional demand customers as independent variables. The specifications of the general service demand customer model are as follows:

$$GSDCUS = -433.3 + 5.34(POP) + 19.60(CLYDCus) + 0.49(OptDCus)$$

Where:

GSDCUS = Number of General Service Demand Customers

POP = Alachua County Population (thousands)

CLYDCus = Clay Demand Transfer Customers

OptDCus = Optional Demand Customers

Adjusted R<sup>2</sup> = 0.9953

DF (error) = 25 (period of study, 1978-2007)

t - statistics:

Intercept = -5.52

POP = 11.02

CLYDCus = 4.32

OptDCus = 5.92

The forecast of energy sales to general service demand customers was the resultant product of projected number of customers and projected average annual use per customer.

### 3.2.4 Large Power Sector

The large power customer class currently includes approximately 18 customers with billing demands of at least 1,000 kW. Analyses of average annual energy use were based on historical observations from 1976 through 2007. The model developed to project average use by large power customers includes Alachua County nonagricultural employment and large power price of electricity as independent variables. Energy use per customer has been observed to increase over time, presumably due to the periodic expansion or increased utilization of existing facilities. This growth is measured in the model by local employment levels. The specifications of the large power average use model are as follows:

$$LPAVUSE = 9154 + 22.7 (NONAG) - 23.1 (LPPR07)$$

Where:

LPAVUSE = Average Annual Energy Consumption (MWh per Year)  
NONAG = Alachua County Nonagricultural Employment (000's)  
LPPR07 = Average Price for 1,000 kWh in the Large Power Sector

Adjusted R<sup>2</sup> = 0.9171

DF (error) = 29 (period of study, 1976-2007)

t - statistics:

INTERCEPT = 8.40

NONAG = 4.02

LPPR07 = -3.60

The forecast of energy sales to the large power sector was derived from the product of projected average use per customer and the projected number of large power customers, which are projected to remain constant at eighteen.

### 3.2.5 Outdoor Lighting Sector

The outdoor lighting sector consists of streetlight, traffic light, and rental light accounts. Outdoor lighting energy sales account for approximately 1.25% of total energy sales. Outdoor lighting energy sales were forecast using a model which specified lighting energy as a function of the natural log of the number of residential customers. The specifications of this model are as follows:

$LGMWH = 288466 + 27984 (LNRESCUS)$

Where:

LGMWH = Outdoor Lighting Energy Sales

LNRESCUS = Number of Residential Customers (natural log)

Adjusted R<sup>2</sup> = 0.9905

DF (error) = 12 (period of study, 1994-2007)

t - statistics:

Intercept = -34.19

RESCUS = 36.85

### 3.2.6 Wholesale Energy Sales

As previously described, the System provides control area services to two wholesale customers: Clay Electric Cooperative (Clay) at the Farnsworth Substation; and the City of Alachua (Alachua) at the Alachua No. 1 Substation, and at the Hague Point of Service. Approximately 7% of Alachua's 2007 energy requirements were met through generation entitlements of nuclear generating units operated by PEF and FPL. These wholesale delivery points serve an urban area that is either included in, or adjacent to the Gainesville urban area. These loads are considered part of the System's native load for facilities planning through the forecast horizon. GRU provides other utilities services in the same geographic areas served by Clay and Alachua, and continued electrical service will avoid duplicating facilities. Furthermore, the populations served by Clay and Alachua benefit from services provided by the City of Gainesville, which are in part supported by transfers from the System.

Clay-Farnsworth net energy requirements were modeled with an equation in which Alachua County population was the independent variable. Output from this model was adjusted to account for the history of load that has been transferred between GRU and Clay-Farnsworth, yielding energy sales to Clay. Historical boundary adjustments between Clay and GRU have reduced the duplication of facilities in both companies' service areas. The form of the Clay-Farnsworth net energy requirements equation is as follows:

$$CLYNEL = -49562 + 557.6 (POP)$$

Where:

CLYNEL = Farnsworth Substation Net Energy (MWh)

POP = Alachua County Population (000's)

Adjusted R<sup>2</sup> = 0.9351

DF (error) = 16 (period of study, 1990-2007)

t - statistics:

Intercept = -6.53

POP = 15.68

Net energy requirements for Alachua were estimated using a model in which City of Alachua population was the independent variable. BEBR provided historical estimates of City of Alachua Population. This variable was projected from a trend analysis of the component populations within Alachua County. The model used to develop projections of sales to the City of Alachua is of the following form:

$ALANEL = -64259 + 23256 (ALAPOP)$

Where:

ALANEL = City of Alachua Net Energy (MWh)

ALAPOP = City of Alachua Population (000's)

Adjusted R<sup>2</sup> = 0.9872

DF (error) = 24 (period of study, 1982-2007)

t - statistics:

Intercept = -21.77

ALAPOP = 43.95

To obtain a final forecast of the System's sales to Alachua, projected net energy requirements were reduced by 8,077 MWh reflecting the City of Alachua's nuclear generation entitlements.

### **3.2.7 Total System Sales, Net Energy for Load, Seasonal Peak Demands and DSM Impacts**

The forecast of total system energy sales was derived by summing energy sales projections for each customer class; residential, general service non-demand, general service demand, large power, outdoor lighting, sales to Clay, and sales to Alachua. Net energy for load was then forecast by applying a delivered efficiency factor for the System to total energy sales. The projected delivered efficiency factor (0.96) is the median of observed historical values from 1995 through 2007. The impact of energy savings from conservation programs was accounted for in energy sales to each customer class, prior to calculating net energy for load.

The forecasts of seasonal peak demands were derived from forecasts of annual net energy for load. Winter peak demands are projected to occur in January of each year, and summer peak demands are projected to occur in August of each year, although historical data suggests the summer peak is nearly as likely to occur in July. The average ratio of the most recent 25 years' monthly net energy for load for January and August, as a portion of annual net energy for load, was applied to projected annual net energy for load to obtain estimates of January and August net energy for load over the forecast horizon. The medians of the past 25 years' load factors for January and August were applied to January and August net energy for load projections, yielding seasonal peak demand projections. Forecast seasonal peak demands include the net impacts from planned demand-side management programs.

## **3.3 ENERGY SOURCES AND FUEL REQUIREMENTS**

### **3.3.1 Fuels Used by System**

Presently, the system is capable of using coal, residual oil, distillate oil, natural gas, and a small percentage of nuclear fuel to satisfy its fuel requirements. Since the completion of the Deerhaven 2 coal-fired unit, the System has relied upon

coal to fulfill much of its fuel requirements. To the extent that the System participates in interchange sales and purchases, actual consumption of these fuels will likely differ from the base case requirements indicated in Schedule 5. These projections are based on a fuel price forecast prepared in March 2007.

### **3.3.2 Methodology for Projecting Fuel Use**

The fuel use projections were produced using the Electric Generation Expansion Analysis System (EGEAS) developed under Electric Power Research Institute guidance. Ng Engineering provides support, maintenance, and training for the EGEAS software. This is the same software the System uses to perform long-range integrated resource planning. EGEAS has the ability to model each of the System's generating units as well as optimize the selection of new capacity and technologies (see Section 4), and include the effects of environmental limits, dual fuel units, reliability constraints, and maintenance schedules. The production modeling process uses a load-duration curve convolution and conjoint probability model to simulate optimal hourly dispatch of the System's generating resources.

The input data to this model includes:

- (1) Long-term forecast of System electric energy and power demand needs;
- (2) Projected fuel prices, outage parameters, nuclear refueling cycle (as needed), and maintenance schedules for each generating unit in the System;
- (3) Similar data for the new plants that will be added to the system to maintain system reliability.

The output of this model includes:

- (1) Monthly and yearly operating fuel expenses by fuel type and unit; and
- (2) Monthly and yearly capacity factors, energy production, hours of operation, fuel utilization, and heat rates for each unit in the system.

### **3.3.3 Purchased Power Agreements**

**3.3.3.1 G2 Energy Baseline Landfill Gas.** GRU has entered into a contract to receive 3 MW of landfill gas fueled capacity at the Marion County Baseline Landfill, from G2 Energy Marion, LLC. The generation facility is expected to begin commercial operation in mid 2008.

**3.3.3.2 Progress Energy 50 MW.** GRU is negotiating a contract with Progress Energy Florida (PEF) for 50 MW of base load capacity. This contract will begin (pending FERC approval of PEF's contract structure) January 1, 2009 and continue through December 31, 2013. Extensions of this contract are subject to negotiation.

**3.3.3.3 Biomass RFP for PPA.** Eleven responses to GRU's "Request for Proposals" (RFP) for a biomass fueled facility in the 30-100 MW range were received on December 15, 2007. Addendum Two has been issued to solicit binding proposals from the top three proposals from the initial RFP. The responses to Addendum Two will be received April 11, 2008 and are to include biomass fueled capacity and energy through a purchase power agreement (PPA), with an option to buy the plant at a later date, or cost estimates for an engineer, procure, and construct (EPC) contract to build a new biomass unit for GRU to own and operate.

## **3.4 DEMAND-SIDE MANAGEMENT**

### **3.4.1 Demand-Side Management Program History and Current Status**

Demand and energy forecasts and generation expansion plans outlined in this Ten Year Site Plan include impacts from GRU's Demand-Side Management (DSM) programs. The System forecast reflects the incremental impacts of DSM measures, net of cumulative impacts from 1980 through 2007. DSM programs are available for all retail customers, including commercial and industrial customers, and

are designed to effectively reduce and control the growth rates of electric consumption and weather sensitive peak demands.

DSM direct services currently available to the System's residential customers, or expected to be implemented during fiscal year 2008, include energy audits, low income household whole house energy efficiency improvements, and air conditioning sizing calculations. GRU also offers rebates and other financial incentives for the promotion of:

- high efficiency central air conditioning
- high efficiency room air conditioning
- central air conditioner maintenance
- heat recovery water heating
- reflective roof coating for mobile homes
- solar water heating
- solar photovoltaic systems
- natural gas in new construction
- Home Performance with the federal Energy Star program
- Energy Star building practices of the EPA
- Green Building practices in multi-family dwellings
- heating/cooling duct repair
- energy efficiency for low-income households
- adequate insulation
- removing second refrigerators from homes and recycling the materials
- compact fluorescent light bulbs
- energy efficiency low-interest loans
- natural gas for displacement of electric in water heating, space heating, and space cooling in existing structures.

DSM services available to the System's non-residential customers include energy audits, lighting efficiency and lighting maintenance services. In addition GRU offers rebates and other considerations for the promotion of:

- solar water heating
- solar photovoltaic
- natural gas for water heating, space heating and dehumidification
- vending machine motion sensors
- efficient exit lighting
- energy efficiency retrofits

The System continues to offer standardized interconnection procedures and compensation for excess energy production for both residential and non-residential customers who install distributed resources and offers rebates for the installation of photovoltaic generation.

GRU secured grant funding through the Department of Community Affairs' PV for Schools Educational Enhancement Program for PV systems that were installed at two middle schools in 2003. GRU began offering green energy (i.e., GRUGreen<sup>sm</sup>) to its customers when the LFGTE project became operational in 2003. The majority of the energy available under this program comes from landfill gas, but also includes some solar and wind energy credits. GRUGreen<sup>sm</sup> is available to all GRU customers at a cost equivalent to two cents per kWh. A combination of customer contributions and State and Federal grants allowed GRU to add its 10 kW photovoltaic array at the Electric System Control Center in 1996.

GRU has also produced numerous *factsheets*, publications and videos which are available at no charge to customers to assist them in making informed decisions affecting their energy utilization patterns. Examples include: Passive Solar Design-Factors for North Central Florida, a booklet which provides detailed solar and environmental data for passive solar designs in this area; Solar Guidebook, a

brochure which explains common applications of solar energy in Gainesville; and The Energy Book, a guide to saving home energy dollars.

### **3.4.2 Future Demand-Side Management Programs**

GRU continues to monitor the potential for additional DSM efforts including programs addressing thermal storage, district chilled water cooling, window shading, additional energy efficiency in low-income households and demand response. GRU continues to review the efforts of conservation leaders in the industry, and has conducted fact finding trips to California, Texas, Vermont and New York to maximize these efforts. GRU plans to continue to expand its DSM programs as a way to cost-effectively meet customer needs and hedge against potential future carbon tax and trade programs. GRU has budgeted funds to proceed with installing a 250 kW PV system in the parking lot of a Wal-Mart super center in Gainesville. This demonstration project will showcase both fixed mounted and tracking PV technology.

### **3.4.3 Demand-Side Management Methodology and Results**

The expected effect of DSM program participation was derived from a comparative analysis of historical energy usage of DSM program participants and non-participants. The methodology upon which existing DSM programs is based includes consideration of what would happen under current conditions, the fact that the conservation induced by utility involvement tends to "buy" conservation at the margin, adjustment for behavioral rebound and price elasticity effects and effects of abnormal weather. Known interactions between measures and programs were accounted for where possible. Projected penetration rates were based on historical levels of program implementations and tied to escalation rates paralleling service area population growth.

The implementation of DSM programs planned for 2008-2017 is expected to provide 48 MW of summer peak reduction, and 128 GWh of annual energy savings by the year 2017. Total DSM program achievements from 1980-2017 are shown in Table 3.1.

#### **3.4.4 Gainesville Energy Advisory Committee**

The Gainesville Energy Advisory Committee (GEAC) is a nine-member citizen group that is charged with formulating recommendations to the Gainesville City Commission concerning national, state and local energy-related issues. The GEAC offers advice and guidance on energy management studies and consumer awareness programs.

##### Background and Achievements

The GEAC's efforts have resulted in numerous contributions, accomplishments, and achievements for the City of Gainesville. Specifically, the GEAC helped establish a residential energy audit program in 1979, and was involved in the 1980 ratemaking process resulting in the creation of an inverted block residential rate and a voluntary residential time-of-use rate. The GEAC promoted *Solar Month* in October of 1991 by sponsoring a seminar to foster the viability of solar energy as an alternative to conventional means of energy supply. Representatives from Sandia National Laboratories, the Florida Solar Energy Center, PEF, and GRU gave presentations on various solar projects and technologies. A recommendation from GEAC followed the Solar Day Seminars for GRU to investigate offering its citizen-ratepayers the option of contributing to photovoltaic power production through monthly donations on their utility bills. The interest generated by the seminars along with grant money from the State of Florida Department of Community Affairs and the Utility Photovoltaic Group and donations from GRU customers and friends of solar energy resulted in the 10 kilowatt PV system at the System Control Center. GRU solicited public input on its solar water heater rebate program through the GEAC, and the committee in turn formally supported the program. The GEAC sponsored a Biomass

Seminar for a joint meeting of the Gainesville City Commission and the Alachua County Commission. The GEAC has strongly supported the EPA's Energy Star program, and has helped GRU earn EPA's 1998 Utility Ally of the Year award. GEAC contributed to the development of a Green Builder program for existing multi-family dwellings as a long-range load reduction strategy. Multi-family dwellings represent approximately 35% of GRU's total residential load. GEAC has also supported GRU's IRP efforts through their sponsorship of community workshops and review of the IRP.

### **3.4.5 Supply Side Programs**

Prior to the addition of Deerhaven Unit 2 in 1982, the System was relying on oil and natural gas for over 90% of native load energy requirements. In 2007, oil-fired generation comprised 1.6% of total net generation, natural gas-fired generation contributed 26.2%, nuclear fuel contributed 4.6%, and coal-fired generation provided 67.6% of total net generation. Deerhaven 2 is also contributing to reduced oil use by other utilities by offering coal-generated energy on the Florida energy market. The PV system at the System Control Center provides slightly more than 10 kilowatts of capacity at solar noon on clear days. Finally, the landfill gas to energy (LFGTE) project is capable of providing 1.3 MW of renewable energy on a continuous basis.

The System has several programs to improve the adequacy and reliability of the transmission and distribution systems, which will also result in decreased energy losses. These include the installation of distribution capacitors, purchase of high-efficiency distribution transformers, and the reconductoring of the feeder system.

#### Transformers

GRU has been purchasing overhead and underground transformers with a higher efficiency than the NEMA TP-1 Standard for the past 18 years. Higher efficiency means less kW losses or power lost due the design of the transformer.

Since 1988, there have been 15,903 high-efficiency transformers installed on GRU's distribution system.

A study was initiated to compare the kW losses of GRU's transformer design to a design based on NEMA TP-1 Efficiency Standard for Transformers. The results of this investigation showed that relative to the standard design, GRU experienced these savings:

Average Annual Demand Loss Savings	2.5 MW
Average Annual Energy Saved	21,900 MWh
Peak Demand Savings	5.5 MW

### Reconductoring

GRU has been continuously improving the feeder system by reconductoring feeders from 4/0 Copper to 795 MCM aluminum overhead conductor. Also, in specific areas the feeders have been installed underground using 1000 MCM underground cable.

Following is a comparison of the resistance for the types of conductors used on GRU's electric distribution system:

795 MCM Aluminum Overhead Conductor	0.13 ohms/mile
1000 MCM Aluminum Underground Cable	0.13 ohms/mile
4/0 Copper Overhead Conductor	0.31 ohms/mile

Calculations with average loading on the conductors show the total savings due to moving from 4/0 copper to an aluminum conductor (795 or 1000 MCM):

Average Annual Demand Savings	2.4 MW
Average Annual Energy Saved	21,000 MWh
Peak Demand Savings	7.9 MW

## Capacitors

GRU strives to maintain an average power factor of 0.98 by adding capacitors where necessary on the distribution feeder. Without these capacitors the average uncorrected power factor is 0.92.

The percentage of loss reduction can be calculated as shown:

$$\% \text{ Loss Reduction} = [1 - (\text{Uncorrected pf} / \text{Corrected pf})^2] \times 100$$

$$\% \text{ Loss Reduction} = [1 - (0.92 / 0.98)^2] \times 100$$

$$\% \text{ Loss Reduction} = 11.9$$

In general, overall system losses have stabilized near 4% of net generation as reflected in the forecasted relationship of total energy sales to net energy for load.

### **3.5 FUEL PRICE FORECAST ASSUMPTIONS**

GRU consults a variety of reputable sources to compile projections of fuel prices for fuels currently used and those that are evaluated for potential future use. Oil prices are obtained from the Annual Energy Outlook 2008 (AEO2008), published in February 2008 by the U.S. Department of Energy's Energy Information Administration (EIA). Natural gas price projections are derived from several forecasts published by the PIRA Energy Group. The source for projected coal prices is Hill & Associates (a Wood Mackenzie Company). Projected prices for nuclear fuel were provided by PEF. These forecasts are often provided in constant-year (real) dollars, and GRU translates these prices to nominal dollars using the projected Gross Domestic Product – Implicit Price Deflator from AEO2008. Fuel prices are analyzed in two parts: the cost of the fuel (commodity), and the cost of transporting the fuel to GRU's generating stations. The external forecasts typically address the commodity prices, and GRU's specific transportation costs are included to derive delivered prices. A summary of historical and projected fuel prices is provided in Table 3.3.

### **3.5.1 Oil**

GRU relies on No. 6 Oil (residual) and No. 2 Oil (distillate or diesel) as back-up fuels for natural gas fired generation. These fuels are delivered to GRU generating stations by truck. Forecast prices for these two types of oil are derived directly from AEO2008.

During calendar year 2007, distillate fuel oil was used to produce 0.03% of GRU's total net generation. Distillate fuel oil is expected to be the most expensive fuel available to GRU. During calendar year 2007, residual fuel oil was used to produce 1.6% of GRU's total net generation. The quantity of fuel oils used by GRU is expected to remain low.

### **3.5.2 Coal**

Coal is the primary fuel used by GRU to generate electricity, comprising 67.6% of total net generation during calendar year 2007. GRU purchases low-sulfur (0.7%), high Btu eastern coal for use in Deerhaven Unit 2. In 2009, Deerhaven Unit 2 will begin operating following the retrofit of an air quality control system, which is being added as a means of complying with new environmental regulations. Deerhaven Unit 2 will be able to utilize coals with up to approximately 1.7% sulfur content following the retrofit, therefore GRU also projects prices for both low and medium sulfur coals for evaluation in Deerhaven Unit 2 following the air quality control retrofit.

Prices for compliance coal for 2008 were based on GRU's contractual options with its coal suppliers. Projected prices for compliance coal for 2009 and beyond are based on Hill & Associates' forecast for a low sulfur coal from the central Appalachian region. GRU has a contract with CSXT for delivery of coal to the Deerhaven plant site through 2019. Prices for medium sulfur coals from the central

Appalachian region and the Illinois basin were also derived from the Hill & Associates forecast.

### **3.5.3 Natural Gas**

GRU procures natural gas for power generation and for distribution by a Local Distribution Company (LDC). In 2007, GRU purchased approximately 7.6 million MMBtu for use by both systems. GRU power plants used 75% of the total purchased for GRU during 2007, while the LDC used the remaining 25%.

GRU purchases natural gas via arrangements with producers and marketers connected with the Florida Gas Transmission (FGT) interstate pipeline. GRU's delivered cost of natural gas includes the commodity component, Florida Gas Transmission's (FGT) fuel charge, FGT's usage (transportation) charge, FGT's reservation (capacity) charge, and basis adjustments.

Prices for 2008 and 2009 were derived from PIRA Energy Group's February 2008 Short-Term Henry Hub Gas Price Forecast. Prices for 2010-2017 were derived from PIRA Energy Group's August 2007 long-term Henry Hub forecast.

### **3.5.4 Nuclear Fuel**

GRU's nuclear fuel price forecast includes a component for fuel and a component for fuel disposal. The projection for the price of the fuel component is based on Progress Energy Florida's (PEF) forecast of nuclear fuel prices. The projection for the cost of fuel disposal is based on a trend analysis of actual costs to GRU.

**Schedule 2.1  
History and Forecast of Energy Consumption and  
Number of Customers by Customer Class**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Year	Service Area Population	Persons per Household	RESIDENTIAL			COMMERCIAL *		
			GWh	Average Number of Customers	Average kWh per Customer	GWh	Average Number of Customers	Average kWh per Customer
1998	156,797	2.35	777	66,722	11,649	640	7,868	81,363
1999	161,076	2.35	763	68,543	11,137	648	8,095	80,036
2000	164,584	2.34	788	70,335	11,202	674	8,368	80,490
2001	169,395	2.34	803	72,391	11,092	697	8,603	80,986
2002	172,755	2.34	851	73,827	11,527	721	8,778	82,112
2003	174,227	2.34	854	74,456	11,467	726	8,959	81,090
2004	179,459	2.33	878	77,021	11,398	739	9,225	80,143
2005	182,904	2.34	888	78,164	11,358	752	9,378	80,199
2006	183,430	2.31	877	79,407	11,047	746	9,565	78,042
2007	187,406	2.31	878	81,128	10,817	778	9,793	79,398
2008	190,349	2.31	898	82,402	10,893	790	10,029	78,731
2009	192,974	2.30	909	83,865	10,838	803	10,262	78,229
2010	195,580	2.29	921	85,257	10,804	817	10,490	77,884
2011	198,141	2.29	934	86,600	10,785	832	10,712	77,649
2012	200,661	2.28	946	87,894	10,761	846	10,929	77,380
2013	203,108	2.28	956	89,161	10,717	857	11,140	76,970
2014	205,521	2.27	965	90,379	10,683	869	11,345	76,633
2015	207,864	2.27	976	91,570	10,658	882	11,545	76,378
2016	210,137	2.27	986	92,735	10,631	894	11,740	76,124
2017	212,384	2.26	996	93,851	10,613	906	11,929	75,933

\* Commercial includes General Service Non-Demand and General Service Demand Rate Classes

**Schedule 2.2  
History and Forecast of Energy Consumption and  
Number of Customers by Customer Class**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Year	<u>GWh</u>	<u>Average Number of Customers</u>	<u>Average MWh per Customer</u>	<u>Railroads and Railways GWh</u>	<u>Street and Highway Lighting GWh</u>	<u>Other Sales to Public Authorities GWh</u>	<u>Total Sales to Ultimate Consumers GWh</u>
	<b>INDUSTRIAL **</b>						
1998	157	15	10,443	0	21	0	1,595
1999	173	17	10,188	0	22	0	1,606
2000	172	17	10,114	0	22	0	1,656
2001	173	17	10,162	0	23	0	1,696
2002	178	18	10,178	0	24	0	1,774
2003	181	19	9,591	0	24	0	1,786
2004	188	18	10,444	0	25	0	1,830
2005	189	18	10,477	0	25	0	1,854
2006	200	20	10,093	0	25	0	1,849
2007	196	18	10,891	0	26	0	1,877
2008	192	18	10,653	0	26	0	1,906
2009	191	18	10,614	0	27	0	1,930
2010	190	18	10,571	0	27	0	1,955
2011	190	18	10,537	0	28	0	1,984
2012	189	18	10,500	0	28	0	2,009
2013	188	18	10,458	0	29	0	2,030
2014	187	18	10,412	0	29	0	2,050
2015	187	18	10,367	0	29	0	2,074
2016	186	18	10,322	0	30	0	2,096
2017	185	18	10,277	0	30	0	2,117

\*\* Industrial includes Large Power Rate Class

**Schedule 2.3  
History and Forecast of Energy Consumption and  
Number of Customers by Customer Class**

(1)	(2)	(3)	(4)	(5)	(6)
<u>Year</u>	<u>Sales For Resale GWh</u>	<u>Utility Use and Losses GWh</u>	<u>Net Energy for Load GWh</u>	<u>Other Customers</u>	<u>Total Number of Customers</u>
1998	108	76	1,779	0	74,605
1999	109	83	1,798	0	76,655
2000	120	93	1,868	0	78,720
2001	125	62	1,882	0	81,011
2002	142	92	2,008	0	82,623
2003	146	83	2,015	0	83,434
2004	149	70	2,049	0	86,264
2005	163	66	2,082	0	87,560
2006	174	75	2,099	0	88,992
2007	188	57	2,122	0	90,939
2008	191	87	2,184	0	92,449
2009	196	88	2,214	0	94,146
2010	201	91	2,247	0	95,765
2011	206	90	2,280	0	97,330
2012	210	92	2,311	0	98,840
2013	215	93	2,338	0	100,318
2014	219	96	2,365	0	101,742
2015	224	95	2,393	0	103,133
2016	228	96	2,420	0	104,493
2017	232	98	2,447	0	105,798

**Schedule 3.1  
History and Forecast of Summer Peak Demand - MW  
Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Year</u>	<u>Total</u>	<u>Wholesale</u>	<u>Retail</u>	<u>Interruptible</u>	Residential Load <u>Management</u>	Residential <u>Conservation</u>	Comm./Ind. Load <u>Management</u>	Comm./Ind. <u>Conservation</u>	<u>Net Firm Demand</u>
1998	416	26	370	0	0	12	0	8	396
1999	439	26	393	0	0	12	0	8	419
2000	446	28	397	0	0	13	0	8	425
2001	430	28	381	0	0	13	0	8	409
2002	454	32	401	0	0	13	0	8	433
2003	439	33	384	0	0	14	0	8	417
2004	455	33	399	0	0	14	0	9	432
2005	489	37	428	0	0	15	0	9	465
2006	488	39	425	0	0	15	0	9	464
2007	507	44	437	0	0	16	0	10	481
2008	505	44	431	0	0	18	0	12	475
2009	515	45	436	0	0	20	0	14	481
2010	524	46	440	0	0	22	0	16	486
2011	535	47	444	0	0	25	0	19	491
2012	544	48	447	0	0	28	0	21	495
2013	552	49	449	0	0	30	0	24	498
2014	560	50	450	0	0	33	0	27	500
2015	569	51	452	0	0	36	0	30	503
2016	578	52	456	0	0	38	0	32	508
2017	586	53	459	0	0	40	0	34	512

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**Schedule 3.2**  
**History and Forecast of Winter Peak Demand - MW**  
**Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Winter</u>	<u>Total</u>	<u>Wholesale</u>	<u>Retail</u>	<u>Interruptible</u>	Residential Load <u>Management</u>	Residential Conservation	Comm./Ind. Load <u>Management</u>	Comm./Ind. Conservation	<u>Net Firm Demand</u>
1998 / 1999	393	28	323	0	0	35	0	7	351
1999 / 2000	380	27	310	0	0	36	0	7	337
2000 / 2001	408	33	331	0	0	37	0	7	364
2001 / 2002	416	33	336	0	0	39	0	8	369
2002 / 2003	442	37	357	0	0	40	0	8	394
2003 / 2004	398	31	319	0	0	40	0	8	350
2004 / 2005	426	36	341	0	0	41	0	8	377
2005 / 2006	436	40	346	0	0	42	0	8	386
2006 / 2007	412	38	324	0	0	42	0	8	362
2007 / 2008	438	44	344	0	0	42	0	8	388
2008 / 2009	444	45	349	0	0	42	0	8	394
2009 / 2010	449	46	353	0	0	42	0	8	399
2010 / 2011	455	47	358	0	0	42	0	8	405
2011 / 2012	461	48	363	0	0	42	0	8	411
2012 / 2013	466	49	367	0	0	42	0	8	416
2013 / 2014	470	50	370	0	0	42	0	8	420
2014 / 2015	475	51	374	0	0	42	0	8	425
2015 / 2016	480	52	378	0	0	42	0	8	430
2016 / 2017	485	53	382	0	0	42	0	8	435
2017 / 2018	490	54	386	0	0	42	0	8	440

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**Schedule 3.3**  
**History and Forecast of Net Energy for Load - GWH**  
**Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Year</u>	<u>Total</u>	<u>Residential Conservation</u>	<u>Comm./Ind. Conservation</u>	<u>Retail</u>	<u>Wholesale</u>	<u>Utility Use &amp; Losses</u>	<u>Net Energy for Load</u>	<u>Load Factor %</u>
1998	1,863	63	21	1,595	108	76	1,779	51%
1999	1,887	67	22	1,606	109	83	1,798	49%
2000	1,961	70	23	1,655	120	93	1,868	50%
2001	1,979	74	23	1,695	125	62	1,882	53%
2002	2,110	78	24	1,774	142	92	2,008	53%
2003	2,121	82	24	1,786	146	83	2,015	55%
2004	2,158	84	25	1,830	149	70	2,049	54%
2005	2,196	88	26	1,854	163	65	2,082	51%
2006	2,215	90	26	1,849	174	76	2,099	52%
2007	2,252	97	33	1,877	188	57	2,122	50%
2008	2,332	106	42	1,905	191	88	2,184	52%
2009	2,374	112	48	1,930	196	88	2,214	53%
2010	2,419	118	54	1,956	201	90	2,247	53%
2011	2,464	124	60	1,983	206	91	2,280	53%
2012	2,508	131	66	2,009	210	92	2,311	53%
2013	2,548	137	73	2,030	215	93	2,338	54%
2014	2,587	143	79	2,052	219	94	2,365	54%
2015	2,627	149	85	2,073	224	96	2,393	54%
2016	2,666	155	91	2,095	228	97	2,420	54%
2017	2,705	161	97	2,117	232	98	2,447	55%

**Schedule 4**

**Previous Year and 2-Year Forecast of Peak Demand and Net Energy for Load**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	ACTUAL		FORECAST			
	2007		2008		2009	
	Peak		Peak		Peak	
<u>Month</u>	<u>Demand</u>	<u>NEL</u>	<u>Demand</u>	<u>NEL</u>	<u>Demand</u>	<u>NEL</u>
	<u>(MW)</u>	<u>(GWh)</u>	<u>(MW)</u>	<u>(GWh)</u>	<u>(MW)</u>	<u>(GWh)</u>
JAN	362	158	361	162	394	171
FEB	334	144	319	147	365	149
MAR	302	152	320	154	325	156
APR	335	153	347	156	352	158
MAY	372	178	414	188	420	191
JUN	441	199	451	206	458	208
JUL	452	220	471	225	478	228
AUG	481	238	475	230	481	233
SEP	432	205	447	209	453	212
OCT	385	182	386	178	391	181
NOV	290	144	335	155	340	157
DEC	300	149	361	167	366	170

**Schedule 5  
FUEL REQUIREMENTS  
As of January 1, 2008**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
FUEL REQUIREMENTS:			UNITS	ACTUAL 2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
(1)	NUCLEAR		TRILLION BTU	0.964	1.059	0.794	1.094	0.968	1.270	1.149	1.270	1.149	1.270	1.149
(2)	0.7% COAL		1000 TON	552.699	607.402	114.833								
(2.1)	1.7% COAL		1000 TON			462.835	620.484	622.616	637.642	627.727	645.434	647.539	664.218	638.549
<b>RESIDUAL</b>														
(3)		STEAM	1000 BBL	51.341	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(4)		CC	1000 BBL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(5)		CT	1000 BBL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(6)		TOTAL:	1000 BBL	51.341	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>DISTILLATE</b>														
(7)		STEAM	1000 BBL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(8)		CC	1000 BBL	0.145	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(9)		CT	1000 BBL	1.111	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(10)		TOTAL:	1000 BBL	1.256	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>NATURAL GAS</b>														
(11)		STEAM	1000 MCF	2,620.740	1,003.781	1,303.724	1,023.474	1,069.733	834.093	1,000.022	1,946.012	2,037.784	1,859.784	2,136.940
(12)		CC	1000 MCF	2,122.300	3,246.892	3,587.883	3,108.014	3,361.043	3,198.719	3,494.484	3,908.347	4,115.395	4,088.390	4,473.646
(13)		CT	1000 MCF	542.568	347.734	686.069	517.482	642.397	513.951	557.939	1,130.194	1,258.346	1,084.779	1,404.497
(14)		TOTAL:	1000 MCF	5,285.608	4,598.407	5,577.676	4,648.970	5,073.173	4,546.763	5,052.445	6,984.553	7,411.525	7,032.953	8,015.083
(15)	Landfill Gas		1000 MCF	17.884	11.424	11.424	11.424	11.424	11.424	11.424	11.424	11.424	0.000	0.000

**Schedule 6.1**  
**ENERGY SOURCES (GWH)**  
As of January 1, 2008

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	ENERGY SOURCES		UNITS	ACTUAL 2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
(1)	ANNUAL FIRM INTERCHANGE (INTER-REGION)		GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(2)	NUCLEAR		GWH	93.948	100.832	75.648	104.188	92.220	120.972	109.439	120.972	109.439	120.972	109.439
(3)	COAL		GWH	1,280.195	1,464.893	1,358.648	1,459.991	1,465.550	1,501.296	1,478.875	1,521.610	1,527.098	1,567.155	1,507.090
	RESIDUAL													
(4)	STEAM		GWH	29.488	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(5)	CC		GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(6)	CT		GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(7)	TOTAL:		GWH	29.488	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	DISTILLATE													
(8)	STEAM		GWH	0.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(9)	CC		GWH	0.065	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(10)	CT		GWH	0.275	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(11)	TOTAL:		GWH	0.369	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	NATURAL GAS													
(12)	STEAM		GWH	210.013	84.240	110.711	85.442	90.620	70.314	83.851	165.417	174.607	157.785	182.829
(13)	CC		GWH	239.097	338.747	380.621	317.815	340.389	327.177	360.972	439.793	454.606	458.408	507.858
(14)	CT		GWH	40.491	24.449	58.430	46.977	55.172	47.173	50.026	88.858	98.113	86.430	106.350
(15)	TOTAL:		GWH	489.600	447.436	549.762	450.234	486.181	444.664	494.849	694.068	727.326	702.623	797.037
(16)	NUG		GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(17)	HYDRO		GWH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(18)	Landfill Gas		GWH	0.409	0.428	0.428	0.428	0.428	0.428	0.428	0.428	0.428	0.000	0.000
(19)	Purchased Energy		GWH	292.247	170.163	229.779	231.680	235.673	244.096	254.647	28.208	28.836	29.036	33.250
(20)	Energy Sales		GWH	64.212	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(21)	NET ENERGY FOR LOAD		GWH	2,122.043	2,183.752	2,214.265	2,246.521	2,280.052	2,311.456	2,338.238	2,365.286	2,393.127	2,419.786	2,446.816

**Schedule 6.2**  
**ENERGY SOURCES (%)**  
As of January 1, 2008

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
ENERGY SOURCES			UNITS	ACTUAL 2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
(1)	ANNUAL FIRM INTERCHANGE (INTER-REGION)		GWH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(2)	NUCLEAR		GWH	4.43%	4.62%	3.42%	4.64%	4.04%	5.23%	4.68%	5.11%	4.57%	5.00%	4.47%
(3)	COAL		GWH	60.33%	67.08%	61.36%	64.99%	64.28%	64.95%	63.25%	64.33%	63.81%	64.76%	61.59%
RESIDUAL														
(4)		STEAM	GWH	1.39%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(5)		CC	GWH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(6)		CT	GWH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(7)		TOTAL:	GWH	1.39%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
DISTILLATE														
(8)		STEAM	GWH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(9)		CC	GWH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(10)		CT	GWH	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(11)		TOTAL:	GWH	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NATURAL GAS														
(12)		STEAM	GWH	9.90%	3.86%	5.00%	3.80%	3.97%	3.04%	3.59%	6.99%	7.30%	6.52%	7.47%
(13)		CC	GWH	11.27%	15.51%	17.19%	14.15%	14.93%	14.15%	15.44%	18.59%	19.00%	18.94%	20.76%
(14)		CT	GWH	1.91%	1.12%	2.64%	2.09%	2.42%	2.04%	2.14%	3.76%	4.10%	3.57%	4.35%
(15)		TOTAL:	GWH	23.07%	20.49%	24.83%	20.04%	21.32%	19.24%	21.16%	29.34%	30.39%	29.04%	32.57%
(16)	NUG		GWH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(17)	HYDRO		GWH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(18)	Landfill Gas		GWH	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.00%	0.00%
(19)	Purchased Energy		GWH	13.77%	7.79%	10.38%	10.31%	10.34%	10.56%	10.89%	1.19%	1.20%	1.20%	1.36%
(20)	Energy Sales		GWH	3.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(21)	NET ENERGY FOR LOAD		GWH	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

**TABLE 3.1****DEMAND-SIDE MANAGEMENT IMPACTS  
Total Program Achievements**

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<u>Year</u>	<u>MWh</u>	<u>Summer kW</u>
1980	254	168
1981	575	370
1982	1,054	674
1983	2,356	1,212
1984	8,024	2,801
1985	16,315	4,619
1986	25,416	7,018
1987	30,279	8,318
1988	34,922	9,539
1989	38,824	10,554
1990	43,661	11,753
1991	48,997	12,936
1992	54,898	14,317
1993	61,356	15,752
1994	66,725	16,871
1995	72,057	18,022
1996	75,894	18,577
1997	79,998	19,066
1998	84,017	19,541
1999	88,631	20,055
2000	93,132	20,654
2001	97,428	21,185
2002	102,159	21,720
2003	106,277	22,222
2004	109,441	22,676
2005	113,182	23,405
2006	116,544	24,078
2007	130,871	26,510
2008	147,876	29,710
2009	160,176	33,910
2010	172,476	38,510
2011	184,776	43,510
2012	197,076	48,910
2013	209,376	54,510
2014	221,676	60,210
2015	233,976	66,010
2016	246,321	70,310
2017	258,666	74,610

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**TABLE 3.2**

**DELIVERED FUEL PRICES  
\$/MMBtu**

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<u>Year</u>	<u>Residual Fuel Oil</u>	<u>Distillate Fuel Oil</u>	<u>Natural Gas</u>	<u>0.7% Sulfur Coal (1)</u>	<u>1.7% Sulfur Coal (2)</u>	<u>Nuclear</u>
1998	2.73	3.97	2.87	1.66		0.40
1999	2.79	3.47	2.86	1.66		0.44
2000	4.52	5.99	4.53	1.62		0.38
2001	4.15	6.53	4.94	1.88		0.38
2002	4.58	5.69	3.95	2.06		0.38
2003	4.87	6.59	5.97	2.04		0.43
2004	5.17	5.17	6.40	2.03		0.41
2005	7.15	18.67	9.15	2.38		0.45
2006	8.07	15.24	8.51	3.00		0.45
2007	7.68	16.35	8.37	2.89		0.42
2008	9.42	16.40	10.40	2.99	2.37	0.44
2009	9.49	14.09	9.09	2.44	2.41	0.45
2010	9.38	13.94	8.09	2.57	2.50	0.67
2011	9.37	13.62	8.14	2.61	2.56	0.68
2012	9.32	13.41	8.25	2.68	2.65	0.88
2013	9.33	13.32	8.49	2.85	2.76	0.89
2014	9.24	13.20	8.85	2.93	2.83	0.93
2015	9.15	13.17	9.13	3.06	2.94	0.93
2016	9.04	13.06	9.52	3.16	3.03	0.92
2017	9.27	13.47	9.89	3.27	3.18	0.92

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(1) Approximate heat content of 0.7% sulfur coal is 12,500 Btu/lb.

(2) Approximate heat content of 1.7% sulfur coal is 12,300 Btu/lb.

## **4. FORECAST OF FACILITIES REQUIREMENTS**

### **4.1 GENERATION RETIREMENTS**

The System plans to retire three of its currently operating generating units prior to the end of 2015 (see Schedule 8). In December of 2003 GRU commissioned its newest units at the Southwest Landfill. Engines installed at the landfill gas to electric energy project will be retired as the gas production decreases through time. The first engine is expected to be removed in December 2009, and the second in December 2015. The John R. Kelly steam unit #7 (JRK #7) (23 MW) will be 50 years old in 2011. After an extensive examination during the last maintenance outage, JRK #7 was found in excellent condition and suitable for operation through October 2013.

### **4.2 RESERVE MARGIN AND SCHEDULED MAINTENANCE**

GRU uses a planning criterion of 15% capacity reserve margin (suggested for emergency power pricing purposes by Florida Public Service Commission Rule 25-6.035). Available generating capacities are compared with System summer peak demands in Schedule 7.1 (and Figure 4.1) and System winter peak demands in Schedule 7.2 (and Figure 4.2). Higher peak demands in summer and lower unit operating capacities in summer result in lower reserve margins during the summer season than in winter. Summer reserve margins without capacity additions are forecast to fall below 15% starting in 2018. The Gainesville community is discussing the ramifications of adding additional resources during the next ten to fifteen years to address its reserve margin requirements. GRU will import firm capacity as needed in future years. With the implementation of the Total Resource Cost (TRC) test and the resulting demand side management projects the need for generating capacity has been pushed beyond 2017. A direct load control program is also being considered, to maintain adequate reserves even longer.

### **4.3 GENERATION ADDITIONS**

Due to new EPA regulations promulgated in March 2005, the retrofit of our Deerhaven #2 Air Quality Control System (AQCS) is proceeding as one means of complying with the new regulations. The upgraded AQCS will consist of a selective catalytic reduction (SCR) system and a dry flue gas desulfurization system (FGD) which will include a baghouse (BH). It is expected that the SCR and the FGD/BH will be operational by early 2009. The power to operate this system will reduce the overall net output of the Deerhaven #2 unit by approximately 3 MW.

Construction has begun on the distributed generation project, GRU South Energy Center located at the new Shands Healthcare Cancer Hospital (4.1 MW combustion turbine). Characteristics of the combustion turbine are summarized in Schedule 9 at the end of this section.

As part owner in the Crystal River 3 nuclear unit, GRU will benefit from three uprates of the unit's capacity approved by the Nuclear Regulatory Commission (NRC). GRU's share (1.4079%) of the uprates (first 11 MW in 2008, second 28 MW in 2009, and 140 MW in 2011) will net the System 2.5 MW of additional base load capacity.

Responses to GRU's "Request for Letters of Interest" (RFLOI) were received November 15, 2006. The fuel types and the technologies proposed were varied and interesting. The fuel proposed included coal, biomass, municipal solid waste, landfill gases and others; some are finite in quantity and others are renewable and sustainable. The technologies included traditional steam turbine generator sets as well as gassifiers, both plasma driven and integrated gasification systems. Other responses included sources of machinery and offers of partial power contracts on existing and future units.

Eleven responses to GRU's "Request for Proposals" (RFP) for a biomass fueled facility in the 30-100 MW range were received on December 15, 2007. Addendum Two has been issued to solicit binding proposals from the top three proposals from the initial RFP. The responses to Addendum Two will be received April 11, 2008 and are to include biomass fueled capacity and energy through a purchase power agreement (PPA), with an option to buy the plant at a later date, or cost estimates for an engineer, procure, and construct (EPC) contract to build a new biomass unit for GRU to own and operate.

#### **4.4 DISTRIBUTION SYSTEM ADDITIONS**

Up to five new, identical, mini-power delivery substations (PDS) were planned for the GRU system back in 1999. Three of the five; Rocky Point, Kanapaha, and Ironwood were installed by 2003. A fourth PDS is planned for 2009. The location for this PDS, which will be known as Springhill, will be a parcel owned by GRU west of Interstate 75 and north of 39<sup>th</sup> Avenue along our existing 138 kV transmission line. A fifth PDS is being considered for addition to the System no earlier than 2011. The location of this proposed fifth PDS would be in the northern part of the service territory near U.S. Highway 441. These new mini-power delivery substations have been planned to redistribute the load from the existing substations as new load centers grow and develop within the System.

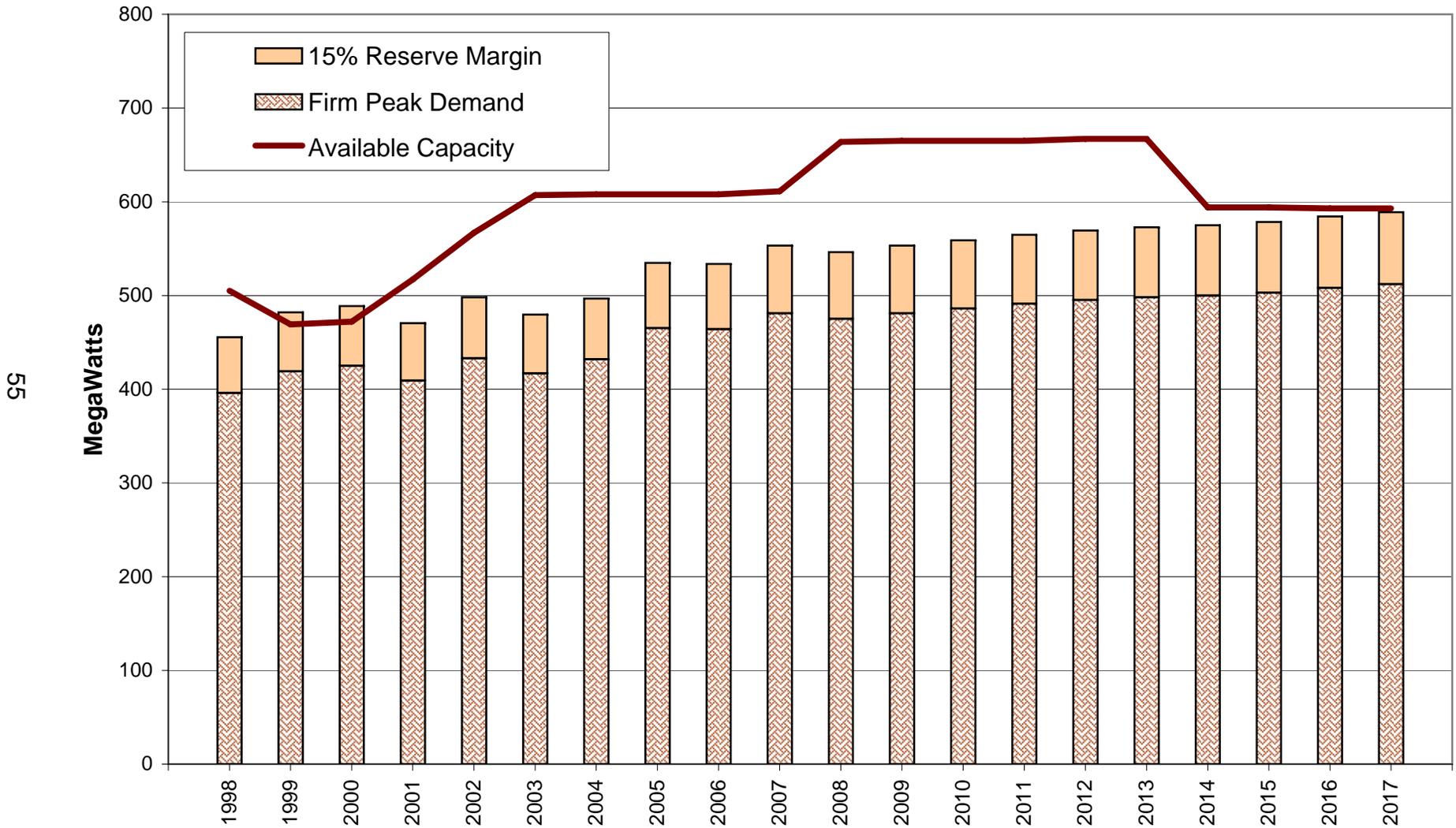
Each PDS will consist of one (or more) 138-12.47 KV, 33.6 MVA, wye-wye substation transformer with a maximum of eight distribution circuits. The proximity of these new PDS's to other, existing adjacent area substations will allow for backup in the event of a substation transformer failure.

**Schedule 7.1**  
**Forecast of Capacity, Demand, and Scheduled Maintenance at Time of Summer Peak**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Year	Total Installed Capacity (2) MW	Firm Capacity Import MW	Firm Capacity Export MW	QF MW	Total Capacity Available MW	System Firm Summer Peak Demand (1) MW	Reserve Margin before Maintenance MW	% of Peak	Scheduled Maintenance MW	Reserve Margin after Maintenance (1) MW	% of Peak
1998	547	31	73	0	505	396	109	27.5%	0	109	27.5%
1999	547	32	110	0	469	419	50	11.9%	14	36	8.6%
2000	547	0	78	0	472	425	47	11.1%	0	47	11.1%
2001	610	0	93	0	517	409	108	26.4%	0	108	26.4%
2002	610	0	43	0	567	433	134	30.9%	0	134	30.9%
2003	610	0	3	0	607	417	190	45.6%	0	190	45.6%
2004	611	0	3	0	608	432	176	40.7%	0	176	40.7%
2005	611	0	3	0	608	465	143	30.8%	0	143	30.8%
2006	611	0	3	0	608	464	144	31.0%	0	144	31.0%
2007	611	0	0	0	611	481	130	27.0%	0	130	27.0%
2008	611	53	0	0	664	475	189	39.8%	0	189	39.8%
2009	612	53	0	0	665	481	184	38.3%	0	184	38.3%
2010	612	53	0	0	665	486	179	36.8%	0	179	36.8%
2011	612	53	0	0	665	491	174	35.4%	0	174	35.4%
2012	614	53	0	0	667	495	172	34.7%	0	172	34.7%
2013	614	53	0	0	667	498	169	33.9%	0	169	33.9%
2014	591	3	0	0	594	500	94	18.8%	0	94	18.8%
2015	591	3	0	0	594	503	91	18.1%	0	91	18.1%
2016	590	3	0	0	593	508	85	16.7%	1	84	16.5%
2017	590	3	0	0	593	512	81	15.8%	0	81	15.8%

- (1) System Peak demands shown in this table reflect continued service to partial and full requirements wholesale customers. In the event these contracts are not renewed, reserve margins shown in this table will increase significantly.
- (2) Details of planned changes to installed capacity from 2008-2017 are reflected in Schedule 8.

**Figure 4.1**  
**Summer Peak Demand and Generation Capacity**



**Schedule 7.2**  
**Forecast of Capacity, Demand, and Scheduled Maintenance at Time of Winter Peak**

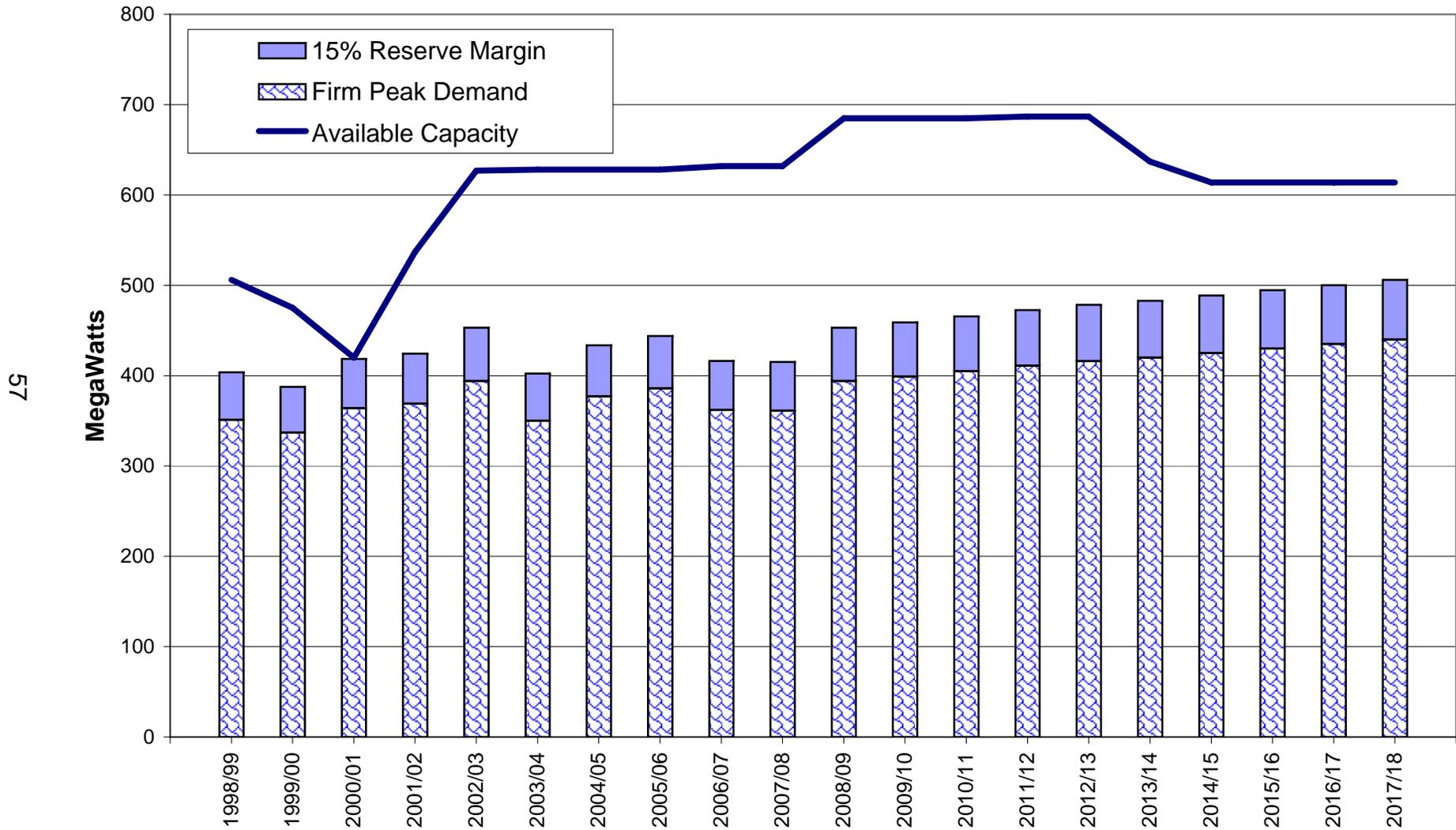
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Year	Total Installed Capacity (2) MW	Firm Capacity Import MW	Firm Capacity Export MW	QF MW	Total Capacity Available MW	System Firm Winter Peak Demand (1) MW	Reserve Margin before Maintenance MW	% of Peak	Scheduled Maintenance MW	Reserve Margin after Maintenance (1) MW	% of Peak
1998/99	563	31	88	0	506	351	155	44.2%	0	155	44.2%
1999/00	563	0	88	0	475	337	138	40.9%	15	123	36.5%
2000/01	513	0	93	0	420	364	56	15.4%	0	56	15.4%
2001/02	630	0	93	0	537	369	168	45.5%	0	168	45.5%
2002/03	630	0	3	0	627	394	233	59.1%	0	233	59.1%
2003/04	631	0	3	0	628	350	278	79.4%	0	278	79.4%
2004/05	631	0	3	0	628	377	251	66.6%	0	251	66.6%
2005/06	631	0	3	0	628	386	242	62.7%	0	242	62.7%
2006/07	632	0	0	0	632	362	270	74.6%	0	270	74.6%
2007/08	632	0	0	0	632	361	271	75.1%	0	271	75.1%
2008/09	632	53	0	0	685	394	291	73.9%	0	291	73.9%
2009/10	632	53	0	0	685	399	286	71.7%	0	286	71.7%
2010/11	632	53	0	0	685	405	280	69.1%	0	280	69.1%
2011/12	634	53	0	0	687	411	276	67.2%	0	276	67.2%
2012/13	634	53	0	0	687	416	271	65.1%	0	271	65.1%
2013/14	634	3	0	0	637	420	217	51.7%	0	217	51.7%
2014/15	611	3	0	0	614	425	189	44.5%	0	189	44.5%
2015/16	611	3	0	0	614	430	184	42.8%	0	184	42.8%
2016/17	611	3	0	0	614	435	179	41.1%	1	178	40.9%
2017/18	611	3	0	0	614	440	174	39.5%	1	173	39.3%

(1) System Peak demands shown in this table reflect continued service to partial and full requirements wholesale customers.

In the event these contracts are not renewed, reserve margins shown in this table will increase significantly.

(2) Details of planned changes to installed capacity from 2008-2017 are reflected in Schedule 8.

**Figure 4.2**  
**Winter Peak Demand and Generation Capacity**



**Schedule 8**

**PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHANGES**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Plant Name	Unit No.	Location	Unit Type	Fuel Pri.	Fuel Alt.	Fuel Transport		Const. Start Mo/Yr	Comm. In-Service Mo/Yr	Expected Retire Mo/Yr	Gross Capability		Net Capability		Status
						Pri.	Alt.				Summer (MW)	Winter (MW)	Summer (MW)	Winter (MW)	
CRYSTAL RIVER	3	Citrus County Sec. 33, T17S, R16E	ST	NUC		TK			Jan-08				0.165	0.169	I
DEERHAVEN	FS02	Alachua County Secs. 26,27, 35 T8S, R19E	ST	BIT		RR		Jan-07	May-09		0	0	-3	-3	D
GRU ENERGY CENTER (Distributed generation)	GT1	Alachua County Sec. 10, T10S, R20E	GT	NG		PL		Apr-07	May-09		4.5	4.5	4.1	4.1	U
SOUTHWEST	LFG1	Alachua County Sec. 19, T11S, R18E	IC	LFG		PL				Dec-09	-0.65	-0.65	-0.65	-0.65	RT
CRYSTAL RIVER	3	Citrus County Sec. 33, T17S, R16E	ST	NUC		TK			Jan-10				0.386	0.396	I
CRYSTAL RIVER	3	Citrus County Sec. 33, T17S, R16E	ST	NUC		TK			Jan-12				1.930	1.978	I
J. R. KELLY	FS07	Alachua County Sec. 4, T10S, R20E	ST	NG	RFO	PL	TK			Oct-13	-24	-24	-23.2	-23.2	RT
SOUTHWEST	LFG2	Alachua County Sec. 19, T11S, R18E	IC	LFG		PL				Dec-15	-0.65	-0.65	-0.65	-0.65	RT

**Unit Type**

GT = Combustion (gas) Turbine  
 IC = Internal Combustion Engine (diesel, piston)  
 ST = Steam Turbine

**Transportation Method**

PL = Pipeline  
 RR = Railroad  
 TK = Truck

**Fuel Type**

BIT = Bituminous Coal  
 LFG = Land Fill Gas  
 NG = Natural Gas  
 NUC = Nuclear  
 RFO = Residual Fuel Oil  
 WDS = Wood/Wood Waste Solids  
 (Wood Trimming, Logging Residue, Forest Restoration)

**Status**

D = Decrease in capacity.  
 I = Increase in capacity.  
 L = Regulatory approval pending. Not under construction (started site preparation).  
 P = Proposed for installation but not City Commission authorized. Not under construction.  
 RT = Unit to be retired  
 U = Under construction, less than 50% complete.

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**Schedule 9**  
**Description of Proposed Facility Under Discussion**

(1) Plant Name and Unit Number:	GRU Energy Center (Distributed Generation)
(2) Net Capacity	
a. Summer	4.1 MW
b. Winter	4.1 MW
(3) Technology Type:	Combustion Turbine (Solar)
(4) Anticipated Construction Timing	
a. Field construction start-date:	4/1/2007
b. Commercial in-service date:	5/1/2009
(5) Fuel	
a. Primary Fuel (by Heat Input)	Natural Gas
b. Alternate Fuel	na
(6) Air Pollution Control Strategy:	Low NOx Burners
(7) Cooling Method:	air cooled
(8) Total Site Area (ft <sup>2</sup> ):	50,000
(9) Construction Status:	Regulatory approval pending.
(10) Certification Status:	Not Certified
(11) Status with Federal Agencies:	Permitting in Progress
(12) Projected Unit Performance Data	
Planned Outage Factor (POF):	3.0%
Forced Outage Factor (FOF):	6.0%
Equivalent Availability Factor (EAF):	95.0%
Resulting Capacity Factor (CF)	90.0%
Average Net Operating Heat Rate (ANOHR):	10,100
(13) Projected Unit Financial Data	
Book Life (Years)	30
Total Installed Cost (2009\$/kW)	930.49
Direct Construction Cost (\$2009/kW):	0.00
Escalation (\$2009/kW)	28.75
Escalation:	3.00%
Fixed O&M (\$2009/kW-Yr):	0.00
Variable O&M (\$2009/MWh):	15.33

## **5. ENVIRONMENTAL AND LAND USE INFORMATION**

### **5.1 DESCRIPTION OF POTENTIAL SITES FOR NEW GENERATING FACILITIES**

Currently, there are no new potential generation sites planned.

### **5.2 DESCRIPTION OF PREFERRED SITES FOR NEW GENERATING FACILITIES**

New potential generating facilities (resulting from GRU's "Request for Proposals for Biomass-fueled Generation Facility") may be located at the existing Deerhaven plant site, shown in Figure 2.1 and Figure 5.1, located north of Gainesville off U.S. Highway 441. The potential offerings could be fired with woody biomass and some small amount of municipal solid waste. The Deerhaven site is preferred for the proposed project for several major reasons. Since it is an existing power generation site, future development is possible while minimizing impacts to the greenfield (undeveloped) areas. It also has an established access to fuel supply and power delivery; as well as fuel, water and combustion product management facilities.

#### **5.2.1 Land Use and Environmental Features**

The location of the Deerhaven Generating Station ("Site") is indicated on Figure 2.1 and Figure 5.1, overlain on USGS maps that were originally at a scale of 1 inch : 24,000 feet. Figure 5.2 provides a photographic depiction of the land use and cover of the existing site and adjacent areas. The existing land use of the certified portion of the site is industrial (i.e., electric power generation and transmission and ancillary uses such as fuel storage and conveyance; water, combustion product, and forest management). The areas acquired since 2002 have been annexed into the City of Gainesville. The current zoning remains County Agricultural, but a land use change application has been filed with the City of Gainesville. Eventually, the site will be zoned (city) Public Services with

conservation areas. Surrounding land uses are primarily rural or agricultural with some low-density residential development. The Deerhaven site encompasses approximately 3474 acres.

The Site is located in the Suwannee River Water Management District. A small increase in water quantities for potable uses is projected. It is estimated that industrial water usage associated with the new unit could be as much as 3 million gallons per day (MGD). The groundwater allocation in the existing Site Certification may be sufficient to accommodate the requirements of the site in the future with the proposed new unit, if reclaimed water is used. Water for potable use will be supplied via the City's potable water system. Groundwater will continue to be extracted from the Floridian aquifer. A significant amount of reclaimed water from GRU's Main St. and/or Kanapaha wastewater treatment plants may be made available to the site to supply industrial process and cooling water needs. Process wastewater is currently collected, treated and reused on-site. The site has zero discharge of process wastewater to surface and ground waters, with a brine concentrator and on-site storage of water treatment and solid by-products. It is expected that this practice would continue with the addition of a new unit. Other water conservation measures may be identified during the design of the project.

### **5.2.2 Air Emissions**

All of the proposed technologies minimize the formation of nitrogen oxides (i.e., NO<sub>x</sub>) and control any SO<sub>2</sub> emissions and trace metal emissions using BACT. Particulate matter emissions will most likely be controlled utilizing a fabric filter.

## **5.3 STATUS OF APPLICATION FOR SITE CERTIFICATION**

Not applicable.

Figure 5.1

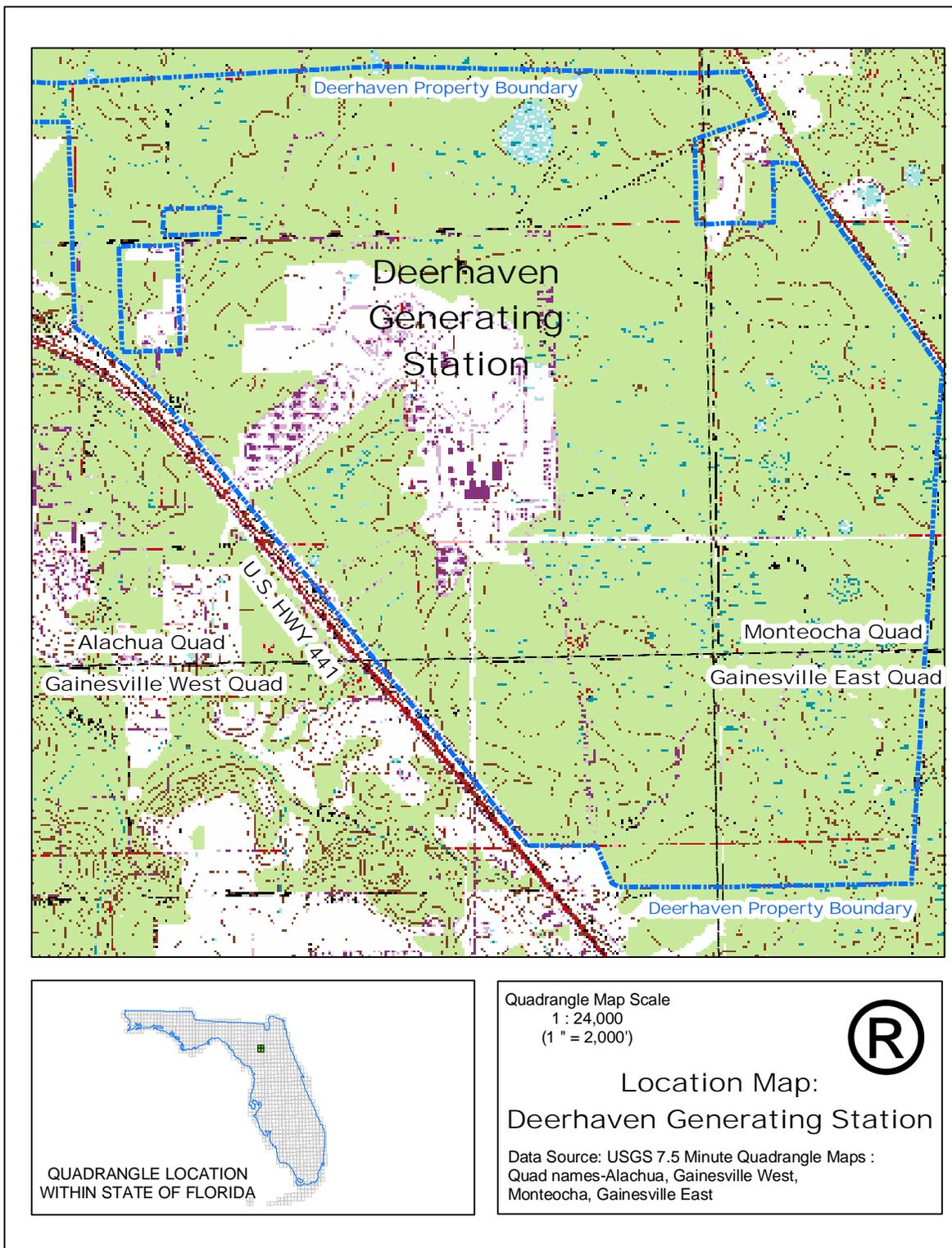
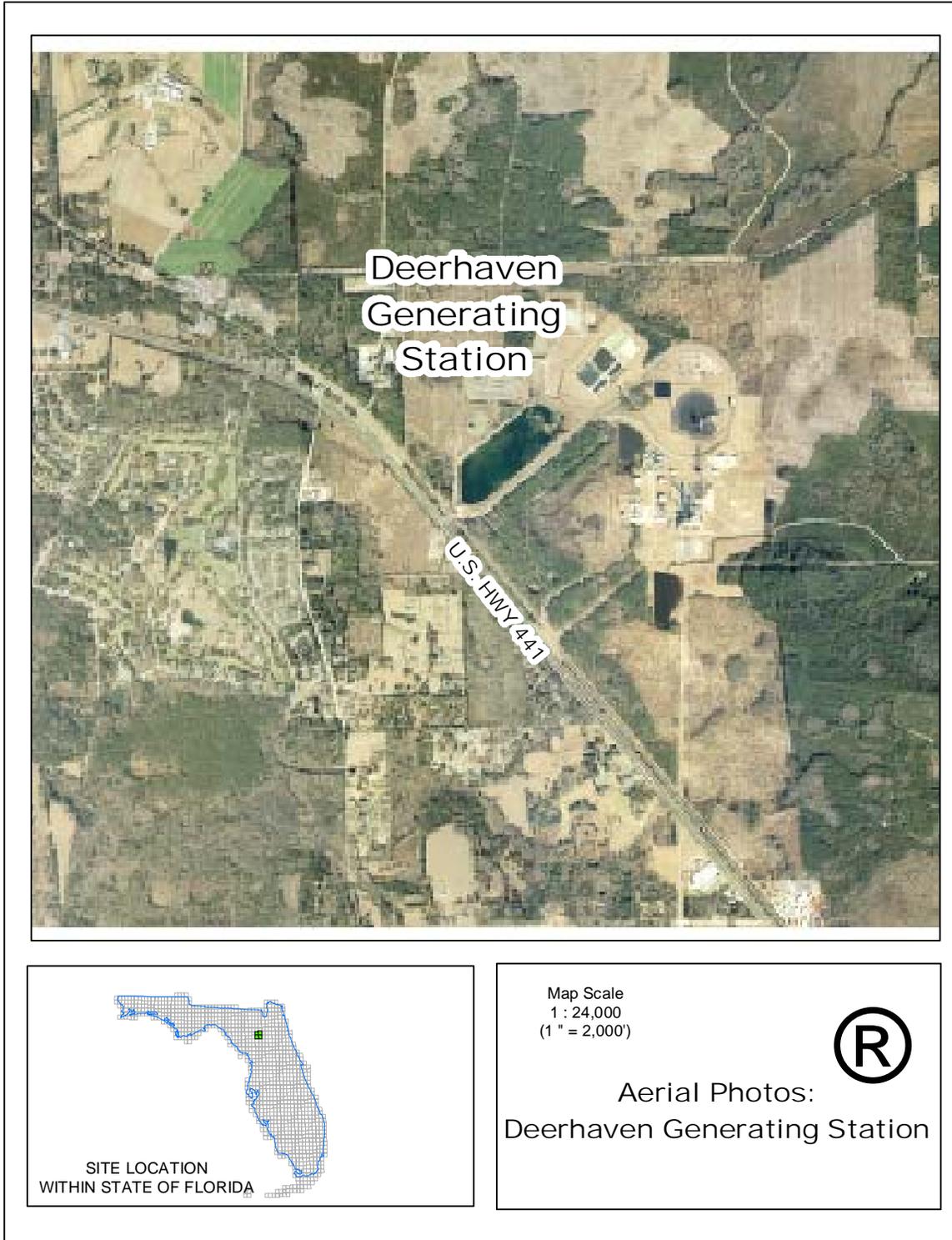


Figure 5.2



GAINESVILLE REGIONAL UTILITIES

2009 TEN-YEAR SITE PLAN



Submitted to:

The Florida Public Service Commission

April 2009

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## INTRODUCTION

The 2009 Ten-Year Site Plan for Gainesville Regional Utilities (GRU) is submitted to the Florida Public Service Commission pursuant to Section 186.801, Florida Statutes. The contents of this report conform to information requirements listed in Form PSC/EAG 43, as specified by Rule 25-22.072, Florida Administrative Code. The four sections of the 2009 Ten-Year Site Plan are:

- Description of Existing Facilities
- Forecast of Electric Energy and Demand Requirements
- Forecast of Facilities Requirements
- Environmental and Land Use Information

Gainesville Regional Utilities (GRU) is a municipal electric, natural gas, water, wastewater, and telecommunications utility system, owned and operated by the City of Gainesville, Florida. The GRU retail electric system service area includes the City of Gainesville and the surrounding urban area. The highest net integrated peak demand recorded to date on GRU's electrical system was 481 Megawatts on August 8, 2007.

## 1. DESCRIPTION OF EXISTING FACILITIES

**Gainesville Regional Utilities** (GRU) operates a fully vertically-integrated electric power production, transmission, and distribution system (herein referred to as "the System"), and is wholly owned by the City of Gainesville. In addition to retail electric service, GRU also provides wholesale electric service to the City of Alachua (Alachua) and Clay Electric Cooperative (Clay). These wholesale contracts will terminate after December 31, 2010 and December 31, 2012 respectively, unless renewed. GRU's distribution system serves its retail territory of approximately 124 square miles and 92,795 customers (2008 average). The general locations of GRU electric facilities and the electric system service area are shown in Figure 1.1.

### 1.1 GENERATION

The existing generating facilities operated by GRU are tabulated in Schedule 1 at the end of this chapter. The present summer net capability is 610 MW and the winter net capability is 630 MW<sup>1</sup>. Currently, the System's energy is produced by three fossil fuel steam turbines, six simple-cycle combustion turbines, one combined-cycle unit, and a 1.4079% ownership share of the Crystal River 3 (CR3) nuclear unit operated by Progress Energy Florida (PEF).

The System has two primary generating plant sites -- Deerhaven and John R. Kelly (JRK). Each site comprises both steam-turbine and gas-turbine generating units. The JRK station also utilizes a combined cycle unit.

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<sup>1</sup> Net capability is that specified by the "SERC Guideline Number Two for Uniform Generator Ratings for Reporting." The winter rating will normally exceed the summer rating because generating plant efficiencies are increased by lower ambient air temperatures and lower cooling water temperatures.

## **1.1.1 Generating Units**

**1.1.1.1 Steam Turbines.** The System's three operational simple-cycle steam turbines are powered by fossil fuels and CR3 is nuclear powered. The fossil fueled steam turbines comprise 54.8% of the System's net summer capability and produced 84.6% of the electric energy supplied by the System in 2008. These units range in size from 23.2 MW to 228.4 MW. The combined-cycle unit, which includes a heat recovery steam generator/turbine and combustion turbine set, comprises 18.4% of the System's net summer capability and produced 8.5% of the electric energy supplied by the System in 2008. The System's 11.6 MW share of CR3 comprises 1.9% of the System's net summer capability and produced 5.7% of total electric energy in 2008. The System's share of CR3 will increase to 11.981 MW in 2010, and to 13.911 MW in 2012 as the result of capacity upgrades planned by PEF. Deerhaven Unit 2 and CR3 are used for base load purposes, while JRK Unit 7, JRK CC1, and Deerhaven Unit 1 are used for intermediate loading.

**1.1.1.2 Gas Turbines.** The System's six industrial gas turbines make up 24.9% of the System's summer generating capability and produced 1.3% of the electric energy supplied by the System in 2008. These simple-cycle combustion turbines are utilized for peaking purposes only because their energy conversion efficiencies are considerably lower than steam units. As a result, they yield higher operating costs and are consequently unsuitable for base load operation. Gas turbines are advantageous in that they can be started and placed on line quickly. The System's gas turbines are most economically used as peaking units during high demand periods when base and intermediate units cannot serve all of the System loads.

**1.1.1.3 Internal Combustion (Piston/Diesel).** The two reciprocating internal combustion engines operated by the System at the Southwest Landfill were decommissioned in 2008 due to a diminished fuel supply.

**1.1.1.4 Environmental Considerations.** All of the System's steam turbines, except for Crystal River 3, utilize recirculating cooling towers with a mechanical draft for the cooling of condensed steam. Crystal River 3 uses a once-through cooling system aided by helper towers. Only Deerhaven 2 currently has flue gas cleaning equipment consisting of a "hot-side" electrostatic precipitator. Construction is currently underway on a selective catalytic reduction system to reduce NO<sub>x</sub>, and a dry flue gas desulfurization unit with fabric filters, which will reduce SO<sub>2</sub>, mercury, and particulates. This equipment will result in a net decrease of 6 MW for Deerhaven 2.

## **1.1.2 Generating Plant Sites**

The locations of the System's generating plant sites are shown on Figure 1.1.

**1.1.2.1 John R. Kelly Plant.** The Kelly Station is located in southeast Gainesville near the downtown business district and consists of one combined cycle, one steam turbine, three gas turbines, and the associated cooling facilities, fuel storage, pumping equipment, transmission and distribution equipment.

**1.1.2.2 Deerhaven Plant.** The Deerhaven Station is located six miles northwest of Gainesville. The original site, which was certified pursuant to the Power Plant Siting Act, includes an 1146 acre parcel of partially forested land. The facility consists of two steam turbines, three gas turbines, and the associated cooling facilities, fuel storage, pumping equipment and transmission equipment. As amended to include the addition of Deerhaven Unit 2 in 1981, the certified site now includes coal unloading and storage facilities and a zero discharge water treatment plant, which treats water effluent from both steam units. A potential expansion area, owned by the System and adjacent to the certified Deerhaven plant site, was incorporated into the Gainesville City limits February 12, 2007 (ordinance 0-06-130), consists of an additional 2328 acres, for a total of 3474 acres.

## **1.2 TRANSMISSION**

### **1.2.1 The Transmission Network**

GRU's bulk electric power transmission network (System) consists of a 230 kV radial and a 138 kV loop connecting the following:

- 1) GRU's two generating stations,
- 2) GRU's nine distribution substations,
- 3) One 230 kV and two 138 kV interties with Progress Energy Florida (PEF),
- 4) A 138 kV intertie with Florida Power and Light Company (FPL),
- 5) A radial interconnection with Clay at Farnsworth Substation, and
- 6) A loop-fed interconnection with the City of Alachua at Alachua No. 1 Substation.

Refer to Figure 1.1 for line geographical locations and Figure 1.2 for electrical connectivity and line numbers.

### **1.2.2 Transmission Lines**

The ratings for all of GRU's transmission lines are given in Table 1.1. The load ratings for GRU's transmission lines were developed in Appendix 6.1 of GRU's Long-Range Transmission Planning Study, March 1991. Refer to Figure 1.2 for a one-line diagram of GRU's electric system. The criteria for normal and emergency loading are taken to be:

- Normal loading: conductor temperature not to exceed 100° C (212° F).
- Emergency 8 hour loading: conductor temperature not to exceed 125° C (257° F).

The present transmission network consists of the following:

<u>Line</u>	<u>Circuit Miles</u>	<u>Conductor</u>
138 kV double circuit	80.01	795 MCM ACSR
138 kV single circuit	16.30	1192 MCM ACSR
138 kV single circuit	20.91	795 MCM ACSR
230 kV single circuit	<u>2.53</u>	795 MCM ACSR
Total	119.75	

Annually, GRU participates in Florida Reliability Coordinating Council, Inc. (FRCC) studies that analyze multi-level contingencies. Contingencies are occurrences that depend on changes or uncertain conditions and, as used here, represent various equipment failures that may occur. All single and two circuits-common pole contingencies have no identifiable problems.

Contingency simulations revealed the system effects of serving peak summer load with assumed outages of both Deerhaven Unit 2 and the Archer 230 kV tie line. The results identified GRU bus voltages that would fall below acceptable levels. This will be addressed by installing two 3-phase, 138kV, 24.6 MVAR capacitor banks: one at the Parker Transmission Substation (May 2009); and another at the McMichen Substation (July 2009).

According to the state system reliability coordinator, who is responsible for the integrity and stability of the entire Florida transmission grid, GRU could plan to import about 250 MW before exceeding the bus voltage standard for reliability with these new capacitor banks.

### **1.2.3 State Interconnections**

The System is currently interconnected with PEF and FPL at four separate points. The System interconnects with PEF's Archer Substation via a 230 kV transmission line to the System's Parker Substation with 224 MVA of transformation capacity from 230 kV to 138 kV. The System also interconnects with PEF's Idylwild Substation with two separate circuits via a 150 MVA 138/69 kV transformer at the Idylwild Substation. The System interconnects with FPL via a 138 kV tie between FPL's Hampton Substation and the System's Deerhaven Substation. This interconnection has a transformation capacity at Bradford Substation of 224 MVA. All listed capacities are based on normal (Rating A) capacities.

### **1.3 DISTRIBUTION**

The System has six loop-fed and three radial distribution substations connected to the transmission network: Ft. Clarke, Kelly, McMichen, Millhopper, Serenola, Sugarfoot, Ironwood, Kanapaha, and Rocky Point substations, respectively. Parker is GRU's only 230 kV transmission voltage substation. The locations of these substations are shown on Figure 1.1.

The six major distribution substations are connected to the 138 kV bulk power transmission network with looped feeds which prevent the outage of a single transmission line from causing major outages in the distribution system. Ironwood, Kanapaha and Rocky Point are served by a single tap to the 138 kV network which would require distribution switching to restore customer power if the single transmission line tapped experiences an outage. GRU serves its retail customers through a 12.47 kV distribution network. The distribution substations, their present rated transformer capabilities, and the number of circuits for each are listed in Table 1.2.

The System has three Power Delivery Substations (PDS) with single 33.6 MVA transformers that are directly radial-tapped to our looped 138 kV system.

Ft. Clarke, Kelly, McMichen, and Serenola substations currently consist of two transformers of basically equal size allowing these stations to be loaded under normal conditions to 80 percent of the capabilities shown in Table 1.2. Millhopper and Sugarfoot Substations currently consist of three transformers of equal size allowing both of these substations to be loaded under normal conditions to 100 percent of the capability shown in Table 1.2. One of the two 22.4 MVA transformers at Ft. Clarke has been repaired with rewinding to a 28.0 MVA rating. This makes the normal rating for this substation 50.4 MVA.

In 2007 GRU expanded its John R. Kelly Plant generation-transmission-distribution substation configuration to include a third 56 MVA 138/12.47 kV transformer located on the south side of the plant (referred to as Kelly West). This expansion has enhanced reliability by reassigning load to a point on the system not directly tied to the generator buses of the plant. The additional transformer capacity will allow for load growth in Gainesville's downtown area.

#### **1.4 WHOLESALE ENERGY**

The System provides full requirements wholesale electric service to Clay Electric Cooperative (Clay) through a contract between GRU and Seminole Electric Cooperative (Seminole), of which Clay is a member. The System began the 138 kV service at Clay's Farnsworth Substation in February 1975. This substation is supplied through a 2.37 mile radial line connected to the System's transmission facilities at Parker Road near SW 24<sup>th</sup> Avenue.

The System also provides full requirements wholesale electric service to the City of Alachua. The Alachua No. 1 Substation is supplied by GRU's looped 138 kV transmission system. The System provides approximately 94% of Alachua's energy requirements with the remainder being supplied by Alachua's generation entitlements from the PEF's Crystal River 3 and FPL's St. Lucie 2 nuclear units. Energy supplied to the City of Alachua by these nuclear units is wheeled over GRU's

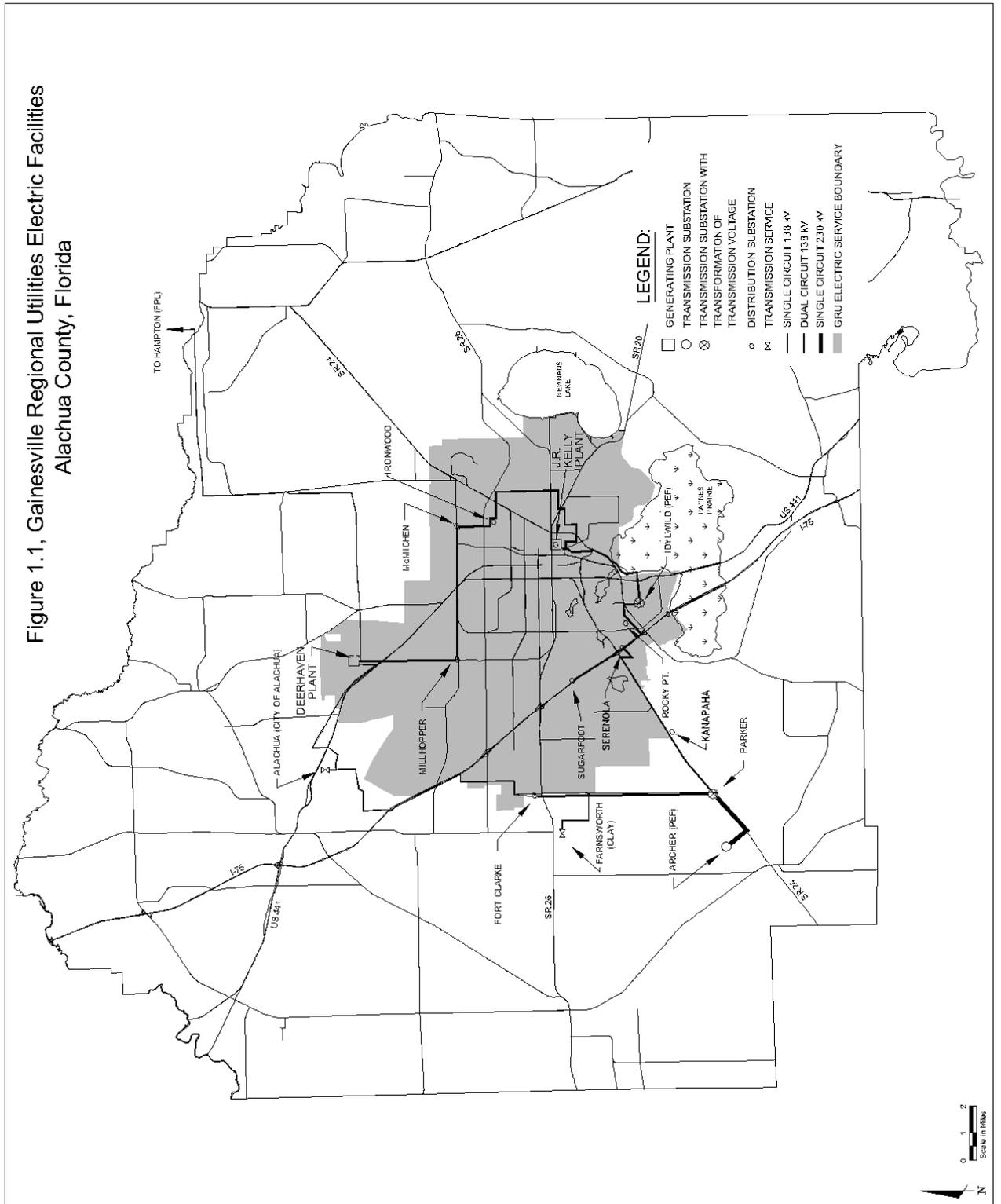
transmission network, with GRU providing generation backup in the event of outages of these nuclear units. The City of Alachua and GRU agreed to extend the original contract that expired on December 31, 2008 for two years.

Wholesale sales to Clay and the City of Alachua have been included as native load for purposes of projecting GRU's needs for generating capacity and associated reserve margins. This forms a conservative basis for planning purposes in the event these contracts are renewed. Schedules 7.1 and 7.2 at the end of Section 3 summarize GRU's reserve margins.

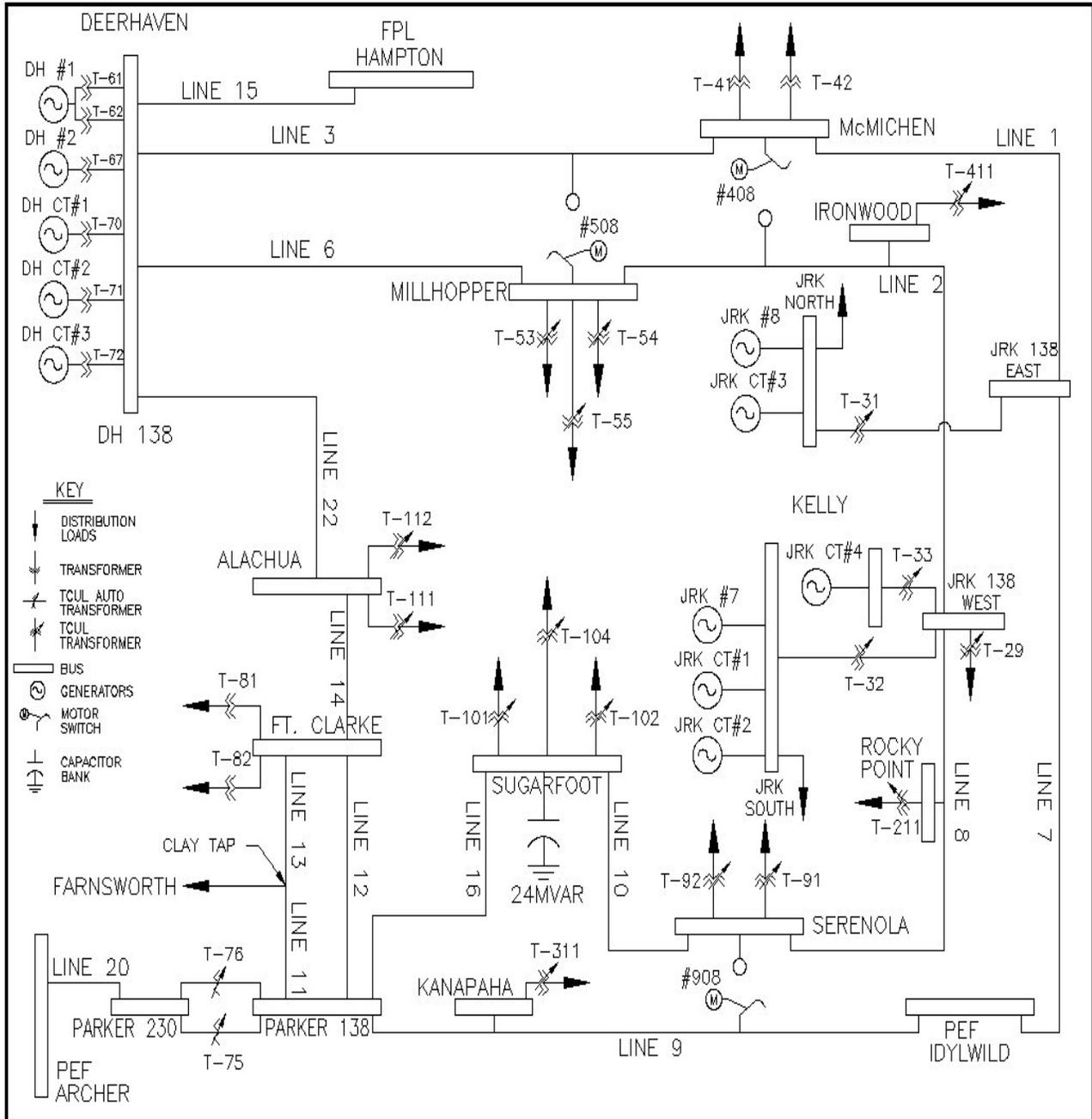
### **1.5 DISTRIBUTED GENERATION**

Construction of the South Energy Center was completed in February of 2009. The South Energy Center will provide multiple onsite utility services to the new Shands at UF Cancer Hospital. The new facility houses a 4.1 MW (summer rating) natural gas-fired turbine capable of supplying 100% of the hospital's electric and thermal needs. The South Energy Center will provide electricity, chilled water, steam and medical gases to the hospital. The unique design is 75% efficient at primary fuel conversion to useful energy and greatly reduces emissions compared to traditional generation. Commercial operation of the South Energy Center is expected to begin in May of 2009.

Figure 1.1, Gainesville Regional Utilities Electric Facilities  
Alachua County, Florida



**FIGURE 1.2 Gainesville Regional Utilities Electric System One-Line Diagram.**



**Schedule 1  
EXISTING GENERATING FACILITIES**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Plant Name	Unit No.	Location	Unit Type	Primary Fuel		Alternate Fuel		Alt. Fuel Storage (Days)	Commercial In-Service Month/Year	Expected Retirement Month/Year	Gross Capability		Net Capability		Status
				Type	Trans.	Type	Trans.				Summer MW	Winter MW	Summer MW	Winter MW	
<b>J. R. Kelly</b>		Alachua County									<b>180.00</b>	<b>189.00</b>	<b>177.20</b>	<b>186.20</b>	
	FS08	Sec. 4, T10S, R20E	CA	WH	PL				[ 4/65 ; 5/01 ]	2051	38.00	38.00	37.00	37.00	OP
	FS07	(GRU)	ST	NG	PL	RFO	TK		8/61	10/13	24.00	24.00	23.20	23.20	OP
	GT04		CT	NG	PL	DFO	TK		5/01	2051	76.00	82.00	75.00	81.00	OP
	GT03		GT	NG	PL	DFO	TK		5/69	05/19	14.00	15.00	14.00	15.00	OP
	GT02		GT	NG	PL	DFO	TK		9/68	09/18	14.00	15.00	14.00	15.00	OP
	GT01		GT	NG	PL	DFO	TK		2/68	02/18	14.00	15.00	14.00	15.00	OP
<b>Deerhaven</b>		Alachua County									<b>437.00</b>	<b>447.00</b>	<b>421.40</b>	<b>432.40</b>	
	FS02	Secs. 26,27,35	ST	BIT	RR				10/81	2031	235.00	235.00	228.40	228.40	OP
	FS01	T8S, R19E	ST	NG	PL	RFO	TK		8/72	08/22	88.00	88.00	83.00	83.00	OP
	GT03	(GRU)	GT	NG	PL	DFO	TK		1/96	2046	76.00	82.00	75.00	81.00	OP
	GT02		GT	NG	PL	DFO	TK		8/76	2026	19.00	21.00	17.50	20.00	OP
	GT01		GT	NG	PL	DFO	TK		7/76	2026	19.00	21.00	17.50	20.00	OP
<b>Crystal River</b> (818/815)	3	Citrus County Sec. 33, T17S, R16E (PEF)	ST	NUC	TK				3/77	2037	<b>12.24</b>	<b>12.42</b>	<b>11.60</b>	<b>11.89</b>	OP
<b>System Total</b>													<b>610.20</b>	<b>630.49</b>	

Unit Type

CA = Combined Cycle Steam Part  
 CT = Combined Cycle Combustion Turbine Part  
 GT = Gas Turbine  
 ST = Steam Turbine

Fuel Type

BIT = Bituminous Coal  
 DFO = Distillate Fuel Oil  
 NG = Natural Gas  
 NUC = Uranium  
 RFO = Residual Fuel Oil  
 WH = Waste Heat

Transportation Method

PL = Pipe Line  
 RR = Railroad  
 TK = Truck

Status

OP = Operational

**TABLE 1.1**

**TRANSMISSION LINE RATINGS  
SUMMER POWER FLOW LIMITS**

<b>Line Number</b>	<b>Description</b>	<b>Normal 100°C (MVA)</b>	<b>Limiting Device</b>	<b>8-Hour Emergency 125°C (MVA)</b>	<b>Limiting Device</b>
1	McMichen - Depot East	236.2	Conductor	282.0	Conductor
2	Millhopper - Depot West	236.2	Conductor	282.0	Conductor
3	Deerhaven - McMichen	236.2	Conductor	282.0	Conductor
6	Deerhaven - Millhopper	236.2	Conductor	282.0	Conductor
7	Depot East - Idylwild	236.2	Conductor	282.0	Conductor
8	Depot West - Serenola	236.2	Conductor	282.0	Conductor
9	Idylwild - Parker	236.2	Conductor	236.2	Conductor
10	Serenola - Sugarfoot	236.2	Conductor	282.0	Conductor
11	Parker - Clay Tap	143.6	Switch	186.0	Switch
12	Parker - Ft. Clarke	236.2	Conductor	282.0	Conductor
13	Clay Tap - Ft. Clarke	143.6	Switch	186.0	Switch
14	Ft. Clarke - Alachua	287.3	Switch	356.0	Conductor
15	Deerhaven - Hampton	224.0 <sup>1</sup>	Transformers	270.0	Transformers
16	Sugarfoot - Parker	236.2	Conductor	282.0	Conductor
20	Parker-Archer(T75,T76)	224.0	Transformers	300.0	Transformers
22	Alachua - Deerhaven	287.3	Switch	356.0	Conductor
xx	Clay Tap - Farnsworth	236.2	Conductor	282.0	Conductor
xx	Idylwild – PEF	150.0 <sup>2</sup>	Transformer	168.0 <sup>2</sup>	Transformer

- 1) These two transformers are located at the FPL Bradford Substation and are the limiting elements in the Normal and Emergency ratings for this intertie.
- 2) This transformer, along with the entire Idylwild Substation, is owned and maintained by PEF.

**Assumptions:**

- 100 °C for normal conductor operation
- 125 °C for emergency 8 hour conductor operation
- 40 °C ambient air temperature
- 2 ft/sec wind speed
- Transformers T75 & T76 normal limits are based on a 65 °C temperature rise rating.

**TABLE 1.2**  
**SUBSTATION TRANSFORMATION AND CIRCUITS**

Distribution Substation	Normal Transformer Rated Capability	Current Number of Circuits
Ft. Clarke	50.4 MVA	4
J.R. Kelly <sup>2</sup>	168.0 MVA	20
McMichen	44.8 MVA	6
Millhopper	100.8 MVA	10
Serenola	67.2 MVA	8
Sugarfoot	100.8 MVA	9
Ironwood	33.6 MVA	3
Kanapaha	33.6 MVA	3
Rocky Point	33.6 MVA	3

Transmission Substation	Normal Transformer Rated Capability	Number of Circuits
Parker	224 MVA	5
Deerhaven	No transformations- All 138 kV circuits	4

2 J.R. Kelly is a generating station as well as 2 distribution substations. One substation has 14 distribution feeders directly fed from the 2- 12.47 kV generator buses with connection to the 138 kV loop by 2- 56 MVA transformers. The other substation (Kelly West) has 6 distribution feeders fed from a single, loop-fed 56 MVA transformer.

## **2. FORECAST OF ELECTRIC ENERGY AND DEMAND REQUIREMENTS**

Section 2 includes documentation of GRU's forecast of number of customers, energy sales and seasonal peak demands; a forecast of energy sources and fuel requirements; and an overview of GRU's involvement in demand-side management programs.

The accompanying tables provide historical and forecast information for calendar years 1999-2018. Energy sales and number of customers are tabulated in Schedules 2.1, 2.2 and 2.3. Schedule 3.1 gives summer peak demand for the base case forecast by reporting category. Schedule 3.2 presents winter peak demand for the base case forecast by reporting category. Schedule 3.3 presents net energy for load for the base case forecast by reporting category. Short-term monthly load data is presented in Schedule 4. Projected net energy requirements for the System, by method of generation, are shown in Schedule 6.1. The percentage breakdowns of energy shown in Schedule 6.1 are given in Schedule 6.2. The quantities of fuel expected to be used to generate the energy requirements shown in Schedule 6.1 are given by fuel type in Schedule 5.

### **2.1 FORECAST ASSUMPTIONS AND DATA SOURCES**

- (1) All regression analyses were based on annual data. Historical data was compiled for calendar years 1970 through 2008. System data, such as net energy for load, seasonal peak demands, customer counts and energy sales, was obtained from GRU records and sources.
- (2) Estimates and projections of Alachua County population were obtained from the Florida Population Studies, March 2008 (Bulletin No. 150), published by the Bureau of Economic and Business Research (BEBR) at the University of Florida.
- (3) Historical weather data was used to fit regression models. The forecast assumes normal weather conditions. Normal heating degree days and cooling degree days equal the mean of data reported to NOAA by the Gainesville Municipal Airport station from 1984-2008.

- (4) All income and price figures were adjusted for inflation, and indexed to a base year of 2008, using the U.S. Consumer Price Index for All Urban Consumers from the U.S. Department of Labor, Bureau of Labor Statistics. Inflation is assumed to average approximately 2.5% per year for each year of the forecast.
- (5) The U.S. Department of Commerce provided historical estimates of total income and per capita income for Alachua County. Forecast values of per capita income for Alachua County were obtained from Global Insight.
- (6) Historical estimates of household size were obtained from BEBR, and projected levels were estimated from a logarithmic trend.
- (7) The Florida Agency for Workforce Innovation and the U.S. Department of Labor provided historical estimates of non-agricultural employment in Alachua County. Forecast values of non-agricultural employment were obtained from Global Insight.
- (8) GRU's corporate model was the basis for projections of the average price of 1,000 kWh of electricity for all customer classes. The price of electricity is expected to slightly outpace inflation over the forecast horizon.
- (9) Estimates of energy and demand reductions resulting from planned demand-side management programs (DSM) were subtracted from all retail forecasts. GRU's involvement with DSM is described in more detail later in this section.
- (10) The City of Alachua will generate (via generation entitlement shares of PEF and FPL nuclear units) approximately 8,077 MWh (6 %) of its annual energy requirements.

## 2.2 FORECASTS OF NUMBER OF CUSTOMERS, ENERGY SALES AND SEASONAL PEAK DEMANDS

Number of customers, energy sales and seasonal peak demands were forecast from 2009 through 2018. Separate energy sales forecasts were developed for each of the following customer segments: residential, general service non-demand, general service demand, large power, outdoor lighting, sales to Clay, and sales to Alachua. Separate forecasts of number of customers were developed for residential, general service non-demand, general service demand and large power retail rate classifications. The basis for these independent forecasts originated with the development of least-squares regression models. All modeling was performed in-house using the Statistical Analysis System (SAS)<sup>3</sup>. The following text describes the regression equations utilized to forecast energy sales and number of customers.

### 2.2.1 Residential Sector

The equation of the model developed to project residential average annual energy use (kilowatt-hours per year) specifies average use as a function of household income in Alachua County, residential price of electricity, heating degree days, and cooling degree days. The form of this equation is as follows:

$$\begin{aligned} \text{RESAVUSE} = & 7890 + 0.026 (\text{HHY08}) - 19.42 (\text{RESPR08}) \\ & + 0.73 (\text{HDD}) + 0.94 (\text{CDD}) \end{aligned}$$

Where:

RESAVUSE	=	Average Annual Residential Energy Use Per Customer
HHY08	=	Average Household Income
RESPR08	=	Residential Price, Dollars per 1000 kWh
HDD	=	Annual Heating Degree Days
CDD	=	Annual Cooling Degree Days

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<sup>3</sup> SAS is the registered trademark of SAS Institute, Inc., Cary, NC.

Adjusted R<sup>2</sup> = 0.8093  
 DF (error) = 32 (period of study, 1971-2008)  
 t - statistics:  
 Intercept = 5.03  
 HHY08 = 2.36  
 RESPR08 = -5.10  
 HDD = 3.07  
 CDD = 3.45

Projections of the average annual number of residential customers were developed from a linear regression model stating the number of customers as a function of Alachua County population, the number of persons per household, the historical series of Clay customer transfers, and an indicator variable for customer counts recorded under the billing system used prior to 1992. The residential customer model specifications are:

$$\begin{aligned}
 RESCUS &= 99588 + 287.8 (POP) - 40779 (HHSIZE) \\
 &+ 0.90 (CLYRCUS) - 976 (OldSys)
 \end{aligned}$$

Where:

RESCUS = Number of Residential Customers  
 POP = Alachua County Population (thousands)  
 HHSIZE = Number of Persons per Household  
 CLYRCUS = Clay Customer Transfers  
 OldSys = Older Billing System (1978-1991)

Adjusted R<sup>2</sup> = 0.9992  
 DF (error) = 25 (period of study, 1978-2008)  
 t - statistics:  
 Intercept = 9.63  
 POP = 30.34  
 HHSIZE = -11.15  
 CLYRCUS = 5.09

$$\text{OldSys} = -2.37$$

The product of forecasted values of average use and number of customers yielded the projected energy sales for the residential sector.

### 2.2.2 General Service Non-Demand Sector

The general service non-demand (GSN) customer class includes non-residential customers with maximum annual demands less than 50 kilowatts (kW). In 1990, GRU began offering GSN customers the option to elect the General Service Demand (GSD) rate classification. This option offers potential benefit to GSN customers that use high amounts of energy and have good load factors. Since 1990, 428 customers have elected to transfer to the GSD rate class. The forecast assumes that additional GSN customers will voluntarily elect the GSD classification, but at a more modest pace than has been observed historically. A regression model was developed to project average annual energy use by GSN customers. The model includes as independent variables, the cumulative number of optional demand customers and cooling degree days. The specifications of this model are as follows:

$$GSNAVUSE = 23.51 - 0.012 (OPTDCus) + 0.0016 (CDD)$$

Where:

GSNAVUSE = Average annual energy usage by GSN customers

OPTDCus = Cumulative number of Optional Demand Customers

CDD = Annual Cooling Degree Days

Adjusted R<sup>2</sup> = 0.8521

DF (error) = 26 (period of study, 1979-2008)

t - statistics:

Intercept	=	11.25
OPTDCus	=	-12.13
CDD	=	2.11

The number of general service non-demand customers was projected using an equation specifying customers as a function of Alachua County population, Clay non-demand transfer customers, and the number of optional demand customers. The specifications of the general service non-demand customer model are as follows:

$$GSNCUS = -5345 + 60.0(POP) + 2.81(CLYNCus) - 3.15(OptDCus)$$

Where:

GSNCUS	=	Number of General Service Non-Demand Customers
POP	=	Alachua County Population (thousands)
CLYNCus	=	Clay Non-Demand Transfer Customers
OptDCus	=	Optional Demand Customers

$$\text{Adjusted } R^2 = 0.9947$$

$$DF \text{ (error)} = 26 \text{ (period of study, 1978-2008)}$$

t - statistics:

Intercept	=	-8.56
POP	=	15.28
CLYNCus	=	2.27
OptDCus	=	-4.82

Forecasted energy sales to general service non-demand customers were derived from the product of projected number of customers and the projected average annual use per customer.

### 2.2.3 General Service Demand Sector

The general service demand customer class includes non-residential customers with established annual maximum demands generally of at least 50 kW but less than 1,000 kW. Average annual energy use per customer was projected using an equation specifying average use as a function of per capita income (Alachua County) and the number of optional demand customers. A significant portion of the energy load in this sector is from large retailers such as department stores and grocery stores, whose business activity is related to income levels of area residents. Average energy use projections for general service demand customers result from the following model:

$$GSDAVUSE = 326.2 + 0.0081(PCY08) - 0.22(OPTDCust)$$

Where:

GSDAVUSE = Average annual energy use by GSD Customers

PCY08 = Per Capita Income in Alachua County

OPTDCust = Cumulative number of Optional Demand Customers

Adjusted R<sup>2</sup> = 0.6934

DF (error) = 26 (period of study, 1979-2008)

t - statistics:

Intercept = 12.19

PCY08 = 7.64

OPTDCust = -7.63

The annual average number of customers was projected using a regression model that includes Alachua County population, Clay demand customer transfers, and the number of optional demand customers as independent variables. The specifications of the general service demand customer model are as follows:

$$GSDCUS = -437.9 + 5.37(POP) + 19.65(CLYDCus) + 0.48(OptDCus)$$

Where:

GSDCUS = Number of General Service Demand Customers

POP = Alachua County Population (thousands)

CLYDCus = Clay Demand Transfer Customers

OptDCus = Optional Demand Customers

Adjusted R<sup>2</sup> = 0.9958

DF (error) = 26 (period of study, 1978-2008)

t - statistics:

Intercept = -5.74

POP = 11.38

CLYDCus = 4.40

OptDCus = 6.28

The forecast of energy sales to general service demand customers was the resultant product of projected number of customers and projected average annual use per customer.

#### **2.2.4 Large Power Sector**

The large power customer class currently includes eleven customers that maintain an average monthly billing demand of at least 1,000 kW. Analyses of average annual energy use were based on historical observations from 1976 through 2008. The model developed to project average use by large power customers includes Alachua County nonagricultural employment and large power price of electricity as independent variables. Energy use per customer has been observed to increase over time, presumably due to the periodic expansion or increased utilization of existing facilities. This growth is measured in the model by local employment levels. The specifications of the large power average use model are as follows:

$$LPAVUSE = 7549 + 31.6 (NONAG) - 13.8 (LPPR08)$$

Where:

LPAVUSE = Average Annual Energy Consumption (MWh per Year)  
NONAG = Alachua County Nonagricultural Employment (000's)  
LPPR08 = Average Price for 1,000 kWh in the Large Power Sector

Adjusted R<sup>2</sup> = 0.8994

DF (error) = 30 (period of study, 1976-2008)

t - statistics:

INTERCEPT = 6.61

NONAG = 5.43

LPPR08 = -2.10

The forecast of energy sales to the large power sector was derived from the product of projected average use per customer and the projected number of large power customers, which are projected to remain constant at eleven.

### 2.2.5 Outdoor Lighting Sector

The outdoor lighting sector consists of streetlight, traffic light, and rental light accounts. Outdoor lighting energy sales account for approximately 1.3% of total energy sales. Outdoor lighting energy sales were forecast using a model which specified lighting energy as a function of the natural log of the number of residential customers. The specifications of this model are as follows:

$LGMWH = -287291 + 27878 (LNRESCUS)$

Where:

LGMWH = Outdoor Lighting Energy Sales

LNRESCUS = Number of Residential Customers (natural log)

Adjusted R<sup>2</sup> = 0.9918

DF (error) = 13 (period of study, 1994-2008)

t - statistics:

Intercept = -38.25

RESCUS = 41.28

### 2.2.6 Wholesale Energy Sales

As previously described, the System provides control area services to two wholesale customers: Clay Electric Cooperative (Clay) at the Farnsworth Substation; and the City of Alachua (Alachua) at the Alachua No. 1 Substation, and at the Hague Point of Service. Approximately 6% of Alachua's 2008 energy requirements were met through generation entitlements of nuclear generating units operated by PEF and FPL. These wholesale delivery points serve an urban area that is either included in, or adjacent to the Gainesville urban area. These loads are considered part of the System's native load for facilities planning through the forecast horizon. GRU provides other utilities services in the same geographic areas served by Clay and Alachua, and continued electrical service will avoid duplicating facilities. Furthermore, the populations served by Clay and Alachua benefit from services provided by the City of Gainesville, which are in part supported by transfers from the System.

Clay-Farnsworth net energy requirements were modeled with an equation in which Alachua County population was the independent variable. Output from this model was adjusted to account for the history of load that has been transferred between GRU and Clay-Farnsworth, yielding energy sales to Clay. Historical boundary adjustments between Clay and GRU have reduced the duplication of facilities in both companies' service areas. The form of the Clay-Farnsworth net energy requirements equation is as follows:

$$CLYNEL = -53730 + 578.3 (POP)$$

Where:

CLYNEL = Farnsworth Substation Net Energy (MWh)

POP = Alachua County Population (000's)

Adjusted R<sup>2</sup> = 0.9420

DF (error) = 17 (period of study, 1990-2008)

t - statistics:

Intercept = -7.38

POP = 17.13

Net energy requirements for Alachua were estimated using a model in which City of Alachua population was the independent variable. BEBR provided historical estimates of City of Alachua Population. This variable was projected from a trend analysis of the component populations within Alachua County. The model used to develop projections of sales to the City of Alachua is of the following form:

$ALANEL = -61514 + 22693 (ALAPOP)$

Where:

ALANEL = City of Alachua Net Energy (MWh)

ALAPOP = City of Alachua Population (000's)

Adjusted R<sup>2</sup> = 0.9846

DF (error) = 25 (period of study, 1982-2008)

t - statistics:

Intercept = -19.33

ALAPOP = 40.77

To obtain a final forecast of the System's sales to Alachua, projected net energy requirements were reduced by 8,077 MWh reflecting the City of Alachua's nuclear generation entitlements.

## **2.2.7 Total System Sales, Net Energy for Load, Seasonal Peak Demands and Conservation Impacts**

The forecast of total system energy sales was derived by summing energy sales projections for each customer class; residential, general service non-demand, general service demand, large power, outdoor lighting, sales to Clay, and sales to Alachua. Net energy for load was then forecast by applying a delivered efficiency factor for the System to total energy sales. The projected delivered efficiency factor used in this forecast is 0.96. Historical delivered efficiencies were examined from the past 25 years to make this determination. The impact of energy savings from conservation programs was accounted for in energy sales to each customer class, prior to calculating net energy for load.

The forecasts of seasonal peak demands were derived from forecasts of annual net energy for load. Winter peak demands are projected to occur in January of each year, and summer peak demands are projected to occur in August of each year, although historical data suggests the summer peak is nearly as likely to occur in July. The average ratio of the most recent 25 years' monthly net energy for load for January and August, as a portion of annual net energy for load, was applied to projected annual net energy for load to obtain estimates of January and August net energy for load over the forecast horizon. The medians of the past 25 years' load factors for January and August were applied to January and August net energy for load projections, yielding seasonal peak demand projections. Forecast seasonal peak demands include the net impacts from planned conservation programs.

## **2.3 ENERGY SOURCES AND FUEL REQUIREMENTS**

### **2.3.1 Fuels Used by System**

Presently, the system is capable of using coal, residual oil, distillate oil, natural gas, and a small percentage of nuclear fuel to satisfy its fuel requirements. Since the completion of the Deerhaven 2 coal-fired unit, the System has relied upon

coal to fulfill much of its fuel requirements. To the extent that the System participates in interchange sales and purchases, actual consumption of these fuels will likely differ from the base case requirements indicated in Schedule 5. These projections are based on a fuel price forecast prepared in 2008.

### **2.3.2 Methodology for Projecting Fuel Use**

The fuel use projections were produced using the Electric Generation Expansion Analysis System (EGEAS) developed under Electric Power Research Institute guidance. Ng Engineering provides support, maintenance, and training for the EGEAS software. This is the same software the System uses to perform long-range integrated resource planning. EGEAS has the ability to model each of the System's generating units as well as optimize the selection of new capacity and technologies (see Section 3), and include the effects of environmental limits, dual fuel units, reliability constraints, and maintenance schedules. The production modeling process uses a load-duration curve convolution and conjoint probability model to simulate optimal hourly dispatch of the System's generating resources.

The input data to this model includes:

- (1) Long-term forecast of System electric energy and power demand needs;
- (2) Projected fuel prices, outage parameters, nuclear refueling cycle, and maintenance schedules for each generating unit in the System;
- (3) Similar data for the new plants that will or could be added to the system to maintain system reliability.

The output of this model includes:

- (1) Monthly and yearly operating fuel expenses by fuel type and unit; and
- (2) Monthly and yearly capacity factors, energy production, hours of operation, fuel utilization, and heat rates for each unit in the system.

### **2.3.3 Purchased Power Agreements**

**2.3.3.1 G2 Energy Baseline Landfill Gas.** GRU has entered into a 15-year contract to receive 3 MW of landfill gas fueled capacity at the Marion County Baseline Landfill, from G2 Energy Marion, LLC. The generation facility began commercial operation on January 1, 2009. G2 expects to complete a capacity expansion of 0.8 MW by December 2009, bringing net output to 3.8 MW.

**2.3.3.2 Progress Energy 50 MW.** GRU negotiated a contract with Progress Energy Florida (PEF) for 50 MW of base load capacity. This contract began January 1, 2009 and continues through December 31, 2013. Extensions of this contract are subject to negotiation. An additional 25 MW baseload capacity was contracted from January 1, 2009 through December 31, 2010, and another additional 25 MW of baseload capacity was contracted for March through August of 2009 and 2010.

**2.3.3.3 Biomass RFP for PPA.** GRU is negotiating a 25-year purchase power agreement with American Renewables for 100 MW of biomass capacity to be online before January 1, 2014. GRU anticipates reselling approximately 50 MW of capacity from this unit for up to 10 years.

**2.3.3.4 Inglis Hydro.** GRU is negotiating with Inglis Hydroelectric, LLC for about 2 MW of hydro power located in Levy County near the Inglis locks of the Cross Florida Barge Canal. The anticipated in-service date is mid 2013.

**2.3.3.5 Solar Feed-In Tariff.** In March of 2009 GRU became the first utility in the United States to offer a European-style solar feed-in tariff (FIT). Under this program, GRU agrees to purchase 100% of the solar power produced from any private generator at a fixed rate for a contract term of 20 years. The FIT rate has built-in subsidy to incentivize the installation of solar in the community, and help create a strong solar marketplace. GRU's FIT costs are recovered through fuel adjustment charges, and have been limited to the equivalent of a 1.5% base rate increase. This limit translates to an annual capacity stop-loss to purchase 4 MW.

GRU has received applications to fully build out this capacity in the first two years of the program, and applications are continuing to be acquired.

## **2.4 DEMAND-SIDE MANAGEMENT**

### **2.4.1 Demand-Side Management Program History and Current Status**

Demand and energy forecasts and generation expansion plans outlined in this Ten Year Site Plan include impacts from GRU's Demand-Side Management (DSM) programs. The System forecast reflects the incremental impacts of DSM measures, net of cumulative impacts from 1980 through 2008. DSM programs are available for all retail customers, including commercial and industrial customers, and are designed to effectively reduce and control the growth rates of electric consumption and weather sensitive peak demands.

DSM direct services currently available to the System's residential customers, or expected to be implemented during 2009, include energy audits and low income household whole house energy efficiency improvements. GRU also offers rebates and other financial incentives for the promotion of:

- high efficiency central air conditioning
- high efficiency room air conditioning
- central air conditioner maintenance
- reflective roof coating for mobile homes
- solar water heating
- solar photovoltaic systems
- natural gas in new construction
- Home Performance with the federal Energy Star program
- Energy Star building practices of the EPA
- Green Building practices
- heating/cooling duct repair

- variable speed pool pumps
- energy efficiency for low-income households
- attic and raised-floor insulation
- removing second refrigerators from homes and recycling the materials
- compact fluorescent light bulbs
- energy efficiency low-interest loans
- natural gas for displacement of electric in water heating, space heating, and space cooling in existing structures.

Energy audits are available to the System's non-residential customers. In addition GRU offers rebates and other considerations for the promotion of:

- solar water heating
- solar photovoltaic
- natural gas for water heating and space heating
- vending machine motion sensors
- efficient exit lighting
- customized business rebates for energy efficiency retrofits

The System continues to offer standardized interconnection procedures and compensation for excess energy production for both residential and non-residential customers who install distributed resources and offers rebates to residential customers for the installation of photovoltaic generation. The solar feed-in tariff has replaced photovoltaic rebates as the incentive for non-residential customers to implement distributed solar generation.

Grants and voluntary customer contributions have made several renewable projects possible within GRU's service area. A combination of customer contributions and State and Federal grants allowed GRU to add its 10 kW photovoltaic array at the Electric System Control Center in 1996. GRU secured grant funding through the Department of Community Affairs' PV for Schools

Educational Enhancement Program for PV systems that were installed at two middle schools in 2003. And currently, the GRUGreen<sup>sm</sup> program gives customers the opportunity to invest in renewable energy resources including landfill gas, solar, and wind energy credits through contributions on their monthly bill.

GRU has also produced numerous *factsheets*, publications, and videos which are available at no charge to customers to assist them in making informed decisions affecting their energy utilization patterns. Examples include: Passive Solar Design-Factors for North Central Florida, a booklet which provides detailed solar and environmental data for passive solar designs in this area; Solar Guidebook, a brochure which explains common applications of solar energy in Gainesville; and The Energy Book, a guide to conserving energy at home.

#### **2.4.2 Future Demand-Side Management Programs**

GRU continues to monitor the potential for additional DSM efforts including programs addressing thermal storage, district chilled water cooling, window shading, additional energy efficiency in low-income households and demand response. GRU continues to review the efforts of conservation leaders in the industry, and has conducted fact finding trips to California, Texas, Vermont and New York to maximize these efforts. GRU plans to continue to expand its DSM programs as a way to cost-effectively meet customer needs and hedge against potential future carbon tax and trade programs.

#### **2.4.3 Demand-Side Management Methodology and Results**

The expected effect of DSM program participation was derived from a comparative analysis of historical energy usage of DSM program participants and non-participants. The methodology upon which existing DSM programs is based includes consideration of what would happen under current conditions, the fact that the conservation induced by utility involvement tends to "buy" conservation at the

margin, adjustment for behavioral rebound and price elasticity effects and effects of abnormal weather. Known interactions between measures and programs were accounted for where possible. Projected penetration rates were based on historical levels of program implementations and tied to escalation rates paralleling service area population growth. GRU has contracted with a consultant to perform a measurement and verification analysis of several of the conservation programs implemented over the past two years. Results from this study will aid GRU in both determining which programs are most effective and in quantifying the energy and demand savings achieved by these measures.

The implementation of DSM programs planned for 2009-2018 is expected to provide an additional 49 MW of summer peak reduction and 123 GWh of annual energy savings by the year 2018. A history and projection of total DSM program achievements from 1980-2018 is shown in Table 2.1.

#### **2.4.4 Gainesville Energy Advisory Committee**

The Gainesville Energy Advisory Committee (GEAC) is a nine-member citizen group that is charged with formulating recommendations to the Gainesville City Commission concerning national, state and local energy-related issues. The GEAC offers advice and guidance on energy management studies and consumer awareness programs.

GEAC has contributed to several significant policy changes, including helping to establish a residential energy audit program, creating inverted-block and time-of-use electric rates, and making solar a generation priority for the City of Gainesville. GEAC was instrumental in the development and installation of a 10 kilowatt PV system at the System Control Center. GEAC has strongly supported the EPA's Energy Star program, and has helped GRU earn EPA's 1998 Utility Ally of the Year award. As a long-range load reduction strategy, GEAC contributed to the development of a Green Builder program for existing multi-family dwellings, which

account for approximately 35% of GRU's total residential load. GEAC also supported GRU's IRP efforts through their sponsorship of community workshops and review of the IRP.

### **2.4.5 Supply Side Programs**

Prior to the addition of Deerhaven Unit 2 in 1982, the System was relying on oil and natural gas for over 90% of native load energy requirements. In 2008, oil-fired generation comprised 0.5% of total net generation, natural gas-fired generation contributed 19.7%, nuclear fuel contributed 5.7%, and coal-fired generation provided 74.1% of total net generation. Deerhaven 2 is also contributing to reduced oil use by other utilities by offering coal-generated energy on the Florida energy market. The PV system at the System Control Center provides slightly more than 10 kilowatts of capacity at solar noon on clear days.

The System has several programs to improve the adequacy and reliability of the transmission and distribution systems, which will also result in decreased energy losses. These include the installation of distribution capacitors, purchase of high-efficiency distribution transformers, and the reconductoring of the feeder system.

**2.4.5.1 Transformers.** GRU has been purchasing overhead and underground transformers with a higher efficiency than the NEMA TP-1 Standard for the past 18 years. Higher efficiency means less kW losses or power lost due the design of the transformer. Since 1988, there have been 18,073 high-efficiency transformers installed on GRU's distribution system. A study was initiated to compare the kW losses of GRU's transformer design to a design based on NEMA TP-1 Efficiency Standard for Transformers. The results of this investigation showed that relative to the standard design, GRU experienced these savings:

Average Annual Demand Loss Savings	2.8 MW
Average Annual Energy Saved	24,900 MWh

Peak Demand Savings

6.2 MW

**2.4.5.2 Reconductoring.** GRU has been continuously improving the feeder system by reconductoring feeders from 4/0 Copper to 795 MCM aluminum overhead conductor. Also, in specific areas the feeders have been installed underground using 1000 MCM underground cable. Following is a comparison of the resistance for the types of conductors used on GRU's electric distribution system:

795 MCM Aluminum Overhead Conductor	0.13 ohms/mile
1000 MCM Aluminum Underground Cable	0.13 ohms/mile
4/0 Copper Overhead Conductor	0.31 ohms/mile

Calculations with average loading on the conductors show the total savings due to moving from 4/0 copper to an aluminum conductor (795 or 1000 MCM):

Average Annual Demand Savings	2.4 MW
Average Annual Energy Saved	21,000 MWh
Peak Demand Savings	7.9 MW

**2.4.5.3 Capacitors.** GRU strives to maintain an average power factor of 0.98 by adding capacitors where necessary on each distribution feeder. Without these capacitors the average uncorrected power factor would be 0.92.

The percentage of loss reduction can be calculated as shown:

$$\% \text{ Loss Reduction} = [1 - (\text{Uncorrected pf} / \text{Corrected pf})^2] \times 100$$

$$\% \text{ Loss Reduction} = [1 - (0.92 / 0.98)^2] \times 100$$

$$\% \text{ Loss Reduction} = 11.9$$

In general, overall system losses have stabilized near 4% of net generation as reflected in the forecasted relationship of total energy sales to net energy for load.

## **2.5 FUEL PRICE FORECAST ASSUMPTIONS**

GRU consults a variety of reputable sources to compile projections of fuel prices for fuels currently used and those that are evaluated for potential future use. Oil prices are obtained from the Annual Energy Outlook 2009 (AEO2009), published in March 2009 by the U.S. Department of Energy's Energy Information Administration (EIA). Natural gas price projections are derived from several forecasts published by the PIRA Energy Group. Coal prices are projected in the near term based on knowledge of contractual agreements with suppliers. These prices are projected to the out years by applying growth rates for U.S. coal prices provided in AEO2009. Projected prices for nuclear fuel were provided by PEF. Any price forecasts that are provided in constant-year (real) dollars are translated to nominal dollars using the projected Gross Domestic Product – Implicit Price Deflator from AEO2009. Fuel prices are analyzed in two parts: the cost of the fuel (commodity), and the cost of transporting the fuel to GRU's generating stations. The external forecasts typically address the commodity prices, and GRU's specific transportation costs are included to derive delivered prices. A summary of historical and projected fuel prices is provided in Table 2.2.

### **2.5.1 Oil**

GRU relies on No. 6 Oil (residual) and No. 2 Oil (distillate or diesel) as back-up fuels for natural gas fired generation. These fuels are delivered to GRU generating stations by truck. Forecast prices for these two types of oil are derived directly from AEO2009.

During calendar year 2008, distillate fuel oil was used to produce 0.07% of GRU's total net generation. Distillate fuel oil is expected to be the most expensive fuel available to GRU. During calendar year 2008, residual fuel oil was used to

produce 0.44% of GRU's total net generation. The quantity of fuel oils used by GRU is expected to remain low.

### **2.5.2 Coal**

Coal is the primary fuel used by GRU to generate electricity, comprising 74.1% of total net generation during calendar year 2008. GRU purchases low-sulfur (0.7%), high Btu eastern coal for use in Deerhaven Unit 2. In 2009, Deerhaven Unit 2 will begin operating following the retrofit of an air quality control system, which is being added as a means of complying with new environmental regulations. Deerhaven Unit 2 will be able to utilize coals with up to approximately 1.7% sulfur content following the retrofit, therefore GRU also projects prices for both low and medium sulfur coals for evaluation in Deerhaven Unit 2 following the air quality control retrofit.

Projected prices for coal used by Deerhaven Unit 2 through 2011 were based on GRU's contractual options with its coal suppliers. Projected prices beyond 2011 were escalated using growth rates for U.S. coal prices from AEO2009. GRU has a contract with CSXT for delivery of coal to the Deerhaven plant site through 2019.

### **2.5.3 Natural Gas**

GRU procures natural gas for power generation and for distribution by a Local Distribution Company (LDC). In 2008, GRU purchased approximately 6.1 million MMBtu for use by both systems. GRU power plants used 65% of the total purchased for GRU during 2008, while the LDC used the remaining 35%.

GRU purchases natural gas via arrangements with producers and marketers connected with the Florida Gas Transmission (FGT) interstate pipeline. GRU's delivered cost of natural gas includes the commodity component, Florida Gas

Transmission's (FGT) fuel charge, FGT's usage (transportation) charge, FGT's reservation (capacity) charge, and basis adjustments.

Prices for 2009 and 2010 were projected in-house using anticipated impacts from risk management activities, commodity costs, and other pricing impacts including transportation costs. Delivered prices from 2011 through 2018 represent the sum of GRU's anticipated transportation costs and commodity prices from PIRA Energy Group's October 2008 long-term Henry Hub forecast.

#### **2.5.4 Nuclear Fuel**

GRU's nuclear fuel price forecast includes a component for fuel and a component for fuel disposal. The projection for the price of the fuel component is based on Progress Energy Florida's (PEF) forecast of nuclear fuel prices. The projection for the cost of fuel disposal is based on a trend analysis of actual costs to GRU.

**Schedule 2.1**  
**History and Forecast of Energy Consumption and**  
**Number of Customers by Customer Class**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Year	Service Area Population	Persons per Household	RESIDENTIAL			COMMERCIAL *		
			GWh	Average Number of Customers	Average kWh per Customer	GWh	Average Number of Customers	Average kWh per Customer
1999	161,203	2.35	763	68,543	11,137	648	8,095	80,036
2000	164,932	2.34	788	70,335	11,202	674	8,368	80,490
2001	169,269	2.34	803	72,391	11,092	697	8,603	80,986
2002	172,149	2.33	851	73,827	11,527	721	8,778	82,112
2003	173,148	2.33	854	74,456	11,467	726	8,959	81,090
2004	178,642	2.32	878	77,021	11,398	739	9,225	80,143
2005	180,830	2.31	888	78,164	11,358	752	9,378	80,199
2006	183,248	2.31	877	79,407	11,047	746	9,565	78,042
2007	186,764	2.30	878	81,128	10,817	778	9,793	79,398
2008	188,945	2.30	820	82,271	9,969	773	10,508	73,538
2009	190,515	2.29	824	83,147	9,908	756	10,579	71,480
2010	192,016	2.29	823	83,993	9,795	754	10,699	70,485
2011	194,169	2.28	827	85,124	9,719	761	10,885	69,945
2012	196,511	2.28	834	86,338	9,654	771	11,091	69,544
2013	198,769	2.27	840	87,516	9,599	782	11,290	69,280
2014	200,905	2.27	847	88,641	9,552	793	11,478	69,130
2015	202,924	2.26	853	89,715	9,512	805	11,655	69,103
2016	204,800	2.26	859	90,726	9,471	816	11,819	69,066
2017	206,577	2.25	865	91,693	9,434	827	11,974	69,070
2018	208,277	2.25	871	92,626	9,401	838	12,121	69,163

\* Commercial includes General Service Non-Demand and General Service Demand Rate Classes

**Schedule 2.2**  
**History and Forecast of Energy Consumption and**  
**Number of Customers by Customer Class**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Year	<u>GWh</u>	<u>Average Number of Customers</u>	<u>Average MWh per Customer</u>	<u>Railroads and Railways GWh</u>	<u>Street and Highway Lighting GWh</u>	<u>Other Sales to Public Authorities GWh</u>	<u>Total Sales to Ultimate Consumers GWh</u>
	<b>INDUSTRIAL **</b>						
1999	173	17	10,188	0	22	0	1,606
2000	172	17	10,114	0	22	0	1,656
2001	173	17	10,162	0	23	0	1,696
2002	178	18	10,178	0	24	0	1,774
2003	181	19	9,591	0	24	0	1,786
2004	188	18	10,444	0	25	0	1,830
2005	189	18	10,477	0	25	0	1,854
2006	200	20	10,093	0	25	0	1,849
2007	196	18	10,891	0	26	0	1,877
2008	184	16	11,497	0	26	0	1,803
2009	159	11	14,431	0	27	0	1,766
2010	157	11	14,277	0	27	0	1,761
2011	157	11	14,312	0	28	0	1,773
2012	158	11	14,405	0	28	0	1,791
2013	160	11	14,538	0	28	0	1,810
2014	161	11	14,649	0	29	0	1,830
2015	162	11	14,761	0	29	0	1,849
2016	163	11	14,854	0	29	0	1,867
2017	164	11	14,934	0	30	0	1,886
2018	165	11	15,022	0	30	0	1,904

\*\* Industrial includes Large Power Rate Class

**Schedule 2.3  
History and Forecast of Energy Consumption and  
Number of Customers by Customer Class**

(1)	(2)	(3)	(4)	(5)	(6)
<u>Year</u>	<u>Sales For Resale GWh</u>	<u>Utility Use and Losses GWh</u>	<u>Net Energy for Load GWh</u>	<u>Other Customers</u>	<u>Total Number of Customers</u>
1999	109	83	1,798	0	76,655
2000	120	93	1,868	0	78,720
2001	125	62	1,882	0	81,011
2002	142	92	2,008	0	82,623
2003	146	83	2,015	0	83,434
2004	149	70	2,049	0	86,264
2005	163	66	2,082	0	87,560
2006	174	75	2,099	0	88,992
2007	188	57	2,122	0	90,939
2008	196	79	2,079	0	92,795
2009	198	81	2,045	0	93,737
2010	201	82	2,044	0	94,703
2011	205	83	2,061	0	96,020
2012	210	84	2,085	0	97,440
2013	215	85	2,110	0	98,817
2014	219	86	2,135	0	100,130
2015	224	87	2,160	0	101,381
2016	227	89	2,183	0	102,556
2017	231	88	2,205	0	103,678
2018	235	89	2,228	0	104,759

**Schedule 3.1**  
**History and Forecast of Summer Peak Demand - MW**  
**Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Year</u>	<u>Total</u>	<u>Wholesale</u>	<u>Retail</u>	<u>Interruptible</u>	Residential Load <u>Management</u>	Residential <u>Conservation</u>	Comm./Ind. Load <u>Management</u>	Comm./Ind. <u>Conservation</u>	<u>Net Firm Demand</u>
1999	439	26	393	0	0	12	0	8	419
2000	446	28	397	0	0	13	0	8	425
2001	430	28	381	0	0	13	0	8	409
2002	454	32	401	0	0	13	0	8	433
2003	439	33	384	0	0	14	0	8	417
2004	455	33	399	0	0	14	0	9	432
2005	489	37	428	0	0	15	0	9	465
2006	488	39	425	0	0	15	0	9	464
2007	507	44	437	0	0	16	0	10	481
2008	487	43	414	0	0	18	0	12	457
2009	475	45	396	0	0	20	0	14	441
2010	478	46	393	0	0	23	0	16	439
2011	485	47	394	0	0	26	0	18	441
2012	492	48	395	0	0	28	0	21	443
2013	500	49	396	0	0	31	0	24	445
2014	508	50	398	0	0	34	0	26	448
2015	516	51	399	0	0	37	0	29	450
2016	523	52	401	0	0	39	0	31	453
2017	532	53	404	0	0	42	0	33	457
2018	539	54	406	0	0	44	0	35	460

**Schedule 3.2**  
**History and Forecast of Winter Peak Demand - MW**  
**Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Winter</u>	<u>Total</u>	<u>Wholesale</u>	<u>Retail</u>	<u>Interruptible</u>	Residential Load <u>Management</u>	Residential <u>Conservation</u>	Comm./Ind. Load <u>Management</u>	Comm./Ind. <u>Conservation</u>	<u>Net Firm Demand</u>
1999 / 2000	380	27	310	0	0	36	0	7	337
2000 / 2001	408	33	331	0	0	37	0	7	364
2001 / 2002	416	33	336	0	0	39	0	8	369
2002 / 2003	442	37	357	0	0	40	0	8	394
2003 / 2004	398	31	319	0	0	40	0	8	350
2004 / 2005	426	36	341	0	0	41	0	8	377
2005 / 2006	436	40	346	0	0	42	0	8	386
2006 / 2007	412	38	324	0	0	42	0	8	362
2007 / 2008	411	40	321	0	0	42	0	8	361
2008 / 2009	471	45	376	0	0	42	0	8	421
2009 / 2010	409	45	314	0	0	42	0	8	359
2010 / 2011	412	46	316	0	0	42	0	8	362
2011 / 2012	416	47	319	0	0	42	0	8	366
2012 / 2013	421	48	323	0	0	42	0	8	371
2013 / 2014	425	49	326	0	0	42	0	8	375
2014 / 2015	430	50	330	0	0	42	0	8	380
2015 / 2016	434	51	333	0	0	42	0	8	384
2016 / 2017	437	52	335	0	0	42	0	8	387
2017 / 2018	441	53	338	0	0	42	0	8	391
2018 / 2019	445	54	341	0	0	42	0	8	395

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**Schedule 3.3  
History and Forecast of Net Energy for Load - GWH  
Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Year</u>	<u>Total</u>	<u>Residential Conservation</u>	<u>Comm./Ind. Conservation</u>	<u>Retail</u>	<u>Wholesale</u>	<u>Utility Use &amp; Losses</u>	<u>Net Energy for Load</u>	<u>Load Factor %</u>
1999	1,887	67	22	1,606	109	83	1,798	49%
2000	1,961	70	23	1,655	120	93	1,868	50%
2001	1,979	74	23	1,695	125	62	1,882	53%
2002	2,110	78	24	1,774	142	92	2,008	53%
2003	2,121	82	24	1,786	146	83	2,015	55%
2004	2,158	84	25	1,830	149	70	2,049	54%
2005	2,196	88	26	1,854	163	65	2,082	51%
2006	2,215	90	26	1,849	174	76	2,099	52%
2007	2,253	98	33	1,877	186	59	2,122	50%
2008	2,230	108	43	1,804	196	79	2,079	52%
2009	2,209	115	49	1,765	198	82	2,045	53%
2010	2,219	121	54	1,761	201	82	2,044	53%
2011	2,249	128	60	1,774	205	82	2,061	53%
2012	2,285	134	66	1,791	210	84	2,085	54%
2013	2,323	141	72	1,810	215	85	2,110	54%
2014	2,360	147	78	1,830	219	86	2,135	54%
2015	2,398	154	84	1,850	224	86	2,160	55%
2016	2,433	160	90	1,869	227	87	2,183	55%
2017	2,467	166	96	1,886	231	88	2,205	55%
2018	2,503	173	102	1,904	235	89	2,228	55%

**Schedule 4**

**Previous Year and 2-Year Forecast of Peak Demand and Net Energy for Load**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	ACTUAL		FORECAST			
	2008		2009		2010	
	Peak		Peak		Peak	
<u>Month</u>	<u>Demand</u>	<u>NEL</u>	<u>Demand</u>	<u>NEL</u>	<u>Demand</u>	<u>NEL</u>
	<u>(MW)</u>	<u>(GWh)</u>	<u>(MW)</u>	<u>(GWh)</u>	<u>(MW)</u>	<u>(GWh)</u>
JAN	361	162	420	161	359	158
FEB	319	142	421	137	331	137
MAR	273	147	293	144	293	144
APR	324	156	326	147	326	147
MAY	406	187	390	177	389	177
JUN	449	200	424	194	424	193
JUL	431	209	437	210	437	210
AUG	457	209	441	214	439	214
SEP	432	200	419	196	419	196
OCT	345	166	360	167	360	167
NOV	337	150	314	145	314	145
DEC	340	151	337	156	336	156

**Schedule 5  
FUEL REQUIREMENTS  
As of January 1, 2009**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
FUEL REQUIREMENTS			UNITS	ACTUAL 2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
(1)	NUCLEAR		TRILLION BTU	1.011	1.059	1.094	0.968	1.270	1.149	1.270	1.149	1.270	1.149	1.270
(2)	COAL		1000 TON	550.410	456.424	462.534	518.122	504.654	448.138	526.404	548.563	549.501	562.157	554.082
<b>RESIDUAL</b>														
(3)		STEAM	1000 BBL	14.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(4)		CC	1000 BBL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(5)		CT	1000 BBL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(6)		TOTAL:	1000 BBL	14.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>DISTILLATE</b>														
(7)		STEAM	1000 BBL	0.074	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(8)		CC	1000 BBL	1.062	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(9)		CT	1000 BBL	1.871	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(10)		TOTAL:	1000 BBL	3.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>NATURAL GAS</b>														
(11)		STEAM	1000 MCF	2,239.919	131.459	80.086	186.163	215.865	34.472	109.691	78.927	73.054	69.455	83.687
(12)		CC	1000 MCF	1,310.994	2,283.106	1,355.691	2,184.140	2,051.867	973.657	2,117.528	2,016.030	2,136.495	2,102.704	2,280.569
(13)		CT	1000 MCF	303.268	796.529	520.008	959.886	882.923	313.255	849.063	779.940	671.840	754.448	733.355
(14)		TOTAL:	1000 MCF	3,854.181	3,211.094	1,955.785	3,330.189	3,150.655	1,321.384	3,076.282	2,874.897	2,881.389	2,926.607	3,097.611
(15)	Landfill Gas		1000 MCF	0.264	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**Schedule 6.1**  
**ENERGY SOURCES (GWH)**  
As of January 1, 2009

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	ENERGY SOURCES		UNITS	ACTUAL 2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
(1)	ANNUAL FIRM INTERCHANGE (INTER-REGION)		GWh	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(2)	NUCLEAR		GWh	98.554	100.832	104.188	92.220	120.972	109.439	120.972	109.439	120.972	109.439	120.972
(3)	COAL		GWh	1,277.016	1,054.260	1,048.342	1,192.942	1,197.177	1,049.275	1,264.761	1,321.026	1,323.310	1,353.841	1,335.281
	RESIDUAL													
(4)	STEAM		GWh	7.567	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(5)	CC		GWh	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(6)	CT		GWh	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(7)	TOTAL:		GWh	7.567	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	DISTILLATE													
(8)	STEAM		GWh	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(9)	CC		GWh	0.537	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(10)	CT		GWh	0.626	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(11)	TOTAL:		GWh	1.163	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	NATURAL GAS													
(12)	STEAM		GWh	173.161	11.006	6.672	15.530	17.991	2.898	9.082	6.393	5.932	5.642	6.799
(13)	CC		GWh	145.343	229.804	133.580	228.573	216.442	89.126	213.289	197.424	209.286	206.695	231.480
(14)	CT		GWh	20.936	63.873	46.943	74.378	73.365	32.367	67.699	62.876	57.649	60.324	61.017
(15)	TOTAL:		GWh	339.440	304.683	187.195	318.481	307.798	124.391	290.070	266.693	272.867	272.661	299.296
(16)	NUG		GWh	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(17)	BIOFUELS		GWh	0.000	0.000	0.000	0.000	0.000	394.312	393.192	394.512	394.826	395.522	396.060
(18)	BIOMASS	ppa	GWh	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(19)	GEOTHERMAL		GWh	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(20)	HYDRO	ppa	GWh	0.000	0.000	0.000	0.000	0.000	11.050	11.050	11.050	11.050	11.050	11.050
(21)	LANDFILL GAS	ppa	GWh	0.000	23.146	29.319	29.319	29.319	29.319	29.319	29.319	29.319	29.319	29.319
(22)	MSW		GWh	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(23)	SOLAR	FIT-PV	GWh	0.000	5.490	10.980	16.470	19.215	21.960	24.705	27.450	30.195	32.940	35.685
(24)	WIND		GWh	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(25)	OTHER RENEWABLE	LFG-SWLF	GWh	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(26)	Total Renewable		GWh	0.003	28.636	40.299	45.789	48.534	456.641	458.266	462.331	465.390	468.831	472.114
(27)	Purchased Energy		GWh	428.109	556.880	663.601	411.942	410.321	369.973	0.594	0.620	0.585	0.627	0.654
(28)	Energy Sales		GWh	72.903	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(29)	NET ENERGY FOR LOAD		GWh	2,078.949	2,045.291	2,043.625	2,061.374	2,084.802	2,109.719	2,134.663	2,160.109	2,183.124	2,205.399	2,228.317

**Schedule 6.2**  
**ENERGY SOURCES (%)**  
As of January 1, 2009

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
ENERGY SOURCES			UNITS	ACTUAL 2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
(1)	ANNUAL FIRM INTERCHANGE (INTER-REGION)		GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(2)	NUCLEAR		GWh	4.74%	4.93%	5.10%	4.47%	5.80%	5.19%	5.67%	5.07%	5.54%	4.96%	5.43%
(3)	COAL		GWh	61.43%	51.55%	51.30%	57.87%	57.42%	49.74%	59.25%	61.16%	60.62%	61.39%	59.92%
<b>RESIDUAL</b>														
(4)		STEAM	GWh	0.36%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(5)		CC	GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(6)		CT	GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(7)		TOTAL:	GWh	0.36%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>DISTILLATE</b>														
(8)		STEAM	GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(9)		CC	GWh	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(10)		CT	GWh	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(11)		TOTAL:	GWh	0.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>NATURAL GAS</b>														
(12)		STEAM	GWh	8.33%	0.54%	0.33%	0.75%	0.86%	0.14%	0.43%	0.30%	0.27%	0.26%	0.31%
(13)		CC	GWh	6.99%	11.24%	6.54%	11.09%	10.38%	4.22%	9.99%	9.14%	9.59%	9.37%	10.39%
(14)		CT	GWh	1.01%	3.12%	2.30%	3.61%	3.52%	1.53%	3.17%	2.91%	2.64%	2.74%	2.74%
(15)		TOTAL:	GWh	16.33%	14.90%	9.16%	15.45%	14.76%	5.90%	13.59%	12.35%	12.50%	12.36%	13.43%
(16)	NUG		GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(17)	BIOFUELS		GWh	0.00%	0.00%	0.00%	0.00%	0.00%	18.69%	18.42%	18.26%	18.09%	17.93%	17.77%
(18)	BIOMASS	ppa	GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(19)	GEO THERMAL		GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(20)	HYDRO	ppa	GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.52%	0.52%	0.51%	0.51%	0.50%	0.50%
(21)	LANDFILL GAS	ppa	GWh	0.00%	1.13%	1.43%	1.42%	1.41%	1.39%	1.37%	1.36%	1.34%	1.33%	1.32%
(22)	MSW		GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(23)	SOLAR	fit	GWh	0.00%	0.27%	0.54%	0.80%	0.92%	1.04%	1.16%	1.27%	1.38%	1.49%	1.60%
(24)	WIND		GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(25)	OTHER RENEWABLE		GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(26)	Total Renewable		GWh	0.000144%	1.40%	1.97%	2.22%	2.33%	21.64%	21.47%	21.40%	21.32%	21.26%	21.19%
(27)	Purchased Energy		GWh	20.59%	27.23%	32.47%	19.98%	19.68%	17.54%	0.03%	0.03%	0.03%	0.03%	0.03%
(28)	Energy Sales		GWh	3.51%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(29)	NET ENERGY FOR LOAD		GWh	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

**TABLE 2.1****DEMAND-SIDE MANAGEMENT IMPACTS  
Total Program Achievements**


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<u>Year</u>	<u>MWh</u>	<u>Summer kW</u>
1980	254	168
1981	575	370
1982	1,054	674
1983	2,356	1,212
1984	8,024	2,801
1985	16,315	4,619
1986	25,416	7,018
1987	30,279	8,318
1988	34,922	9,539
1989	38,824	10,554
1990	43,661	11,753
1991	48,997	12,936
1992	54,898	14,317
1993	61,356	15,752
1994	66,725	16,871
1995	72,057	18,022
1996	75,894	18,577
1997	79,998	19,066
1998	84,017	19,541
1999	88,631	20,055
2000	93,132	20,654
2001	97,428	21,185
2002	102,159	21,720
2003	106,277	22,222
2004	109,441	22,676
2005	113,182	23,405
2006	116,544	24,078
2007	130,872	26,511
2008	151,347	30,139
2009	163,647	34,339
2010	175,947	38,939
2011	188,247	43,939
2012	200,547	49,339
2013	212,847	54,939
2014	225,147	60,639
2015	237,447	66,439
2016	249,792	70,739
2017	262,137	75,039
2018	274,483	79,339

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**TABLE 2.2**  
**DELIVERED FUEL PRICES**  
**\$/MMBtu**

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<u>Year</u>	<u>Residual Fuel Oil</u>	<u>Distillate Fuel Oil</u>	<u>Natural Gas</u>	<u>Compliance Coal (1)</u>	<u>Performance Coal (2)</u>	<u>Nuclear</u>
1999	2.79	3.47	2.86	1.66		0.44
2000	4.52	5.99	4.53	1.62		0.38
2001	4.15	6.53	4.94	1.88		0.38
2002	4.58	5.69	3.95	2.06		0.38
2003	4.87	6.59	5.97	2.04		0.43
2004	5.17	5.17	6.40	2.03		0.41
2005	7.15	18.67	9.15	2.38		0.45
2006	8.07	15.24	8.68	3.00		0.45
2007	7.68	16.35	8.52	2.94		0.40
2008	7.60	13.74	10.57	3.87		0.42
2009	8.35	15.24	6.57	3.86		0.48
2010	12.97	14.91	6.76		3.31	0.65
2011	14.68	16.68	8.49		3.43	0.66
2012	16.53	18.46	8.84		3.53	0.83
2013	17.65	19.44	9.04		3.61	0.85
2014	19.80	21.74	9.43		3.73	0.92
2015	20.90	22.97	9.95		3.83	0.93
2016	21.60	23.83	10.46		3.88	0.96
2017	22.02	24.44	11.08		3.94	0.96
2018	22.87	25.39	11.90		4.04	0.95

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- (1) Compliance coal has an average heat content 12,800 Btu/lb and a sulfur content of approximately 0.7%.  
(2) Performance coal has an average heat content 12,500 Btu/lb and a sulfur content of approximately 1.25%.

### **3. FORECAST OF FACILITIES REQUIREMENTS**

#### **3.1 GENERATION RETIREMENTS**

The System plans to retire one generating unit within the next 10 years. The John R. Kelly steam unit #7 (JRK #7) (23 MW) is presently scheduled to be retired in October 2013.

#### **3.2 RESERVE MARGIN AND SCHEDULED MAINTENANCE**

GRU uses a planning criterion of 15% capacity reserve margin (suggested for emergency power pricing purposes by Florida Public Service Commission Rule 25-6.035). Available generating capacities are compared with System summer peak demands in Schedule 7.1 (and Figure 3.1) and System winter peak demands in Schedule 7.2 (and Figure 3.2). Higher peak demands in summer and lower unit operating capacities in summer result in lower reserve margins during the summer season than in winter. In consideration of existing resources, expected future purchases, and savings impacts from conservation programs, GRU expects to maintain a summer reserve margin well in excess of 15% over the next 10 years.

#### **3.3 GENERATION ADDITIONS**

Due to new EPA regulations promulgated in March 2005, the retrofit of our Deerhaven #2 Air Quality Control System (AQCS) is proceeding as one means of complying with the new regulations. The upgraded AQCS will consist of a selective catalytic reduction (SCR) system and a dry flue gas desulfurization system (FGD) which will include a baghouse (BH). It is expected that the SCR and the FGD/BH will be operational following the 2009 spring maintenance outage.

The GRU South Energy Center located at the new Shands Healthcare Cancer Hospital (4.1 MW combustion turbine) was recently completed and will begin

commercial operation in early summer 2009. Characteristics of the combustion turbine are summarized in Schedule 8 at the end of this section.

As part owner in the Crystal River 3 nuclear unit, GRU will benefit from three uprates of the unit's capacity approved by the Nuclear Regulatory Commission (NRC). GRU's share (1.4079%) of the uprates (first 11 MW in 2008, second 28 MW in 2009, and 140 MW in 2011) will net the System 2.5 MW of additional base load capacity.

Eleven responses to GRU's "Request for Proposals" (RFP) for a biomass fueled facility in the 30-100 MW range were received on December 15, 2007. Addendum Two has been issued to solicit binding proposals from the top three proposals from the initial RFP. The responses to Addendum Two were received April 11, 2008 and included biomass fueled capacity and energy through a purchase power agreement (PPA), with an option to buy the plant at a later date. The proposed biomass facility will be owned and operated by American Renewables. This facility is planned to have a net capacity of 100 MW and will be designed to use clean woody fuels including forest residuals and tree thinnings.

### **3.4 DISTRIBUTION SYSTEM ADDITIONS**

Up to five new, identical, mini-power delivery substations (PDS) were planned for the GRU system back in 1999. Three of the five; Rocky Point, Kanapaha, and Ironwood were installed by 2003. A fourth PDS is planned for spring 2010. The location for this PDS, which will be known as Springhill, will be a parcel owned by GRU west of Interstate 75 and north of 39<sup>th</sup> Avenue along our existing 138 kV transmission line. A fifth PDS is being considered for addition to the System no earlier than 2013. The location of this proposed fifth PDS would be in the northern part of the service territory near U.S. Highway 441. These new mini-power delivery substations have been planned to redistribute the load from the existing substations as new load centers grow and develop within the System.

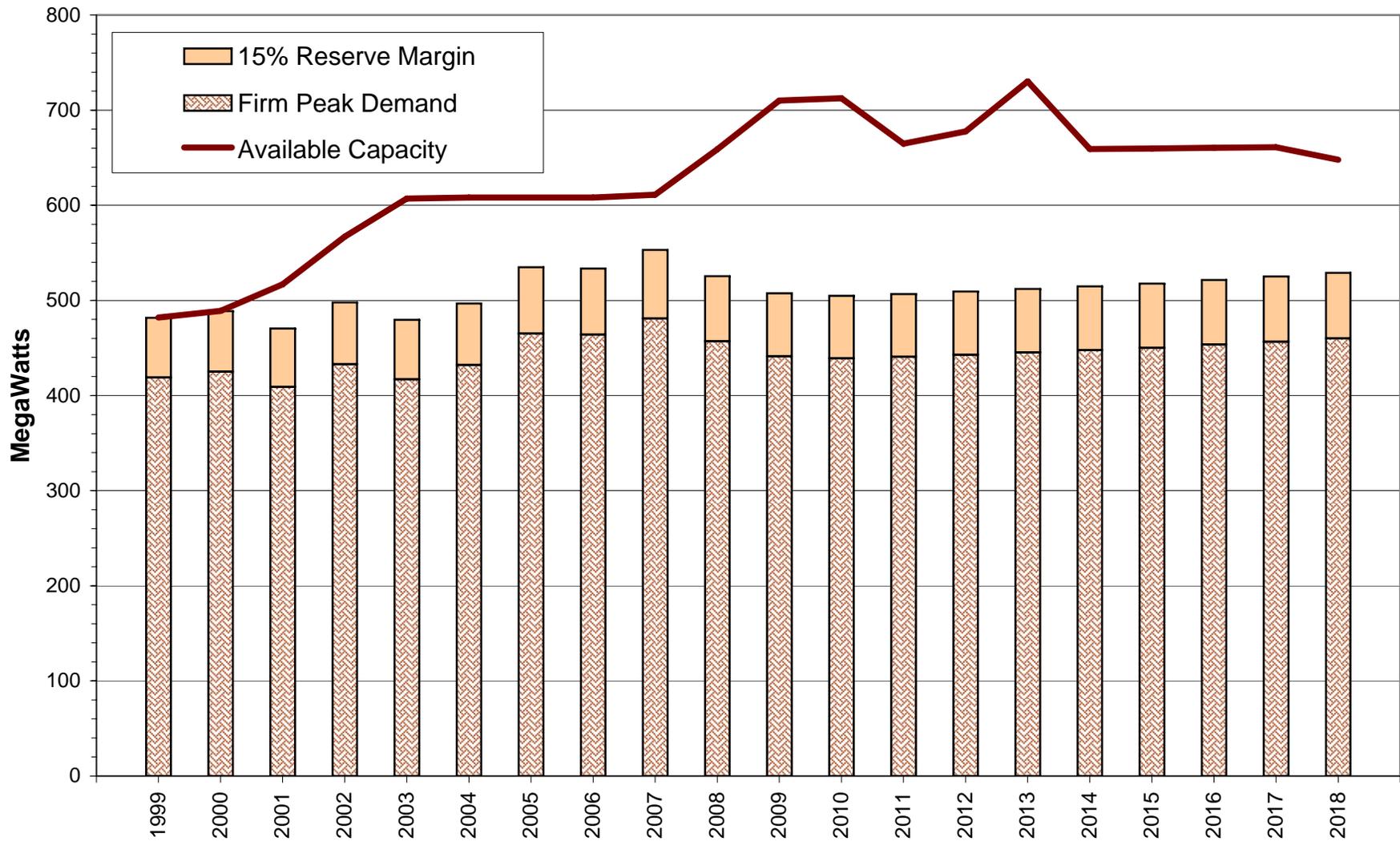
Each PDS will consist of one (or more) 138/12.47 kV, 33.6 MVA, wye-wye substation transformer with a maximum of eight distribution circuits. The proximity of these new PDS's to other, existing adjacent area substations will allow for backup in the event of a substation transformer failure.

**Schedule 7.1  
Forecast of Capacity, Demand, and Scheduled Maintenance at Time of Summer Peak**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Year	Total Installed Capacity (2) MW	Firm Capacity Import MW	Firm Capacity Export MW	QF MW	Total Capacity Available (3) MW	System Firm Summer Peak Demand (1) MW	Reserve Margin before Maintenance		Scheduled Maintenance MW	Reserve Margin after Maintenance (1)	
							MW	% of Peak		MW	% of Peak
1999	547	32	97	0	482	419	63	15.0%	14	49	11.7%
2000	547	0	58	0	489	425	64	15.1%	0	64	15.1%
2001	610	0	93	0	517	409	108	26.4%	0	108	26.4%
2002	610	0	43	0	567	433	134	30.9%	0	134	30.9%
2003	610	0	3	0	607	417	190	45.6%	0	190	45.6%
2004	611	0	3	0	608	432	176	40.7%	0	176	40.7%
2005	611	0	3	0	608	465	143	30.8%	0	143	30.8%
2006	611	0	3	0	608	464	144	31.0%	0	144	31.0%
2007	611	0	0	0	611	481	130	27.0%	0	130	27.0%
2008	610	49	0	0	659	457	202	44.2%	0	202	44.2%
2009	608	105	0	0	710	441	269	60.9%	0	269	60.9%
2010	608	110	0	0	712	439	273	62.3%	0	273	62.3%
2011	608	65	0	0	665	441	224	50.9%	0	224	50.9%
2012	620	67	0	0	678	443	235	53.0%	0	235	53.0%
2013	620	121	0	0	730	445	285	64.0%	0	285	64.0%
2014	597	74	0	0	659	448	211	47.2%	0	211	47.2%
2015	597	76	0	0	660	450	210	46.6%	0	210	46.6%
2016	597	78	0	0	660	453	207	45.6%	0	207	45.6%
2017	597	80	0	0	661	457	204	44.8%	0	204	44.8%
2018	583	82	0	0	648	460	188	40.8%	0	188	40.8%

- (1) System Peak demands shown in this table reflect continued service to partial and full requirements wholesale customers. In the event these contracts are not renewed, reserve margins shown in this table will increase significantly.
- (2) Details of planned changes to installed capacity from 2009-2018 are reflected in Schedule 8.
- (3) The coincidence factor used for Summer photovoltaic capacity is 35%.

**Figure 3.1**  
**Summer Peak Demand and Resources**



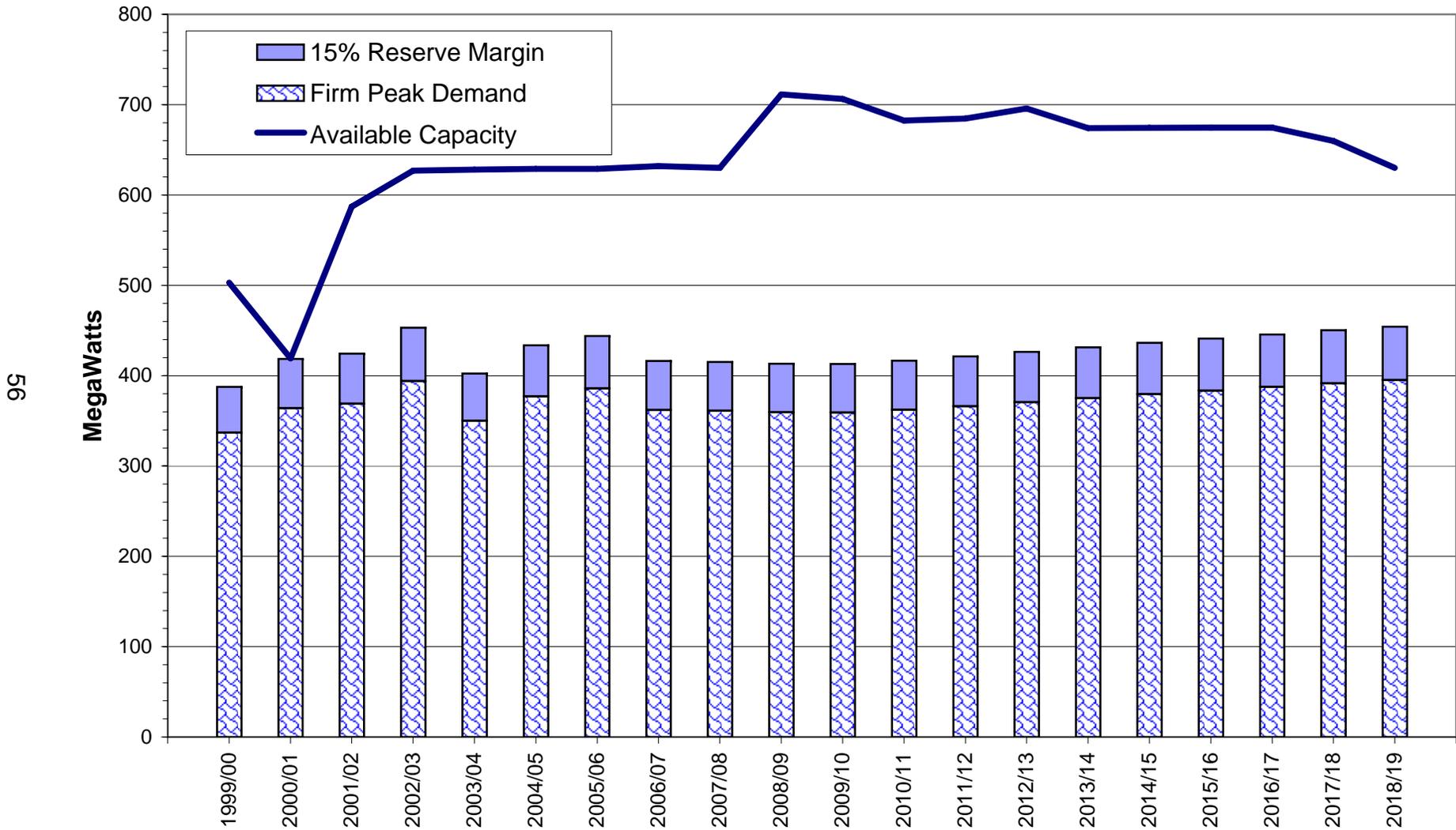
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**Schedule 7.2**  
**Forecast of Capacity, Demand, and Scheduled Maintenance at Time of Winter Peak**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Year	Total Installed Capacity (2) MW	Firm Capacity Import MW	Firm Capacity Export MW	QF MW	Total Capacity Available (3) MW	System Firm Winter Peak Demand (1) MW	Reserve Margin before Maintenance		Scheduled Maintenance MW	Reserve Margin after Maintenance (1)	
							MW	% of Peak		MW	% of Peak
1999/00	561	0	58	0	503	337	166	49.3%	0	166	49.3%
2000/01	512	0	93	0	419	364	55	15.1%	0	55	15.1%
2001/02	630	0	43	0	587	369	218	59.1%	0	218	59.1%
2002/03	630	0	3	0	627	394	233	59.1%	0	233	59.1%
2003/04	631	0	3	0	628	350	278	79.4%	0	278	79.4%
2004/05	632	0	3	0	629	377	252	66.8%	0	252	66.8%
2005/06	632	0	3	0	629	386	243	63.0%	0	243	63.0%
2006/07	632	0	0	0	632	362	270	74.6%	0	270	74.6%
2007/08	630	0	0	0	630	361	269	74.5%	0	269	74.5%
2008/09	635	76	0	0	711	359	352	98.0%	0	352	98.0%
2009/10	629	81	0	0	707	359	347	96.8%	0	347	96.8%
2010/11	629	61	0	0	682	362	320	88.4%	0	320	88.4%
2011/12	631	65	0	0	685	366	318	87.0%	0	318	87.0%
2012/13	640	69	0	0	696	371	325	87.8%	0	325	87.8%
2013/14	617	72	0	0	674	375	299	79.8%	0	299	79.8%
2014/15	617	74	0	0	674	380	295	77.7%	0	295	77.7%
2015/16	617	76	0	0	675	384	291	75.9%	0	291	75.9%
2016/17	617	78	0	0	675	387	287	74.1%	0	287	74.1%
2017/18	602	80	0	0	660	391	268	68.6%	0	268	68.6%
2018/19	572	82	0	0	630	395	235	59.5%	0	235	59.5%

- (1) System Peak demands shown in this table reflect continued service to partial and full requirements wholesale customers. In the event these contracts are not renewed, reserve margins shown in this table will increase significantly.
- (2) Details of planned changes to installed capacity from 2009-2018 are reflected in Schedule 8.
- (3) The coincidence factor used for Winter photovoltaic capacity is 9.3%.

**Figure 3.2**  
**Winter Peak Demand and Resources**



**Schedule 8**

**PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHANGES**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Plant Name	Unit No.	Location	Unit Type	Fuel		Fuel Transport		Const. Start Mo/Yr	Comm. In-Service Mo/Yr	Expected Retire Mo/Yr	Gross Capability		Net Capability		Status
				Pri.	Alt.	Pri.	Alt.				Summer (MW)	Winter (MW)	Summer (MW)	Winter (MW)	
DEERHAVEN	FS02	Alachua County Secs. 26,27 35 T8S, R19E	ST	BIT		RR		Jan-07	May-09		0	0	-6.3	-6.3	D
DEERHAVEN	FS02	Alachua County Secs. 26,27 35 T8S, R19E	ST	BIT		RR		Sep-09	May-12		0	0	9.1	9.1	A
SOUTH ENERGY CENTER (Distributed generation)	GT1	Alachua County Sec. 10, T10S, R20E	GT	NG		PL		Apr-07	May-09		4.5	4.5	4.1	4.1	V
CRYSTAL RIVER	3	Citrus County Sec. 33, T17S, R16E	ST	NUC		TK			Jan-10				0.386	0.396	A
CRYSTAL RIVER	3	Citrus County Sec. 33, T17S, R16E	ST	NUC		TK			Jan-12				1.930	1.978	A
J. R. KELLY	FS07	Alachua County Sec. 4, T10S, R20E	ST	NG	RFO	PL	TK			Oct-13	-24	-24	-23.2	-23.2	RT

**Unit Type**

GT = Combustion (gas) Turbine  
ST = Steam Turbine

**Transportation Method**

PL = Pipeline  
RR = Railroad  
TK = Truck

**Fuel Type**

BIT = Bituminous Coal  
NG = Natural Gas  
NUC = Nuclear  
RFO = Residual Fuel Oil

**Status**

A = Generating unit capability increased  
D = Generating unit capability decreased  
RT = Existing generator scheduled for retirement  
V = Under construction, more than 50% complete

**Schedule 9**  
**Description of Proposed Facility Under Discussion**

(1) Plant Name and Unit Number:	GRU Energy Center (Distributed Generation)
(2a) Net Capacity	
a. Summer	4.1 MW
b. Winter	4.1 MW
(2a) Gross Capacity	
a. Summer	4.5 MW
b. Winter	4.5 MW
(3) Technology Type:	Combustion Turbine (Solar)
(4) Anticipated Construction Timing	
a. Field construction start-date:	4/1/2007
b. Commercial in-service date:	5/1/2009
(5) Fuel	
a. Primary Fuel (by Heat Input)	Natural Gas
b. Alternate Fuel	na
(6) Air Pollution Control Strategy:	Low NOx Burners
(7) Cooling Method:	air cooled
(8) Total Site Area (ft <sup>2</sup> ):	50,000
(9) Construction Status:	Approved
(10) Certification Status:	Not Certified
(11) Status with Federal Agencies:	Air Permit issued 7/25/07
(12) Projected Unit Performance Data	
Planned Outage Factor (POF):	3.0%
Forced Outage Factor (FOF):	6.0%
Equivalent Availability Factor (EAF):	95.0%
Resulting Capacity Factor (CF)	90.0%
Average Net Operating Heat Rate (ANOHR):	10,100
(13) Projected Unit Financial Data	
Book Life (Years)	30
Total Installed Cost (2009\$/kW)	930.49
Direct Construction Cost (\$2009/kW):	0.00
Escalation (\$2009/kW)	28.75
Escalation:	3.00%
Fixed O&M (\$2009/kW-Yr):	0.00
Variable O&M (\$2009/MWh):	15.33

## **4. ENVIRONMENTAL AND LAND USE INFORMATION**

### **4.1 DESCRIPTION OF POTENTIAL SITES FOR NEW GENERATING FACILITIES**

Currently, there are no new potential generation sites planned.

### **4.2 DESCRIPTION OF PREFERRED SITES FOR NEW GENERATING FACILITIES**

The new potential generating facility (resulting from GRU's "Request for Proposals for Biomass-fueled Generation Facility") is planned to be located on land leased from GRU on the northwest portion of the existing Deerhaven plant site. The Deerhaven site is shown in Figure 1.1 and Figure 4.1, located north of Gainesville off U.S. Highway 441. The Deerhaven site is preferred for the proposed project for several major reasons. Since it is an existing power generation site, future development is possible while minimizing impacts to the greenfield (undeveloped) areas. It also has an established access to fuel supply and power delivery; as well as fuel, water and combustion product management facilities. The preferred location of the proposed biomass facility is shown on Figure 4.1.

#### **4.2.1 Land Use and Environmental Features**

The location of the Deerhaven Generating Station ("Site") is indicated on Figure 1.1 and Figure 4.1, overlain on USGS maps that were originally at a scale of 1 inch : 24,000 feet. Figure 4.2 provides a photographic depiction of the land use and cover of the existing site and adjacent areas. The existing land use of the certified portion of the site is industrial (i.e., electric power generation and transmission and ancillary uses such as fuel storage and conveyance; water, combustion product, and forest management). The areas acquired since 2002 have been annexed into the City of Gainesville. The current zoning remains County Agricultural, but a land use change application has been filed with the City

of Gainesville. Eventually, the site will be zoned (city) Public Services with conservation areas. Surrounding land uses are primarily rural or agricultural with some low-density residential development. The Deerhaven site encompasses approximately 3474 acres.

The Site is located in the Suwannee River Water Management District. A small increase in water quantities for potable uses is projected. It is estimated that industrial water usage associated with the new unit could be as much as two million gallons per day (MGD). The groundwater allocation in the existing Site Certification would be sufficient to accommodate the requirements of the site in the future with the proposed new unit. Water for potable use will be supplied via the City's potable water system. Groundwater will continue to be extracted from the Floridian aquifer. A significant amount of reclaimed water from GRU's Main St. and/or Kanapaha wastewater treatment plants may be made available to the site to supply industrial process and cooling water needs. Process wastewater is currently collected, treated and reused on-site. The site has zero discharge of process wastewater to surface and ground waters, with a brine concentrator and on-site storage of solid water treatment by-products. It is expected that this practice would continue with the addition of a new unit. Other water conservation measures may be identified during the design of the project.

#### **4.2.2 Air Emissions**

The proposed generation technology would necessarily meet all applicable standards for all criteria pollutants.

### **4.3 STATUS OF APPLICATION FOR SITE CERTIFICATION**

American Renewables will be applying for site certification for the planned 100 MW biomass generating facility located on land that is part of the Deerhaven site.

Figure 4.1

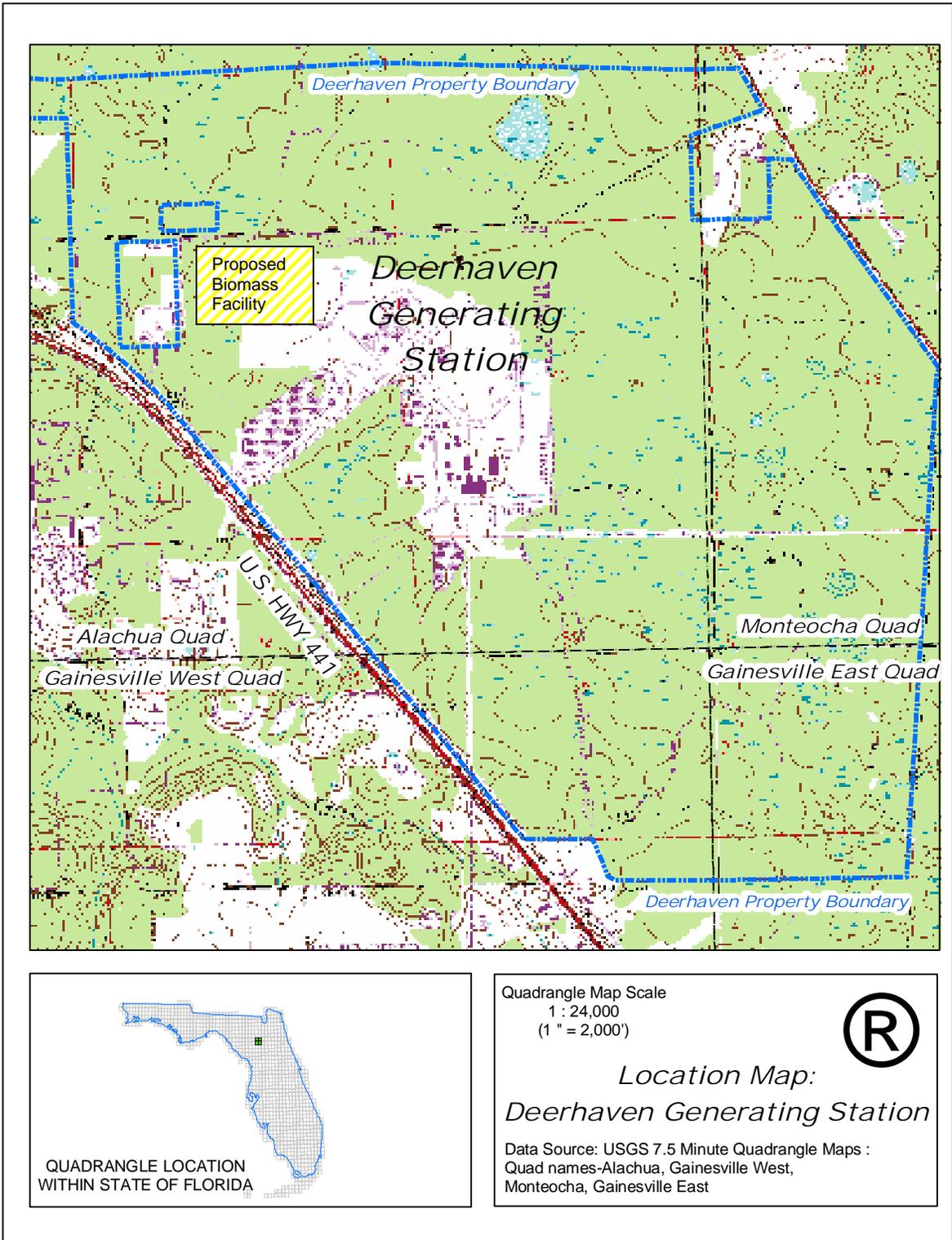
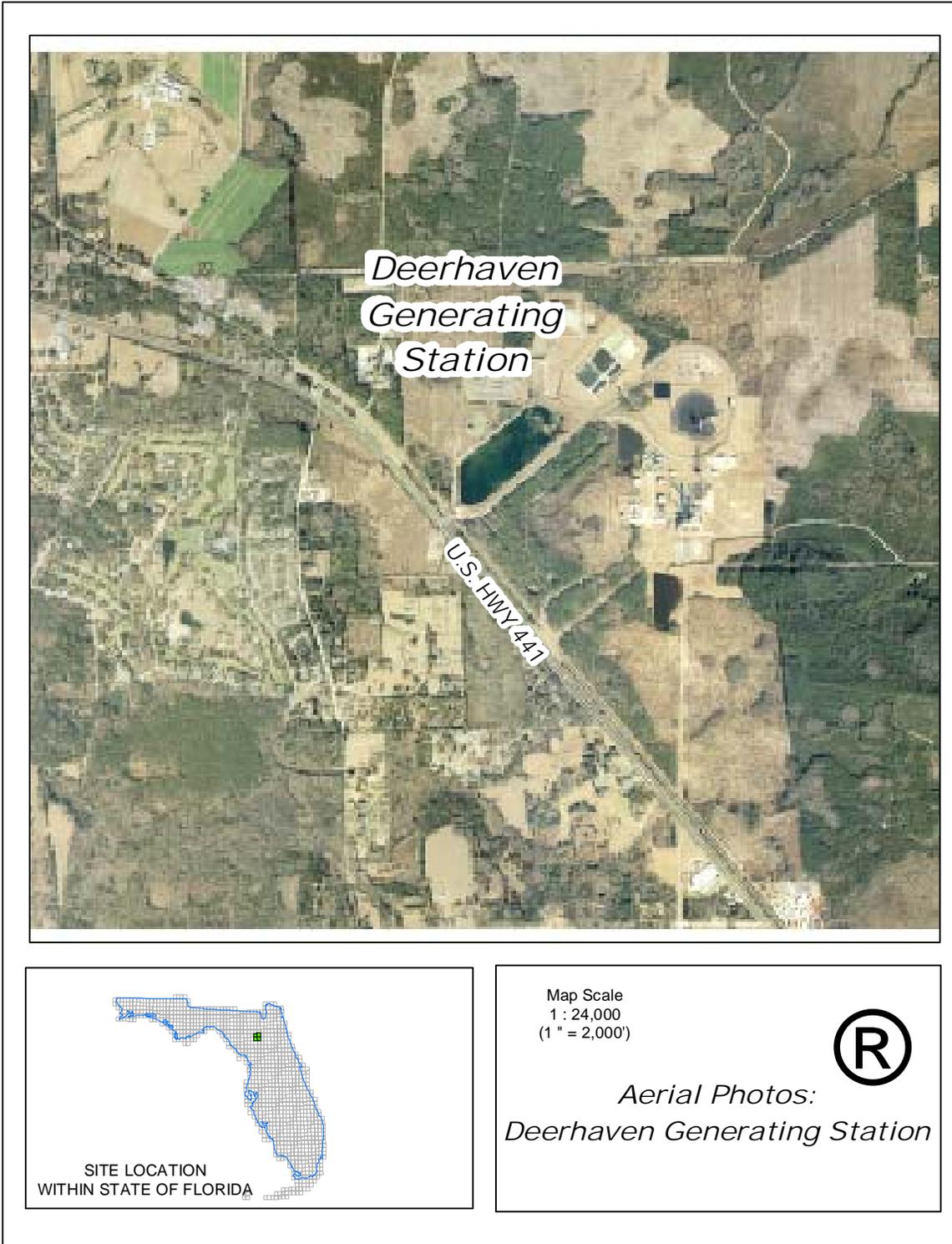


Figure 4.2



GAINESVILLE REGIONAL UTILITIES

2010 TEN-YEAR SITE PLAN



Submitted to:

The Florida Public Service Commission

April 1, 2010

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## INTRODUCTION

The 2010 Ten-Year Site Plan for Gainesville Regional Utilities (GRU) is submitted to the Florida Public Service Commission pursuant to Section 186.801, Florida Statutes. The contents of this report conform to information requirements listed in Form PSC/EAG 43, as specified by Rule 25-22.072, Florida Administrative Code. The four sections of the 2010 Ten-Year Site Plan are:

- Description of Existing Facilities
- Forecast of Electric Energy and Demand Requirements
- Forecast of Facilities Requirements
- Environmental and Land Use Information

Gainesville Regional Utilities (GRU) is a municipal electric, natural gas, water, wastewater, and telecommunications utility system, owned and operated by the City of Gainesville, Florida. The GRU retail electric system service area includes the City of Gainesville and the surrounding urban area. The highest net integrated peak demand recorded to date on GRU's electrical system was 481 Megawatts on August 8, 2007.

## 1. DESCRIPTION OF EXISTING FACILITIES

**Gainesville Regional Utilities** (GRU) operates a fully vertically-integrated electric power production, transmission, and distribution system (herein referred to as "the System"), and is wholly owned by the City of Gainesville. In addition to retail electric service, GRU also provides wholesale electric service to the City of Alachua (Alachua) and Clay Electric Cooperative (Clay). GRU's distribution system serves its retail territory of approximately 124 square miles and 93,045 customers (2009 average). The general locations of GRU electric facilities and the electric system service area are shown in Figure 1.1.

### 1.1 GENERATION

The existing generating facilities operated by GRU are tabulated in Schedule 1 at the end of this chapter. The present summer net capability is 609 MW and the winter net capability is 630 MW<sup>1</sup>. Currently, the System's energy is produced by three fossil fuel steam turbines, seven simple-cycle combustion turbines, one combined-cycle unit, and a 1.4079% ownership share of the Crystal River 3 (CR3) nuclear unit operated by Progress Energy Florida (PEF).

The System has two primary generating plant sites -- Deerhaven and John R. Kelly (JRK). Each site comprises both steam-turbine and gas-turbine generating units. The JRK station also utilizes a combined cycle unit.

---

<sup>1</sup> Net capability is that specified by the "SERC Guideline Number Two for Uniform Generator Ratings for Reporting." The winter rating will normally exceed the summer rating because generating plant efficiencies are increased by lower ambient air temperatures and lower cooling water temperatures.

## **1.1.1 Generating Units**

**1.1.1.1 Steam Turbines.** The System's three operational simple-cycle steam turbines are powered by fossil fuels and CR3 is nuclear powered. The fossil fueled steam turbines comprise 54.0% of the System's net summer capability and produced 79.9% of the electric energy supplied by the System in 2009. These units range in size from 23.2 MW to 222.1 MW. The combined-cycle unit, which includes a heat recovery steam generator/turbine and combustion turbine set, comprises 18.4% of the System's net summer capability and produced 13.6% of the electric energy supplied by the System in 2009. The System's 12.0 MW share of CR3 comprises 2.0% of the System's net summer capability and produced 4.8% of total electric energy in 2009. The System's share of CR3 will increase to 13.911 MW in 2012 as the result of capacity upgrades planned by PEF. Deerhaven Unit 2 and CR3 are used for base load purposes, while JRK Unit 7, JRK CC1, and Deerhaven Unit 1 are used for intermediate loading.

**1.1.1.2 Gas Turbines.** The System's six industrial gas turbines make up 25.6% of the System's summer generating capability and produced 1.7% of the electric energy supplied by the System in 2009. These simple-cycle combustion turbines are utilized for peaking purposes only because their energy conversion efficiencies are considerably lower than steam units. As a result, they yield higher operating costs and are consequently unsuitable for base load operation. Gas turbines are advantageous in that they can be started and placed on line quickly. The System's gas turbines are most economically used as peaking units during high demand periods when base and intermediate units cannot serve all of the System loads.

**1.1.1.3 Environmental Considerations.** All of the System's steam turbines, except for Crystal River 3, utilize recirculating cooling towers with a mechanical draft for the cooling of condensed steam. Crystal River 3 uses a once-through cooling system aided by helper towers. Only Deerhaven 2 currently has flue gas cleaning equipment consisting of a "hot-side" electrostatic precipitator. Installation of a

selective catalytic reduction system to reduce NO<sub>x</sub>, and a dry flue gas desulfurization unit with fabric filters to reduce SO<sub>2</sub>, mercury, and particulates, was completed in 2009. Operation of this equipment decreases net output for Deerhaven 2 by 6 MW.

### **1.1.2 Generating Plant Sites**

The locations of the System's generating plant sites are shown on Figure 1.1.

**1.1.2.1 John R. Kelly Plant.** The Kelly Station is located in southeast Gainesville near the downtown business district and consists of one combined cycle, one steam turbine, three gas turbines, and the associated cooling facilities, fuel storage, pumping equipment, transmission and distribution equipment.

**1.1.2.2 Deerhaven Plant.** The Deerhaven Station is located six miles northwest of Gainesville. The original site, which was certified pursuant to the Power Plant Siting Act, includes an 1146 acre parcel of partially forested land. The facility consists of two steam turbines, three gas turbines, and the associated cooling facilities, fuel storage, pumping equipment and transmission equipment. As amended to include the addition of Deerhaven Unit 2 in 1981, the certified site now includes coal unloading and storage facilities and a zero discharge water treatment plant, which treats water effluent from both steam units. A potential expansion area, owned by the System and adjacent to the certified Deerhaven plant site, was incorporated into the Gainesville City limits February 12, 2007 (ordinance 0-06-130), consists of an additional 2328 acres, for a total of 3474 acres.

## **1.2 TRANSMISSION**

### **1.2.1 The Transmission Network**

GRU's bulk electric power transmission network (System) consists of a 230 kV radial and a 138 kV loop connecting the following:

- 1) GRU's two generating stations,

- 2) GRU's nine distribution substations,
- 3) One 230 kV and two 138 kV interties with Progress Energy Florida (PEF),
- 4) A 138 kV intertie with Florida Power and Light Company (FPL),
- 5) A radial interconnection with Clay at Farnsworth Substation, and
- 6) A loop-fed interconnection with the City of Alachua at Alachua No. 1 Substation.

Refer to Figure 1.1 for line geographical locations and Figure 1.2 for electrical connectivity and line numbers.

### 1.2.2 Transmission Lines

The ratings for all of GRU's transmission lines are given in Table 1.1. The load ratings for GRU's transmission lines were developed in Appendix 6.1 of GRU's Long-Range Transmission Planning Study, March 1991. Refer to Figure 1.2 for a one-line diagram of GRU's electric system. The criteria for normal and emergency loading are taken to be:

- Normal loading: conductor temperature not to exceed 100° C (212° F).
- Emergency 8 hour loading: conductor temperature not to exceed 125° C (257° F).

The present transmission network consists of the following:

<u>Line</u>	<u>Circuit Miles</u>	<u>Conductor</u>
138 kV double circuit	80.01	795 MCM ACSR
138 kV single circuit	16.30	1192 MCM ACSR
138 kV single circuit	20.91	795 MCM ACSR
230 kV single circuit	<u>2.53</u>	795 MCM ACSR
Total	119.75	

Annually, GRU participates in Florida Reliability Coordinating Council, Inc. (FRCC) studies that analyze multi-level contingencies. Contingencies are occurrences that depend on changes or uncertain conditions and, as used here,

represent various equipment failures that may occur. All single and two circuits-common pole contingencies have no identifiable problems.

Contingency simulations revealed the system effects of serving peak summer load with assumed outages of both Deerhaven Unit 2 and the Archer 230 kV tie line. The results identified GRU bus voltages that would fall below acceptable levels. This has been addressed by installing two 3-phase, 138kV, 24.6 MVAR capacitor banks: one at the Parker Transmission Substation (May 2009); and another at the McMichen Substation (October 2009).

According to the state system reliability coordinator, who is responsible for the integrity and stability of the entire Florida transmission grid, GRU could plan to import about 250 MW before exceeding the bus voltage standard for reliability with these new capacitor banks.

### **1.2.3 State Interconnections**

The System is currently interconnected with PEF and FPL at four separate points. The System interconnects with PEF's Archer Substation via a 230 kV transmission line to the System's Parker Substation with 224 MVA of transformation capacity from 230 kV to 138 kV. The System also interconnects with PEF's Idylwild Substation with two separate circuits via their 150 MVA 138/69 kV transformer. The System interconnects with FPL via a 138 kV tie between FPL's Hampton Substation and the System's Deerhaven Substation. This interconnection has a transformation capacity at Bradford Substation of 224 MVA. All listed capacities are based on normal (Rating A) capacities.

The System is planned, operated, and maintained to be in compliance with all FERC, NERC, and FRCC requirements as required to assure the integrity and reliability of Florida's bulk power system. NERC conducted a spot check of GRU's Critical Infrastructure Protection, which the System passed successfully.

### 1.3 DISTRIBUTION

The System has six loop-fed and three radial distribution substations connected to the transmission network: Ft. Clarke, Kelly, McMichen, Millhopper, Serenola, Sugarfoot, Ironwood, Kanapaha, and Rocky Point substations, respectively. Parker is GRU's only 230 kV transmission voltage substation. The locations of these substations are shown on Figure 1.1.

The six major distribution substations are connected to the 138 kV bulk power transmission network with looped feeds which prevent the outage of a single transmission line from causing any outages in the distribution system. Ironwood, Kanapaha and Rocky Point are served by a single tap to the 138 kV network which would require distribution switching to restore customer power if the single transmission line tapped experiences an outage. GRU serves its retail customers through a 12.47 kV distribution network. The distribution substations, their present rated transformer capabilities, and the number of circuits for each are listed in Table 1.2.

The System has three Power Delivery Substations (PDS) with single 33.6 MVA transformers that are directly radial-tapped to our looped 138 kV system. Ft. Clarke, Kelly, McMichen, and Serenola substations currently consist of two transformers of basically equal size allowing these stations to be loaded under normal conditions to 80 percent of the capabilities shown in Table 1.2. Millhopper and Sugarfoot Substations currently consist of three transformers of equal size allowing both of these substations to be loaded under normal conditions to 100 percent of the capability shown in Table 1.2. One of the two 22.4 MVA transformers at Ft. Clarke has been repaired with rewinding to a 28.0 MVA rating. This makes the normal rating for this substation 50.4 MVA.

In 2007 GRU expanded its John R. Kelly Plant generation-transmission-distribution substation configuration to include a third 56 MVA 138/12.47 kV transformer located on the south side of the plant (referred to as Kelly West). This expansion has enhanced reliability by reassigning load to a point on the system not directly tied to the generator buses of the plant. The additional transformer capacity will allow for load growth in Gainesville's downtown area.

#### **1.4 WHOLESALE ENERGY**

The System provides full requirements wholesale electric service to Clay Electric Cooperative (Clay) through a contract between GRU and Seminole Electric Cooperative (Seminole), of which Clay is a member. The System began the 138 kV service at Clay's Farnsworth Substation in February 1975. This substation is supplied through a 2.37 mile radial line connected to the System's transmission facilities at Parker Road near SW 24<sup>th</sup> Avenue.

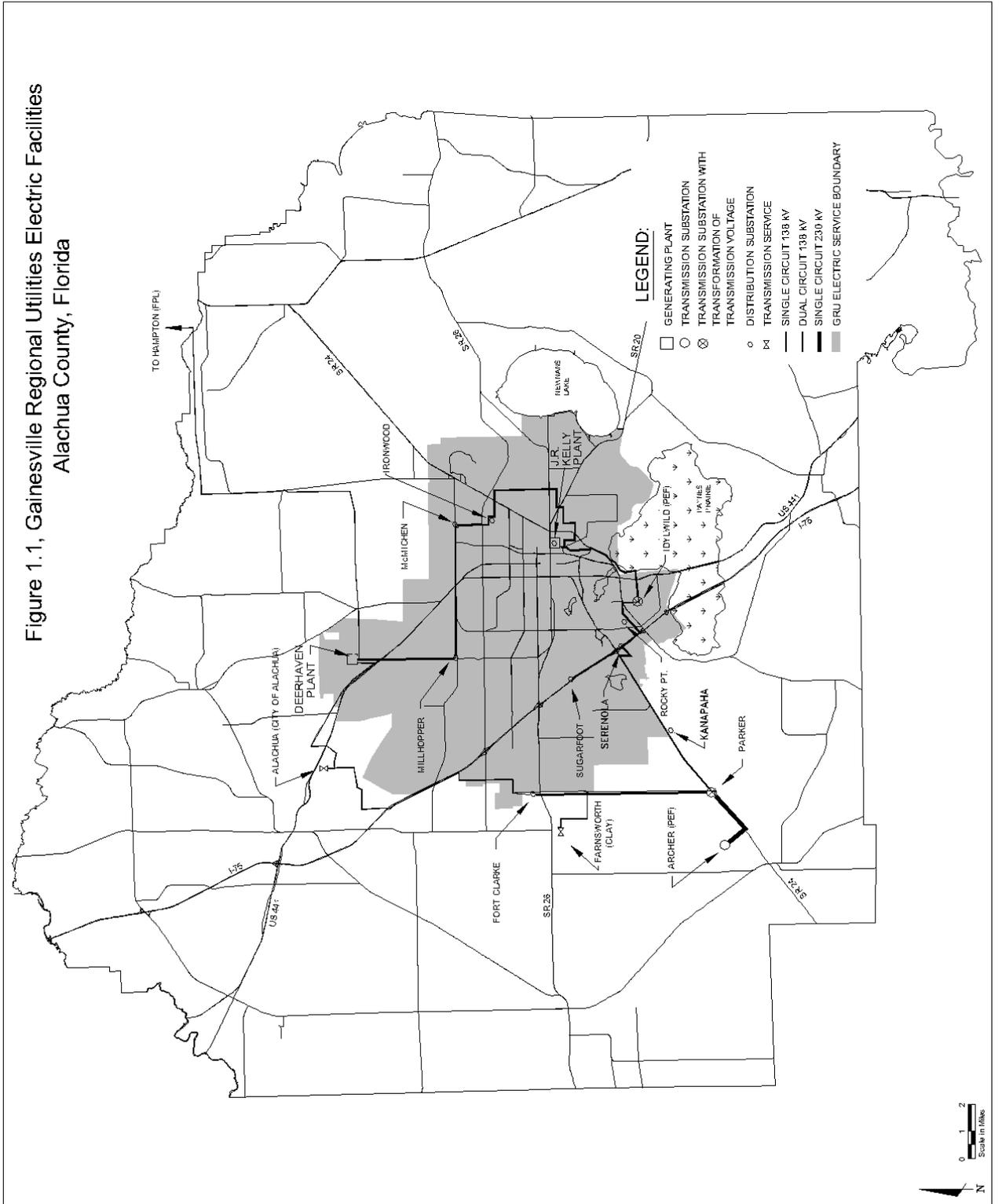
The System also provides full requirements wholesale electric service to the City of Alachua. The Alachua No. 1 Substation is supplied by GRU's looped 138 kV transmission system. The System provides approximately 95% of Alachua's energy requirements with the remainder being supplied by Alachua's generation entitlements from the PEF's Crystal River 3 and FPL's St. Lucie 2 nuclear units. Energy supplied to the City of Alachua by these nuclear units is wheeled over GRU's transmission network, with GRU providing generation backup in the event of outages of these nuclear units. The System began serving the City of Alachua in July 1985 and has provided full requirements wholesale electric service since January 1988.

Wholesale sales to Clay and the City of Alachua have been included as native load for purposes of projecting GRU's needs for generating capacity and associated reserve margins. This forms a conservative basis for planning purposes in the event these contracts are renewed. Schedules 7.1 and 7.2 at the end of Section 3 summarize GRU's reserve margins.

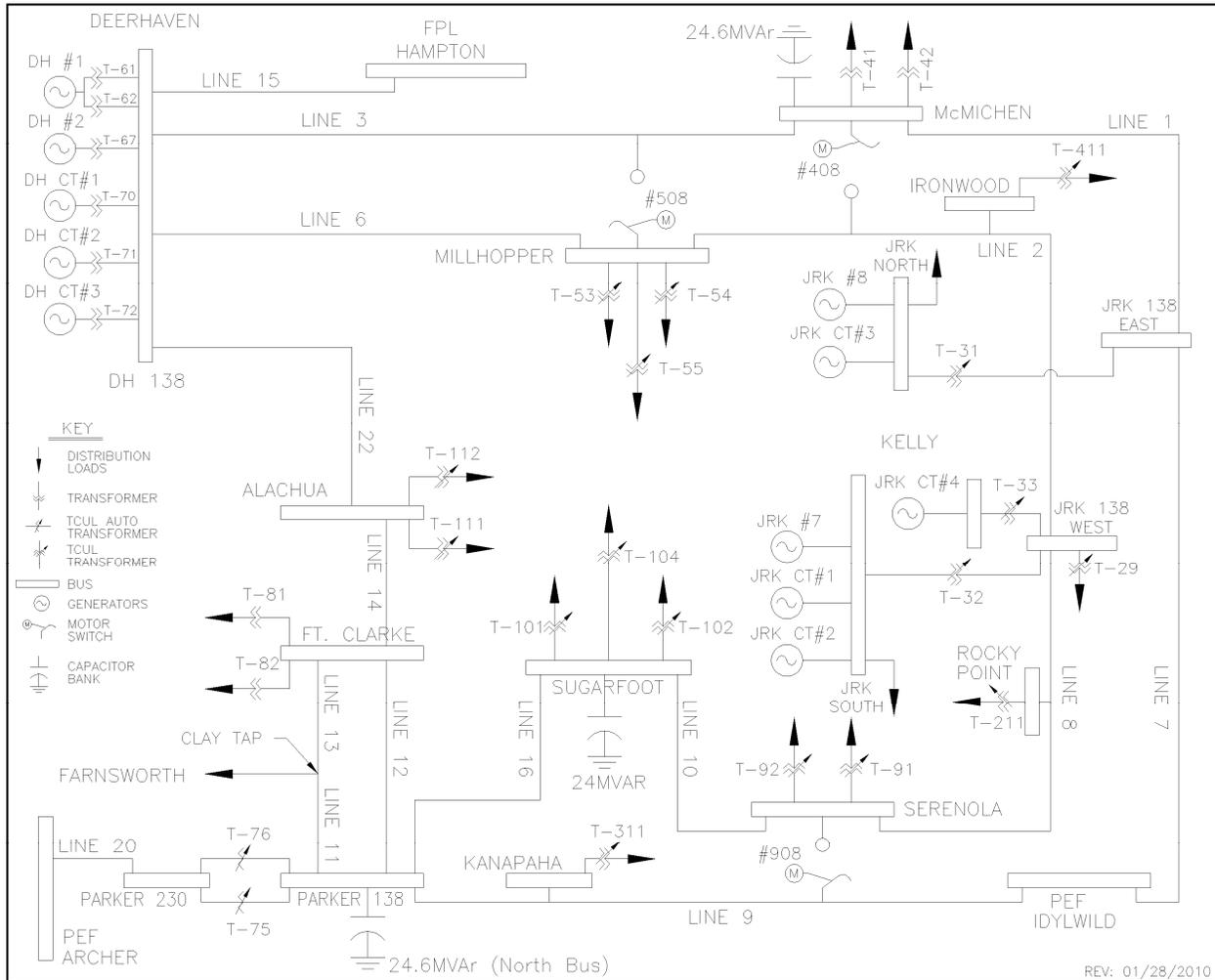
## **1.5 DISTRIBUTED GENERATION**

The South Energy Center began commercial operation in May 2009. The South Energy Center provides multiple onsite utility services to the new Shands at UF South Campus hospital. The new facility houses a 4.1 MW (summer rating) natural gas-fired turbine capable of supplying 100% of the hospital's electric and thermal needs. The South Energy Center provides electricity, chilled water, steam, and the storage and delivery of medical gases to the hospital. The unique design is 75% efficient at primary fuel conversion to useful energy and greatly reduces emissions compared to traditional generation. The facility is designed to provide electric power into the GRU distribution system when its capacity is not totally required by the hospital.

Figure 1.1, Gainesville Regional Utilities Electric Facilities  
 Alachua County, Florida



**FIGURE 1.2 Gainesville Regional Utilities Electric System One-Line Diagram.**



**Schedule 1**  
**EXISTING GENERATING FACILITIES (Summer 2010)**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Plant Name	Unit No.	Location	Unit Type	Primary Fuel		Alternate Fuel		Alt. Fuel Storage (Days)	Commercial In-Service Month/Year	Expected Retirement Month/Year	Gross Capability		Net Capability		Status
				Type	Trans.	Type	Trans.				Summer MW	Winter MW	Summer MW	Winter MW	
<b>J. R. Kelly</b>		Alachua County									<b>180.0</b>	<b>189.0</b>	<b>177.2</b>	<b>186.2</b>	
	FS08	Sec. 4, T10S, R20E	CA	WH	PL				[ 4/65 ; 5/01 ]	2051	38.0	38.0	37.0	37.0	OP
	FS07	(GRU)	ST	NG	PL	RFO	TK		8/61	10/13	24.0	24.0	23.2	23.2	OP
	GT04		CT	NG	PL	DFO	TK		5/01	2051	76.0	82.0	75.0	81.0	OP
	GT03		GT	NG	PL	DFO	TK		5/69	05/19	14.0	15.0	14.0	15.0	OP
	GT02		GT	NG	PL	DFO	TK		9/68	09/18	14.0	15.0	14.0	15.0	OP
	GT01		GT	NG	PL	DFO	TK		2/68	02/18	14.0	15.0	14.0	15.0	OP
<b>Deerhaven</b>		Alachua County									<b>437.0</b>	<b>447.0</b>	<b>415.1</b>	<b>426.1</b>	
	FS02	Secs. 26,27,35	ST	BIT	RR				10/81	2031	235.0	235.0	222.1	222.1	OP
	FS01	T8S, R19E	ST	NG	PL	RFO	TK		8/72	08/22	88.0	88.0	83.0	83.0	OP
	GT03	(GRU)	GT	NG	PL	DFO	TK		1/96	2046	76.0	82.0	75.0	81.0	OP
	GT02		GT	NG	PL	DFO	TK		8/76	2026	19.0	21.0	17.5	20.0	OP
	GT01		GT	NG	PL	DFO	TK		7/76	2026	19.0	21.0	17.5	20.0	OP
<b>Crystal River</b>	3	Citrus County	ST	NUC	TK				3/77	2037	<b>13.5</b>	<b>13.7</b>	<b>12.9</b>	<b>13.2</b>	OP
		Sec. 33, T17S, R16E													
<b>South Energy Center</b>	GT1	Alachua County	GT	NG		PL			5/09		<b>4.5</b>	<b>4.5</b>	<b>4.1</b>	<b>4.1</b>	OP
Distributed Generation		SEC. 10, T10S, R20E													
<b>System Total</b>													<b>609.3</b>	<b>629.6</b>	

<u>Unit Type</u>	<u>Fuel Type</u>	<u>Transportation Method</u>	<u>Status</u>
CA = Combined Cycle Steam Part	BIT = Bituminous Coal	PL = Pipe Line	OP = Operational
CT = Combined Cycle Combustion Turbine Part	DFO = Distillate Fuel Oil	RR = Railroad	
GT = Gas Turbine	NG = Natural Gas	TK = Truck	
ST = Steam Turbine	NUC = Uranium		
	RFO = Residual Fuel Oil		
	WH = Waste Heat		

**TABLE 1.1**

**TRANSMISSION LINE RATINGS  
SUMMER POWER FLOW LIMITS**

<b>Line Number</b>	<b>Description</b>	<b>Normal 100°C (MVA)</b>	<b>Limiting Device</b>	<b>Emergency 125°C (MVA)</b>	<b>Limiting Device</b>
1	McMichen - Depot East	236.2	Conductor	282.0	Conductor
2	Millhopper - Depot West	236.2	Conductor	282.0	Conductor
3	Deerhaven - McMichen	236.2	Conductor	282.0	Conductor
6	Deerhaven - Millhopper	236.2	Conductor	282.0	Conductor
7	Depot East - Idylwild	236.2	Conductor	282.0	Conductor
8	Depot West - Serenola	236.2	Conductor	282.0	Conductor
9	Idylwild - Parker	236.2	Conductor	236.2	Conductor
10	Serenola - Sugarfoot	236.2	Conductor	282.0	Conductor
11	Parker - Clay Tap	143.6	Conductor	282.0	Conductor
12	Parker - Ft. Clarke	236.2	Conductor	282.0	Conductor
13	Clay Tap - Ft. Clarke	143.6	Conductor	186.0	Conductor
14	Ft. Clarke - Alachua	287.3	Switch	356.0	Conductor
15	Deerhaven - Hampton	224.0 <sup>1</sup>	Transformers	270.0	Transformers
16	Sugarfoot - Parker	236.2	Conductor	282.0	Conductor
20	Parker-Archer(T75,T76)	224.0	Transformers <sup>3</sup>	300.0	Transformers <sup>3</sup>
22	Alachua - Deerhaven	287.3	Switch	356.0	Conductor
xx	Clay Tap - Farnsworth	236.2	Conductor	282.0	Conductor
xx	Idylwild – PEF	150.0 <sup>2</sup>	Transformer	168.0 <sup>2</sup>	Transformer

- 1) These two transformers are located at the FPL Bradford Substation and are the limiting elements in the Normal and Emergency ratings for this intertie.
- 2) This transformer, along with the entire Idylwild Substation, is owned and maintained by PEF.
- 3) Transformers T75 & T76 normal limits are based on a 65° C temperature rise rating, and the emergency rating is 140% loading for two hours.

**Assumptions:**

- 100 °C for normal conductor operation
- 125 °C for emergency 8 hour conductor operation
- 40 °C ambient air temperature
- 2 ft/sec wind speed

**TABLE 1.2**  
**SUBSTATION TRANSFORMATION AND CIRCUITS**

Distribution Substation	Normal Transformer Rated Capability	Current Number of Circuits
Ft. Clarke	50.4 MVA	4
J.R. Kelly <sup>2</sup>	168.0 MVA	20
McMichen	44.8 MVA	6
Millhopper	100.8 MVA	10
Serenola	67.2 MVA	8
Sugarfoot	100.8 MVA	9
Ironwood	33.6 MVA	3
Kanapaha	33.6 MVA	3
Rocky Point	33.6 MVA	3

Transmission Substation	Normal Transformer Rated Capability	Number of Circuits
Parker	224 MVA	5
Deerhaven	No transformations- All 138 kV circuits	4

2 J.R. Kelly is a generating station as well as 2 distribution substations. One substation has 14 distribution feeders directly fed from the 2- 12.47 kV generator buses with connection to the 138 kV loop by 2- 56 MVA transformers. The other substation (Kelly West) has 6 distribution feeders fed from a single, loop-fed 56 MVA transformer.

## **2. FORECAST OF ELECTRIC ENERGY AND DEMAND REQUIREMENTS**

Section 2 includes documentation of GRU's forecast of number of customers, energy sales and seasonal peak demands; a forecast of energy sources and fuel requirements; and an overview of GRU's involvement in demand-side management programs.

The accompanying tables provide historical and forecast information for calendar years 2000-2019. Energy sales and number of customers are tabulated in Schedules 2.1, 2.2 and 2.3. Schedule 3.1 gives summer peak demand for the base case forecast by reporting category. Schedule 3.2 presents winter peak demand for the base case forecast by reporting category. Schedule 3.3 presents net energy for load for the base case forecast by reporting category. Short-term monthly load data is presented in Schedule 4. Projected sources of energy for the System, by method of generation, are shown in Schedule 6.1. The percentage breakdowns of energy sources shown in Schedule 6.1 are given in Schedule 6.2. The quantities of fuel expected to be used to generate the energy requirements shown in Schedule 6.1 are given by fuel type in Schedule 5.

### **2.1 FORECAST ASSUMPTIONS AND DATA SOURCES**

- (1) All regression analyses were based on annual data. Historical data was compiled for calendar years 1970 through 2008. System data, such as net energy for load, seasonal peak demands, customer counts and energy sales, was obtained from GRU records and sources.
- (2) Estimates and projections of Alachua County population were obtained from the Florida Population Studies, March 2008 (Bulletin No. 150), published by the Bureau of Economic and Business Research (BEBR) at the University of Florida.
- (3) Historical weather data was used to fit regression models. The forecast assumes normal weather conditions. Normal heating degree days and cooling degree days equal the mean of data reported to NOAA by the Gainesville Municipal Airport station from 1984-2008.

- (4) All income and price figures were adjusted for inflation, and indexed to a base year of 2008, using the U.S. Consumer Price Index for All Urban Consumers from the U.S. Department of Labor, Bureau of Labor Statistics. Inflation is assumed to average approximately 2.5% per year for each year of the forecast.
- (5) The U.S. Department of Commerce provided historical estimates of total income for Alachua County. Forecast values of total income for Alachua County were obtained from Global Insight.
- (6) Historical estimates of household size were obtained from BEBR, and projected levels were estimated from a logarithmic trend.
- (7) The Florida Agency for Workforce Innovation and the U.S. Department of Labor provided historical estimates of non-agricultural employment in Alachua County. Forecast values of non-agricultural employment were obtained from Global Insight.
- (8) GRU's corporate model was the basis for projections of the average price of 1,000 kWh of electricity for all customer classes. The price of electricity is expected to slightly outpace inflation over the forecast horizon.
- (9) Estimates of energy and demand reductions resulting from planned demand-side management programs (DSM) were subtracted from all retail forecasts. GRU's involvement with DSM is described in more detail later in this section.
- (10) The City of Alachua will generate (via generation entitlement shares of PEF and FPL nuclear units) approximately 8,077 MWh of its annual energy requirements.

## 2.2 FORECASTS OF NUMBER OF CUSTOMERS, ENERGY SALES AND SEASONAL PEAK DEMANDS

Number of customers, energy sales and seasonal peak demands were forecast from 2010 through 2019. Separate energy sales forecasts were developed for each of the following customer segments: residential, general service non-demand, general service demand, large power, outdoor lighting, sales to Clay, and sales to Alachua. Separate forecasts of number of customers were developed for residential, general service non-demand, general service demand and large power retail rate classifications. The basis for these independent forecasts originated with the development of least-squares regression models. All modeling was performed in-house using the Statistical Analysis System (SAS)<sup>3</sup>. The following text describes the regression equations utilized to forecast energy sales and number of customers.

### 2.2.1 Residential Sector

The equation of the model developed to project residential average annual energy use (kilowatt-hours per year) specifies average use as a function of household income in Alachua County, residential price of electricity, heating degree days, and cooling degree days. The form of this equation is as follows:

$$\begin{aligned} \text{RESAVUSE} = & 7890 + 0.026 (\text{HHY08}) - 19.42 (\text{RESPR08}) \\ & + 0.73 (\text{HDD}) + 0.94 (\text{CDD}) \end{aligned}$$

Where:

RESAVUSE	=	Average Annual Residential Energy Use Per Customer
HHY08	=	Average Household Income
RESPR08	=	Residential Price, Dollars per 1000 kWh
HDD	=	Annual Heating Degree Days
CDD	=	Annual Cooling Degree Days

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<sup>3</sup> SAS is the registered trademark of SAS Institute, Inc., Cary, NC.

Adjusted R<sup>2</sup> = 0.8093  
 DF (error) = 32 (period of study, 1971-2008)  
 t - statistics:  
 Intercept = 5.03  
 HHY08 = 2.36  
 RESPR08 = -5.10  
 HDD = 3.07  
 CDD = 3.45

Projections of the average annual number of residential customers were developed from a linear regression model stating the number of customers as a function of Alachua County population, the number of persons per household, the historical series of Clay customer transfers, and an indicator variable for customer counts recorded under the billing system used prior to 1992. The residential customer model specifications are:

$$\begin{aligned}
 RESCUS &= 99588 + 287.8 (POP) - 40779 (HHSIZE) \\
 &+ 0.90 (CLYRCUS) - 976 (OldSys)
 \end{aligned}$$

Where:

RESCUS = Number of Residential Customers  
 POP = Alachua County Population (thousands)  
 HHSIZE = Number of Persons per Household  
 CLYRCUS = Clay Customer Transfers  
 OldSys = Older Billing System (1978-1991)

Adjusted R<sup>2</sup> = 0.9992  
 DF (error) = 25 (period of study, 1978-2008)  
 t - statistics:  
 Intercept = 9.63  
 POP = 30.34  
 HHSIZE = -11.15  
 CLYRCUS = 5.09

$$\text{OldSys} = -2.37$$

The product of forecasted values of average use and number of customers yielded the projected energy sales for the residential sector.

### 2.2.2 General Service Non-Demand Sector

The general service non-demand (GSN) customer class includes non-residential customers with maximum annual demands less than 50 kilowatts (kW). In 1990, GRU began offering GSN customers the option to elect the General Service Demand (GSD) rate classification. This option offers potential benefit to GSN customers that use high amounts of energy and have good load factors. Since 1990, 505 customers have elected to transfer to the GSD rate class. The forecast assumes that additional GSN customers will voluntarily elect the GSD classification, but at a more modest pace than has been observed historically. A regression model was developed to project average annual energy use by GSN customers. The model includes as independent variables, the cumulative number of optional demand customers and cooling degree days. The specifications of this model are as follows:

$$GSNAVUSE = 23.51 - 0.012 (OPTDCus) + 0.0016 (CDD)$$

Where:

GSNAVUSE = Average annual energy usage by GSN customers

OPTDCus = Cumulative number of Optional Demand Customers

CDD = Annual Cooling Degree Days

Adjusted R<sup>2</sup> = 0.8521

DF (error) = 26 (period of study, 1979-2008)

t - statistics:

Intercept	=	11.25
OPTDCus	=	-12.13
CDD	=	2.11

The number of general service non-demand customers was projected using an equation specifying customers as a function of Alachua County population, Clay non-demand transfer customers, and the number of optional demand customers. The specifications of the general service non-demand customer model are as follows:

$$GSNCUS = -5345 + 60.0(POP) + 2.81(CLYNCus) - 3.15(OptDCus)$$

Where:

GSNCUS	=	Number of General Service Non-Demand Customers
POP	=	Alachua County Population (thousands)
CLYNCus	=	Clay Non-Demand Transfer Customers
OptDCus	=	Optional Demand Customers

$$\text{Adjusted } R^2 = 0.9947$$

$$DF \text{ (error)} = 26 \text{ (period of study, 1978-2008)}$$

t - statistics:

Intercept	=	-8.56
POP	=	15.28
CLYNCus	=	2.27
OptDCus	=	-4.82

Forecasted energy sales to general service non-demand customers were derived from the product of projected number of customers and the projected average annual use per customer.

### 2.2.3 General Service Demand Sector

The general service demand customer class includes non-residential customers with established annual maximum demands generally of at least 50 kW but less than 1,000 kW. Average annual energy use per customer was projected using an equation specifying average use as a function of per capita income (Alachua County) and the number of optional demand customers. A significant portion of the energy load in this sector is from large retailers such as department stores and grocery stores, whose business activity is related to income levels of area residents. Average energy use projections for general service demand customers result from the following model:

$$GSDAVUSE = 326.2 + 0.0081(PCY08) - 0.22(OPTDCust)$$

Where:

GSDAVUSE = Average annual energy use by GSD Customers

PCY08 = Per Capita Income in Alachua County

OPTDCust = Cumulative number of Optional Demand Customers

Adjusted R<sup>2</sup> = 0.6934

DF (error) = 26 (period of study, 1979-2008)

t - statistics:

Intercept = 12.19

PCY08 = 7.64

OPTDCust = -7.63

The annual average number of customers was projected using a regression model that includes Alachua County population, Clay demand customer transfers, and the number of optional demand customers as independent variables. The specifications of the general service demand customer model are as follows:

$$GSDCUS = -437.9 + 5.37(POP) + 19.65(CLYDCus) + 0.48(OptDCus)$$

Where:

GSDCUS = Number of General Service Demand Customers

POP = Alachua County Population (thousands)

CLYDCus = Clay Demand Transfer Customers

OptDCus = Optional Demand Customers

Adjusted R<sup>2</sup> = 0.9958

DF (error) = 26 (period of study, 1978-2008)

t - statistics:

Intercept = -5.74

POP = 11.38

CLYDCus = 4.40

OptDCus = 6.28

The forecast of energy sales to general service demand customers was the resultant product of projected number of customers and projected average annual use per customer.

#### **2.2.4 Large Power Sector**

The large power customer class currently includes twelve customers that maintain an average monthly billing demand of at least 1,000 kW. Analyses of average annual energy use were based on historical observations from 1976 through 2008. The model developed to project average use by large power customers includes Alachua County nonagricultural employment and large power price of electricity as independent variables. Energy use per customer has been observed to increase over time, presumably due to the periodic expansion or increased utilization of existing facilities. This growth is measured in the model by local employment levels. The specifications of the large power average use model are as follows:

$$LPAVUSE = 7549 + 31.6 (NONAG) - 13.8 (LPPR08)$$

Where:

LPAVUSE = Average Annual Energy Consumption (MWh per Year)  
NONAG = Alachua County Nonagricultural Employment (000's)  
LPPR08 = Average Price for 1,000 kWh in the Large Power Sector

Adjusted R<sup>2</sup> = 0.8994

DF (error) = 30 (period of study, 1976-2008)

t - statistics:

INTERCEPT = 6.61

NONAG = 5.43

LPPR08 = -2.10

The forecast of energy sales to the large power sector was derived from the product of projected average use per customer and the projected number of large power customers, which are projected to remain constant at eleven.

### 2.2.5 Outdoor Lighting Sector

The outdoor lighting sector consists of streetlight, traffic light, and rental light accounts. Outdoor lighting energy sales account for approximately 1.3% of total energy sales. Outdoor lighting energy sales were forecast using a model which specified lighting energy as a function of the natural log of the number of residential customers. The specifications of this model are as follows:

$LGMWH = -287291 + 27878 (LNRESCUS)$

Where:

LGMWH = Outdoor Lighting Energy Sales

LNRESCUS = Number of Residential Customers (natural log)

Adjusted R<sup>2</sup> = 0.9918

DF (error) = 13 (period of study, 1994-2008)

t - statistics:

Intercept = -38.25

RESCUS = 41.28

### 2.2.6 Wholesale Energy Sales

As previously described, the System provides control area services to two wholesale customers: Clay Electric Cooperative (Clay) at the Farnsworth Substation; and the City of Alachua (Alachua) at the Alachua No. 1 Substation, and at the Hague Point of Service. Approximately 5% of Alachua's 2009 energy requirements were met through generation entitlements of nuclear generating units operated by PEF and FPL. These wholesale delivery points serve an urban area that is either included in, or adjacent to the Gainesville urban area. These loads are considered part of the System's native load for facilities planning through the forecast horizon. GRU provides other utilities services in the same geographic areas served by Clay and Alachua, and continued electrical service will avoid duplicating facilities. Furthermore, the populations served by Clay and Alachua benefit from services provided by the City of Gainesville, which are in part supported by transfers from the System. The wholesale contracts for Alachua and Clay will terminate after December 31, 2010 and December 31, 2012, respectively, unless renewed.

Clay-Farnsworth net energy requirements were modeled with an equation in which Alachua County population was the independent variable. Output from this model was adjusted to account for the history of load that has been transferred between GRU and Clay-Farnsworth, yielding energy sales to Clay. Historical boundary adjustments between Clay and GRU have reduced the duplication of facilities in both companies' service areas. The form of the Clay-Farnsworth net energy requirements equation is as follows:

$$CLYNEL = -53730 + 578.3 (POP)$$

Where:

CLYNEL = Farnsworth Substation Net Energy (MWh)

POP = Alachua County Population (000's)

Adjusted R<sup>2</sup> = 0.9420

DF (error) = 17 (period of study, 1990-2008)

t - statistics:

Intercept = -7.38

POP = 17.13

Net energy requirements for Alachua were estimated using a model in which City of Alachua population was the independent variable. BEBR provided historical estimates of City of Alachua Population. This variable was projected from a trend analysis of the component populations within Alachua County. The model used to develop projections of sales to the City of Alachua is of the following form:

$ALANEL = -61514 + 22693 (ALAPOP)$

Where:

ALANEL = City of Alachua Net Energy (MWh)

ALAPOP = City of Alachua Population (000's)

Adjusted R<sup>2</sup> = 0.9846

DF (error) = 25 (period of study, 1982-2008)

t - statistics:

Intercept = -19.33

ALAPOP = 40.77

To obtain a final forecast of the System's sales to Alachua, projected net energy requirements were reduced by 8,077 MWh reflecting the City of Alachua's nuclear generation entitlements.

## **2.2.7 Total System Sales, Net Energy for Load, Seasonal Peak Demands and Conservation Impacts**

The forecast of total system energy sales was derived by summing energy sales projections for each customer class; residential, general service non-demand, general service demand, large power, outdoor lighting, sales to Clay, and sales to Alachua. Net energy for load was then forecast by applying a delivered efficiency factor for the System to total energy sales. The projected delivered efficiency factor used in this forecast is 0.96. Historical delivered efficiencies were examined from the past 25 years to make this determination. The impact of energy savings from conservation programs was accounted for in energy sales to each customer class, prior to calculating net energy for load.

The forecasts of seasonal peak demands were derived from forecasts of annual net energy for load. Winter peak demands are projected to occur in January of each year, and summer peak demands are projected to occur in August of each year, although historical data suggests the summer peak is nearly as likely to occur in July. The average ratio of the most recent 25 years' monthly net energy for load for January and August, as a portion of annual net energy for load, was applied to projected annual net energy for load to obtain estimates of January and August net energy for load over the forecast horizon. The medians of the past 25 years' load factors for January and August were applied to January and August net energy for load projections, yielding seasonal peak demand projections. Forecast seasonal peak demands include the net impacts from planned conservation programs.

## **2.3 ENERGY SOURCES AND FUEL REQUIREMENTS**

### **2.3.1 Fuels Used by System**

Presently, the system is capable of using coal, residual oil, distillate oil, natural gas, and a small percentage of nuclear fuel to satisfy its fuel requirements. Since the completion of the Deerhaven 2 coal-fired unit, the System has relied upon

coal to fulfill much of its fuel requirements. To the extent that the System participates in interchange sales and purchases, actual consumption of these fuels will likely differ from the base case requirements indicated in Schedule 5.

### **2.3.2 Methodology for Projecting Fuel Use**

The fuel use projections were produced using the GenTrader<sup>®</sup> program developed by Power Costs, Inc. (PCI), 3550 West Robinson, Suite 200, Norman, Oklahoma 73072. PCI provides support, maintenance, and training for the GenTrader<sup>®</sup> software. GenTrader<sup>®</sup> has the ability to model each of the System's generating units, as well as purchase option from the energy market, on an hour-by-hour basis and includes the effects of environmental limits, dual fuel units, reliability constraints, maintenance schedules, startup time & startup fuel, and minimum down time for forced outages.

The input data to this model includes:

- (1) Long-term forecast of System electric energy and power demand needs;
- (2) Projected fuel prices, outage parameters, nuclear refueling cycle, and maintenance schedules for each generating unit in the System;
- (3) Purchase power & energy options from the market.

The output of this model includes:

- (1) Monthly and yearly operating fuel expenses by fuel type and unit; and
- (2) Monthly and yearly capacity factors, energy production, hours of operation, fuel utilization, and heat rates for each unit in the system.

### **2.3.3 Purchased Power Agreements**

**2.3.3.1 G2 Energy Baseline Landfill Gas.** GRU has entered into a 15-year contract to receive 3 MW of landfill gas fueled capacity at the Marion County Baseline Landfill, from G2 Energy Marion, LLC. The generation facility began commercial operation on January 1, 2009. G2 expects to complete a capacity expansion of 0.8 MW by September 2010, bringing net output to 3.8 MW.

**2.3.3.2 Progress Energy 50 MW.** GRU negotiated a contract with Progress Energy Florida (PEF) for 50 MW of base load capacity. This contract began January 1, 2009 and continues through December 31, 2013. Extensions of this contract are subject to negotiation. An additional 25 MW baseload capacity was contracted from January 1, 2009 through December 31, 2010, and another additional 25 MW of baseload capacity was contracted for March through August of 2009 and 2010.

**2.3.3.3 Biomass RFP for PPA.** On September 18, 2009 GRU and Gainesville Renewable Energy Center LLC filed as joint applicants for a Need Determination by the Florida Public Service Commission pursuant to the Florida Electrical Power Siting Act. The application contains a complete description of the competitive solicitation process that culminated in a 30 year Power Purchase Agreement for the 100 MW net capacity power plant to be fueled entirely with biomass, and is scheduled to become operational in late 2013. On February 28, 2010 application for a Site Certification Amendment at GRU's Deerhaven Plant site was submitted to the Florida Department of Environmental Protection. GRU anticipates reselling approximately 50 MW of capacity from this unit for up to 10 years.

**2.3.3.4 Solar Feed-In Tariff.** In March of 2009 GRU became the first utility in the United States to offer a European-style solar feed-in tariff (FIT). Under this program, GRU agrees to purchase 100% of the solar power produced from any private generator at a fixed rate for a contract term of 20 years. The FIT rate has

built-in subsidy to incentivize the installation of solar in the community, and help create a strong solar marketplace. GRU's FIT costs are recovered through fuel adjustment charges, and have been limited to the equivalent of a 1.5% base rate increase. This limit translates to an annual capacity stop-loss to purchase 4 MW. GRU has received applications to fully build out this capacity over the next seven years.

## **2.4 DEMAND-SIDE MANAGEMENT**

### **2.4.1 Demand-Side Management Program History and Current Status**

Demand and energy forecasts and generation expansion plans outlined in this Ten Year Site Plan include impacts from GRU's Demand-Side Management (DSM) programs. The System forecast reflects the incremental impacts of DSM measures, net of cumulative impacts from 1980 through 2009. DSM programs are available for all retail customers, including commercial and industrial customers, and are designed to effectively reduce and control the growth rates of electric consumption and weather sensitive peak demands.

DSM direct services currently available to the System's residential customers, or expected to be implemented during 2010, include energy audits and low income household whole house energy efficiency improvements. GRU also offers rebates and other financial incentives for the promotion of:

- high efficiency central air conditioning
- high efficiency room air conditioning
- central air conditioner maintenance
- solar water heating
- solar photovoltaic systems
- natural gas in new construction
- Home Performance with the federal Energy Star program

- Energy Star building practices of the EPA
- Green Building practices
- heating/cooling duct repair
- variable speed pool pumps
- energy efficiency for low-income households
- attic and raised-floor insulation
- removing second refrigerators from homes and recycling the materials
- compact fluorescent light bulbs
- energy efficiency low-interest loans
- natural gas for displacement of electric in water heating, space heating, and space cooling in existing structures.
- home energy reports to compare household energy consumption to that of neighbors.

Energy audits are available to the System's non-residential customers. In addition GRU offers rebates and other considerations for the promotion of:

- solar water heating
- solar photovoltaic
- natural gas for water heating and space heating
- vending machine motion sensors
- customized business rebates for energy efficiency retrofits

The System continues to offer standardized interconnection procedures and compensation for excess energy production for both residential and non-residential customers who install distributed resources and offers rebates to residential customers for the installation of photovoltaic generation. The solar feed-in tariff has replaced photovoltaic rebates as the incentive for non-residential customers to implement distributed solar generation.

Grants and voluntary customer contributions have made several renewable projects possible within GRU's service area. A combination of customer contributions and State and Federal grants allowed GRU to add its 10 kW photovoltaic array at the Electric System Control Center in 1996. GRU secured grant funding through the Department of Community Affairs' PV for Schools Educational Enhancement Program for PV systems that were installed at two middle schools in 2003.

GRU has also produced numerous *factsheets*, publications, and videos which are available at no charge to customers to assist them in making informed decisions affecting their energy utilization patterns. Examples include: Passive Solar Design-Factors for North Central Florida, a booklet which provides detailed solar and environmental data for passive solar designs in this area; Solar Guidebook, a brochure which explains common applications of solar energy in Gainesville; and The Energy Book, a guide to conserving energy at home.

#### **2.4.2 Future Demand-Side Management Programs**

GRU continues to monitor the potential for additional DSM efforts including programs addressing thermal storage, district chilled water cooling, window shading, additional energy efficiency in low-income households, heat pump water heaters, and demand response. GRU continues to review the efforts of conservation leaders in the industry, and has conducted fact finding trips to California, Texas, Vermont and New York to maximize these efforts. GRU plans to continue to expand its DSM programs as a way to cost-effectively meet customer needs and hedge against potential future carbon tax and trade programs.

#### **2.4.3 Demand-Side Management Methodology and Results**

The expected effect of DSM program participation was derived from a comparative analysis of historical energy usage of DSM program participants and

non-participants. The methodology upon which existing DSM programs is based includes consideration of what would happen under current conditions, the fact that the conservation induced by utility involvement tends to "buy" conservation at the margin, adjustment for behavioral rebound and price elasticity effects and effects of abnormal weather. Known interactions between measures and programs were accounted for where possible. Projected penetration rates were based on historical levels of program implementations and tied to escalation rates paralleling service area population growth. GRU contracted with a consultant to perform a measurement and verification analysis of several of the conservation programs implemented over the past two years. Results from this study aided GRU in both determining which programs are most effective and in quantifying the energy and demand savings achieved by these measures. In 2010, GRU plans to continue third-party evaluation, measurement, and verification.

The implementation of DSM programs planned for 2010-2019 is expected to provide an additional 49 MW of summer peak reduction and 123 GWh of annual energy savings by the year 2019. A history and projection of total DSM program achievements from 1980-2019 is shown in Table 2.1.

#### **2.4.4 Gainesville Energy Advisory Committee**

The Gainesville Energy Advisory Committee (GEAC) is a nine-member citizen group that is charged with formulating recommendations to the Gainesville City Commission concerning national, state and local energy-related issues. The GEAC offers advice and guidance on energy management studies and consumer awareness programs.

GEAC has contributed to several significant policy changes, including helping to establish a residential energy audit program, creating inverted-block and time-of-use electric rates, and making solar a generation priority for the City of Gainesville. GEAC was instrumental in the development and installation of a 10 kilowatt PV

system at the System Control Center. GEAC has strongly supported the EPA's Energy Star program, and has helped GRU earn EPA's 1998 Utility Ally of the Year award. As a long-range load reduction strategy, GEAC contributed to the development of a Green Builder program for existing multi-family dwellings, which account for approximately 35% of GRU's total residential load. GEAC also supported GRU's IRP efforts through their sponsorship of community workshops and review of the IRP.

## **2.4.5 Supply Side Programs**

Prior to the addition of Deerhaven Unit 2 in 1982, the System was relying on oil and natural gas for over 90% of native load energy requirements. In 2009, oil-fired generation comprised 0.3% of total net generation, natural gas-fired generation contributed 23.4%, nuclear fuel contributed 4.8%, and coal-fired generation provided 71.5% of total net generation. The PV system at the System Control Center provides slightly more than 10 kilowatts of capacity at solar noon on clear days.

The System has several programs to improve the adequacy and reliability of the transmission and distribution systems, which will also result in decreased energy losses. These include the installation of distribution capacitors, purchase of high-efficiency distribution transformers, and the reconductoring of the feeder system.

**2.4.5.1 Transformers.** GRU has been purchasing overhead and underground transformers with a higher efficiency than the NEMA TP-1 Standard for the past 22 years. Higher efficiency translates to less power lost due to the design of the transformers. GRU has exceeded NEMA standards since 1988.

**2.4.5.2 Reconductoring.** GRU has been continuously improving the feeder system by reconductoring feeders from 4/0 Copper to 795 MCM aluminum overhead conductor. Also, in specific areas the feeders have been installed underground using 1000 MCM underground cable.

**2.4.5.3 Distribution Capacitors.** GRU strives to maintain an average power factor of 0.98 by adding capacitors where necessary on each distribution feeder. Without these capacitors the average uncorrected power factor could be less than 0.92.

The percentage of loss reduction can be calculated as shown:

$$\% \text{ Loss Reduction} = [1 - (\text{Uncorrected pf} / \text{Corrected pf})^2] \times 100$$

$$\% \text{ Loss Reduction} = [1 - (0.92 / 0.98)^2] \times 100$$

$$\% \text{ Loss Reduction} = 11.9$$

In general, overall system losses have stabilized near 4% of net generation as reflected in the forecasted relationship of total energy sales to net energy for load.

## **2.5 FUEL PRICE FORECAST ASSUMPTIONS**

GRU consults a variety of reputable sources to compile projections of fuel prices for fuels currently used and those that are evaluated for potential future use. Oil prices were obtained from the Annual Energy Outlook 2009 (AEO2009), published in March 2009 by the U.S. Department of Energy's Energy Information Administration (EIA). Natural gas price projections are derived from several forecasts published by the PIRA Energy Group. Coal prices are projected in the near term based on knowledge of contractual agreements with suppliers. These prices are projected to the out years by applying growth rates for U.S. coal prices provided in AEO2009. Projected prices for nuclear fuel were provided by PEF. Any price forecasts that are provided in constant-year (real) dollars are translated to nominal dollars using the projected Gross Domestic Product – Implicit Price Deflator from AEO2009. Fuel prices are analyzed in two parts: the cost of the fuel (commodity), and the cost of transporting the fuel to GRU's generating stations. The external forecasts typically address the commodity prices, and GRU's specific

transportation costs are included to derive delivered prices. A summary of historical and projected fuel prices is provided in Table 2.2.

### **2.5.1 Oil**

GRU relies on No. 6 Oil (residual) and No. 2 Oil (distillate or diesel) as back-up fuels for natural gas fired generation. These fuels are delivered to GRU generating stations by truck. Forecast prices for these two types of oil are derived directly from AEO2009.

During calendar year 2009, distillate fuel oil was used to produce 0.06% of GRU's total net generation. Distillate fuel oil is expected to be the most expensive fuel available to GRU. During calendar year 2009, residual fuel oil was used to produce 0.21% of GRU's total net generation. The quantity of fuel oils used by GRU is expected to remain low.

### **2.5.2 Coal**

Coal is the primary fuel used by GRU to generate electricity, comprising 71.5% of total net generation during calendar year 2009. GRU purchases low sulfur and medium sulfur, high Btu eastern coal for use in Deerhaven Unit 2. In 2009, Deerhaven Unit 2 was retrofitted with an air quality control system, which was added as a means of complying with new environmental regulations. Following this retrofit, Deerhaven Unit 2 is able to utilize coals with up to approximately 1.7% sulfur content with the new control system. As a result, GRU will evaluate prices for both low sulfur and medium sulfur coals for use in Deerhaven Unit 2.

Projected prices for coal used by Deerhaven Unit 2 through 2011 were based on GRU's contractual options with its coal suppliers. Projected prices beyond 2011 were escalated using growth rates for U.S. coal prices from AEO2009. GRU has a contract with CSXT for delivery of coal to the Deerhaven plant site through 2019.

### **2.5.3 Natural Gas**

GRU procures natural gas for power generation and for distribution by a Local Distribution Company (LDC). In 2009, GRU purchased approximately 6.7 million MMBtu for use by both systems. GRU power plants used 69% of the total purchased for GRU during 2009, while the LDC used the remaining 31%.

GRU purchases natural gas via arrangements with producers and marketers connected with the Florida Gas Transmission (FGT) interstate pipeline. GRU's delivered cost of natural gas includes the commodity component, Florida Gas Transmission's (FGT) fuel charge, FGT's usage (transportation) charge, FGT's reservation (capacity) charge, and basis adjustments.

Prices for 2009 and 2010 were projected in-house using anticipated impacts from risk management activities, commodity costs, and other pricing impacts including transportation costs. Delivered prices from 2011 through 2019 represent the sum of GRU's anticipated transportation costs and commodity prices from PIRA Energy Group's October 2008 long-term Henry Hub forecast.

### **2.5.4 Nuclear Fuel**

GRU's nuclear fuel price forecast includes a component for fuel and a component for fuel disposal. The projection for the price of the fuel component is based on Progress Energy Florida's (PEF) forecast of nuclear fuel prices. The projection for the cost of fuel disposal is based on a trend analysis of actual costs to GRU.

**Schedule 2.1  
History and Forecast of Energy Consumption and  
Number of Customers by Customer Class**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Year	Service Area Population	Persons per Household	RESIDENTIAL			COMMERCIAL *		
			GWh	Average Number of Customers	Average kWh per Customer	GWh	Average Number of Customers	Average kWh per Customer
2000	164,932	2.34	788	70,335	11,202	674	8,368	80,490
2001	169,269	2.34	803	72,391	11,092	697	8,603	80,986
2002	172,149	2.33	851	73,827	11,527	721	8,778	82,112
2003	173,148	2.33	854	74,456	11,467	726	8,959	81,090
2004	178,642	2.32	878	77,021	11,398	739	9,225	80,143
2005	180,830	2.31	888	78,164	11,358	752	9,378	80,199
2006	183,248	2.31	877	79,407	11,047	746	9,565	78,042
2007	186,764	2.30	878	81,128	10,817	778	9,793	79,398
2008	188,945	2.30	820	82,271	9,969	773	10,508	73,538
2009	189,992	2.30	808	82,605	9,785	786	10,428	75,408
2010	192,016	2.29	823	83,993	9,809	754	10,699	70,485
2011	194,169	2.28	827	85,124	9,665	761	10,885	69,945
2012	196,511	2.28	834	86,338	9,582	771	11,091	69,544
2013	198,769	2.27	840	87,516	9,524	782	11,290	69,280
2014	200,905	2.27	847	88,641	9,477	793	11,478	69,130
2015	202,924	2.26	853	89,715	9,437	805	11,655	69,103
2016	204,800	2.26	859	90,726	9,406	816	11,819	69,066
2017	206,577	2.25	865	91,693	9,371	827	11,974	69,070
2018	208,277	2.25	871	92,626	9,339	838	12,121	69,163
2019	209,936	2.24	876	93,541	9,309	848	12,266	69,167

\* Commercial includes General Service Non-Demand and General Service Demand Rate Classes

**Schedule 2.2**  
**History and Forecast of Energy Consumption and**  
**Number of Customers by Customer Class**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Year	<u>GWh</u>	<u>Average Number of Customers</u>	<u>Average MWh per Customer</u>	<u>Railroads and Railways GWh</u>	<u>Street and Highway Lighting GWh</u>	<u>Other Sales to Public Authorities GWh</u>	<u>Total Sales to Ultimate Consumers GWh</u>
	<b>INDUSTRIAL **</b>						
2000	172	17	10,114	0	22	0	1,656
2001	173	17	10,162	0	23	0	1,696
2002	178	18	10,178	0	24	0	1,774
2003	181	19	9,591	0	24	0	1,786
2004	188	18	10,444	0	25	0	1,830
2005	189	18	10,477	0	25	0	1,854
2006	200	20	10,093	0	25	0	1,849
2007	196	18	10,891	0	26	0	1,877
2008	184	16	11,497	0	26	0	1,803
2009	168	12	13,842	0	26	0	1,789
2010	157	11	14,277	0	27	0	1,761
2011	157	11	14,312	0	28	0	1,773
2012	158	11	14,405	0	28	0	1,791
2013	160	11	14,538	0	28	0	1,810
2014	161	11	14,649	0	29	0	1,830
2015	162	11	14,761	0	29	0	1,849
2016	163	11	14,854	0	29	0	1,867
2017	164	11	14,934	0	30	0	1,886
2018	165	11	15,022	0	30	0	1,904
2019	166	11	15,072	0	30	0	1,920

\*\* Industrial includes Large Power Rate Class

**Schedule 2.3  
History and Forecast of Energy Consumption and  
Number of Customers by Customer Class**

(1)	(2)	(3)	(4)	(5)	(6)
<u>Year</u>	<u>Sales For Resale GWh</u>	<u>Utility Use and Losses GWh</u>	<u>Net Energy for Load GWh</u>	<u>Other Customers</u>	<u>Total Number of Customers</u>
2000	120	93	1,868	0	78,720
2001	125	62	1,882	0	81,011
2002	142	92	2,008	0	82,623
2003	146	83	2,015	0	83,434
2004	149	70	2,049	0	86,264
2005	163	66	2,082	0	87,560
2006	174	75	2,099	0	88,992
2007	188	57	2,122	0	90,939
2008	196	79	2,079	0	92,795
2009	203	91	2,083	0	93,045
2010	201	82	2,044	0	94,703
2011	205	83	2,061	0	96,020
2012	210	84	2,085	0	97,440
2013	215	85	2,110	0	98,817
2014	219	86	2,135	0	100,130
2015	224	87	2,160	0	101,381
2016	227	89	2,183	0	102,556
2017	231	88	2,205	0	103,678
2018	235	89	2,228	0	104,759
2019	238	91	2,249	0	105,818

**Schedule 3.1  
History and Forecast of Summer Peak Demand - MW  
Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Year</u>	<u>Total</u>	<u>Wholesale</u>	<u>Retail</u>	<u>Interruptible</u>	Residential Load <u>Management</u>	Residential <u>Conservation</u>	Comm./Ind. Load <u>Management</u>	Comm./Ind. <u>Conservation</u>	<u>Net Firm Demand</u>
2000	446	28	397	0	0	13	0	8	425
2001	430	28	381	0	0	13	0	8	409
2002	454	32	401	0	0	13	0	8	433
2003	439	33	384	0	0	14	0	8	417
2004	455	33	399	0	0	14	0	9	432
2005	489	37	428	0	0	15	0	9	465
2006	488	39	425	0	0	15	0	9	464
2007	507	44	437	0	0	16	0	10	481
2008	487	43	414	0	0	18	0	12	457
2009	499	46	419	0	0	20	0	14	465
2010	478	46	393	0	0	23	0	16	439
2011	485	47	394	0	0	26	0	18	441
2012	492	48	395	0	0	28	0	21	443
2013	500	49	396	0	0	31	0	24	445
2014	508	50	398	0	0	34	0	26	448
2015	516	51	399	0	0	37	0	29	450
2016	523	52	401	0	0	39	0	31	453
2017	532	53	404	0	0	42	0	33	457
2018	539	54	406	0	0	44	0	35	460
2019	546	55	408	0	0	46	0	37	463

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**Schedule 3.2**  
**History and Forecast of Winter Peak Demand - MW**  
**Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Winter</u>	<u>Total</u>	<u>Wholesale</u>	<u>Retail</u>	<u>Interruptible</u>	Residential Load <u>Management</u>	Residential <u>Conservation</u>	Comm./Ind. Load <u>Management</u>	Comm./Ind. <u>Conservation</u>	<u>Net Firm Demand</u>
2000 / 2001	408	33	331	0	0	37	0	7	364
2001 / 2002	416	33	336	0	0	39	0	8	369
2002 / 2003	442	37	357	0	0	40	0	8	394
2003 / 2004	398	31	319	0	0	40	0	8	350
2004 / 2005	426	36	341	0	0	41	0	8	377
2005 / 2006	436	40	346	0	0	42	0	8	386
2006 / 2007	412	38	324	0	0	42	0	8	362
2007 / 2008	411	40	321	0	0	42	0	8	361
2008 / 2009	471	45	376	0	0	42	0	8	421
2009 / 2010	514	50	414	0	0	42	0	8	464
2010 / 2011	412	46	316	0	0	42	0	8	362
2011 / 2012	416	47	319	0	0	42	0	8	366
2012 / 2013	421	48	323	0	0	42	0	8	371
2013 / 2014	425	49	326	0	0	42	0	8	375
2014 / 2015	430	50	330	0	0	42	0	8	380
2015 / 2016	434	51	333	0	0	42	0	8	384
2016 / 2017	437	52	335	0	0	42	0	8	387
2017 / 2018	441	53	338	0	0	42	0	8	391
2018 / 2019	445	54	341	0	0	42	0	8	395
2019 / 2020	448	55	343	0	0	42	0	8	398

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**Schedule 3.3**  
**History and Forecast of Net Energy for Load - GWH**  
**High Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Year</u>	<u>Total</u>	<u>Residential Conservation</u>	<u>Comm./Ind. Conservation</u>	<u>Retail</u>	<u>Wholesale</u>	<u>Utility Use &amp; Losses</u>	<u>Net Energy for Load</u>	<u>Load Factor %</u>
2000	1,961	70	23	1,655	120	93	1,868	50%
2001	1,979	74	23	1,695	125	62	1,882	53%
2002	2,110	78	24	1,774	142	92	2,008	53%
2003	2,121	82	24	1,786	146	83	2,015	55%
2004	2,158	84	25	1,830	149	70	2,049	54%
2005	2,196	88	26	1,854	163	65	2,082	51%
2006	2,215	90	26	1,849	174	76	2,099	52%
2007	2,253	98	33	1,877	186	59	2,122	50%
2008	2,230	108	43	1,804	196	79	2,079	52%
2009	2,247	115	49	1,789	203	91	2,083	51%
2010	2,378	130	58	1,887	215	88	2,190	53%
2011	2,416	138	64	1,904	221	89	2,214	53%
2012	2,460	144	71	1,929	226	90	2,245	53%
2013	2,507	152	78	1,954	232	91	2,277	54%
2014	2,552	159	84	1,980	237	92	2,309	54%
2015	2,600	167	91	2,006	242	94	2,342	54%
2016	2,644	174	98	2,030	247	95	2,372	54%
2017	2,687	181	105	2,053	252	96	2,401	55%
2018	2,732	189	111	2,079	256	97	2,432	55%
2019	2,773	196	118	2,100	261	98	2,459	55%

**Schedule 4**

**Previous Year and 2-Year Forecast of Peak Demand and Net Energy for Load**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	ACTUAL		FORECAST			
	2009		2010		2011	
	Peak		Peak		Peak	
<u>Month</u>	<u>Demand</u>	<u>NEL</u>	<u>Demand</u>	<u>NEL</u>	<u>Demand</u>	<u>NEL</u>
	<u>(MW)</u>	<u>(GWh)</u>	<u>(MW)</u>	<u>(GWh)</u>	<u>(MW)</u>	<u>(GWh)</u>
JAN	420	163	464	184	362	160
FEB	421	147	373	137	334	138
MAR	319	147	293	144	295	145
APR	310	148	326	147	329	148
MAY	400	179	389	177	393	179
JUN	465	210	424	193	428	195
JUL	421	209	437	210	441	212
AUG	433	208	439	214	441	216
SEP	404	199	419	196	422	197
OCT	406	179	360	167	363	168
NOV	272	140	314	145	317	146
DEC	297	154	336	156	339	157

**Schedule 5**  
**FUEL REQUIREMENTS**  
As of January 1, 2010

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
FUEL REQUIREMENTS			UNITS	ACTUAL 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
(1)	NUCLEAR		TRILLION BTU	1	1	1	1	1	1	1	1	1	1	1
(2)	COAL		1000 TON	556	646	556	609	626	536	544	547	553	555	561
	RESIDUAL													
(3)	STEAM		1000 BBL	0	0	0	0	0	0	0	0	0	0	0
(4)	CC		1000 BBL	0	0	0	0	0	0	0	0	0	0	0
(5)	CT		1000 BBL	10	0	0	0	0	0	0	0	0	0	0
(6)	TOTAL:		1000 BBL	10	0	0	0	0	0	0	0	0	0	0
	DISTILLATE													
(7)	STEAM		1000 BBL	0	0	0	0	0	0	0	0	0	0	0
(8)	CC		1000 BBL	0	0	0	0	0	0	0	0	0	0	0
(9)	CT		1000 BBL	3	0	0	0	0	0	0	0	0	0	0
(10)	TOTAL:		1000 BBL	3	0	0	0	0	0	0	0	0	0	0
	NATURAL GAS													
(11)	STEAM		1000 MCF	1902	791	1600	1362	1310	1414	1509	1484	1474	1572	1613
(12)	CC		1000 MCF	2181	796	2336	1588	1626	1762	1591	1786	1892	1963	2034
(13)	CT		1000 MCF	173	498	853	686	692	659	960	716	914	776	887
(14)	TOTAL:		1000 MCF	4256	2085	4789	3636	3628	3835	4060	3986	4280	4311	4534
(15)	OTHER (specify)		TRILLION BTU	0	0	0	0	0	0	0	0	0	0	0

**Schedule 6.1**  
**ENERGY SOURCES (GWH)**  
As of January 1, 2010

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	ENERGY SOURCES		UNITS	ACTUAL 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
(1)	ANNUAL FIRM INTERCHANGE (INTER-REGION)		GWh	0	0	0	0	0	0	0	0	0	0	0
(2)	NUCLEAR		GWh	87	52	105	122	108	122	108	122	108	122	108
(3)	COAL		GWh	1287	1496	1287	1411	1450	1225	1247	1254	1267	1273	1289
	RESIDUAL													
(4)		STEAM	GWh	4	0	0	0	0	0	0	0	0	0	0
(5)		CC	GWh	0	0	0	0	0	0	0	0	0	0	0
(6)		CT	GWh	1	0	0	0	0	0	0	0	0	0	0
(7)		TOTAL:	GWh	5	0	0	0	0	0	0	0	0	0	0
	DISTILLATE													
(8)		STEAM	GWh	0	0	0	0	0	0	0	0	0	0	0
(9)		CC	GWh	1	0	0	0	0	0	0	0	0	0	0
(10)		CT	GWh	0	0	0	0	0	0	0	0	0	0	0
(11)		TOTAL:	GWh	1	0	0	0	0	0	0	0	0	0	0
	NATURAL GAS													
(12)		STEAM	GWh	147	62	131	108	103	111	119	116	116	123	126
(13)		CC	GWh	245	69	205	140	142	154	139	157	166	172	179
(14)		CT	GWh	29	44	71	58	59	56	76	59	73	63	71
(15)		TOTAL:	GWh	421	175	407	306	304	321	334	332	355	358	376
(16)	NUG		GWh	0	0	0	0	0	0	0	0	0	0	0
(17)	BIOFUELS		GWh	0	0	0	0	0	0	0	0	0	0	0
(18)	BIOMASS	ppa	GWh	0	0	0	0	0	394	394	395	394	394	394
(19)	GEOTHERMAL		GWh	0	0	0	0	0	0	0	0	0	0	0
(20)	HYDRO	ppa	GWh	0	0	0	0	0	0	0	0	0	0	0
(21)	LANDFILL GAS	ppa	GWh	24	27	32	32	32	32	32	32	32	32	32
(22)	MSW		GWh	0	0	0	0	0	0	0	0	0	0	0
(23)	SOLAR	FIT-PV	GWh	1	8	17	26	30	35	39	43	48	48	48
(24)	WIND		GWh	0	0	0	0	0	0	0	0	0	0	0
(25)	OTHER RENEWABLE	LFG-SWLF	GWh	0	0	0	0	0	0	0	0	0	0	0
(26)	Total Renewable		GWh	25	35	49	58	62	461	465	470	474	474	474
(27)	Purchased Energy		GWh	257	286	213	188	186	6	6	5	1	1	2
(28)	Energy Sales		GWh	0	0	0	0	0	0	0	0	0	0	0
(29)	NET ENERGY FOR LOAD		GWh	2083	2044	2061	2085	2110	2135	2160	2183	2205	2228	2249

**Schedule 6.2**  
**ENERGY SOURCES (%)**  
As of January 1, 2010

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
ENERGY SOURCES			UNITS	ACTUAL 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
(1)	ANNUAL FIRM INTERCHANGE (INTER-REGION)		GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(2)	NUCLEAR		GWh	4.18%	2.54%	5.09%	5.85%	5.12%	5.71%	5.00%	5.59%	4.90%	5.48%	4.80%
(3)	COAL		GWh	61.79%	73.19%	62.45%	67.67%	68.72%	57.38%	57.73%	57.44%	57.46%	57.14%	57.31%
<b>RESIDUAL</b>														
(4)		STEAM	GWh	0.19%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(5)		CC	GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(6)		CT	GWh	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(7)		TOTAL:	GWh	0.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>DISTILLATE</b>														
(8)		STEAM	GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(9)		CC	GWh	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(10)		CT	GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(11)		TOTAL:	GWh	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>NATURAL GAS</b>														
(12)		STEAM	GWh	7.06%	3.03%	6.36%	5.18%	4.88%	5.20%	5.51%	5.31%	5.26%	5.52%	5.60%
(13)		CC	GWh	11.76%	3.38%	9.95%	6.71%	6.73%	7.21%	6.44%	7.19%	7.53%	7.72%	7.96%
(14)		CT	GWh	1.39%	2.15%	3.44%	2.78%	2.80%	2.62%	3.52%	2.70%	3.31%	2.83%	3.16%
(15)		TOTAL:	GWh	20.21%	8.56%	19.75%	14.68%	14.41%	15.04%	15.46%	15.21%	16.10%	16.07%	16.72%
(16)	NUG		GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(17)	BIOFUELS		GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(18)	BIOMASS	ppa	GWh	0.00%	0.00%	0.00%	0.00%	0.00%	18.45%	18.24%	18.09%	17.87%	17.68%	17.52%
(19)	GEOTHERMAL		GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(20)	HYDRO	ppa	GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(21)	LANDFILL GAS	ppa	GWh	1.15%	1.32%	1.55%	1.53%	1.52%	1.50%	1.48%	1.47%	1.45%	1.44%	1.42%
(22)	MSW		GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(23)	SOLAR	fit	GWh	0.05%	0.39%	0.82%	1.25%	1.42%	1.64%	1.81%	1.97%	2.18%	2.15%	2.13%
(24)	WIND		GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(25)	OTHER RENEWABLE		GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(26)	Total Renewable		GWh	1.200192%	1.71%	2.38%	2.78%	2.94%	21.59%	21.53%	21.53%	21.50%	21.27%	21.08%
(27)	Purchased Energy		GWh	12.34%	13.99%	10.33%	9.02%	8.82%	0.28%	0.28%	0.23%	0.05%	0.04%	0.09%
(28)	Energy Sales		GWh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(29)	NET ENERGY FOR LOAD		GWh	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

**TABLE 2.1****DEMAND-SIDE MANAGEMENT IMPACTS  
Total Program Achievements**

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<u>Year</u>	<u>MWh</u>	<u>Summer kW</u>
1980	254	168
1981	575	370
1982	1,054	674
1983	2,356	1,212
1984	8,024	2,801
1985	16,315	4,619
1986	25,416	7,018
1987	30,279	8,318
1988	34,922	9,539
1989	38,824	10,554
1990	43,661	11,753
1991	48,997	12,936
1992	54,898	14,317
1993	61,356	15,752
1994	66,725	16,871
1995	72,057	18,022
1996	75,894	18,577
1997	79,998	19,066
1998	84,017	19,541
1999	88,631	20,055
2000	93,132	20,654
2001	97,428	21,185
2002	102,159	21,720
2003	106,277	22,222
2004	109,441	22,676
2005	113,182	23,405
2006	116,544	24,078
2007	130,876	26,510
2008	151,356	30,138
2009	165,775	31,801
2010	178,075	36,401
2011	190,375	41,401
2012	202,675	46,801
2013	214,975	52,401
2014	227,275	58,101
2015	239,575	63,901
2016	251,920	68,201
2017	264,265	72,501
2018	276,611	76,801
2019	288,957	81,101

---

**TABLE 2.2**  
**DELIVERED FUEL PRICES**  
**\$/MMBtu**

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<u>Year</u>	<u>Residual Fuel Oil</u>	<u>Distillate Fuel Oil</u>	<u>Natural Gas</u>	<u>Compliance Coal (1)</u>	<u>Performance Coal (2)</u>	<u>Nuclear</u>
2000	4.52	5.99	4.53	1.62		0.38
2001	4.15	6.53	4.94	1.88		0.38
2002	4.58	5.69	3.95	2.06		0.38
2003	4.87	6.59	5.97	2.04		0.43
2004	5.17	5.17	6.40	2.03		0.41
2005	7.15	18.67	9.15	2.38		0.45
2006	8.07	15.24	8.68	3.00		0.45
2007	7.68	16.35	8.52	2.94		0.40
2008	7.60	13.74	10.57	3.87		0.42
2009	6.54	10.99	6.11	3.96		0.59
2010	12.97	14.91	6.76		3.31	0.65
2011	14.68	16.68	8.49		3.43	0.66
2012	16.53	18.46	8.84		3.53	0.83
2013	17.65	19.44	9.04		3.61	0.85
2014	19.80	21.74	9.43		3.73	0.92
2015	20.90	22.97	9.95		3.83	0.93
2016	21.60	23.83	10.46		3.88	0.96
2017	22.02	24.44	11.08		3.94	0.96
2018	22.87	25.39	11.90		4.04	0.95
2019	23.43	26.15	12.87		4.12	0.95

---

- (1) Compliance coal has an average heat content 12,800 Btu/lb and a sulfur content of approximately 0.7%.  
(2) Performance coal has an average heat content 12,500 Btu/lb and a sulfur content of approximately 1.25%.

### **3. FORECAST OF FACILITIES REQUIREMENTS**

#### **3.1 GENERATION RETIREMENTS**

The System plans to retire one generating unit within the next 10 years. The John R. Kelly steam unit #7 (JRK #7) (23 MW) is presently scheduled to be retired in October 2013.

#### **3.2 RESERVE MARGIN AND SCHEDULED MAINTENANCE**

GRU uses a planning criterion of 15% capacity reserve margin (suggested for emergency power pricing purposes by Florida Public Service Commission Rule 25-6.035). Available generating capacities are compared with System summer peak demands in Schedule 7.1 (and Figure 3.1) and System winter peak demands in Schedule 7.2 (and Figure 3.2). Higher peak demands in summer and lower unit operating capacities in summer result in lower reserve margins during the summer season than in winter. In consideration of existing resources, expected future purchases, and savings impacts from conservation programs, GRU expects to maintain a summer reserve margin well in excess of 15% over the next 10 years.

#### **3.3 GENERATION ADDITIONS**

Due to new EPA regulations promulgated in March 2005, the retrofit of our Deerhaven #2 Air Quality Control System (AQCS) was implemented in order to comply with the new regulations. The upgraded AQCS consists of a selective catalytic reduction (SCR) system and a dry flue gas desulfurization system (FGD) which will include a baghouse (BH). The SCR and the FGD/BH were made operational during the 2009 spring maintenance outage.

The GRU South Energy Center located at the new Shands Healthcare Cancer Hospital (4.1 MW combustion turbine) was recently completed and began commercial operation in early summer 2009.

As part owner in the Crystal River 3 nuclear unit, GRU will benefit from three uprates of the unit's capacity approved by the Nuclear Regulatory Commission (NRC). GRU's share (1.4079%) of the uprates (first 11 MW in 2008, second 28 MW in 2009, and 140 MW in 2011) will net the System 2.5 MW of additional base load capacity.

On September 18, 2009 GRU and Gainesville Renewable Energy Center LLC filed as joint applicants for a Need Determination by the Florida Public Service Commission pursuant to the Florida Electrical Power Siting Act. The application contains a complete description of the competitive solicitation process that culminated in a 30 year Power Purchase Agreement for the 100 MW net capacity power plant to be fueled entirely with biomass. Final Need Determination will be obtained in June of 2010. On February 28, 2010 application for a Site Certification Amendment at GRU's Deerhaven Plant site was submitted to the Florida Department of Environmental Protection. A comprehensive transmission planning study was performed and no transmission upgrade will be required.

### **3.4 DISTRIBUTION SYSTEM ADDITIONS**

Up to five new, identical, mini-power delivery substations (PDS) were planned for the GRU system back in 1999. Three of the five; Rocky Point, Kanapaha, and Ironwood were installed by 2003. A fourth PDS is under construction and should be in service by August 2010. The location for this PDS, which will be known as Springhill, is a parcel owned by GRU west of Interstate 75 and north of 39<sup>th</sup> Avenue along our existing 138 kV transmission line. A fifth PDS is being considered for addition to the System no earlier than 2015. The location of this proposed fifth PDS would be in the northern part of the service territory near U.S. Highway 441. These new mini-power delivery substations have been planned to redistribute the load from the existing substations as new load centers grow and develop within the System.

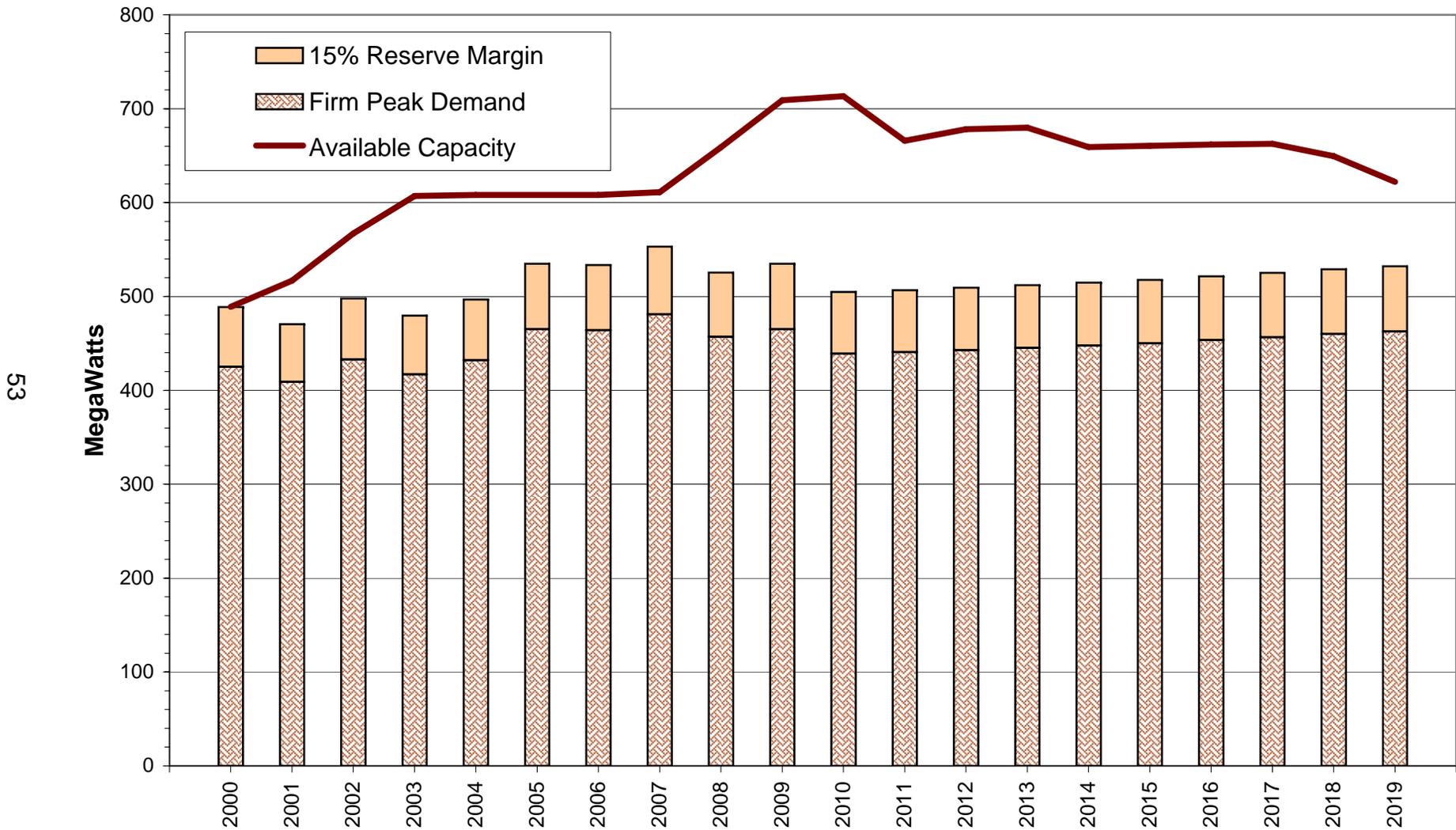
Each PDS will consist of one (or more) 138/12.47 kV, 33.6 MVA, wye-wye substation transformer with a maximum of eight distribution circuits. The proximity of these new PDS's to other, existing adjacent area substations will allow for backup in the event of a substation transformer failure.

**Schedule 7.1  
Forecast of Capacity, Demand, and Scheduled Maintenance at Time of Summer Peak**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Year	Total Installed Capacity (2) MW	Firm Capacity Import MW	Firm Capacity Export MW	OF MW	Total Capacity Available (3) MW	System Firm Summer Peak Demand (1) MW	Reserve Margin before Maintenance MW % of Peak		Scheduled Maintenance MW	Reserve Margin after Maintenance (1) MW % of Peak	
2000	547	0	58	0	489	425	64	15.1%	0	64	15.1%
2001	610	0	93	0	517	409	108	26.4%	0	108	26.4%
2002	610	0	43	0	567	433	134	30.9%	0	134	30.9%
2003	610	0	3	0	607	417	190	45.6%	0	190	45.6%
2004	611	0	3	0	608	432	176	40.7%	0	176	40.7%
2005	611	0	3	0	608	465	143	30.8%	0	143	30.8%
2006	611	0	3	0	608	464	144	31.0%	0	144	31.0%
2007	611	0	0	0	611	481	130	27.0%	0	130	27.0%
2008	610	49	0	0	659	457	202	44.2%	0	202	44.2%
2009	608	101	0	0	709	465	244	52.5%	0	244	52.5%
2010	609	110	0	0	713	439	274	62.5%	0	274	62.5%
2011	609	65	0	0	666	441	225	51.2%	0	225	51.2%
2012	620	69	0	0	678	443	235	53.2%	0	235	53.2%
2013	620	73	0	0	680	445	234	52.6%	0	234	52.6%
2014	597	78	0	0	659	448	211	47.2%	0	211	47.2%
2015	597	82	0	0	661	450	210	46.8%	0	210	46.8%
2016	597	86	0	0	662	453	209	46.0%	0	209	46.0%
2017	597	88	0	0	663	457	206	45.1%	0	206	45.1%
2018	583	90	0	0	649	460	189	41.2%	0	189	41.2%
2019	555	92	0	0	622	463	159	34.4%	0	159	34.4%

- (1) System Peak demands shown in this table reflect continued service to partial and full requirements wholesale customers. In the event these contracts are not renewed, reserve margins shown in this table will increase significantly.
- (2) Details of planned changes to installed capacity from 2009-2018 are reflected in Schedule 8.
- (3) The coincidence factor used for Summer photovoltaic capacity is 35%.

**Figure 3.1**  
**Summer Peak Demand and Resources**

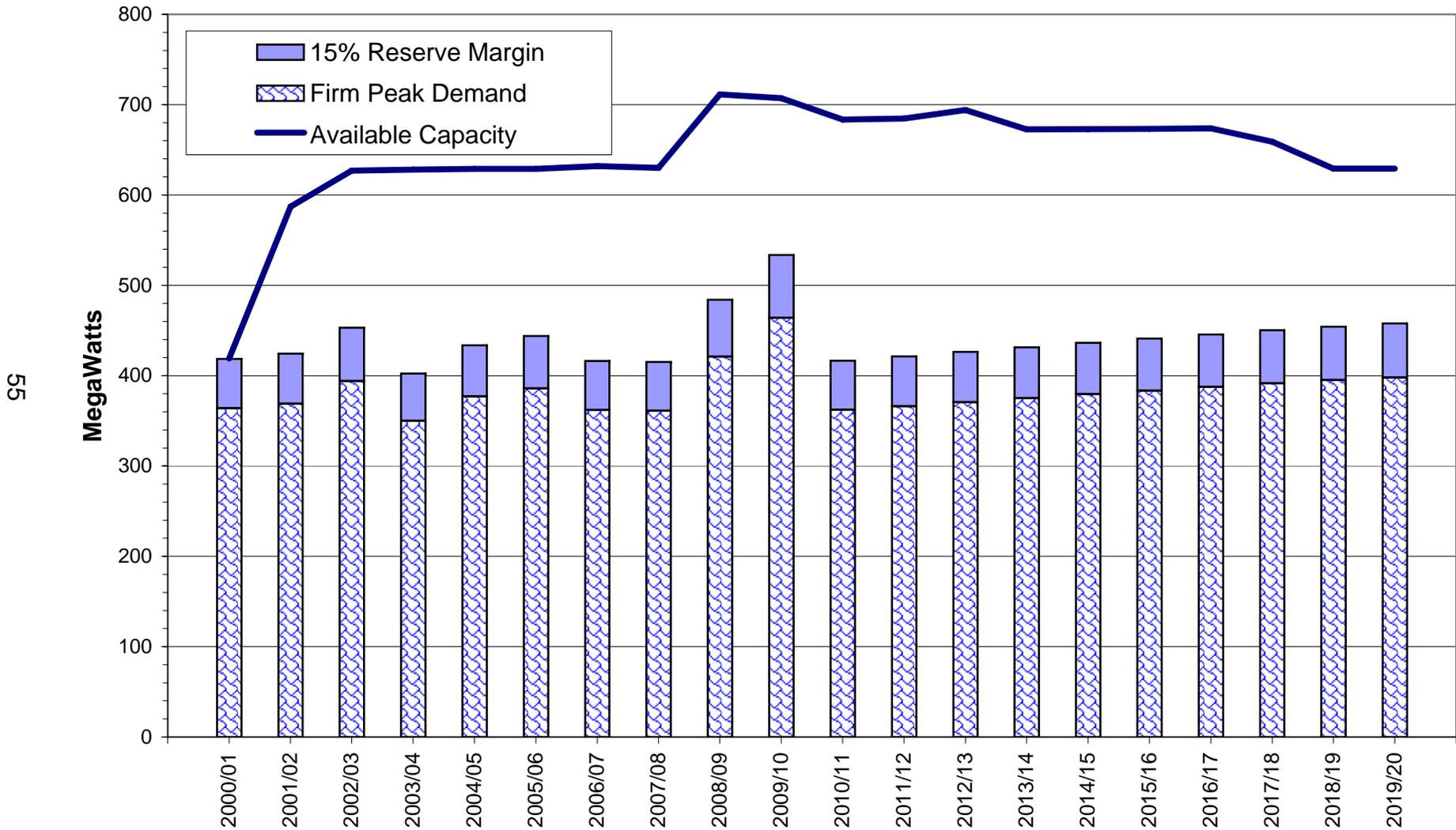


**Schedule 7.2**  
**Forecast of Capacity, Demand, and Scheduled Maintenance at Time of Winter Peak**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Year	Total Installed Capacity (2) MW	Firm Capacity Import MW	Firm Capacity Export MW	QF MW	Total Capacity Available (3) MW	System Firm Winter Peak Demand (1) MW	Reserve Margin before Maintenance		Scheduled Maintenance MW	Reserve Margin after Maintenance (1)	
							MW	% of Peak		MW	% of Peak
2000/01	512	0	93	0	419	364	55	15.1%	0	55	15.1%
2001/02	630	0	43	0	587	369	218	59.1%	0	218	59.1%
2002/03	630	0	3	0	627	394	233	59.1%	0	233	59.1%
2003/04	631	0	3	0	628	350	278	79.4%	0	278	79.4%
2004/05	632	0	3	0	629	377	252	66.8%	0	252	66.8%
2005/06	632	0	3	0	629	386	243	63.0%	0	243	63.0%
2006/07	632	0	0	0	632	362	270	74.6%	0	270	74.6%
2007/08	630	0	0	0	630	361	269	74.5%	0	269	74.5%
2008/09	635	76	0	0	711	421	290	69.0%	0	290	69.0%
2009/10	630	78	0	0	707	464	243	52.4%	0	243	52.4%
2010/11	630	61	0	0	683	362	321	88.7%	0	321	88.7%
2011/12	631	65	0	0	685	366	318	87.0%	0	318	87.0%
2012/13	640	69	0	0	694	371	323	87.3%	0	323	87.3%
2013/14	617	74	0	0	673	375	298	79.3%	0	298	79.3%
2014/15	617	78	0	0	673	380	293	77.3%	0	293	77.3%
2015/16	617	82	0	0	673	384	290	75.6%	0	290	75.6%
2016/17	617	86	0	0	674	387	286	73.9%	0	286	73.9%
2017/18	602	88	0	0	659	391	267	68.3%	0	267	68.3%
2018/19	572	90	0	0	629	395	234	59.2%	0	234	59.2%
2019/20	572	92	0	0	629	398	231	58.1%	0	231	58.1%

- (1) System Peak demands shown in this table reflect continued service to partial and full requirements wholesale customers. In the event these contracts are not renewed, reserve margins shown in this table will increase significantly.
- (2) Details of planned changes to installed capacity from 2009-2018 are reflected in Schedule 8.
- (3) The coincidence factor used for Winter photovoltaic capacity is 9.3%.

**Figure 3.2**  
**Winter Peak Demand and Resources**



**Schedule 8**

**PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHANGES**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Plant Name	Unit No.	Location	Unit Type	Fuel		Fuel Transport		Const. Start Mo/Yr	Comm. In-Service Mo/Yr	Expected Retire Mo/Yr	Gross Capability		Net Capability		Status
				Pri.	Alt.	Pri.	Alt.				Summer (MW)	Winter (MW)	Summer (MW)	Winter (MW)	
DEERHAVEN	FS02	Alachua County Secs. 26,27 35 T8S, R19E	ST	BIT		RR		Sep-09	May-12		0	0	9.1	9.1	A
CRYSTAL RIVER	3	Citrus County Sec. 33, T17S, R16E	ST	NUC		TK			Jan-12				1.930	1.978	A
J. R. KELLY	FS07	Alachua County Sec. 4, T10S, R20E	ST	NG	RFO	PL	TK			Oct-13	-24	-24	-23.2	-23.2	RT

**Unit Type**

GT = Combustion (gas) Turbine  
ST = Steam Turbine

**Fuel Type**

BIT = Bituminous Coal  
NG = Natural Gas  
NUC = Nuclear  
RFO = Residual Fuel Oil

**Transportation Method**

PL = Pipeline  
RR = Railroad  
TK = Truck

**Status**

A = Generating unit capability increased  
D = Generating unit capability decreased  
RT = Existing generator scheduled for retirement  
V = Under construction, more than 50% complete

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## **4. ENVIRONMENTAL AND LAND USE INFORMATION**

### **4.1 DESCRIPTION OF POTENTIAL SITES FOR NEW GENERATING FACILITIES**

Currently, there are no new potential generation sites planned.

### **4.2 DESCRIPTION OF PREFERRED SITES FOR NEW GENERATING FACILITIES**

The new potential biomass-fueled generation facility is planned to be located on land leased from GRU on the northwest portion of the existing Deerhaven plant site. The Deerhaven site is shown in Figure 1.1 and Figure 4.1, located north of Gainesville off U.S. Highway 441. The Deerhaven site is preferred for the proposed project for several major reasons. Since it is an existing power generation site, future development is possible while minimizing impacts to the greenfield (undeveloped) areas. It also has an established access to fuel supply and power delivery; as well as fuel, water and combustion product management facilities. The preferred location of the proposed biomass facility is shown on Figure 4.1.

#### **4.2.1 Land Use and Environmental Features**

The location of the Deerhaven Generating Station ("Site") is indicated on Figure 1.1 and Figure 4.1, overlain on USGS maps that were originally at a scale of 1 inch : 24,000 feet. Figure 4.2 provides a photographic depiction of the land use and cover of the existing site and adjacent areas. The existing land use of the certified portion of the site is industrial (i.e., electric power generation and transmission and ancillary uses such as fuel storage and conveyance; water, combustion product, and forest management). The areas acquired since 2002 have been annexed into the City of Gainesville. The site is a PS, Public Services and Operations District, zoned property. Surrounding land uses are primarily rural or agricultural with some low-density residential development. The Deerhaven site

encompasses approximately 3474 acres.

The Site is located in the Suwannee River Water Management District. A small increase in water quantities for potable uses is projected. It is estimated that industrial water usage associated with the new unit could be as much as two million gallons per day (MGD). The groundwater allocation in the existing Site Certification would be sufficient to accommodate the requirements of the site in the future with the proposed new unit. Water for potable use will be supplied via the City's potable water system. Groundwater will continue to be extracted from the Floridian aquifer. A significant amount of reclaimed water from GRU's Main St. and/or Kanapaha wastewater treatment plants may be made available to the site to supply industrial process and cooling water needs. Process wastewater is currently collected, treated and reused on-site. The site has zero discharge of process wastewater to surface and ground waters, with a brine concentrator and on-site storage of solid water treatment by-products. It is expected that this practice would continue with the addition of a new unit. Other water conservation measures may be identified during the design of the project.

#### **4.2.2 Air Emissions**

The proposed generation technology would necessarily meet all applicable standards for all criteria pollutants.

#### **4.3 STATUS OF APPLICATION FOR SITE CERTIFICATION**

On February 28, 2010 GRU and Gainesville Renewable Energy Center LLC applied for site certification for the planned 100 MW biomass generating facility located on land that is part of the Deerhaven site.

Figure 4.1

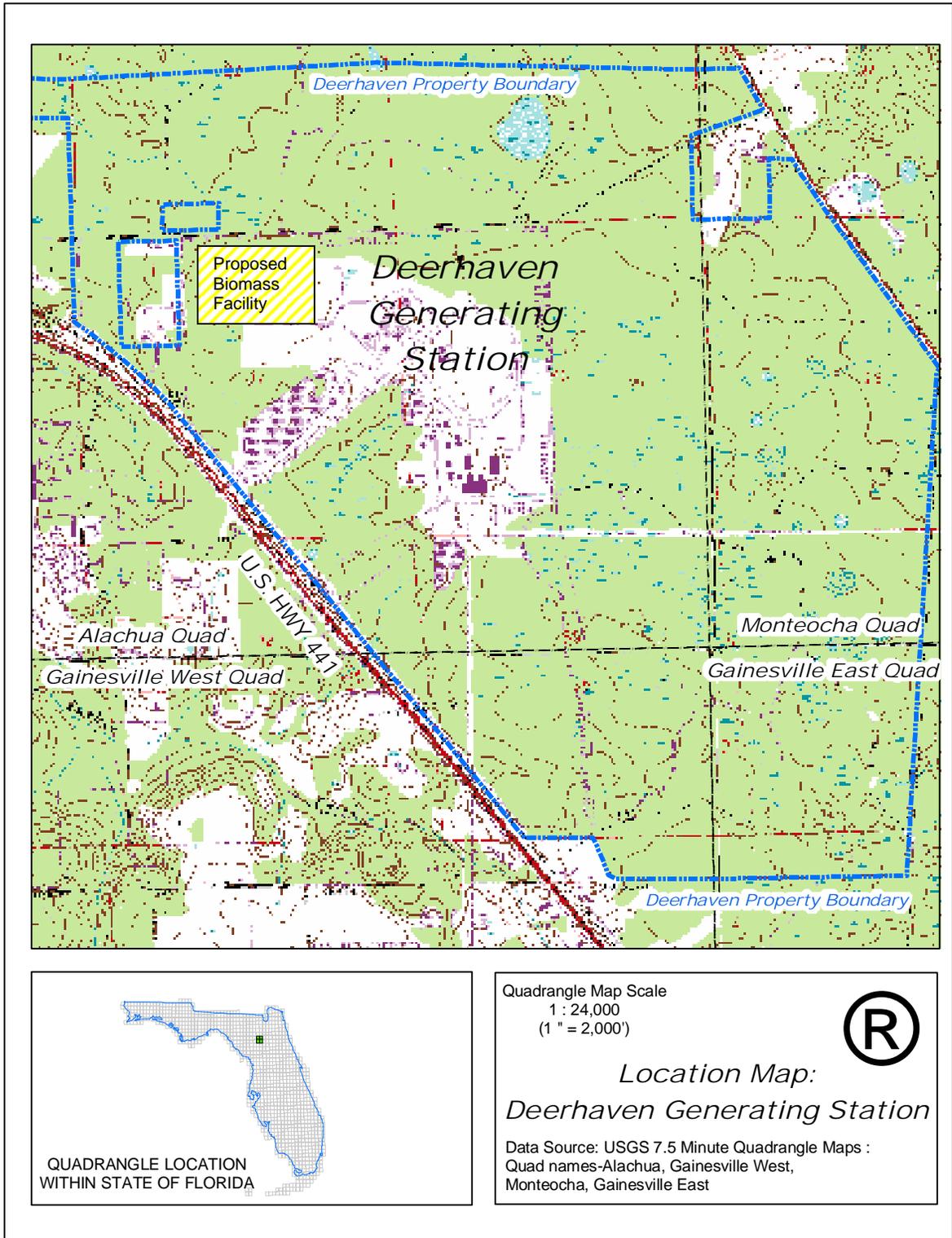
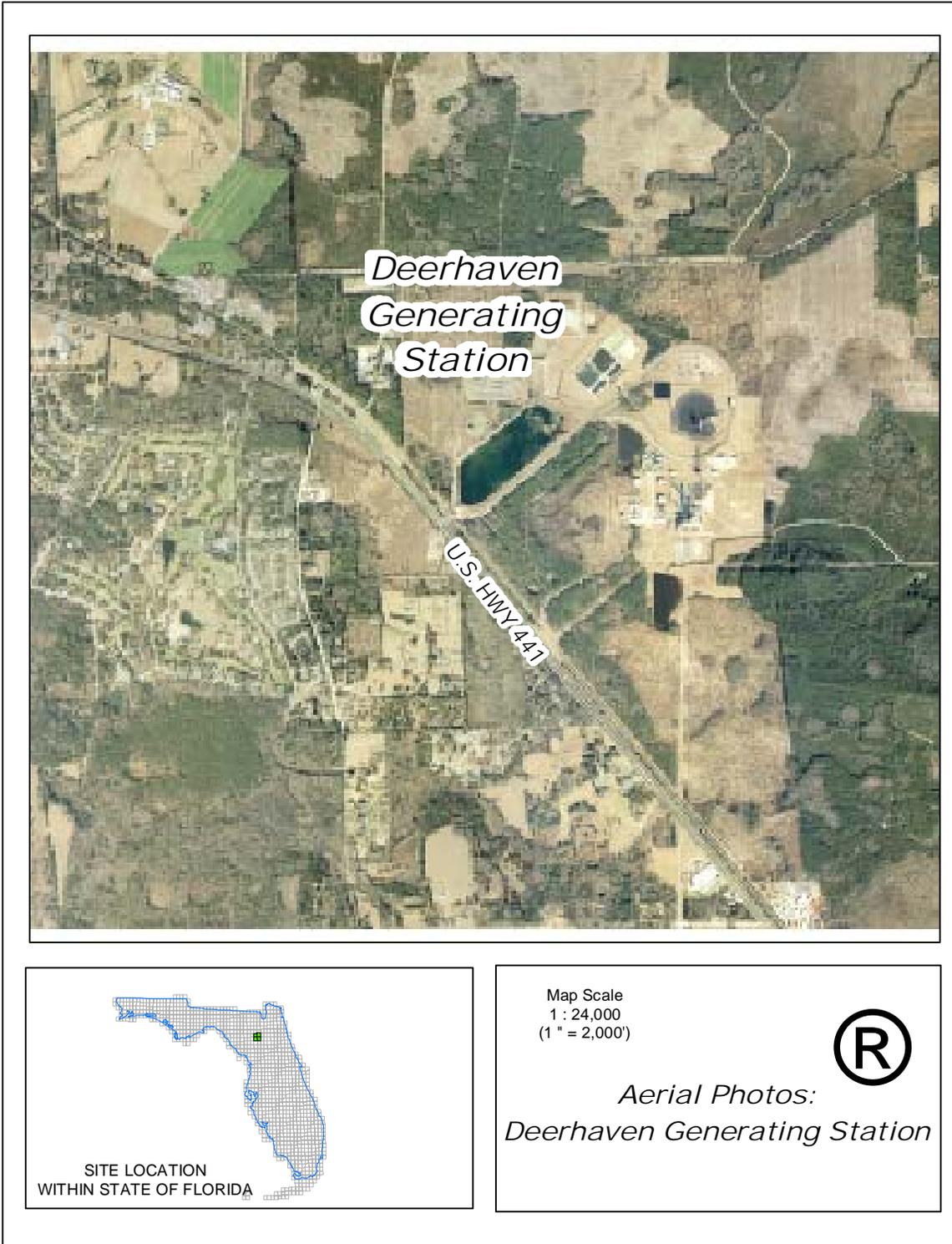


Figure 4.2



# **City of Gainesville**

*City Hall  
200 East University Avenue  
Gainesville, Florida 32601*



## **Meeting Minutes**

**Monday, October 8, 2007**

**1:00 PM**

**City Hall Auditorium**

## **City Commission**

*Mayor Pegeen Hanrahan (At Large)  
Mayor-Commissioner Pro Tem Rick Bryant (At Large)  
Commissioner Jeanna Mastrodicasa (At Large)  
Commissioner Scherwin Henry (District 1)  
Commissioner Ed Braddy (District 2)  
Commissioner Jack Donovan (District 3)  
Commissioner Craig Lowe (District 4)*

*Persons with disabilities who require assistance to participate in this meeting are requested to notify the Office of Equal Opportunity at 334-5051 or call the TDD phone line at 334-2069 at least two business days in advance.*

## CALL TO ORDER - 1:06 PM

## ROLL CALL

Present: Edward Braddy, Pegeen Hanrahan, Rick Bryant, Craig Lowe, Jack Donovan, Jeanna Mastrodicasa and Scherwin Henry

## INVOCATION

*The City Commission observed a moment of silence.*

## CONSENT AGENDA

*Mayor-Commissioner Pro Tem Bryant moved and Commissioner Lowe seconded to adopt the Consent Agenda with the following modifications.*

*(VOTE: 6-0, Commissioner Braddy - Absent, MOTION CARRIED)*

### *MODIFICATIONS:*

- 1. File #070513 - Request to Accept a Florida Department of State Division of Cultural Affairs Challenge Grant - (Revised Fiscal Note).*
- 2. File #070538 Arbitrator Decision in Fraternal Order of Police Gator Lodge 67 vs. City of Gainesville - (Remove from the Consent Agenda and place on the Regular Agenda for discussion).*

## CITY MANAGER, CONSENT AGENDA ITEMS

### 070482.

#### **Interlocal Agreement with Alachua County Board of County Commissioners - Base Level Transit Services (B)**

**This item involves a request to authorize the City Manager to execute the Interlocal Agreement between the City of Gainesville Regional Transit System (City) and the Alachua County Board of County Commissioners (County) for Base Level Transit Service.**

#### **RECOMMENDATION**

*Recommended Motion: The City Commission authorize the City Manager to execute the Interlocal Agreement with Alachua County Board of County Commissioners for base level transit service for the period of October 1, 2007, through September 30, 2008, subject to approval by the City Attorney as to form and legality.*

*Alternative Recommendation: The City Commission deny authorization for the City Manager to execute the Interlocal Agreement with Alachua County Board of County Commissioners for base level transit service for the period of*

*October 1, 2007, through September 30, 2008.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**070483.**

**Interlocal Agreement with Alachua County Board of County Commissioners - Route 75 Transit Services (B)**

**This item involves a request to authorize the City Manager to execute the Interlocal Agreement between the City of Gainesville Regional Transit System (City) and the Alachua County Board of County Commissioners (County) for Route 75 Transit Services.**

**RECOMMENDATION**

*Recommended Motion: The City Commission authorize the City Manager to execute the Interlocal Agreement with Alachua County Board of County Commissioners for Route 75 transit service for the period of October 1, 2007, through September 30, 2008, subject to approval by the City Attorney as to form and legality.*

*Alternative Recommendation: The City Commission deny authorization for the City Manager to execute the Interlocal Agreement with Alachua County Board of County Commissioners for Route 75 transit service for the period of October 1, 2007, through September 30, 2008.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**070484.**

**Final Adoption of the Transit Development Plan for FY 2008 (B)**

**This item involves a request that the City Commission adopt the RTS Transit Development Plan as submitted to the Florida Department of Transportation (FDOT) on August 31, 2007.**

**RECOMMENDATION**

*The City Commission adopt the TDP for FY2008-2012.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**070503.**

**Citation Module for Gainesville Police Department - Request for Purchase Order to Sungard OSSI's (B)**

**This item requests the City Commission to authorize the issuance of a Purchase Order for a Mobile Citation Module and the ensuing Annual Maintenance Fee.**

**RECOMMENDATION**

*Recommended Motion: The City Commission authorizes the City Manager to execute a Purchase Order to Sungard OSSI, a specified source, in an amount not to exceed \$61,600.00 for the purchase of this module.*

*Alternative Recommendation A: The City Commission authorizes less than \$61,600.00 for the Mobile Citation Module with the understanding that this will drastically limit the police department's ability to manage its Records Management Database.*

*Alternative Recommendation B: The City Commission denies funding.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**070513.**

**Request to Accept a Florida Department of State Division of Cultural Affairs Challenge Grant (NB)**

**This item involves a request to accept a Florida Department of State Division of Cultural Affairs Challenge grant for the Liquid Muse: Paintings from the St. Johns Region traveling art exhibition and related events.**

**RECOMMENDATION**

*Recommended Motion: The City Commission approve the request to accept a Florida Department of State Division of Cultural Affairs Challenge grant for the Liquid Muse: Paintings from the St. Johns Region art exhibition and related events, if awarded, and authorize the City Manager or designee to execute any related documents pending approval by the City Attorney as to form and legality.*

*Alternative Recommendation: The City Commission deny the request to accept a Florida Department of State Division of Cultural Affairs Challenge grant if awarded funding for the Liquid Muse: Paintings from the St. Johns Region art exhibition and related events.*

**This Matter was Approved as Recommended on the Consent Agenda.**

**GENERAL MANAGER FOR UTILITIES, CONSENT AGENDA ITEMS**

**CITY ATTORNEY, CONSENT AGENDA ITEMS**

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**CLERK OF THE COMMISSION, CONSENT AGENDA ITEMS****070519.****City Commission Minutes (B)****RECOMMENDATION**

*The City Commission approve the minutes of September 10, 2007 (Regular Meeting); September 17, 2007 (Special Meeting); September 24, 2007 (Board of Trustees and Regular Meeting); and September 25, 2007 (Special Meeting); as circulated.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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070519b\_20071008.pdf  
070519c\_BOT\_20071008.pdf  
070519d\_20071008.pdf

**070532.****Resignation of Gainesville Code Enforcement Board Member Alfonso T. Atwaters (B)****RECOMMENDATION**

*The City Commission accept the resignation of Alfonso T. Atwaters from the Gainesville Code Enforcement Board effective immediately with appreciation for his service.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**EQUAL OPPORTUNITY DIRECTOR, CONSENT AGENDA ITEMS****COMMITTEE REPORTS, CONSENT AGENDA ITEMS****PUBLIC SAFETY COMMITTEE, CONSENT****REGIONAL UTILITIES COMMITTEE, CONSENT****060775.****Impact of Tiered Rates on People with Low Income Levels (NB) - 060775****RECOMMENDATION**

*The Regional Utilities Committee (RUC) recommends that the City Commission send a letter to Governor Crist promoting the tiered rate structure as a conservation tool and remove item #060775 from the referral list.*

**This Matter was Approved as Recommended on the Consent Agenda.**

## Passed The Consent Agenda

**A motion was made by Mayor-Commissioner Pro Tem Bryant, seconded by Commissioner Lowe, including all the preceding items marked as having been adopted on the Consent Agenda. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan  
Absent: Edward Braddy

## COMMUNITY REDEVELOPMENT AGENCY, CONSENT ITEMS

### END OF CONSENT AGENDA

### ADOPTION OF THE REGULAR AGENDA

*Mayor-Commissioner Pro Tem Bryant moved and Commissioner Henry seconded to adopt the Regular Agenda with the following modifications.*

*(VOTE: 6-0, Commissioner Braddy - Absent, MOTION CARRIED)*

#### *MODIFICATIONS:*

- 1. File #070529 - Opportunity to Construct a Large Photovoltaic System - (Additional back-up submitted - Power Point Presentation and new recommendation).*
- 2. File #070528 - Nuclear Energy Option - (Additional Back-up/Power Point Presentation).*

### CHARTER OFFICER UPDATES

### CLERK OF THE COMMISSION

### CITY MANAGER

### GENERAL MANAGER FOR UTILITIES

#### **070430. Excellence in Leadership Group Project (B)**

**Last Spring the Excellence in Leadership (EIL) team was asked to develop a new residential energy efficiency program. The purpose of the program was to increase energy efficiency using a more customized or "whole house" approach.**

*GRU General Manager for Utilities Karen Johnson gave introductions.*

*GRU Energy Supply Design Engineer Eric Walters, Marketing and Communications Specialist Dan Clark, Water/Wastewater Supervising Design Engineer Jason Sparks, Electric Transmission and Distribution Forester Joe Wolf, Marketing and Communications Specialist Josie Binion Strategic Planning Utility Analyst Diane Wilson, Sr. Account Representative Bill Shepherd and Strategic Planning Utility Analyst David Barclay gave presentations.*

*NOTE: Commissioner Braddy entered the meeting room at 1:14 PM.*

**RECOMMENDATION**      *The City Commission hear a presentation from EIL members regarding the Home Performance with Energy Star Program to be implemented in January 2008.*

**Discussed**

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**070527.**

**Biomass Power Supply Request for Proposals (RFP) (B)**

**Biomass generating resources have the potential to provide i) cost effective renewable capacity and/or energy benefits, ii) environmental attributes consistent with the preferences of the Gainesville community, and iii) enhanced and reliable energy supply for the GRU system. Staff has drafted a power supply Request for Proposals (RFP) for biomass-fueled base load generation capacity, and wishes to review this proposal with the Commission to be certain the wishes of the Community are appropriately represented.**

*GRU Assistant General Manager for Strategic Planning Ed Regan gave a presentation.*

*AMENDMENT: Authorize staff to issue the proposed power supply RFP for biomass fueled generation capacity with the following amendment: 1) Page 3 of 25 (2nd paragraph) of the RFP beginning with the sentence - "Municipal solid waste generating technologies only be considered if they employ advanced pollution controls - insert the sentence: "The materials used as fuel should not be those that could feasibly be recycled"; and 2) authorize staff to adjust the schedule (not to conflict with swearing-in) and correct other scrivener's errors as necessary.*

*Chair Hanrahan recognized Walter Willard, Dr. Dwight Adams, Dr. Joshua Dickinson, Sally Dickinson, Dian Deevey, Dr. Tom Bussing, Rob Brinkman and Ed Brown who spoke to the matter.*

**RECOMMENDATION**      *The City Commission authorize staff to issue the proposed power supply RFP for biomass-fueled generation capacity.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Henry, that this matter be Approved as Amended. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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## WAIVER OF RULES

*The rules were waived by consensus to hear File #070538 before File #070529.*

### 070529.

#### **Opportunity to Construct a Large Photovoltaic System (B)**

**Staff has been in discussions with a large retail customer interested in constructing an extensive photovoltaic system (up to 250 kW system) on top of a covered parking structure.**

*GRU Utility Analyst David Barclay gave a presentation.*

*Chair Hanrahan recognized Dr. Tom Bussing, Sally Dickinson, Harold Kegelmann, Dian Deevey, Rob Brinkman, Ed Brown, Dr. Dwight Adams and Ted LaCombe who spoke to the matter.*

*FIRST MOTION: Commissioner Donovan moved and Commissioner Lowe seconded to ask staff to bring back a cost benefit analysis on the various options presented by staff today.*

*(VOTE: 2-5, Commissioner's Donovan and Lowe - Yes; and Commissioners Braddy, Bryant, Henry, Mastrodicasa and Mayor Hanrahan - No, MOTION FAILED)*

*Chair Hanrahan recognized Wal-Mart Representative Quinta Vettel who spoke to the matter.*

*SECOND MOTION (MAIN MOTION): Mayor-Commissioner Pro Tem Bryant moved and Commissioner Henry seconded to approve staff's recommendation to move forward with the discussions with Wal-mart regarding the photovoltaic project using the pass through as fuel cost funding mechanism, with up to 5 cents impact per month.*

*(VOTE: 7-0, MOTION CARRIED)*

#### **RECOMMENDATION**

*The City Commission hear a presentation from staff regarding the proposed project; cost estimates; timelines; and funding sources.*

**A motion was made by Mayor-Commissioner Pro Tem Bryant, seconded by Commissioner Henry, that this matter be Approved, as shown above (Second Motion). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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**CITY ATTORNEY**

**CITY AUDITOR**

**EQUAL OPPORTUNITY DIRECTOR**

**COMMITTEE REPORTS (PULLED FROM CONSENT)**

**PUBLIC SAFETY COMMITTEE**

**ADVISORY BOARDS/COMMITTEES (APPOINTMENTS/REPORTS)**

**OUTSIDE AGENCIES**

**MEMBERS OF THE CITY COMMISSION**

**COMMISSION COMMENTS (if time available)**

**RECESS - 5:17 PM**

**RECONVENE - 5:50 PM**

**PLEDGE OF ALLEGIANCE (5:30pm)**

**PROCLAMATIONS/SPECIAL RECOGNITIONS**

**070533. Dave Mays Automotive Business Appreciation Day - October 1, 2007 (B)**

**RECOMMENDATION** *Dave Mays, Owner of Dave Mays Automotive to accept the proclamation.*

**Heard**

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**070534. Fire Prevention Week - October 7-13, 2007 (B)**

**RECOMMENDATION** *Gainesville Fire-Rescue Risk Reduction Bureau Deputy Chief Tim Hayes, Specialist Laura Koppel, and Specialist Krista Gonzalez to accept the proclamation.*

**Heard**

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**070535.****National Arts and Humanities Month - October 2007 (B)****RECOMMENDATION***City of Gainesville Visual Arts Coordinator Erin Friedberg to accept proclamation.***Heard**

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**070536.****United Nations Day in Gainesville - October 18, 2007 (B)****RECOMMENDATION***UN Day in Gainesville Chair Elisabeth Renner to accept the proclamation.***Placed on File**

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**070537.****DECA Week - October 7-13, 2007 (B)****RECOMMENDATION***Buchholz High School DECA Chapter President Clare Rumsey, Vice President Emily Eskin, Secretary Hannah Stark, and Marketing Vice President Matthew Norton to accept the proclamation.***Heard**

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**CITIZEN COMMENT (6:00pm) - Please sign on sign-up sheet****Robert Weaver - Michigan Heights Neighborhood***Tree Trail Apts. Shooting Incidents - Chief Norm Botsford made comments.***Ron Carpenter***East Gainesville Partners - Hatchett Creek Item - Possible Special Meeting.***Rob Brinkman***Net Metering for Photovoltaic Systems.*

**Evelyn Fox**

*NAACP Convention.*

**Matt Funk - 5 Star Pizza**

*Solid Waste Issues Downtown.*

**Walter Willard**

*Various Issues.*

**Pat Fitzpatrick**

*Homeless Issues.*

**Harry Kegelmann**

*Solar Photovoltaic Issues/Peak Oil.*

**070560. Harry Kegelmann - Citizen Comment (B)**

**RECOMMENDATION**     *The City Commission hear comments from Harry Kegelmann and place back-up submitted on file.*

**Nkwanda Jah**

*Housing for the Working Poor*

**Kevin Claney**

*Hatchett Creek Development*

**PUBLIC HEARINGS**

**ORDINANCES, 1ST READING- ROLL CALL REQUIRED**

**070429. SERVICE CHARGES FOR INSTALLATION OR TURN-ON OF UTILITY SERVICE AND FIELD VISITS FOR RECONNECTION OF UTILITY SERVICE (B)**

**Ordinance No. 0-07-81**

AN ORDINANCE AMENDING CHAPTER 27, ARTICLE 1, SECTION 27-15 OF THE CODE OF ORDINANCES OF GAINESVILLE, FLORIDA RELATING TO SERVICE CHARGES FOR INSTALLATION OR TURN-ON OF UTILITY SERVICE AND FIELD VISITS FOR RECONNECTION OF UTILITY SERVICE; AMENDING APPENDIX A, UTILITIES SECTION (1), SUBSECTION c BY DELETING AN ADDITIONAL BILLING CHARGE FOR METERS READ BY THE CONSUMER; AMENDING APPENDIX A, UTILITIES SECTION (3), SUBSECTION c BY PROVIDING FOR A BACKFLOW TESTING FEE; AMENDING APPENDIX A, UTILITIES SECTION (7), SUBSECTION b(3) SERVICE CHARGES BY DELETING A FEE FOR TRANSFER OF UTILITY SERVICE CLASSIFICATION AND PROVIDING FOR A FIELD VISIT TRIP CHARGE; AND AMENDING APPENDIX A, UTILITIES SECTION (7)b BY ADDING SUBSECTION 10 PROVIDING FOR AN UNAUTHORIZED SERVICE INVESTIGATION FEE; PROVIDING A REPEALING CLAUSE; PROVIDING DIRECTIONS TO THE CODIFIER; PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

*Chair Hanrahan recognized Walter Willard who spoke to the matter.*

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Mayor-Commissioner Pro Tem Bryant, that this matter be Adopted on First Reading (Ordinance). The motion carried by the following vote:**

Votes: Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan  
Absent: Edward Braddy

070429\_200710081300.pdf

**070448.**

**CORRECTION OF SCRIVENER'S ERROR (URBAN SERVICES REPORT)  
(B)**

**Ordinance No. 0-07-79**

**An ordinance of the City of Gainesville, Florida, correcting a scrivener's error by adding tax parcel number 06687-004-000 to the title and Section 1 of Ordinance No. 070130, which was adopted on August 27, 2007; and providing an immediate effective date.**

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Mastrodicasa, that this matter be Adopted on First Reading (Ordinance). The motion carried by the following vote:**

Votes: Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan  
Absent: Edward Braddy

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070520.**EXTENSION OF MORATORIUM ON ELECTRONIC AND ANIMATED SIGNS (B)****Ordinance No. 0-07-92**

**An Ordinance of the City of Gainesville, Florida, readopting and ratifying Ordinance No. 070026, and extending the time period of the temporary moratorium on the issuance of any permit, development order, site plan approval and any other official action of the City of Gainesville having the effect of permitting or allowing the construction, operation or erection of an electronic sign or an animated sign, as more specifically described in this Ordinance, excluding approvals and permits for the maintenance of an existing electronic sign or animated sign; the temporary moratorium shall apply to all real property located within the corporate limits of the City of Gainesville; providing a procedure for extraordinary hardship; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

*Chair Hanrahan recognized Walter Willard who spoke to the matter.*

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Henry, that this matter be Adopted on First Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan

Absent: Edward Braddy

070520\_200710081300.pdf

**ORDINANCES, 2ND READING- ROLL CALL REQUIRED**070455.**TOWING - FELONY CONVICTIONS (B)****Ordinance No. 0-07-83**

**An ordinance of the City of Gainesville amending Chapter 14.5, Article III, Section 14.5-27 to provide a time frame for disqualifying felony convictions; providing directions to the codifier; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

*GPD Lieutenant Pete Backhaus and Assistant City Attorney Ron Combs gave presentations.*

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance, as amended.*

**A motion was made by Commissioner Henry, seconded by Commissioner Donovan, that this matter be Adopted on Final Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Peegen Hanrahan  
Absent: Edward Braddy  
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## RESOLUTIONS- ROLL CALL REQUIRED

## PLAN BOARD PETITIONS

## DEVELOPMENT REVIEW BOARD PETITIONS

## SCHEDULED EVENING AGENDA ITEMS

## UNFINISHED BUSINESS

### 070528.

#### Nuclear Energy Option (NB)

**Progress Energy Florida (PEF) has publicly announced their plans to develop new nuclear electrical generating and transmission capacity at a site in Levy County, to potentially come on line between 2015 and 2020. PEF has recently initiated an inquiry into the level of municipal utility interest in participating in these units (probably as joint ownership). Nuclear generation holds the promise of being very reliable and competitive base load electrical capacity should carbon constrains be imposed on a state or national level, and is a valuable and important option for our customers.**

*GRU Assistant General Manager for Strategic Planning Ed Regan gave a presentation.*

*REFERRAL: Approve the recommendation and refer to the Regional Utilities Committee the following: 1) What to do with nuclear waste beyond short term storage and it's impacts; 2) area of safety where the nuclear power plant will be built, for example, salt-water intrusion (near the shore or river); and 3) how this influences our biomass option.*

*Chair Hanrahan recognized Walter Willard, Rob Brinkman and Harry Kegelmann who spoke to the matter.*

#### RECOMMENDATION

*The City Commission authorize the General Manager or her designee to enter into negotiations to secure an option on base load, nuclear generation capacity to be developed by Progress Energy Florida which might become available between 2015 and 2020.*

**A motion was made by Mayor-Commissioner Pro Tem Bryant, seconded by Commissioner Donovan, that this matter be Approved as Recommended and Referred to the Regional Utilities Committee, due back on April 8, 2008. The motion carried by the following vote:**

Votes: Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Peegen Hanrahan  
Absent: Edward Braddy

**070538.**

**ARBITRATOR DECISION IN FRATERNAL ORDER OF POLICE, GATOR LODGE 67 vs. CITY OF GAINESVILLE (NB)**

*Assistant City Attorney Stephanie Marchman, Police Chief Norm Botsford, Fraternal Order of Police (FOP) President Jeff McAdams, Attorney for the FOP Paul Donnelly, Administrative Services Director Becky Rountree and Assistant City Manager Fred Murry gave presentations.*

*FIRST MOTION: Commissioner Lowe moved and Commissioner Mastrodicasa seconded to approve the recommendation.  
(NO VOTE)*

*TABLE THE ITEM MOTION: Commissioner Braddy moved and Commissioner Bryant seconded to table this item.  
(VOTE: 7-0, MOTION CARRIED)*

**RECOMMENDATION**      *The City Commission authorize the City Attorney to file an action challenging the Arbitrator's Award.*

**A motion was made by Commissioner Braddy, seconded by Mayor-Commissioner Pro Tem Bryant, that this matter be Tabled. The motion carried by the following vote:**

Votes: Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Peegen Hanrahan

**070244.**

**VEHICLES FOR HIRE (B)**

*RTS ADA Coordinator Millie Crawford, Assistant City Attorney Ron Combs and MV Transportation Representative Ron Miravich gave presentations.*

*AMENDMENT: Exempt MV and City Vehicles from licensing.*

**RECOMMENDATION**      *The City Commission 1) authorize the City Attorney to draft and the Clerk of the Commission to advertise amendments to the Vehicle for Hire ordinance incorporating the changes proposed in the amendment that was pulled from first reading and the specific changes recommended by the Public Safety Committee at its meeting on September 20, 2007, to address*

*the concerns of the Vehicles for Hire owners and drivers; and  
2) hear from Regional Transit System staff regarding the  
licensing of medical transportation vehicles that was not  
brought forward at the September 20 Public Safety Meeting.*

**A motion was made by Commissioner Donovan, seconded by Commissioner Mastrodicasa, that this matter be Approved as Amended. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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## COMMISSION COMMENT

### Commissioner Jeanna Mastrodicasa

*1. Announcement - Economic Development University Community Committee (EDUCC) meeting next Monday afternoon Oct. 15, 2007 @ 1:00 PM, in the City Hall Auditorium - Presentation on Capital Projects Orientation from Kevin T. Byrne, Chief Investment Officer of the The University Financial Foundation (TUFF).*

*2. Meeting with neighborhood leaders - continued student relations, students living in single family neighborhoods. Student Community Relations Advisory Board - See following Referral File #070561.*

### 070561.

#### **Student Community Relations Advisory Board (SCRAB) Referral (NB)**

##### RECOMMENDATION

*The City Commission refer the issues of: 1) Enforcement of over-occupancy in single family neighborhoods; and 2) helping students to use less energy (reducing GRU usage, recycle more, etc.) to the Student Community Relations Advisory Board.*

**A motion was made by Commissioner Mastrodicasa, seconded by Commissioner Braddy, that this matter be Referred to the Student Community Relations Advisory Board, due back on April 8, 2008. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

### Commissioner Ed Braddy

*Roam Towing Issues - Public Safety Committee Referral.*

### Commissioner Scherwin Henry

*Hatchett Creek Development.*

**Commissioner Rick Bryant**

*Nora Kilroy - GPD*

**Mayor Pegeen Hanrahan**

*Mayor Eric M. Hersh of Weston, Florida - Challenging Constitutional Amendment  
Re: Property Taxes.*

**CITIZEN COMMENT (If time available)**

*There were no citizens who wished to speak during Citizen Comment.*

**ADJOURNMENT - 9:25 PM**

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Kurt M. Lannon, Clerk of the Commission

# **City of Gainesville**

*City Hall  
200 East University Avenue  
Gainesville, Florida 32601*



## **Meeting Minutes**

**Monday, January 28, 2008**

**1:00 PM**

**City Hall Auditorium**

## **City Commission**

*Mayor Pegeen Hanrahan (At Large)  
Mayor-Commissioner Pro Tem Rick Bryant (At Large)  
Commissioner Jeanna Mastrodicasa (At Large)  
Commissioner Scherwin Henry (District 1)  
Commissioner Ed Braddy (District 2)  
Commissioner Jack Donovan (District 3)  
Commissioner Craig Lowe (District 4)*

*Persons with disabilities who require assistance to participate in this meeting are requested to notify the Office of Equal Opportunity at 334-5051 or call the TDD phone line at 334-2069 at least two business days in advance.*

## CALL TO ORDER - 1:06 PM

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## ROLL CALL

Present: Edward Braddy, Pegeen Hanrahan, Rick Bryant, Craig Lowe, Jack Donovan, Jeanna Mastrodicasa and Scherwin Henry

## INVOCATION

[Play Video](#)

*The City Commission Observed a moment of silence.*

## CONSENT AGENDA

*Commissioner Lowe moved and Commissioner Mastrodicasa seconded to adopt the Consent Agenda with the following modifications.*

*(VOTE: 6-0, Commissioner Braddy - Absent, MOTION CARRIED)*

### *MODIFICATIONS:*

- 1. File #070445 - Airport Firefighting Services Reimbursements - (Revised fiscal note and revised back-up).*
- 2. File #070829 - 2009 Federal Legislative Agenda - (New Item - add to the Consent Agenda).*

*Chair Hanrahan recognized Tom Bussing and Barbara Ruth who spoke to the matter.*

## CITY MANAGER, CONSENT AGENDA ITEMS

### **070445.**

#### **Airport Firefighting Services Reimbursement (B)**

**This item provides an update on staff recommendations for proposed changes to the Agreement for services between the City and the Gainesville Alachua County Regional Airport Authority (GACRAA).**

#### **RECOMMENDATION**

*The City Commission authorize the City Manager to develop and execute a revised agreement subject to approval by the City Attorney as to form and legality.*

*Alternative Recommendation A: The City Commission not authorize the City Manager to develop and execute a revised agreement and instead provide further guidance to the City Manager.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**070814.**

**Traffic Engineering Services Agreement between the City of Gainesville and Alachua County for FY 2008 (B)**

**This item involves an agreement between the City of Gainesville (City) and Alachua County (County) for traffic engineering services in the amount of \$146,393.88 in revenue to the City during FY08.**

**RECOMMENDATION**

*Recommended Motion: The City Commission: 1) authorize the City Manager to execute the Traffic Engineering Services Agreement between the City of Gainesville and Alachua County for the period of October 1, 2007 to September 30, 2008.*

*Alternative Recommendation: The City Commission deny the authorization for the City Manager to execute the Agreement with the County, resulting in thirty-nine (39) traffic signals and forty (40) safety beacons not being maintained throughout Alachua County and the loss of at least \$146,393.88 in revenue for FY08.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**070815.**

**Continuation of Employee Bus Pass Programs (B)**

**This item involves a request for the City Commission to authorize the City Manager to execute interlocal agreements with the University of Florida (UF), Alachua County, Alachua/Bradford Regional Workforce Board, North Florida/South Georgia Veterans Administration Health System (VA), and Shands Teaching Hospital and Clinics, Inc. (Shands), for continuation of these employee bus pass programs.**

**RECOMMENDATION**

*Recommended Motion: The City Commission: 1) approve the annual contract for continuation of the Employee Bus Pass Program for City employees through January 2009; and 2) authorize the City Manager to execute interlocal agreements with the University of Florida, Alachua County, Alachua/Bradford Regional Workforce Board, North Florida/South Georgia Veterans Administration Health System, and Shands Teaching Hospital and Clinics, Inc., for continuation of these employee bus pass programs.*

*Alternative Recommendation A: The City Commission can deny continuation of the annual contracts and the resulting fiscal impact is the loss of \$130,045.50 in Regional Transit System revenue generated by the employee bus pass program.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**070821.**

**Florida Division of Cultural Affairs Local Arts Agency Grant (NB)**

**The Department of Parks, Recreation and Cultural Affairs requests City Commission approval to apply to the Florida Division of Cultural Affairs for a three-year Local Arts Agency grant.**

**RECOMMENDATION**

*The City Commission: 1) approve the submission of an application to the Local Arts Agency grant program; 2) authorize the City Manager to accept the grant if awarded; and 3) authorize the City Manager or designee to execute any grant related documents pending approval by the City Attorney as to form and legality.*

*Alternative Recommendation: The City Commission deny the submission of an application.*

**This Matter was Approved as Recommended on the Consent Agenda.**

**070824.**

**Award for Outstanding Achievement in Popular Annual Financial Reporting and Additional Award Announcements (NB)**

**The City was awarded Government Finance Officers Association of the United States and Canada (GFOA) Award for Outstanding Achievement in Popular Annual Financial Reporting for its 2006 Citizen's Report. The 2007 Citizen's Report is hereby presented to the Commission and will also be submitted to GFOA for the award. In addition, the Communications and Marketing Office will be sharing information on recent awards the Office has received from the Florida Government Communicators Association.**

**RECOMMENDATION**

*The City Commission: 1) accept the Award for Outstanding Achievement in Popular Annual Financial Reporting for Fiscal Year 2006; 2) receive the Citizen's Report for the fiscal year ended September 30, 2007; and 3) endorse submittal of the FY 2007 report to the GFOA.*

*NOTE: Document is available for viewing in the Clerk's Office.*

**This Matter was Approved as Recommended on the Consent Agenda.**

**070829.**            **2009 Federal Legislative Agenda (B)**

**RECOMMENDATION**        *The Commission accept the recommendation of the Audit, Finance and Legislative Committee and approve the proposed 2009 Federal Legislative Statement.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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070829B\_200801221300.pdf

070829a\_200802111300.pdf

070829b\_200802111300.pdf

**GENERAL MANAGER FOR UTILITIES, CONSENT AGENDA ITEMS****CITY ATTORNEY, CONSENT AGENDA ITEMS****070833.**            **AMENDING THE CODE OF ORDINANCES TO ELIMINATE REDUNDANT PROVISIONS RELATING TO TERMS OF CHARTER OFFICERS (NB)**

**RECOMMENDATION**        *The City Commission authorize the City Attorney to draft and the Clerk of the Commission to advertise the proposed ordinance repealing section 2-142 of the Code of Ordinances.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**070866.**            **KAREN JOHNSON'S RESIGNATION AS GENERAL MANAGER FOR UTILITIES (NB)**

**RECOMMENDATION**        *(1) Accept Karen Johnson's resignation as General Manager effective March 2, 2008, understanding that she will be employed as Advisor to the General Manager for the period March 3, 2008 through June 30, 2008; (2) amend Personnel Policy 8 to provide for PTO accrual of 10.47 hours per pay period, with a carryover cap of 372 hours and PCLB accrual of 80 hours per pay period for the position of Advisor to the General Manager for the period of time March 3, 2008 through June 30, 2008.*

**This Matter was Approved as Recommended on the Consent Agenda.**

**CLERK OF THE COMMISSION, CONSENT AGENDA ITEMS**

**070832.****City Commission Meetings (NB)****RECOMMENDATION**

*The City Commission: 1) Cancel meetings scheduled for May 26, 2008 and December 22, 2008; and 2) schedule joint meetings with the Alachua County Board of County Commission as follows:  
March 18 @ 5:00 PM - Solid Waste/Annexation Transition Agreement  
May 1 @ 5:00 PM - Koppers  
September 29 @ 3:00 PM  
December 1 @ 3:00 PM*

**This Matter was Approved as Recommended on the Consent Agenda.**

**070852.****Rules of the City Commission (NB)****RECOMMENDATION**

*The City Commission authorize the Clerk of the Commission and City Attorney to draft amendments to the Rules of the City Commission to change Regular meeting dates from Mondays to Thursdays, in concept, either on the 1st and 3rd or 2nd and 4th Thursdays of each month and authorize the Charter Officers to recommend a starting date.*

**This Matter was Approved as Recommended on the Consent Agenda.**

**070860.****Resignation of Citizens' Advisory Committee for Community Development Member Mary Freeman (B)****RECOMMENDATION**

*The City Commission accept the resignation of Mary Freeman from the Citizens' Advisory Committee for Community Development effective immediately and extends its appreciation for her services.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**EQUAL OPPORTUNITY DIRECTOR, CONSENT AGENDA ITEMS****COMMITTEE REPORTS, CONSENT AGENDA ITEMS****RECREATION, CULTURAL AFFAIRS AND PUBLIC WORKS COMMITTEE,**

**CONSENT****PERSONNEL & ORGANIZATIONAL STRUCTURE COMM, CONSENT****PUBLIC SAFETY COMMITTEE, CONSENT****070785.****Federal LECFTF Funding for Special Investigations Division (NB)****RECOMMENDATION**

*The City Commission approve the appropriation of the amount of \$25,000 from the Federal Law Enforcement Contraband Forfeiture Trust Fund for the Special Investigations Division Confidential Funds Enhancement.*

*Alternative Recommendation A: The City Commission authorize partial funding.*

*Alternative Recommendation B: The City Commission deny funding.*

**This Matter was Approved as Recommended on the Consent Agenda.**

**070786.****Gainesville Police Department Reichert House Construction (B)**

**This item requests the City Commission to approve \$5,000 expenditure from State Law Enforcement Contraband Forfeiture Trust Fund to construct a 2,400 square feet building.**

**RECOMMENDATION**

*The Public Safety Committee approve the appropriation of \$5,000 from State Law Enforcement Contraband Forfeiture fund.*

*Alternative Recommendation A: The City Commission authorize partial funding.*

*Alternative Recommendation B: The City Commission deny funding.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**070787.****Federal Law Enforcement Contraband Forfeiture Trust Fund Funding for Thermal Imager for GPD Helicopter (B)****RECOMMENDATION**

*The City Commission approve the appropriation of \$201,250 from the Federal Law Enforcement Contraband Forfeiture*

*Trust Fund for the purchase of a FLIR Systems Ultra 8000 Thermal Imager with Laser Pointer and Meeker Isolation Collar and installation costs and designate FLIR Systems, Inc., as the specified source for the Thermal Imager with Laser Pointer and designate Meeker Aviation as the specified source for the Isolation Collar.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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## **AUDIT, FINANCE AND LEGISLATIVE COMMITTEE, CONSENT**

## **EQUAL OPPORTUNITY COMMITTEE, CONSENT**

## **COMMUNITY REDEVELOPMENT AGENCY, CONSENT ITEMS**

### **Passed The Consent Agenda**

**A motion was made by Commissioner Lowe, seconded by Commissioner Mastrodicasa, including all the preceding items marked as having been adopted on the Consent Agenda. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan  
Absent: Edward Braddy

## **END OF CONSENT AGENDA**

## **ADOPTION OF THE REGULAR AGENDA**

[Play Video](#)

*Commissioner Lowe moved and Commissioner Mastrodicasa seconded to adopt the Regular Agenda with the following modifications.  
(VOTE: 6-0, Commissioner Braddy - Absent, MOTION CARRIED)*

### **MODIFICATIONS:**

- 1. File #070823 - Special Recognition of City of Gainesville's Citizen's Academy - (Move from City Manager category to Proclamations/Special Recognitions category at 5:30 PM).*
- 2. File #070855 - Status Update - Biosolids Land Application Site Purchase - (Withdraw from the agenda).*
- 3. File #070862 - 2008 Series A Bonds and 2008 Series B Bond Resolution - (Additional back-up submitted).*

4. File #070819 - Fat Tuscan Planned Development - (Additional back-up submitted).

5. File #051225 - Anti-Discrimination-Gender Identity - (Waive the Rules to hear this item at 8:30 PM).

6. File #070619 - Land Development Code Amendment - Religious Land use and Institutionalized Persons Act - (Waive the rules to hear this item immediately after File #051225, if all other items on the agenda are completed). *NEW RECOMMENDATION* - (Continue until February 4, 2008 at 8:30 PM).

## **CHARTER OFFICER UPDATES**

## **CLERK OF THE COMMISSION**

## **CITY MANAGER**

## **GENERAL MANAGER FOR UTILITIES**

[Play Video](#)

### **070855.**

#### **Status Update - Biosolids Land Application Site Purchase (B)**

**GRU has been pursuing the purchase of the Whistling Pines Ranch as approved by the City Commission on 7/23/07. Prior to purchase, a Special Exception is being sought from Alachua County to allow the continued land application of biosolids at the Whistling Pines Ranch. Staff will provide an update on the Special Exception process, issues that have been identified through the process, and findings related to the issues raised. We continue to believe that land application of biosolids is a sustainable and cost-effective method for reusing biosolids and want to ensure that the City Commission continues to share that opinion.**

#### **RECOMMENDATION**

*The City Commission: 1) Receive a presentation on the status of the purchase of the biosolids land application site. No further action is required for staff to continue pursuit of a required Special Exception from Alachua County and purchase of the Whistling Pines Ranch.*

#### **Withdrawn**

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### **070808.**

#### **Evaluation of Biomass-Fueled Generation Facility Proposals (B)**

**Staff is providing its evaluation of the proposals received in response to GRU's**

**Request for Proposals (RFP 2007-135) for a Biomass-Fueled Generation Facility for City Commission review and recommends that three respondents be invited to submit binding proposals.**

[Play Video](#)

*General Manager for Utilities Karen Johnson gave introductions.*

*GRU Assistant General Manager for Utilities Ed Regan, Purchasing Manager Joann Dorval, Strategic Planning Engineer Roger Westphal, GRU Attorney Skip Manasco, Fuels Analyst Patrice Kafle, Managing Utility Analyst Dr. Heidi Lannon, Strategic Planning Design Engineer Rob Klemans, Utility Forester Joe Wolf, Power Engineering Manager Randy Casserleigh, Financial Analyst Kevin Crawford and System Planning Director Rick Bachmeier gave presentations.*

*Chair Hanrahan recognized Rob Brinkman, Tom Cunilio, Joshua Dickinson, Lee Bidgood, Abia Theo, Adrienne Burgess, Dwight Adams, Walter Willard, Tom Bussing, Miles Andrews and Janet Woods who spoke to the matter.*

*AMENDMENT: Approve staff's recommendation asking for additional information and options with respect to: 1) Ownership vs. take and pay; 2) the percentage of biomass; 3) forest stewardship issues; 4) locally sourced materials; and 5) eliminating any recyclable material.*

**RECOMMENDATION**      *The City Commission authorize the General Manager or her designee to invite the three top-ranked respondents to RFP 2007-135 to each submit a binding proposal for a biomass-fueled generation facility, replacing any invitee that fails to affirmatively accept the invitation by inviting the next ranked respondent, in the following order of precedence: 1) Sterling Planet; 2) Covanta Energy; 3) Nacodoches Power, LLC; 4) Green Power Systems; 5) Taylor Biomass Energy, LLC; 6) Envortus, Inc.; 7) NRG Energy Inc.; 8) Timberland Harvesters, LLC; and 9) Railex Merchant Energy Group.*

**A motion was made by Commissioner Henry, seconded by Commissioner Donovan, that this matter be Approved as Amended. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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**CITY ATTORNEY**

**CITY AUDITOR**

**EQUAL OPPORTUNITY DIRECTOR**

**COMMITTEE REPORTS (PULLED FROM CONSENT)**

**RECREATION, CULTURAL AFFAIRS AND PUBLIC WORKS COMMITTEE**

**PERSONNEL & ORGANIZATION STRUCTURE COMMITTEE**

**PUBLIC SAFETY COMMITTEE**

**AUDIT, FINANCE AND LEGISLATIVE COMMITTEE**

**ADVISORY BOARDS/COMMITTEES (APPOINTMENTS/REPORTS)**

**OUTSIDE AGENCIES**

[Play Video](#)

**MEMBERS OF THE CITY COMMISSION**

**COMMISSION COMMENTS (if time available)**

**RECESS - 5:22 PM**

[Play Video](#)

**RECONVENE - 5:56 PM**

[Play Video](#)

**PLEDGE OF ALLEGIANCE (5:30pm)**

[Play Video](#)

**PROCLAMATIONS/SPECIAL RECOGNITIONS**

[Play Video](#)

**070861.****School Crossing Guard Appreciation Day - February 1, 2008 (B)**[Play Video](#)**RECOMMENDATION**

*Gainesville Police Department Captain Lonnie Scott and Police Service Technician Supervisor Ernestine Turner to accept the proclamation.*

**Heard**

070861\_200801281300.pdf

**070823.****Special Recognition - City of Gainesville's Citizens' Academy 2007 Graduates. (NB)**

**The City Commission recognize City of Gainesville's Citizens' Academy 2007 Graduates.**

[Play Video](#)

*Marketing and Communications Manager Bob Woods, Sr. Marketing and Communication Specialist Kate Parmelee; and Citizen's Academy graduates Mary C. Rhodes and Sheldon Packer gave presentations.*

**RECOMMENDATION**

*The City Commission: 1) recognize accomplishments of Gainesville 101, 2007 City of Gainesville Citizens' Academy graduates; and 2) hear brief comments from the class speaker on what they have learned.*

**Heard****CITIZEN COMMENT**[Play Video](#)**Dwight Adams**

*Biosolids for Fuel*

**Pat Fitzpatrick**

*Homeless Veterans Issues - See following File #070887.*

**070887.****Citizen Comment - Pat Fitzpatrick (B)****RECOMMENDATION**

*The City Commission hear comments from Pat Fitzpatrick*

*and place back-up submitted on file.*

**Placed on File**

070887\_CITIZEN COMMENT\_20080128.pdf

**Elizabeth Howard**

*Homeless in the Plaza - Farmer's Market Issue*

*Assistant City Manager Fred Murry made comments.*

**Theodore McLeod**

*GPD Issues*

**Jerry Williamson**

*GPD Issues*

**Tom Levy**

*Fat Tuscan Restaurant*

**Terry Martin Back**

*Veteran Assistance Programs.*

**991431**

**3:00 PM (B) - The Pension Review Committee hear a presentation by  
Mr. Daniel J. Holmes, Summit Strategies Group**

*Personal Medical Issue*

**Kevin Claney**

*Airport Noise Study - See following File #070888.*

**070888.**

**Citizen Comment - Kevin Claney (B)**

**RECOMMENDATION**

*The City Commission hear comments from Kevin Claney and  
place back-up submitted on file.*

**Placed on File**

070888\_CITIZENCOMMENT\_20080128.pdf

## Walter Willard

*Various Issues*

## Waiver of Rules

*Commissioner Braddy moved and Commissioner Lowe seconded to waive the rules to hear File #070757 Lynch Park, before the Public Hearings.*

*(VOTE: 6-0, Commissioner Henry - Absent, MOTION CARRIED)*

### [070757.](#)

#### **Lynch Park (B)**

[Play Video](#)

*CRA Project Coordinator Kelly Huard gave a presentation.*

#### **RECOMMENDATION**

*CRA to the City Commission: 1) Approve conceptual plan for Lynch Park; 2) Request the Parks, Recreation & Cultural Affairs Advisory Board and the Parks, Cultural Affairs & Public Works Committee provide input and comment to CRA staff; and 3) Request the Parks, Recreation & Cultural Affairs Advisory Board and the Parks, Cultural Affairs & Public Works Committee examine the potential for additional locations in Porters which could accommodate a fruit/vegetable garden*

**A motion was made by Mayor-Commissioner Pro Tem Bryant, seconded by Commissioner Lowe, that this matter be Approved as Recommended. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Craig Lowe, Rick Bryant and Pegeen Hanrahan

Nay: Edward Braddy

Absent: Scherwin Henry

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## PUBLIC HEARINGS

## ADOPTION READING-ROLL CALL REQUIRED

### [070620.](#)

#### **LAND USE CHANGE – MALLORY SQUARE (B)**

**Ordinance No. 0-07-112, Petition No. 73LUC-06PB**

**An ordinance amending the City of Gainesville 2000-2010 Comprehensive Plan, Future Land Use Map; by changing the land use category of certain property, as more specifically described in this ordinance, from “Residential Medium-Density (8-30 units per acre)” to “Mixed-Use Low-Intensity (8-30 units per acre)”;**  
**located in the vicinity of 3600 block, east side of Southwest 34th Street;**  
**providing a severability clause; providing a repealing clause; and providing an**

effective date.

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Donovan, that this matter be Adopted (Ordinance) on Adoption Reading. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

Absent: Scherwin Henry

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## **ORDINANCES, 1ST READING- ROLL CALL REQUIRED**

### **070621.**

#### **PLANNED DEVELOPMENT – MALLORY SQUARE (B)**

**Ordinance No. 0-07-113, Petition No. 74PDV-07PB**

**An Ordinance of the City of Gainesville, Florida; rezoning certain lands in the City, as more specifically described in this Ordinance, from “RMF-8: 8-30 units/acre multiple-family residential district” to “Planned Development” commonly known as “Mallory Square Planned Development” located in the vicinity of the 3600 block, east side of Southwest 34th Street; adopting a development plan report and development plan maps; providing conditions and restrictions; providing for enforcement and penalties; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Donovan, that this matter be Adopted on First Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

Absent: Scherwin Henry

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### **070208.**

#### **FOREST RIDGE/HENDERSON HEIGHTS NEIGHBORHOOD - RESIDENTIAL PARKING OVERLAY DISTRICT (B)**

**Ordinance No. 0-07-103; Petition No. 78NPD-07PB**

An ordinance of the City of Gainesville amending the Zoning Map Atlas by rezoning and imposing the Residential Parking Overlay District on certain properties zoned RSF-1 (Single-Family Residential, up to 3.5 dwelling units per acre) or RSF-2 (Single-Family Residential, up to 4.6 dwelling units per acre), consisting of 283 parcels on approximately 140 acres commonly known as the Forest Ridge/Henderson Heights Neighborhood, and located north of Northwest 16th Avenue, south of Northwest 23rd Avenue, east of Northwest 23rd Street, and west of Alfred A. Ring Park, as more specifically described in this ordinance; making findings; providing directions to the City Manager; providing directions to the codifier; providing a severability clause; providing a repealing clause; and, providing an effective date in accordance with the schedule provided herein.

[Play Video](#)

*City Neighborhood Planning Coordinator John Wachtel gave a presentation.*

*Chair Hanrahan recognized Melody Marshall and Carol Daly who spoke to the matter.*

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Mayor-Commissioner Pro Tem Bryant, that this matter be Adopted on First Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Craig Lowe, Rick Bryant and Pegeen Hanrahan  
Absent: Scherwin Henry and Edward Braddy

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**050761.****ENERGY EFFICIENCY STANDARDS AND REQUIREMENTS (B)****Ordinance 0-07-74**

An ordinance of the City of Gainesville amending Chapter 13, Article II. Housing Code of the City of Gainesville, relating to energy efficiency requirements; amending Section 13-16 to provide findings of fact and declaration of necessity; amending Section 13-19 to provide definition(s); adding Section 13-99 energy efficiency requirements; providing for enforcement; providing directions to the codifier; providing a severability clause; providing a repealing clause; and, providing an effective date in accordance with the schedule provided herein.

[Play Video](#)

*GRU Managing Utility Analyst Dr. Heidi Lannon gave a presentation.*

*NOTE: Commissioner Henry re-entered the meeting room during this item.*

*Chair Hanrahan recognized Evan Stone, Carol Daly, Frankie Scott, Walter Willard, Bob Mitchell, Brian Leslie, Terry Martin Back, Michelle Ott, Armando Grundy, Ben Techler, Loan Ngo, Walter Willard, Mark Mink, Linda Harris and Rob Brinkman who spoke to the matter.*

*MOTION: Commissioner Lowe moved and Commissioner Mastrodicasa seconded to withdraw the initial motion and refer the entire matter back to the Community Development Committee.*

*(VOTE: 7-0, MOTION CARRIED)*

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Mastrodicasa, that this matter be Referred to the Community Development Committee. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Peegen Hanrahan

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## **070627.**

### **PARKING GARAGE VIOLATIONS (B)**

#### **Ordinance No. 0-07-121**

**An ordinance of the City of Gainesville, Florida, amending section 26-2 by providing a definition for owner/vehicle owner; amending section 26-75 of the Gainesville Code of Ordinances by creating a new subsection (d) making it a violation to damage an entrance or exit control device of a municipal parking garage; creating a new subsection (e) making it a violation to enter or exit a municipal parking garage without paying appropriate fees; creating a new subsection (f) providing affirmative defenses for damaging an entrance or exit control device or entering or exiting without paying appropriate fees; creating a new subsection (g) regarding proof of affirmative defenses; amending Appendix A, Schedule of Fees, Rates and Charges, establishing penalties; providing directions to the codifier; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

[Play Video](#)

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Mastrodicasa, that this matter be Adopted on First Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jeanna Mastrodicasa, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan  
Absent: Jack Donovan and Scherwin Henry

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**070721.**

**VOLUNTARY ANNEXATION - PRAIRIE VIEW TRUST (B)**

**Ordinance No. 0-07-116**

**An Ordinance of the City of Gainesville, Florida, annexing a portion of the City of Gainesville Reserve Area pursuant to Chapter 90-496, Special Act, Laws of Florida, as amended by Chapter 91-382 and Chapter 93-347, Special Acts, Laws of Florida, known as the Alachua County Boundary Adjustment Act; making certain findings; including within the corporate limits of the City of Gainesville, Florida, that certain compact and contiguous area comprised of a portion of Tax Parcel 07240-000-000, as more specifically described in this ordinance, generally located south of the vicinity of Archer Road and Interstate 75, west of Interstate 75 and the City limits, north of Williston Road, and east of SW 62nd Avenue and the vicinity of SW 63rd Boulevard; providing for inclusion of the area in Appendix I of the City Charter; providing for land use and zoning regulations; providing directions to the City Manager and Clerk of the Commission; providing a severability clause; and providing an immediate effective date.**

[Play Video](#)

*Strategic Planning Manager Karen Billings gave a presentation.*

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Mastrodicasa, that this matter be Adopted on First Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy and Pegeen Hanrahan

Absent: Jack Donovan and Rick Bryant

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**ORDINANCES, 2ND READING- ROLL CALL REQUIRED**

**070510.**

**TRESPASS TOWING (B)**

**Ordinance No. 0-07-108**

**An ordinance of the City of Gainesville, Florida, amending Chapter 14.5, Article III, Section 14.5-29(4)(d), Gainesville Code of Ordinances, relating to photographs of vehicle violations and viewing photographs; creating a new Section 14.5-29.1 establishing and requiring the posting of a Customer Bill of**

**Rights; providing directions to the codifier; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

[Play Video](#)

*Police Lieutenant Pete Backhaus gave a presentation.*

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Mastrodicasa, that this matter be Adopted on Final Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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### **070542.**

#### **PLANNED DEVELOPMENT AMENDMENT - A CHILD'S PLACE (B)**

**Ordinance No. 0-07-91, Petition No. 95PDA-07PB**

**An Ordinance of the City of Gainesville, Florida; amending Ordinance No. 2604, that adopted the Planned Development commonly known as "A Child's Place" located in the vicinity of 4127 Northwest 34th Street; providing for the reduction of the lot size of the existing planned development; adopting revised development plan maps and a revised planned development report; amending and adopting additional conditions and restrictions; providing for penalties; providing a severability clause; providing a repealing clause; and providing an effective date.**

[Play Video](#)

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Mayor-Commissioner Pro Tem Bryant, that this matter be Adopted on Final Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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### **070626.**

#### **PARKING ENFORCEMENT PROGRAM BY PUBLIC WORKS DEPARTMENT EMPLOYEES (B)**

**Ordinance No. 0-07-107**

An ordinance of the City of Gainesville, Florida, amending Section 26-2 of the Gainesville Code of Ordinances to provide a definition for parking enforcement specialist; amending Section 26-46 to delete the term traffic enforcement technician and to provide parking enforcement authority to parking enforcement specialists; amending Section 26-53 by deleting the term traffic enforcement technician, providing parking enforcement authority to parking enforcement specialists; providing for notice by department initiating impoundment and prohibiting tampering or removing immobilization devices without authority of department initiating immobilization; deleting obsolete references in sections 26-46 and 26-53; providing directions to the codifier; providing a severability clause; providing a repealing clause; and providing an immediate effective date.

[Play Video](#)

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance, as amended.*

**A motion was made by Commissioner Donovan, seconded by Commissioner Henry, that this matter be Adopted on Final Reading, as amended (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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**070769.****URBAN MIXED-USE ZONING DISTRICTS (B)****Ordinance No. 0-06-120; Petition 141TCH-06 PB**

An ordinance of the City of Gainesville, Florida, amending the City of Gainesville Land Development Code, relating to the establishment of zoning districts and categories and to the correspondence of zoning districts with future land use categories; amending section 30-41, to add the Urban Mixed-Use 1 and Urban Mixed-Use 2 districts; amending section 30-46 to provide corresponding zoning districts and future land use categories that conform to the City of Gainesville 2000-2010 Comprehensive Plan; providing directions to the codifier; providing a severability clause; providing a repealing clause; and providing an immediate effective date.

[Play Video](#)

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Donovan, that this matter be Adopted on Final Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

Absent: Jeanna Mastrodicasa

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## RESOLUTIONS- ROLL CALL REQUIRED

[Play Video](#)

### **070816. Resolution for a Joint Participation Agreement - Service Development Grant for Intelligent Transportation System applications in Transit (B)**

**This item involves adoption of a Resolution authorizing the City Manager to execute a Joint Participation Agreement between the City of Gainesville and Florida Department of Transportation (FDOT) to accept a service development grant for applications in Transit.**

[Play Video](#)

**RECOMMENDATION**      *The City Commission adopt the Resolution.*

**A motion was made by Commissioner Lowe, seconded by Mayor-Commissioner Pro Tem Bryant, that this matter be Adopted (Resolution). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

Absent: Jeanna Mastrodicasa

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### **070862. 2008 Series A Bonds and 2008 Series B Bonds (B)**

**This item is related to financing for costs of acquisition and construction.**

[Play Video](#)

*GRU Chief Financial Officer Jennifer Hunt and Utility Attorney Skip Manasco gave presentations.*

**RECOMMENDATION**      *The City Commission: 1) Adopt the attached resolution (Authorizing Resolution), which:*

*(a) incorporates by reference and adopts, and authorizes the execution and delivery of:*

*(i) a Nineteenth Supplemental Utilities System Revenue Bond Resolution (Nineteenth Supplemental Resolution) which*

*authorizes the issuance, sale, execution and delivery of not to exceed \$105,000,000 in aggregate principal amount of the City's taxable Utilities System Revenue Bonds, 2008 Series A (Federally Taxable) (2008 Series A Bonds) in order to provide monies needed for payment of Costs of Acquisition and Construction (capital projects) that cannot be financed on a tax-exempt basis, and delegates the authority to determine certain matters in connection therewith; and*

*(ii) a Twentieth Supplemental Utilities System Revenue Bond Resolution (Twentieth Supplemental Resolution) which authorizes the issuance, sale, execution and delivery of \$90,000,000 in aggregate principal amount of the City's tax-exempt Variable Rate Utilities System Revenue Bonds, 2008 Series B (2008 Series B Bonds) in order to provide monies needed for payment of Costs of Acquisition and Construction that can be financed on a tax-exempt basis;*

*(b) in the case of the 2008 Series A Bonds:*

*(i) approves the form, and authorizes the execution and delivery, of a contract of purchase between the City and an underwriting group for which Goldman, Sachs & Co. serves as senior book-running manager, and delegates the authority to determine certain matters in connection therewith;*

*(ii) approves the form, and authorizes the execution and delivery, of a continuing disclosure certificate;*

*(iii) delegates the authority to procure municipal bond insurance for all or a portion of the 2008 Series A Bonds; and*

*(iv) approves the form and use of the preliminary official statement and the official statement relating to the 2008 Series A Bonds and authorizes the execution and delivery of said official statement;*

*(c) in the case of the 2008 Series B Bonds:*

*(i) approves the form, and authorizes the execution and delivery, of a contract of purchase between the City and Goldman, Sachs & Co., as sole underwriter;*

*(ii) in the event that the 2008 Series B Bonds are converted to the auction mode, the term mode or the fixed mode, approves the form, and authorizes the execution and delivery, of a continuing disclosure certificate;*

*(iii) approves the form, and authorizes the execution and delivery, of a remarketing agreement between the City and*

*Goldman, Sachs, pursuant to which Goldman, Sachs will serve as the initial remarketing agent for the 2008 Series B Bonds;*

*(iv) approves the form, and authorizes the execution and delivery, of a tender agency agreement between the City and U.S. Bank Trust National Association (who currently serves as Trustee for our Utilities System Revenue Bonds), pursuant to which U.S. Bank Trust will serve as the initial tender agent for the 2008 Series B Bonds;*

*(v) approves the form, and authorizes the execution and delivery, of a standby bond purchase agreement between the City and The Bank of New York, pursuant to which The Bank of New York initially will provide liquidity support for any 2008 Series B Bonds that are tendered for purchase and not remarketed;*

*(vi) approves the form and use of the official statement relating to the 2008 Series B Bonds;*

*(vii) delegates the authority to extend the term of any facility providing liquidity support for the 2008 Series B Bonds or to procure another facility in substitution therefore; and*

*(viii) delegates the authority to remove the remarketing agent and/or the tender agent for the 2008 Series B Bonds and to appoint successor(s) therefore;*

*(d) in the case of the 2008 Series A and B Bonds:*

*(i) authorizes the authentication and delivery of the 2008 Series A and B Bonds;*

*(ii) authorizes the registration or qualification of the 2008 Series A and B Bonds under the blue sky laws of various states; and*

*(iii) authorizes certain City officials to take other actions in connection with the issuance, sale and delivery of the 2008 Series A and B Bonds.*

*1. Authorize the amendment of the interest rate swap transaction between the City and Bear Stearns Financial Products Inc. (BSFP) entered into on October 23, 2006 to (a) postpone the effective date of the swap to the expected date of issuance of the 2008 Series A and B Bonds and (b) allow for the amortization schedule to be changed if the financing team decides that it is beneficial to the Utility to do so, in order to lower the total debt service expected to be paid on the 2008*

*Series B Bonds.*

*2. Authorize the amendment of the interest rate swap transaction between the City and JPMorgan Chase Bank, N.A. (JPMorgan) entered into on October 23, 2006 to (a) postpone the effective date of the swap to the expected date of issuance of the 2008 Series A and B Bonds and (b) allow for the amortization schedule to be changed if the financing team decides that it is beneficial to the Utility to do so, in order to lower the total debt service expected to be paid on the 2008 Series B Bonds.*

*3. Authorize the Clerk of the Commission, the General Manager and other Authorized Officers to execute such documents as may be necessary to proceed with the transactions authorized above and on [January 14???, 2008], and to take such other actions as may be necessary or advisable to proceed with the issuance of the 2008 Series A and B Bonds in accordance with this City Commission authorization.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Mastrodicasa, that this matter be Adopted (Resolution), as amended. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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## PLAN BOARD PETITIONS

[Play Video](#)

### **070818.**

**Fat Tuscan Land Use (B)**

**Petition 115LUC- 07 PB, Joe Montalto, agent for Jay and Michelle Reeves. Amend the 2000-2010 Gainesville Future Land Use Map from O (office - up to 20du/ac) to PUD (planned use district) to allow a small neighborhood café as an accessory use within an Office Land Use district. Located at 725 Northeast 1st Street. Related to Petition 112PDV-07PB - Legistar 070819.**

[Play Video](#)

*City Planner Gene Francis, Agent for the Petitioner Joe Montalto, Petitioner Jay Reeves and Planning Services Director Erik Bredfeldt gave presentations.*

*Chair Hanrahan recognized Tom Levy, Austin Gregg and Michelle Reeves who spoke to the matter.*

*AMENDMENT: Include in the hours of operation that the outdoor portion of the restaurant will not open until 9:00 AM.*

**RECOMMENDATION**      *City Plan Board to City Commission - The City Commission approve Petition 115LUC-07PB as revised by the Plan Board. Plan Board vote 7-0.*

*Staff to City Commission - the City Commission approve Plan Board's recommendation.*

*Staff to the Plan Board - Approve Petition 115LUC-07PB with conditions.*

**A motion was made by Commissioner Donovan, seconded by Commissioner Mastrodicasa, that this matter be Approved (Petition) as revised by the City Plan Board, as amended. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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## **070819.**

### **Fat Tuscan Planned Development (B)**

**Petition 112PDV- 07 PB, Joe Montalto, agent for Jay and Michelle Reeves. Rezone property from OR (office residential district - up to 20du/ac) to PD (planned development) district to allow a small neighborhood café as an accessory use within a professional office building. Located at 725 Northeast 1st Street. Related to Petition 115LUC-07PB - Legistar 070818.**

#### **Play Video**

*City Planner Gene Francis, Agent for the Petitioner Joe Montalto, Petitioner Jay Reeves and Planning Services Director Erik Bredfeldt gave presentations.*

*Chair Hanrahan recognized Tom Levy, Austin Gregg and Michelle Reeves who spoke to the matter.*

*AMENDMENT: Include in the hours of operation that the outdoor portion of the restaurant will not open until 9:00 AM.*

**RECOMMENDATION**      *City Plan Board to City Commission - The City Commission approve Petition 112PDV-07PB as revised by the Plan Board. Plan Board vote 7-0.*

*Staff to City Commission - The City Commission approve Plan Board's recommendation.*

*Staff to the Plan Board - Approve Petition 112PDV-07PB with*

*conditions.*

**A motion was made by Commissioner Donovan, seconded by Commissioner Mastrodicasa, that this matter be Approved (Petition) as revised by the City Plan Board, as amended. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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### **070820.**

#### **Street Vacation on Behalf of the Gainesville Police Department (B)**

**Petition 122SVA-07 PB, City of Gainesville/Public Works Department. Vacate, abandon and close Northwest 5th Street from CSX Railroad Right of Way to a point 10 feet south of the northwest corner of Lot 26 of Brush's Addition to Gainesville as per plat recorded in Plat Book "A," page 88 of the Public Records of Alachua County, and Northwest 7th Place from Northwest 5th Street to Northwest 4th Street.**

[Play Video](#)

*City Planner Jason Simmons gave a presentation.*

#### **RECOMMENDATION**

*City Plan board to city Commission- the City commission approve petition 122SVA-07PB. Plan Board vote 7-0.*

*Staff to the City Commission - the City Commission approve Plan Board's recommendation.*

*Staff to the Plan Board- Approve Petition 122SVA-07PB.*

**A motion was made by Mayor-Commissioner Pro Tem Bryant, seconded by Commissioner Donovan, that this matter be Approved (Petition). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

Absent: Scherwin Henry

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### **070776.**

#### **Sign Code Content Neutral Amendment (B)**

**Petition 104TCH-07PB, amend the Land Development Code section 30-315 through 30-327 of the Sign Code to make it consistent with recent court rulings and to revise the code to make it content neutral.**

[Play Video](#)

**RECOMMENDATION**      *Plan Board to the City Commission - approve the petition with the flag size limit to be determined by Staff.*

*Staff to the Plan Board- approve the petition.*

**A motion was made by Mayor-Commissioner Pro Tem Bryant, seconded by Commissioner Mastrodicasa, that this matter be Approved (Petition). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Craig Lowe, Rick Bryant and Pegeen Hanrahan  
Nay: Scherwin Henry and Edward Braddy

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## DEVELOPMENT REVIEW BOARD PETITIONS

## SCHEDULED EVENING AGENDA ITEMS

## WAIVER OF RULES

*Commissioner Braddy moved and Commissioner Lowe seconded to waive the rules to continue this item to February 4, 2008 at 8:30 PM.*

*(VOTE: 7-0, MOTION CARRIED)*

### 070619.

#### **LAND DEVELOPMENT CODE AMENDMENT - RELIGIOUS LAND USE AND INSTITUTIONALIZED PERSONS ACT (B)**

##### **Ordinance No. 0-07-118, Petition 103TCH-07PB**

**An ordinance of the City of Gainesville, Florida, amending Chapter 30, the Land Development Code, in accordance with the Religious Land Use and Institutionalized Persons Act, 42 U.S.C. § 2000cc, and making other revisions for clarity and consistency; amending Section 30-51 to allow public schools as a use by special use permit in single-family residential districts rather than a use by right and removing public libraries as a use by special use permit in single-family residential districts; amending Section 30-52 to remove conditions on places of religious assembly and allow private schools as a use by right in RMF-5 and RC districts, and allow places of religious assembly and private schools as use by right in MH districts; amending Section 30-53 to remove conditions on places of religious assembly and allow private schools as a use by right in multiple family medium residential districts; amending Sections 30-54, 30-62, 30-63, 30-72, 30-75, 30-76, and 30-78 to allow places of religious assembly as a use by right in residential mixed use, automotive-oriented business, tourist-oriented business, agricultural, public services and operations, airport facility, and corporate park districts; amending Section 30-55 to remove conditions on places of religious assembly and allow private schools as a use by right in residential high density districts; amending Section 30-59 to allow public schools, other than institutions of higher learning, as use by special use permit in**

general office districts; amending Sections 30-61, 30-64, and 30-65 to remove references to places of religious assembly as a condition related to membership organizations; amending Section 30-68 to allow places of religious assembly as a use by right, and remove reference to places of religious assembly as a condition related to membership organizations in warehousing and wholesaling district; amending Sections 30-69 and 30-70 to remove membership sports and recreation clubs as a use by right in limited and general industrial districts; amending Section 30-77 to allow private schools and places of religious assembly as a use by right, and to modify the dimensional requirements in educational services district; amending Section 30-91 to modify dimensional requirements specific to places of religious assembly and requirements for places of religious assembly accessory uses, including day care centers, schools, food distribution centers for the needy, and residences for destitute people; amending Section 30-103 to modify dimensional requirements for private schools; inserting clarifying language in Section 30-110; amending Sections 30-251, 30-306, and 30-307 to remove references to places of religious assembly; amending Section 30-253 to remove landscape buffer requirements specific to places of religious assembly, and apply buffer requirements to all assembly uses; amending Section 30-332 to modify parking spaces required for places of religious assembly; providing directions to the codifier; providing a severability clause; providing a repealing clause; providing a retroactive schedule; and providing an immediate effective date.

*NOTE: The rules were waived in order to continue this item to the February 4, 2008 Special City Commission Meeting at 8:30 PM.*

**RECOMMENDATION**      *The City Commission continue this ordinance until February 4, 2008 at 8:30 PM.*

*CLERK'S NOTE: It is anticipated that the City Commission will waive its Rules to hear this item immediately after Ordinance 051225 (Anti-Discrimination) if all other items are completed.*

**Continued**

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**051225.**

**ANTI-DISCRIMINATION - GENDER IDENTITY (B)**

**Ordinance No. 0-07-88**

**An ordinance of the City of Gainesville, Florida, amending Chapter 8 of the Gainesville Code of Ordinances, relating to discrimination; defining gender identity and readily achievable; adding gender identity as a class protected against discrimination in Article I, In General, Article II, Human Rights Board, Article III, Equal Employment Opportunity, Article IV, Equal Access to Places of Public Accommodation; Article V, Fair Housing, and Article VI, Equal Credit Opportunity; amending sections 8-49 (Employment), 8-69 (Public accommodations), 8-94 (Fair housing) to provide exceptions regarding discrimination on the basis of gender identity, relating to access to, and use of, certain facilities such as shower rooms and dressing rooms, in covered facilities; providing directions to the codifier; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

[Play Video](#)

*Equal Opportunity Director Jimmie Williams gave a presentation.*

*WAIVER OF RULES: Commissioner Bryant moved and Commissioner Henry seconded to waive the rules to extend the meeting until 12:00 Midnight.  
(VOTE: 7-0, MOTION CARRIED)*

*FIRST MOTION: Commissioner Braddy moved and Commissioner Bryant seconded to deny the ordinance.  
(VOTE: 3-4, Commissioners Braddy, Bryant and Henry - Yes; and Commissioners Donovan, Lowe, Mastrodicasa and Mayor Hanrahan - No; MOTION FAILED)*

*RECESS: 10:03 PM*

*RECONVENE: Approximately 10:13 PM*

*CITIZEN COMMENT TO THE MOTION:*

*Chair Hanrahan recognized the following citizens who spoke to the matter:  
Frankie Scott, Caroline Adams, Joyce Dunmore, Cornelius Dunmore, Jamel T. Smith, Jordan Pratt, Christine Miller, Nora Spencer, Maura Ryan, Pastor George Brantley, Jeffrey Highsmith, Brian Leslie, Cheryl Carter, Mark Mink, Barbara Fuller, Oscar Candelaria, Reginald N. Lewis, Kevin Camps, Brian Banks, Akin Ross, Fidelia James, Sandy Williams Johnny M. Mitchell, John Alexander, Nehemiah Ransom, Ulyses Moore, Ishamel Rentz, Terry Fleming, John-David Carling, Carol Daly, Rob Brinkman, Abigail Randall, Linda Basham, Evan Pitts, Jay Burse, Michelle Phillips, Rev. Alex Farmer, Jack Martin, Wesley Karmes, Brenda Krames, Justin Dicus, Bernice Constantin, Karen Arola, Shannon Arola, Mildred Russell, Rose Weiner, Zot Lynn Szurgot, Michelle Ott, Bob Karp, Helen Warren, Florence Turcotte, Linda James, Derek Tirado, Patrick Maness, Heather Dicus, Joe Cirulli, Dan Galasso, Lena Akindipe, Armando Grundy, Matt Gordon, Jose Reyes, Cain Davis, Donnie Tuttle, Alice Primack, Joshua Horton, Susan Baird, Charles Pino, Ernesto Herrera, Colinesha Akridge, Roberto Evans, Keith Perry, Mike Patz, Jean Clark, Laurie Rick, Andy Velopulos, Richard Thompson, Phil Rickman, Adam Harris, Dee Kirchman, Byron Lewis, Caroline Cotton, Jim McKenzie, Joan McBride, Darrell Card, Michael Fortner, Alex Gonzolas, Julianna Woody, Bridget Fleming, John Fleming, Eric Harrell, Evelyn Towns, Sally Harrison, Aleisha Nattiel, Sharon Constantin, Rob Dilbone, Thomas Fortson, Dayna Harden, Irene Lewis, Pat Fitzpatrick, Ruth Smith,*

*Amber Burse and Conrad Irving.*

*WAIVER OF RULES: Commissioner Bryant moved and Commissioner Lowe seconded to waive the rules to extend the meeting until 12:30 AM.  
(VOTE: 7-0, MOTION CARRIED)*

*AMENDMENT: Commissioner Braddy moved and Commissioner Bryant seconded to add the following language to the ordinance: "That no provision of this ordinance and no finding against any individual or private entity shall be enforced until all government agencies covered under section 8-24 are in full compliance with this ordinance and have made all necessary changes to their public accommodations."  
(VOTE: 3-4, Commissioners Braddy, Bryant and Henry - Yes; and Commissioners Donovan, Lowe, Mastrodicasa and Mayor Hanrahan - No, MOTION FAILED)*

*WAIVER OF RULES: Commissioner Bryant moved and Commissioner Braddy seconded to waive the rules to extend the meeting until 12:45 AM.  
(VOTE: 7-0, MOTION CARRIED)*

*WAIVER OF RULES: Commissioner Braddy moved and Commissioner Lowe seconded to waive the rules to extend the meeting until 1:00 AM.  
(VOTE: 6-1, Commissioner Bryant - No, MOTION CARRIED)*

*AMENDMENT: Commissioner Braddy moved to strike the language "gender identity" and replace with the language "inner sense of being". (MOTION DIED - NO SECOND).*

*Assistant City Attorney Charles Hauck made comments.*

*MOVE THE PREVIOUS QUESTION MOTION: Commissioner Lowe moved and Commissioner Mastrodicasa seconded to move the previous question.  
(VOTE: 5-2, Commissioners Braddy and Bryant - No, MOTION CARRIED).*

*AMENDMENT: (REFERRAL): Commissioner Lowe moved and Commissioner Mastrodicasa seconded to adopt the ordinance, add gender identity to the City's anti-discrimination policy, and refer coverage of anti-discrimination by governmental entities to the Equal Opportunity Committee.  
(VOTE: 4-3, Commissioners Braddy, Bryant and Henry - No, MOTION CARRIED)*

*See following referral item #070889.*

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

*CLERK'S NOTE: It is anticipated that the City Commission will waive its Rules to hear this item at 8:30 PM.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Mastrodicasa, that this matter be Adopted on Final Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Craig Lowe and Pegeen Hanrahan  
Nay: Scherwin Henry, Edward Braddy and Rick Bryant

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**070889.****Coverage of Gender Identity Anti-Discrimination by Governmental Entities  
(NB)****RECOMMENDATION**

*The City Commission refer the issue of coverage of gender identity anti-discrimination by governmental entities to the Equal Opportunity Committee.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Mastrodicasa, that this matter be Referred to the Equal Opportunity Committee, due back on July 28, 2008. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Craig Lowe and Pegeen Hanrahan  
Nay: Scherwin Henry, Edward Braddy and Rick Bryant

**UNFINISHED BUSINESS****COMMISSION COMMENT****CITIZEN COMMENT (If time available)****ADJOURNMENT - 1:00 AM**

[Play Video](#)

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Kurt M. Lannon, Clerk of the Commission

# **City of Gainesville**

*City Hall  
200 East University Avenue  
Gainesville, Florida 32601*



## **Meeting Minutes**

**Monday, February 11, 2008**

**1:00 PM**

**City Hall Auditorium**

## **City Commission**

*Mayor Pegeen Hanrahan (At Large)  
Mayor-Commissioner Pro Tem Rick Bryant (At Large)  
Commissioner Jeanna Mastrodicasa (At Large)  
Commissioner Scherwin Henry (District 1)  
Commissioner Ed Braddy (District 2)  
Commissioner Jack Donovan (District 3)  
Commissioner Craig Lowe (District 4)*

*Persons with disabilities who require assistance to participate in this meeting are requested to notify the Office of Equal Opportunity at 334-5051 or call the TDD phone line at 334-2069 at least two business days in advance.*

## CALL TO ORDER - 1:06 PM

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## ROLL CALL

Present: Edward Braddy, Pegeen Hanrahan, Rick Bryant, Craig Lowe, Jack Donovan, Jeanna Mastrodicasa and Scherwin Henry

## INVOCATION

[Play Video](#)

*The City Commission observed a moment of silence.*

## CONSENT AGENDA

[Play Video](#)

*Commissioner Lowe moved and Commissioner Donovan seconded to adopt the Consent Agenda with the following modification.*

*(VOTE: 5-0, Commissioners Bryant and Braddy - Absent, MOTION CARRIED)*

### *MODIFICATION:*

*1. File #070909 - (New Item) Contract for Federal Lobbying Services - (Add to the Consent Agenda).*

## CITY MANAGER, CONSENT AGENDA ITEMS

### **070870.**

#### **E-government Software Solution (B)**

**This item seeks authorization for staff to enter into purchase negotiations with Innoprise Software Incorporated for E-government Software Solution for City Divisions of Building Inspections, Codes Enforcement, and Planning.**

#### **RECOMMENDATION**

*The City Commission: 1) approve the attached vendor ranking for E-government software solutions for Building Inspections, Codes Enforcement, and Planning; and 2) authorize the City Manager to enter into negotiations with the number one ranked vendor, Innoprise Software Incorporated.*

#### *Alternative Recommendation - A*

*The City Commission deny the attached vendor rankings and direct staff to reactivate the E-government software solution evaluation process.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**070872.**

**Establishing the New SHIP Affordable Housing Advisory Committee (NB)**

**This item proposes to create a new SHIP Affordable Housing Advisory Committee (AHAC) pursuant to s. 420.9076 and s. 420.9072.**

**RECOMMENDATION**

*The City Commission: 1) authorize the City Attorney to draft and the Clerk to advertise an Ordinance that creates the Affordable Housing Advisory Committee in accordance with s. 420.9072 and s.420.9076, Florida Statutes; 2) authorize the City Manager or designee to present a list of qualified potential AHAC members that comply with s. 420.9072, Florida Statutes to be considered for appointment by resolution of the City Commission, provided any other interested and qualified citizen can apply for appointment through the Office of the Clerk of the Commission; and 3) authorize the City Manager or designee to appoint the Housing Division to administer the AHAC with assistance as needed from the Planning and Development Services Department.*

*Alternative Recommendation A: The City Commission could choose to not approve recommendation Number 2, and have the Clerk of the Commission advertise the committee member vacancies.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**070909.**

**Contract for Federal Lobbying Services (B)**

**RECOMMENDATION**

*The City Commission: 1) approve the amendment of the Agreement for Professional Federal Lobbying Services to reflect Ms. Thompson's move to MWW Group, Inc.; and 2) direct the City Manager to execute the First Amendment following approval by the City Attorney as to form and legality.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**GENERAL MANAGER FOR UTILITIES, CONSENT AGENDA ITEMS**

**070894.**

**Reimbursement for Oversizing of Potable and Reclaimed Water Facilities at**

**Wilds Plantation Unit 4 (NB)**

**Reimburse the developer of Wilds Plantation Unit 4 for the oversizing of Potable Water (PW) and Reclaimed Water (RCW) facilities.**

**RECOMMENDATION**     *The City Commission authorize the General Manager or her designee to negotiate and execute an agreement for reimbursement to Wilds Development, Inc. for the oversizing of PW and RCW facilities in an amount not to exceed \$300,000.00 subject to approval of the City Attorney as to form and legality.*

**This Matter was Approved as Recommended on the Consent Agenda.**

**CITY ATTORNEY, CONSENT AGENDA ITEMS****CLERK OF THE COMMISSION, CONSENT AGENDA ITEMS****070893.****City Commission Minutes (B)**

**RECOMMENDATION**     *The City Commission approve the minutes of January 14, 2008, January 28, 2008 (Regular Meetings); and February 4, 2008 (Special Meeting); as circulated.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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070893b\_20080211.pdf

**070897.****Resignation of Gainesville Energy Advisory Committee Member Terri Lowery (B)**

**RECOMMENDATION**     *The City Commission accept the resignation of Terri Lowery from the Gainesville Energy Advisory Committee effective immediately and extends its appreciation for her services.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**070898.****Resignation of Gainesville Human Rights Board Member Erica Briggs (B)**

**RECOMMENDATION**     *The City Commission accept the resignation of Erica Briggs from the Gainesville Human Rights Board effective immediately and extends its appreciation for her services.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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## **EQUAL OPPORTUNITY DIRECTOR, CONSENT AGENDA ITEMS**

## **COMMITTEE REPORTS, CONSENT AGENDA ITEMS**

## **EQUAL OPPORTUNITY COMMITTEE, CONSENT**

## **COMMUNITY REDEVELOPMENT AGENCY, CONSENT ITEMS**

### **070754.**

#### **Removal of Sidewalks and Crosswalks Adjacent to Eastside Gateway (B)**

##### **RECOMMENDATION**

*The CRA request that the City Commission refer the sidewalk and crosswalk closures to the Community Development Committee.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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## **Passed The Consent Agenda**

**A motion was made by Commissioner Lowe, seconded by Commissioner Donovan, including all the preceding items marked as having been adopted on the Consent Agenda. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe and Pegeen Hanrahan  
Absent: Edward Braddy and Rick Bryant

## **END OF CONSENT AGENDA**

## **ADOPTION OF THE REGULAR AGENDA**

### **Play Video**

*Commissioner Donovan moved and Commissioner Lowe seconded to adopt the Regular Agenda with the following modifications.*

*(VOTE: 5-0, Commissioners Braddy and Bryant - Absent, MOTION CARRIED)*

#### **MODIFICATIONS:**

*1. File #070779 - Bartley Temple Contract Modification - (Remove Item from the agenda and bring back at a later date).*

2. File #070908 - (New Item) Commissioner Ed Braddy Re: Future Budget Issues - (Add to agenda under "Members of the City Commission").
3. File #070914 - (New Item) Special Recognition - Mayor Hanrahan presenting a ceremonial check from GRU to Akira Wood - (Add to agenda under Special Recognitions).
4. File #070891- Resolution Accepting Report of Board of Canvassers - (Additional back-up submitted- Certificate of Results of the Election).
5. File #070902 - Commissioner Scherwin Henry - RTS Transfer Station - (The rules were waived to take this item immediately after the adoption of the Regular Agenda).

## CHARTER OFFICER UPDATES

## CLERK OF THE COMMISSION

## WAIVER OF RULES

*The City Commission waived the rules without objection to hear the following item File #070902 - Commission Scherwin Henry - RTS Transfer Station after adoption of the Regular Agenda.*

### [070902.](#)

#### **Commissioner Scherwin Henry - RTS Transfer Station (NB)**

#### [Play Video](#)

*Rosa Parks Quiet Courage Commission Representatives Reverend Milford Griner and Dr. Karen Cole-Smith gave presentations.*

*NOTE: Mayor-Commissioner Pro Tem Rick Bryant entered the meeting room at 1:19 PM.*

*MOTION: Approve naming the new RTS Transfer Station after Rosa Parks.*

**RECOMMENDATION**      *The City Commission discuss naming the new RTS Transfer Station.*

**A motion was made by Commissioner Henry, seconded by Commissioner Donovan, that this matter be Approved as shown above (See Motion). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan  
Absent: Edward Braddy

## CITY MANAGER

**070937.****Bartley Temple Contract (B)**

**This item involves consideration of a request to revise a contract between Bartley Temple United Methodist Church and the City of Gainesville.**

**RECOMMENDATION**

*Recommended Motion: If the City Commission concurs that there was a misunderstanding, the Commission should authorize the City Manager to execute the revised contract and proceed with actions that will result in full execution of the revised contract.*

**Withdrawn**

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**070867.****Request for City Commission Contingency Funds from Gainesville Commission on the Status of Women (GCOSW) Sexual Battery Committee (B)**

**This is a request from the Gainesville Commission on the Status of Women Sexual Battery Committee for City Commission Contingency Funds.**

**Play Video**

*Administrative Services Director Becky Rountree gave a presentation.*

*Chair Hanrahan recognized Gainesville Commission on the Status of Women Sexual Battery Committee Funding Chair Sarah Larsen who gave a presentation.*

*MOTION: Approve the request from the Gainesville Commission on the Status of Women for co-sponsorship of \$3,000 from the City Commission Contingency Fund for the 27th Annual Conference - "Pathways to Healing: From Trauma to Recovery."*

**RECOMMENDATION**

*The City Commission consider the request for funds and take action as appropriate.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Donovan, that this matter be Approved as shown above (See Motion). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan  
Absent: Edward Braddy

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**070868.****Request for City Commission Contingency Funds from University of Florida**

**(UF) Black Student Union - Blackout Weekend 2008 (B)**

**This is a request for City Commission Contingency Funds from the University of Florida Black Student Union for Blackout Weekend.**

[Play Video](#)

*UF Black Student Union "Blackout Weekend" Director Belinda James and Black Student Union Treasurer Courtney Stevenson gave presentations.*

*MOTION: 1) Refer the request for co-sponsorship of the University of Florida Black Student Union "Blackout Weekend" to staff; 2) request that staff review both in-kind and monetary support of this event; and 3) bring back recommendations to the next regular City Commission Meeting (February 25, 2008).*

**RECOMMENDATION**      *The City Commission: 1) receive a report from staff; and 2) take action as appropriate.*

**A motion was made by Commissioner Henry, seconded by Mayor-Commissioner Pro Tem Bryant, that this matter be Referred to the City Manager, due back on February 25, 2008. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan  
Absent: Edward Braddy

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**GENERAL MANAGER FOR UTILITIES**

[Play Video](#)

**070855.****Status Update- Biosolids Land Application Site purchase (B)**

**GRU has been pursuing the purchase of the Whistling Pines Ranch as approved by the City Commission on 7/23/07. Prior to purchase, a Special Exception is being sought from Alachua County to allow the continued land application of biosolids at the Whistling Pines Ranch. Staff will provide an update on the Special Exception process, issues that have been identified through the process, and findings related to the issues raised. We continue to believe that land application of biosolids is a sustainable and cost-effective method for reusing biosolids and want to ensure that the City Commission continues to share that opinion.**

[Play Video](#)

*GRU Assistant General Manager for Water/Wastewater Administration David Richardson, GRU Supervising Utility Engineer Rick Hutton and Alachua County Environmental Protection Engineer Gus Olmos gave a presentation.*

*Chair Hanrahan recognized Victor Pizarri, Delphine Meliti, Walter Willard, Warren Thomas and Rosemary Aslaney who spoke to the matter.*

*MOTION: Commissioner Bryant moved and Commissioner Donovan seconded to: 1) Ask GRU staff to continue the process, but update the City Commission with all findings, especially the findings coming from the Alachua County Department of Environmental Protection; and 2) concurrently, ask the City Attorney to investigate the legality of what we're doing as we move forward.*

**RECOMMENDATION**      *The City Commission: 1) Receive a presentation on the status of the purchase of the biosolids land application site. No further action is required for staff to continue pursuit of a required Special Exception from Alachua County and purchase of the Whistling Pines Ranch.*

**A motion was made by Mayor-Commissioner Pro Tem Bryant, seconded by Commissioner Donovan, that this matter be Approved as shown above (See Motion). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Peegen Hanrahan  
Absent: Edward Braddy

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## **CITY ATTORNEY**

## **CITY AUDITOR**

## **EQUAL OPPORTUNITY DIRECTOR**

## **COMMITTEE REPORTS (PULLED FROM CONSENT)**

## **EQUAL OPPORTUNITY COMMITTEE**

[Play Video](#)

### **061163.      Equal Opportunity (EO) Policy Revisions (B)**

[Play Video](#)

*Equal Opportunity Director Jimmie Williams gave a presentation.*

*AMENDMENT: Approve with the exception of leaving in the language "and to develop strategies, training and workshops to ensure diversity in employment, services, programs and activities" in the 5th paragraph of Exhibit A.*

**RECOMMENDATION**      *The Equal Opportunity Committee: 1) request approval from the Commission to authorize the City Attorney to prepare an ordinance adopting the amended Equal Opportunity Policies.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Donovan, that this matter be Approved as Amended. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe and Pegeen Hanrahan  
Absent: Edward Braddy and Rick Bryant

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## ADVISORY BOARDS/COMMITTEES (APPOINTMENTS/REPORTS)

### OUTSIDE AGENCIES

[Play Video](#)

#### **070895.** Nomination - Library District Board of Trustees (B)

[Play Video](#)

**RECOMMENDATION**      *The City Commission nominate Ms. Filer and Ms. Weaver for consideration for appointment by the Library District Governing Board.*

**A motion was made by Commissioner Lowe, seconded by Mayor-Commissioner Pro Tem Bryant, that this matter be Approved as Recommended. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan  
Absent: Edward Braddy

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### MEMBERS OF THE CITY COMMISSION

[Play Video](#)

#### **070892.** Commissioner Jack Donovan - Green Local Government Standard (B)

[Play Video](#)

*MOTION: Commissioner Donovan moved and Commissioner Lowe seconded to refer the issue of possible City of Gainesville membership to the Florida Green Building Coalition (see website) to the Economic Development University City Committee for their review and further recommendations.*

*(VOTE: 7-0, MOTION CARRIED)*

*NOTE: Commissioner Braddy entered the meeting room at 4:17 PM.*

**RECOMMENDATION**      *The City Commission consider adopting a resolution.*

**A motion was made by Commissioner Donovan, seconded by Commissioner Lowe, that this matter be Referred to the Economic Development/University Community Com, due back on September 11, 2008. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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## **COMMISSION COMMENTS (if time available)**

### **Commissioner Scherwin Henry**

*5th Avenue between 6th and 3rd - Issue of Handicapped Parking near Earl Young's Barber Shop.*

*Referred to the City Manager.*

### **070908.**

#### **Commissioner Ed Braddy - Future Budget Issues (B)**

**RECOMMENDATION**      *The City Commission hear a report from Commissioner Braddy on future budget issues.*

**Discussed**

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## **RECESS - 4:46 PM**

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## **RECONVENE - 5:39 PM**

[Play Video](#)

## **PLEDGE OF ALLEGIANCE (5:30pm)**

[Play Video](#)

## **PROCLAMATIONS/SPECIAL RECOGNITIONS**

[Play Video](#)

### **070901.**

#### **United Way "2-1-1" Week - February 11-17, 2008 (B)**

[Play Video](#)

**RECOMMENDATION**      *United Way of North Central Florida Intern Sarah Stewart to accept the proclamation.*

**Heard**

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**070914.**

**Akira Wood Special Recognition (NB)**

**RECOMMENDATION**      *The City Commission hear a presentation with Mayor Pegeen Hanrahan presenting a ceremonial check from GRU to Akira Wood.*

**Heard**

**CITIZEN COMMENT (6:00pm) - Please sign on sign-up sheet**

[Play Video](#)

**Bill Hart**

*Roam Towing*

**Dene Brewer**

*Worker's Comp Claim*

*See following File #070934.*

**070934.**

**Citizen Comment - Dene Brewer (B)**

**RECOMMENDATION**      *The City Commission hear citizen comment from Dene Brewer and place back-up submitted on file.*

**Placed on File**

**Mario Perez**

*Recreation Reorganization (Brian Shea)*

**Isaac Hayes**

*Water Parks*

**Walter Willard**

*Various Issues*

**Pat Fitzpatrick**

*Homeless Issues*

**Rob Brinkman**

*Solar Energy Issues*

**Jessica Hendrix**

*GRU Payment Policies*

**PUBLIC HEARINGS**

[Play Video](#)

**ORDINANCES, 1ST READING- ROLL CALL REQUIRED**

[Play Video](#)

**070833.****OBSOLETE REFERENCE TO TERMS OF CHARTER OFFICERS (B)****Ordinance No. 0-08-03**

**An ordinance of the City of Gainesville, Florida, repealing section 2-142, of the Gainesville Code of Ordinances, relating to terms of the City Manager, the City Attorney, the Clerk of the Commission, and the Internal Auditor; providing directions to the codifier; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

[Play Video](#)

**RECOMMENDATION**

*The City Commission adopt the proposed ordinance.*

**A motion was made by Mayor-Commissioner Pro Tem Bryant, seconded by Commissioner Donovan, that this matter be Adopted on First Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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**070857.****EQUAL OPPORTUNITY - DEFINITION OF EMPLOYER (B)****Ordinance No. 0-08-01**

**An ordinance of the City of Gainesville, Florida, amending section 8-47(c), Gainesville Code of Ordinances, relating to equal employment opportunity; amending the definition of "employer," providing directions to the codifier; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

[Play Video](#)

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Donovan, that this matter be Adopted on First Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan  
Nay: Edward Braddy

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**ORDINANCES, 2ND READING- ROLL CALL REQUIRED**

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**070208.****FOREST RIDGE/HENDERSON HEIGHTS NEIGHBORHOOD - RESIDENTIAL PARKING OVERLAY DISTRICT (B)****Ordinance No. 0-07-103; Petition No. 78NPD-07PB**

**An ordinance of the City of Gainesville amending the Zoning Map Atlas by rezoning and imposing the Residential Parking Overlay District on certain properties zoned RSF-1 (Single-Family Residential, up to 3.5 dwelling units per acre) or RSF-2 (Single-Family Residential, up to 4.6 dwelling units per acre), consisting of 283 parcels on approximately 140 acres commonly known as the Forest Ridge/Henderson Heights Neighborhood, and located north of Northwest 16th Avenue, south of Northwest 23rd Avenue, east of Northwest 23rd Street, and west of Alfred A. Ring Park, as more specifically described in this ordinance; making findings; providing directions to the City Manager; providing directions to the codifier; providing a severability clause; providing a repealing clause; and, providing an effective date in accordance with the schedule provided herein.**

[Play Video](#)

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Mayor-Commissioner Pro Tem Bryant, that this matter be Adopted on Final Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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### 070621.

#### **PLANNED DEVELOPMENT – MALLORY SQUARE (B)**

##### **Ordinance No. 0-07-113, Petition No. 74PDV-07PB**

**An Ordinance of the City of Gainesville, Florida; rezoning certain lands in the City, as more specifically described in this Ordinance, from “RMF-8: 8-30 units/acre multiple-family residential district” to “Planned Development” commonly known as “Mallory Square Planned Development” located in the vicinity of the 3600 block, east side of Southwest 34th Street; adopting a development plan report and development plan maps; providing conditions and restrictions; providing for enforcement and penalties; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

[Play Video](#)

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Donovan, seconded by Commissioner Mastrodicasa, that this matter be Adopted on Final Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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### 070627.

#### **PARKING GARAGE VIOLATIONS (B)**

**Ordinance No. 0-07-121**

An ordinance of the City of Gainesville, Florida, amending section 26-2 by providing a definition for owner/vehicle owner; amending section 26-75 of the Gainesville Code of Ordinances by creating a new subsection (d) making it a violation to damage an entrance or exit control device of a municipal parking garage; creating a new subsection (e) making it a violation to enter or exit a municipal parking garage without paying appropriate fees; creating a new subsection (f) providing affirmative defenses for damaging an entrance or exit control device or entering or exiting without paying appropriate fees; creating a new subsection (g) regarding proof of affirmative defenses; amending Appendix A, Schedule of Fees, Rates and Charges, establishing penalties; providing directions to the codifier; providing a severability clause; providing a repealing clause; and providing an immediate effective date.

[Play Video](#)

*Public Works Traffic Operations Manager Phil Mann gave a presentation.*

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Mayor-Commissioner Pro Tem Bryant, that this matter be Adopted on Final Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan  
Absent: Edward Braddy

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**070721.****VOLUNTARY ANNEXATION - PRAIRIE VIEW TRUST (B)****Ordinance No. 0-07-116**

An Ordinance of the City of Gainesville, Florida, annexing a portion of the City of Gainesville Reserve Area pursuant to Chapter 90-496, Special Act, Laws of Florida, as amended by Chapter 91-382 and Chapter 93-347, Special Acts, Laws of Florida, known as the Alachua County Boundary Adjustment Act; making certain findings; including within the corporate limits of the City of Gainesville, Florida, that certain compact and contiguous area comprised of a portion of Tax Parcel 07240-000-000, as more specifically described in this ordinance, generally located south of the vicinity of Archer Road and Interstate 75, west of Interstate 75 and the City limits, north of Williston Road, and east of SW 62nd Avenue and the vicinity of SW 63rd Boulevard; providing for inclusion of the area in Appendix I of the City Charter; providing for land use and zoning regulations; providing directions to the City Manager and Clerk of the Commission; providing a severability clause; and providing an immediate effective date.

[Play Video](#)

*Chair Hanrahan recognized Walter Willard who spoke to the matter.*

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Donovan, that this matter be Adopted on Final Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan  
Absent: Jack Donovan

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## **RESOLUTIONS- ROLL CALL REQUIRED**

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### **070879. Resolution Supporting the Florida League of Cities' Key Priority Issues for the 2008 Legislative Session (B)**

**Key issues were adopted by the League membership at their recent Legislative Conference and address Affordable Housing, Environmental Permits, Growth Management, Local Business Taxes, Local Government Pension Plans, Mobile Home Park Closures, Municipal Indebtedness, Property Tax Reform, Transportation, and Water.**

[Play Video](#)

**RECOMMENDATION**      *The City Commission: 1) adopt the Resolution; and 2) authorize staff to submit copies of the Resolution to the Governor, President of the Senate, Speaker of the House, and members of the Alachua County Legislative Delegation.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Mastrodicasa, that this matter be Adopted (Resolution) and Approved the Recommendation. The motion carried by the following vote:**

**Votes:** Aye: Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan  
Absent: Jack Donovan

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### **070891. RESOLUTION ACCEPTING REPORT OF BOARD OF CANVASSERS (B)**

**A resolution of the City Commission of the City of Gainesville, Florida, accepting the report of the Board of Canvassers for the City of Gainesville, Florida, election held January 29, 2008; and providing an immediate effective date.**

[Play Video](#)

**RECOMMENDATION**      *The City Commission adopt the proposed resolution.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Henry, that this matter be Adopted (Resolution), as amended. The motion carried by the following vote:**

**Votes:** Aye: Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan  
Absent: Jack Donovan  
  
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## **PLAN BOARD PETITIONS**

## **DEVELOPMENT REVIEW BOARD PETITIONS**

## **SCHEDULED EVENING AGENDA ITEMS**

## **UNFINISHED BUSINESS**

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### **070896. Commissioner Ed Braddy - Florida Renewable RC&D Council Coordinator (B)**

[Play Video](#)

*Florida Renewable RC&D Council Coordinator Tom Cunlio gave a presentation.*

*GRU Assistant General Manager for Strategic Planning Ed Regan gave a presentation.*

**RECOMMENDATION**      *The City Commission hear comments on woody biomass from Mr. Tom Cunilio, Florida Renewable RC&D Council Coordinator.*

#### **Heard**

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## **COMMISSION COMMENT**

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### **Mayor Pegeen Hanrahan**

*Condition of chain link fence by the Thelma Boltin Center.*

*Referred to the City Manager.*

**Commissioner Jack Donovan**

*Plastic Bags - Exploring Other Options*

*See following referral item #070924.*

**070924.****Plastic Bags (NB)****RECOMMENDATION**

*The City Commission refer the issue of moving away from plastic bags and exploring other options to the Recreation Parks and Public Works Committee.*

**A motion was made by Commissioner Donovan, seconded by Commissioner Lowe, that this matter be Referred to the Recreation, Cultural Affairs and Public Works Committee, due back on August 11, 2008. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

**CITIZEN COMMENT (If time available)**

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**Rob Brinkman**

*Renewable Energy Issues*

**ADJOURNMENT - 7:27 PM**

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Kurt M. Lannon, Clerk of the Commission

# **City of Gainesville**

*City Hall  
200 East University Avenue  
Gainesville, Florida 32601*



## **Meeting Minutes**

**Monday, March 24, 2008**

**1:00 PM**

**City Hall Auditorium**

## **City Commission**

*Mayor Pegeen Hanrahan (At Large)  
Mayor-Commissioner Pro Tem Rick Bryant (At Large)  
Commissioner Jeanna Mastrodicasa (At Large)  
Commissioner Scherwin Henry (District 1)  
Commissioner Ed Braddy (District 2)  
Commissioner Jack Donovan (District 3)  
Commissioner Craig Lowe (District 4)*

*Persons with disabilities who require assistance to participate in this meeting are requested to notify the Office of Equal Opportunity at 334-5051 or call the TDD phone line at 334-2069 at least two business days in advance.*

## CALL TO ORDER - 1:04 PM

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## ROLL CALL

Present: Edward Braddy, Pegeen Hanrahan, Rick Bryant, Craig Lowe, Jack Donovan, Jeanna Mastrodicasa and Scherwin Henry

## INVOCATION

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## CONSENT AGENDA

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*Mayor-Commissioner ProTem Bryant moved and Commissioner Lowe seconded to adopt the Consent Agenda with the following modifications.*

*(VOTE: 6-0, Commissioner Braddy - Absent, MOTION CARRIED)*

### *MODIFICATIONS:*

- 1. File #071035 - Heart of Florida - (Remove from the Consent Agenda and replace with File #071046 - Request for City Commission Contingency Funds from Florida's Eden).*
- 2. File #071048 - Proposed Amendment to the Appellate Rules - (New Item submitted by the City Attorney with back-up).*

*Chair Hanrahan recognized Gainesville Sports Organizing Authority Executive Director Jack Hughes who spoke to the matter; and President of the Artists Alliance of North Florida Annie Pais who passed out flyers regarding the Heart of Florida Paint Out event.*

*Assistant City Manager Fred Murry made comments.*

*NOTE: Commissioner Donovan entered the meeting room at 1:09 and Commissioner Henry entered the meeting room at 1:11 PM.*

## CITY MANAGER, CONSENT AGENDA ITEMS

### **070982.**

**Contract Agreement for Gainesville Police Department - Request for Purchase Order to Sungard OSSI (B)**

**This item requests the City Commission to authorize the issuance of a Purchase Order to renew GPD's contract with Sungard OSSI for the annual maintenance fees and licenses.**

**RECOMMENDATION**

*The City Commission authorize the City Manager to execute a Purchase Order to Sungard OSSI, a specified source, in an amount not to exceed \$138,285.00 for the payment of this contract.*

*Alternative Recommendation A: The City Commission authorize less than \$138,285.00 for the contract renewal with the understanding that this will drastically limit the police department's ability to manage its Records Management Database.*

*Alternative Recommendation B: The City Commission denies funding.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**071000.****Amendment to Personnel Policy 12 - Military Leave (B)**

**This item is to amend Personnel Policy 12 - Military Leave.**

**RECOMMENDATION**

*The City Commission ratify the amendment to City of Gainesville Policy 12 - Military Leave, a copy of which is on file with the Clerk of the Commission. After March 24, 2008, the Policy will be on file in the Human Resources Department.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**071001.****Communities for a Lifetime Mini-Grant (B)**

**This item authorizes the acceptance of a Communities for a Lifetime Mini-Grant from the Florida Department of Elder Affairs and authorizes the City Manager to execute a grant agreement and related documents from the Florida Department of Elder Affairs.**

**RECOMMENDATION**

*The City Commission: 1) authorize acceptance of a Communities for a Lifetime Mini-Grant from the Florida Department of Elder Affairs; and 2) authorize the City Manager to execute a grant agreement and related documents from the Florida Department of Elder Affairs.*

*Alternative Recommendation A: The City Commission decline the Communities for a Lifetime Mini-Grant from the Florida Department of Elder Affairs.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**071003.**

**Interlocal Agreement between the City of Gainesville and the School Board of Alachua County (B)**

**This item involves the approval of an Agreement between the City of Gainesville and the School Board of Alachua County for the coordination and joint use of the recreational facilities at the A. Quinn Jones School.**

**RECOMMENDATION**      *Recommended Motion: The City Commission authorize the City Manager to execute the agreement, subject to approval by the City Attorney as to form and legality.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**071027.**

**Traffic Management System Operating Cost (B)**

**Authorization for the Mayor to formally request the Chairman of the County Commission and the Secretary of Florida Department of Transportation, District 2, to increase their financial participation in the maintenance of the Traffic Management System's operating costs.**

**RECOMMENDATION**      *Recommended Motion: The Commission authorizes the Mayor to formally request the Chairman of the County Commission and the Secretary of Florida Department of Transportation, District 2, to increase their financial participation in the maintenance of the Traffic Management System's operating costs.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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071027b\_200803241300.pdf

**071046.**

**Request for City Commission Contingency Funds from Florida's Eden (B)**

**This is a request for City Commission Contingency Funds from Florida's Eden to be used to cover rental fees for the Heart of Florida PAINT OUT event held at the Thomas Center.**

**RECOMMENDATION**      *The City Commission approve the request for Contingency Funds in the amount of \$2,800.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**GENERAL MANAGER FOR UTILITIES, CONSENT AGENDA ITEMS****071028.****Professional Environmental Services (B)**

Staff recommends approval of the final ranking of the environmental consulting firms and authorization to negotiate a contract in accordance with the Consultants' Competitive Negotiations Act (CCNA) for professional environmental service.

**RECOMMENDATION**

*The City Commission: 1) approve the final ranking of environmental consulting firms in the given order of preference for professional environmental services; 2) authorize the General Manager, or his designee, to initiate contract negotiations with the top ranked firm in accordance with the Consultants' Competitive Negotiations Act (CCNA); and 3) authorize the General Manager, or his designee, upon successful negotiations, to execute a five year contract with the highest ranked firm, subject to approval of the City Attorney as to form and legality, in an amount not to exceed budgeted amounts and final appropriation of funds for each year of the contract.*

**This Matter was Approved as Recommended on the Consent Agenda.**

071028\_20080324.pdf

**CITY ATTORNEY, CONSENT AGENDA ITEMS****071022.****JOSEPH W. LITTLE; LUCILLE A. LITTLE; WALTER ANDREW NOLAN; AMY G. NOLAN; KEITH D. WHITE; AND MELANIE WHITE vs. 300 CLUB, INC., CITY OF GAINESVILLE, GAINESVILLE DEVELOPMENT REVIEW BOARD; CASE NO. 01-08-CA-955 (B)****RECOMMENDATION**

*The City Commission authorize the City Attorney to represent the City in the case styled Joseph W. Little; Lucille A. Little; Walter Andrew Nolan; Amy G. Nolan; Keith D. White; and Melanie White vs. 300 Club, Inc., City of Gainesville; City of Gainesville Development Review Board; Case No.: 01-08-CA-955.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**071025.****STEPHAN CARROLL BARNETT vs. CITY OF GAINESVILLE, A FLORIDA MUNICIPAL CORPORATION; CASE NO.: 01-08-CA-508 (B)****RECOMMENDATION**

*Special Counsel if insurance coverage is available to represent the City in the case styled Stephan Carroll Barnett vs. City of Gainesville, a Florida Municipal Corporation; Case No.: 01-08-CA-508.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**071048.**

**PROPOSED AMENDMENT TO THE APPELLATE RULES (B)**

**RECOMMENDATION**     *The City Commission authorize the City Attorney to file a Notice of Joinder in the Opposition Brief to the Proposed Amendment.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**CLERK OF THE COMMISSION, CONSENT AGENDA ITEMS**

**071018.**

**City Commission Minutes (B)**

**RECOMMENDATION**     *The City Commission approve the minutes of February 25, 2008 and March 10, 2008, as circulated.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**071030.**

**Special Meetings (NB)**

**RECOMMENDATION**     *The City Commission schedule special meetings as follows:*

*May 19, 5:00 PM - Commissioner Rick Bryant and Commissioner Ed Braddy last meeting.*

*July 10, 1:00 - 5:00 PM - 2008-2009 Gainesville Regional Utilities Budget*

*July 15, 9:00 - 5:00 PM - 2008-2009 General Government Budget, and CDBG/HOME, Advisory Boards and Enterprise Funds*

*July 17, 9:00 - 5:00 PM - 2008-2009 General Government Budget, and CDBG/HOME, Advisory Boards and Enterprise Funds*

*July 21, 9:00 - 3:00 PM - 2008-2009 General Government Budget, and CDBG/HOME, Advisory Boards and Enterprise Funds*

*July 21, 5:00 - 9:00 PM - 2008-2009 Gainesville Regional Utilities Budget*

*July 25, - 9:00 - 5:00 PM - 2008-2009 General Government Budget, and CDBG/HOME, Advisory Boards and Enterprise Funds*

**This Matter was Approved as Recommended on the Consent Agenda.**

## **EQUAL OPPORTUNITY DIRECTOR, CONSENT AGENDA ITEMS**

### **COMMITTEE REPORTS, CONSENT AGENDA ITEMS**

#### **RECREATION, CULTURAL AFFAIRS AND PUBLIC WORKS COMMITTEE, CONSENT**

##### **070827. Senior Recreation Center (B)**

**The City Commission is asked to accept the ranking of sites for a proposed senior recreation center.**

**RECOMMENDATION**      *The City Commission accept the priority rankings of a site for a proposed senior recreation center at Northside Park, the Northeast Complex, or Cone Park and authorize the City Manager or designee to continue to work with the Community Coalition for Older Adults to appropriately site a senior recreation center at one of these parks.*

*Alternative Recommendation A: The City Commission disapprove the recommended priority rankings and support for the siting of a senior recreation center at a City park.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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#### **COMMUNITY DEVELOPMENT COMMITTEE, CONSENT**

##### **070871. Land Development Code Amendment - Religious Land Use and Institutionalized Persons Act (B)**

**RECOMMENDATION**

*The City Commission adopt the proposed ordinance as amended by: 1) correcting the scrivener's errors; 2) amending Section 30-91 (a) by revising the minimum lot area requirements for places of religious assembly in single family districts as recommended by the Community Development Committee; 3) maintaining the current Land Development Code requirements, as codified in Section 30-91 (c) and (d), for food distribution centers for the needy and residences for destitute people as accessory uses to places of religious assembly pending further study and recommendation by the Community Development Committee; and 4) instructing the City Manager not to issue or deny any permits related to the Section 30-91 (c) and (d) accessory uses until the Community Development Committee further studies these uses and returns a recommendation to the City Commission.*

*Alternative Proposal*

*Commissioner Donovan supported the aforementioned recommendation of the Community Development Committee, except he no longer supported the minimum lot area previously approved by the Committee and encouraged the adoption of a minimum lot area requirement based on a formula. If such a formula could not be developed and agreed upon by March 24, 2008, Commissioner Donovan supported keeping the current minimum lot area requirements for places of religious assembly in single family districts and the Community Development Committee further studying this issue. The Community Development Committee recommended that Commissioner Donovan's proposal be considered by the City Commission as an alternative to the aforementioned recommendation.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**ECONOMIC DEVELOPMENT/UNIVERSITY COMMUNITY COMMITTEE,  
 CONSENT****070997.****Council for Economic Outreach (CEO) Space and Land Task Force Study (B)**

**This item involves referring recent recommendations from the Council for Economic Outreach (CEO) Space and Land Task Force Study reviewed by the EDUCC to Planning and Development Services staff.**

**RECOMMENDATION**

*Recommended Motion: The City Commission: 1) endorse staff analysis of the CEO recommended Public Sector commitments indicated in the Space and Land Task Force Study including a fast track development permit approval process for projects in targeted industries and specific activity centers and the feasibility of allowing specific sites to be "pre-approved" within the Innovation Zone; and 2) direct staff to create a specific time line associated with the redevelopment of the GRU maintenance facility property.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**Passed The Consent Agenda**

**A motion was made by Mayor-Commissioner Pro Tem Bryant, seconded by Commissioner Lowe, including all the preceding items marked as having been adopted on the Consent Agenda. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Peegen Hanrahan  
Absent: Edward Braddy

**COMMUNITY REDEVELOPMENT AGENCY, CONSENT ITEMS****END OF CONSENT AGENDA**

[Play Video](#)

**ADOPTION OF THE REGULAR AGENDA**

[Play Video](#)

*Mayor-Commissioner Pro Tem Bryant moved and Commissioner Henry seconded to adopt the Regular Agenda, as presented.  
(VOTE: 6-0, Commissioner Braddy - Absent, MOTION CARRIED)*

**CHARTER OFFICER UPDATES****CLERK OF THE COMMISSION****CITY MANAGER**

[Play Video](#)

**070998.**

**Preserve America Community Designation (B)**

**This item involves nominating the City of Gainesville as a Preserve America Community.**

[Play Video](#)

*Historic Preservation Planner Dee Henrichs, Preserve America Community Volunteers Jenny Wolfe and Dianna Kelly; and Planning and Development Services Director Erik Bredfeldt gave presentations.*

**RECOMMENDATION**      *The City Commission: 1) Hear a presentation by staff; and 2) direct staff to submit an application for Preserve America Community status.*

**A motion was made by Mayor-Commissioner Pro Tem Bryant, seconded by Commissioner Mastrodicasa, that this matter be Approved as Recommended. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan  
Absent: Edward Braddy  
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**070999.**

**Request for City Commission Contingency Funds from Black on Black Crime Task Force (B)**

**This is a request for City Commission Contingency Funds from Black on Black Crime Task Force to be used to cover operating expenses for the Summer 2008 youth programs and activities.**

[Play Video](#)

*Community Relations Coordinator Tony Jones gave a presentation.*

**RECOMMENDATION**      *The City Commission consider the request for funds and take action as appropriate.*

**A motion was made by Mayor-Commissioner Pro Tem Bryant, seconded by Commissioner Henry, that this matter be Approved as Recommended. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan  
Absent: Edward Braddy  
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## **GENERAL MANAGER FOR UTILITIES**

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**071029.**

**Evaluation of Biomass-Fueled Generation Facility Proposals (B)**

**Staff is seeking approval for the factor weights to be applied in order to evaluate the binding proposals from the three finalists due April 11, 2008 in response to GRU's Request for Proposals for a Biomass-Fueled Generation Facility.**

[Play Video](#)

*GRU Assistant General Manager for Strategic Planning Ed Regan gave a presentation.*

*Chair Hanrahan recognized Dave Bruderly, Walter Willard, David Harlos, Tom Bussing, and Rob Brinkman who spoke to the matter.*

*AMENDMENT: 1) Issue addendum to provide each respondent the option of submitting more than one proposal for evaluation: a) with or without the use of MSW and/or; b) as either PPA or EPC; 2) Revise the Environmental Emissions Factor to reflect: a) Total emission per MWh delivered to Gainesville; b) include fuel transportation emissions; 3) use the Factor "Variable Production Costs" to be scored on heat rate with a factor weight of 5.0; 4) Remove tax revenues from "Local Economic Development" and reduce the factor weight from 5.0 to 3.0; 5) reduce (g) Project Commitment to Sustainable Forest Resource Management to 7:0; and 6) reduce (e) Fuel Requirements and Sources to 3.0.*

*NOTE: Commissioner Braddy entered the meeting room at 1:40 PM.*

**RECOMMENDATION**      *The City Commission receive a presentation from staff discussing the proposed factor weights to be applied to the various factors applicable to evaluating the responses to GRU's Request for Proposals for a Biomass-Fueled Generation Facility, and authorize the General Manager or his designee to apply these weights to the evaluation of the proposals.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Donovan, that this matter be Approved as Amended. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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## **CITY ATTORNEY**

[Play Video](#)

**071026.**

**Land Use Petition: Hatchet Creek Planned Use District; Legislative No. 070210; Petition No. 23 LUC-07PB (B)**

[Play Video](#)

*Hatchett Creek Petitioner Rob Simensky, Airport Chief Executive Officer Alan Penksa, and Airport Authority Chair Peter Johnson gave presentations.*

*AMENDMENT: Approve the recommendation and schedule a Special City Commission meeting for Wednesday, April 16, 2008 at 6:00 PM.*

*Chair Hanrahan recognized Kevin Claney, Walter Willard, Rob Brinkman and Alachua County Commissioner Rodney Long who spoke to the matter.*

**RECOMMENDATION**      *The City Commission: 1) Receive the request of the Petitioner to amend the Conditions approved by the City Commission in October, 2007; 2) If the city commission is desirous of hearing the proposed amendments, direct the city manager and clerk of the commission to advertise and schedule a Petition Hearing as soon as practicable.*

**A motion was made by Mayor-Commissioner Pro Tem Bryant, seconded by Commissioner Braddy, that this matter be Approved as Amended. The motion carried by the following vote:**

Votes: Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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## CITY AUDITOR

## EQUAL OPPORTUNITY DIRECTOR

## COMMITTEE REPORTS (PULLED FROM CONSENT)

## RECREATION, CULTURAL AFFAIRS AND PUBLIC WORKS COMMITTEE

## PERSONNEL & ORGANIZATION STRUCTURE COMMITTEE

## PUBLIC SAFETY COMMITTEE

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### **070268.**

#### **Cameras at Red Lights (B)**

**This item recommends proceeding with a draft ordinance and RFP to install cameras at red lights to cite drivers who run red lights.**

[Play Video](#)

*City Attorney Ron Combs and Police Chief Norm Botsford gave presentations.*

*MOTION (REFERRAL): Postpone this item and refer the "Red Light Running Camera's" study to staff to review and comment on prior to bringing it back after the legislative session.*

**RECOMMENDATION**

*The City Commission 1) hear an presentation from staff; 2) authorize the City Attorney's Office to complete the draft and advertise the ordinance; and 3) authorize staff to proceed with the RFP process.*

*Alternative A: The Commission decide not to proceed with installing cameras at red light.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Henry, that this matter be Referred to the City Manager, due back on September 24, 2008. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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## **AUDIT, FINANCE AND LEGISLATIVE COMMITTEE**

## **ADVISORY BOARDS/COMMITTEES (APPOINTMENTS/REPORTS)**

## **OUTSIDE AGENCIES**

## **MEMBERS OF THE CITY COMMISSION**

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### **071031.**

#### **Commissioner Scherwin Henry - Airport Expansion (B)**

[Play Video](#)

*Chair Hanrahan recognized Ironwood Homeowner's Association Representatives Juan Harrington and Kevin Claney; Airport Chief Executive Officer Alan Penksa and Walter Willard who spoke to the matter.*

**RECOMMENDATION**

*The City Commission hear a presentation and take appropriate action.*

**Discussed**

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**COMMISSION COMMENTS (if time available)****RECESS - 5:20 PM**[Play Video](#)**RECONVENE - 5:59 PM**[Play Video](#)**PLEDGE OF ALLEGIANCE (5:30pm)**[Play Video](#)**PROCLAMATIONS/SPECIAL RECOGNITIONS**[Play Video](#)**071032. Children's Day - March 27, 2008 (B)**[Play Video](#)

**RECOMMENDATION**      *Early Learning Coalition of Alachua County Community Outreach Executive Director Gordon Tremaine to accept the proclamation.*

**Heard**

071032\_20080324.pdf

**071033. Jazz Appreciation Month - April 2008 (B)**[Play Video](#)

**RECOMMENDATION**      *Gainesville Friends of Jazz President Scott Koons to accept the proclamation.*

**Heard**

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**CITIZEN COMMENT (6:00pm) - Please sign on sign-up sheet**

[Play Video](#)

### **Harald Kegelman**

*Fuel prices and food costs.*

### **Theodore McLeod**

*GPD Issues.*

### **Jerry Williamson**

*GPD Issues.*

### **Gabe Kaimowitz**

*Butterfly Rainforest - Children Learning.*

### **Pat Fitzpatrick**

*Homeless Issues.*

### **Mark von Soestbergen**

*CFL Distribution at local Publix - Invitation for Commissioners to participate.*

## **PUBLIC HEARINGS**

[Play Video](#)

## **ORDINANCES, 1ST READING- ROLL CALL REQUIRED**

[Play Video](#)

### **070706. PLANNED DEVELOPMENT AMENDMENT – GAINESVILLE AUTO TOWN CENTER (B)**

#### **Ordinance No. 0-07-120, Petition No. 69PDV-07PB**

**An Ordinance of the City of Gainesville, Florida; rezoning certain lands in the City, as more specifically described in this Ordinance, from “BUS: general business district” to “Planned Development”, commonly known as “Gainesville Auto Town Center”, located in the vicinity of the 3900 block of N. Main Street, west side; adopting a development plan report and development plan maps; providing conditions and restrictions; providing for enforcement and penalties; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

[Play Video](#)

*Chief of Current Planning Lawrence Calderon, Public Works Environmental Coordinator Mark Garland and Attorney for the Petitioner Mac McCuller gave presentations.*

*Chair Hanrahan recognized Rob Brinkman who spoke to the matter.*

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Braddy, seconded by Mayor-Commissioner Pro Tem Bryant, that this matter be Adopted on First Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan  
Nay: Jack Donovan

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**070872.**

**SHIP AFFORDABLE HOUSING ADVISORY COMMITTEE (B)**

**Ordinance No. 0-08-09**

**An ordinance of the City of Gainesville, Florida, amending Chapter 14 relating to the State Housing Initiatives Partnership (SHIP) Program; by adding definitions in section 14-1; by deleting existing section 14-6 in its entirety and replacing with new section 14-6 creating and establishing an Affordable Housing Advisory Committee; by deleting existing section 14-7 and replacing with a new section 14-7 providing for the adoption of local housing initiative strategies; providing directions to the codifier; providing a severability clause; providing a repealing clause; and providing an effective date.**

[Play Video](#)

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Braddy, seconded by Commissioner Donovan, that this matter be Adopted on First Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy and Pegeen Hanrahan  
Absent: Rick Bryant

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**070890.**

**ELECTRONIC AND ANIMATED SIGNS (B)**

**Ordinance No. 0-07-80; Petition No. 139TCH-06 PB**

**An ordinance of the City of Gainesville, Florida, amending the Land Development Code relating to signs; amending section 30-23 by revising the definition of animated sign, deleting the definition of changing message device and adding a definition of electronic sign; amending section 30-316 to prohibit electronic signs; providing directions to the codifier; providing for a mandatory review; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

[Play Video](#)

**RECOMMENDATION**      *The City Commission (1) approve Petition No. 139TCH-06 PB, as amended, and (2) adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Donovan, that this matter be Adopted on First Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Craig Lowe and Pegeen Hanrahan  
Nay: Scherwin Henry, Edward Braddy and Rick Bryant

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**070916.**

**TRAFFIC STUDY REVIEW FEES (B)**

**Ordinance No. 0-08-08**

**An ordinance of the City of Gainesville, Florida, amending Appendix A, Schedule of Fees, Rates and Charges, for Land Development Code Petitions, Applications and Development Fees, by adding traffic study review fees; providing directions to the codifier; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

[Play Video](#)

*Public Works Transportation Planner Deborah Leistner gave a presentation.*

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance, as revised.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Henry, that this matter be Adopted on First Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Peegen Hanrahan  
Nay: Edward Braddy

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## ORDINANCES, 2ND READING- ROLL CALL REQUIRED

[Play Video](#)

### 061163. EQUAL OPPORTUNITY POLICY REVISIONS (B)

#### **Ordinance No. 0-07-98**

**An ordinance of the City of Gainesville, Florida, relating to Equal Opportunity; adopting the amended Policy Statement; adopting the amended Charter Officers' Duties Related to Equal Opportunity Policy; adopting the amended Discrimination, Harassment and Conduct Policy; adopting the amended Retaliation Policy; adopting the amended Disability Policy; adopting the amended Equal Employment Opportunity Policy; and adopting the amended Equal Opportunity Complaint Policy; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

[Play Video](#)

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Mastrodicasa, that this matter be Adopted on Final Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Peegen Hanrahan  
Absent: Jack Donovan and Edward Braddy

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### 070622. PLANNED DEVELOPMENT - ARCHER SQUARE (B)

#### **Ordinance No. 0-07-114, Petition No. 97PDA-07PB**

**An Ordinance of the City of Gainesville, Florida; amending the Planned Development that was originally approved by Alachua County, formerly known as "Winn Dixie", located in the vicinity of 3501 Southwest Archer Road; adopting a new Development Plan and superseding the Development Plan approved by Alachua County, as more specifically provided in this ordinance; providing for the construction, use, and operation of a maximum 100,000 square-foot retail establishment to be known as the Archer Square Planned**

Development; adopting new development plan maps and a new planned development report; adopting new conditions and restrictions; providing for penalties; providing a severability clause; providing a repealing clause; and providing an immediate effective date.

[Play Video](#)

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Henry, that this matter be Adopted on Final Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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**070776.**

**AMENDMENT TO LAND DEVELOPMENT CODE - SIGN REGULATIONS  
(B)**

**Ordinance No. 0-07-87**

**An ordinance of the City of Gainesville, Florida, amending the Sign Regulations of the Land Development Code; amending § 30-315 by adding an objective; amending § 30-316 providing conditions when signs are allowed on public property and rights-of-way without a permit; amending prohibited signs and signs that are exempt; allowing signs on hospital grounds under certain conditions; allowing flags or insignia under certain conditions; allowing substitution of non-commercial messages for commercial messages; providing clarification; amending § 30-317 relating to regulations and conditions for temporary signs; amending § 30-318 by revising the conditions and restrictions relating to permanent identification signs and structures for non-residential uses in residential districts and adding regulations for flags and flagpoles; repealing § 30-319 relating to restrictions on political signs; repealing § 30-320 relating to time and temperature devices; amending § 30-322 providing when permits are required; amending § 30-323 by adopting procedures for the processing of permits and appeals; amending § 30-326 by authorizing the removal of unauthorized signs in the right-of-way; adding section 30-327 relating to severability; providing directions to the codifier; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

[Play Video](#)

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Mastrodicasa, that this matter be Adopted on Final Reading (Ordinance). The motion carried by the following vote:**

Votes: Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan  
Nay: Edward Braddy

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**070619.**

**LAND DEVELOPMENT CODE AMENDMENT - RELIGIOUS LAND USE AND INSTITUTIONALIZED PERSONS ACT (B)**

**Ordinance No. 0-07-118, Petition No. 103TCH-07PB**

**An ordinance of the City of Gainesville, Florida, amending Chapter 30, the Land Development Code, in accordance with the Religious Land Use and Institutionalized Persons Act, 42 U.S.C. § 2000cc, and making other revisions for clarity and consistency; amending Section 30-51 to allow public schools as a use by special use permit in single-family residential districts rather than a use by right and removing public libraries as a use by special use permit in single-family residential districts; amending Section 30-52 to remove conditions on places of religious assembly and allow private schools as a use by right in RMF-5 and RC districts, and allow places of religious assembly and private schools as use by right in MH districts; amending Section 30-53 to remove conditions on places of religious assembly and allow private schools as a use by right in multiple family medium residential districts; amending Sections 30-54, 30-62, 30-63, 30-72, 30-75, 30-76, and 30-78 to allow places of religious assembly as a use by right in residential mixed use, automotive-oriented business, tourist-oriented business, agricultural, public services and operations, airport facility, and corporate park districts; amending Section 30-55 to remove conditions on places of religious assembly and allow private schools as a use by right in residential high density districts; amending Section 30-59 to allow public schools, other than institutions of higher learning, as use by special use permit in general office districts; amending Sections 30-61, 30-64, and 30-65 to remove references to places of religious assembly as a condition related to membership organizations; amending Section 30-68 to allow places of religious assembly as a use by right, and remove reference to places of religious assembly as a condition related to membership organizations in warehousing and wholesaling district; amending Sections 30-69 and 30-70 to remove membership sports and recreation clubs as a use by right in limited and general industrial districts; amending Section 30-77 to allow private schools and places of religious assembly as a use by right, and to modify the dimensional requirements in educational services district; amending Section 30-91 to modify dimensional requirements specific to places of religious assembly and requirements for places of religious assembly accessory uses, including day care centers, schools, food distribution centers for the needy, and residences for destitute people; amending Section 30-103 to modify dimensional requirements for private schools; inserting clarifying language in Section 30-110; amending Sections 30-251, 30-306, and 30-307 to remove references to places of religious assembly; amending Section 30-253 to remove landscape buffer requirements specific to places of religious assembly, and apply buffer requirements to all assembly uses; amending Section 30-332 to**

**modify parking spaces required for places of religious assembly; providing directions to the codifier; providing a severability clause; providing a repealing clause; providing a retroactive schedule; and providing an immediate effective date.**

[Play Video](#)

*Assistant City Attorney Stephanie Marchman and Planning Manager Ralph Hilliard gave presentations.*

*Chair Hanrahan recognized Joe Jackson, Rob Brinkman, Bob Freeman, Larry Schnell, Linda Portal, Mary Mitchell, Jimmy Harnsberger, Pat Fitzpatrick, Mark Goldstein, John Hensdorfer, Beverly Hill, Donna Lawson, Michael Parsons, Reverend Glenn Dixon, Rabbi Berel Goldman and Susan Fairforest who spoke to the matter.*

**RECOMMENDATION**

*The City Commission adopt the proposed ordinance as amended by recommendation of the Community Development Committee by: (1) correcting the scrivener's errors (see yellow highlighted text in the introductory sections of the proposed ordinance adopted on first reading and Exhibit A); (2) amending Section 30-91(a) by revising the minimum lot area requirements for places of religious assembly in single family districts as recommended by the Community Development Committee (see yellow highlighted text in Exhibit A, pg. 53, lines 7-9); (3) maintaining the current Land Development Code requirements, as codified in Section 30-91(c) and (d), for food distribution centers for the needy and residences for destitute people as accessory uses to places of religious assembly pending further study and recommendation by the Community Development Committee (see yellow highlighted text in Exhibit A, pg. 53-55); and (4) instructing the City Manager not to issue or deny any permits related to the Section 30-91(c) and (d) accessory uses until the Community Development Committee further studies these uses and returns a recommendation to the City Commission.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Henry, that this matter be Adopted on Final Reading, as amended (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan  
Nay: Jack Donovan

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## **RESOLUTIONS- ROLL CALL REQUIRED**

## **PLAN BOARD PETITIONS**

## **DEVELOPMENT REVIEW BOARD PETITIONS**

## **SCHEDULED EVENING AGENDA ITEMS**

## **UNFINISHED BUSINESS**

## **COMMISSION COMMENT**

[Play Video](#)

### **Commissioner Jeanna Mastrodicasa**

- 1. Meeting Wednesday, March 26, 2008 at the Savannah Grande - Partners for Prevention of Substance Abuse.*
- 2. Meeting Tuesday, April 8, 2008, at the Reitz Union with Student Government Representatives - Discussion of Hospitality Districts.*

### **Commissioner Scherwin Henry**

*Requested City Manager assistance with Reverend Karl Anderson's request regarding Church plan approval - City Manager to provide a report.*

**Commissioner Jack Donovan**

1. PIPSA - Partner's for Prevention of Drug Abuse.
2. Project Share Program - See following referral item #071064.

**071064.****Project Share Program (NB)****RECOMMENDATION**

*The City Commission direct staff to come up with some ideas for increasing citizen involvement in the Project Share Program.*

**A motion was made by Commissioner Donovan, seconded by Commissioner Braddy, that this matter be Referred to the Regional Utilities Committee, due back on September 24, 2008. The motion carried by the following vote:**

Votes: Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

**CITIZEN COMMENT**

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**George Elmore**

1. Cameras on Red Lights Study.
2. Funding priorities.

**Commissioner Ed Braddy**

1. Cameras on red lights issue.
2. Funding priorities.

**ADJOURNMENT - 9:35 PM**

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Kurt M. Lannon, Clerk of the Commission

# **City of Gainesville**

*City Hall  
200 East University Avenue  
Gainesville, Florida 32601*



## **Meeting Minutes**

**Monday, April 28, 2008**

**1:00 PM**

**City Hall Auditorium**

## **City Commission**

*Mayor Pegeen Hanrahan (At Large)  
Mayor-Commissioner Pro Tem Rick Bryant (At Large)  
Commissioner Jeanna Mastrodicasa (At Large)  
Commissioner Scherwin Henry (District 1)  
Commissioner Ed Braddy (District 2)  
Commissioner Jack Donovan (District 3)  
Commissioner Craig Lowe (District 4)*

*Persons with disabilities who require assistance to participate in this meeting are requested to notify the Office of Equal Opportunity at 334-5051 or call the TDD phone line at 334-2069 at least two business days in advance.*

## CALL TO ORDER - 1:05 PM

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## ROLL CALL

Present: Edward Braddy, Pegeen Hanrahan, Rick Bryant, Craig Lowe, Jack Donovan, Jeanna Mastrodicasa and Scherwin Henry

## INVOCATION

[Play Video](#)

## CONSENT AGENDA

[Play Video](#)

*Commissioner Lowe moved and Commissioner Mastrodicasa seconded to adopt the Consent Agenda, as presented.*

*(VOTE: 6-0, Commissioner Braddy - Absent, MOTION CARRIED)*

## CITY MANAGER, CONSENT AGENDA ITEMS

### 031290.

#### **Second Extension of Evergreen Cemetery Grounds Maintenance Agreement (B)**

**This item involves a request for the second extension to the contract with Oasis Landscape Services, Inc. for the grounds maintenance of Evergreen Cemetery.**

#### RECOMMENDATION

*Recommended Motion: The City Commission: 1) approve the second extension to the contract with Oasis Landscape Services, Inc. for grounds maintenance at Evergreen Cemetery; 2) amend the current contract by extending it an additional four months; and 3) authorize the City Manager or his designee to execute the contract, subject to the approval of the City Attorney as to form and legality.*

*Alternative Recommendation A: The City Commission deny the request.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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### 071092.

#### **Assistance to Firefighters Grant FY2009 Application for Incident Training Simulator (NB)**

**This item requests that the Commission authorize the City Manager to execute a**

**grant award for the FY2009 Assistance to Firefighters Grant for an Incident Training Simulator.**

**RECOMMENDATION**

*The City Commission authorize the City Manager, if awarded the grant, to: 1) execute the grant award contract and other necessary documents, pending approval by the City Attorney as to form and legality; and 2) approve the required payments process for expending the grant funds and matching funds.*

*Alternate Recommendation A: The City Commission not authorize the City Manager to execute the grant award contract or provide the required match funding.*

**This Matter was Approved as Recommended on the Consent Agenda.**

**071093.**

**Acceptance of Florida EMS County Grant Award (NB)**

**This item requests approval to accept \$58,870 in reimbursement grant funding from the Florida Department of Health EMS Grant Program to be distributed to the City of Gainesville through Alachua County.**

**RECOMMENDATION**

*The City Commission authorize the City Manager to expend the funds for the items requested.*

*Alternate Recommendation A: The City Commission not authorize the City Manager to expend funds for the items.*

**This Matter was Approved as Recommended on the Consent Agenda.**

**071095.**

**Amendment to Sublease Agreement (B)**

**This item involves approval and authorization for the City Manager to execute Amendment Number One to the Sublease of the Gainesville Downtown Connector, to include the 6th Street Rail Trail.**

**RECOMMENDATION**

*Recommended Motion: The City Commission: 1) authorize the City Manager to execute Amendment Number One to the Sublease of the Gainesville Downtown Connector, to include the 6th Street Trail, subject to approval by the City Attorney as to form and legality.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**071096.****Vacate Unimproved Right of Way Adjacent to the YMCA (B)**

**This item involves a request for the City Commission to approve a petition to the Planning Department to vacate the unimproved right of ways surrounded by the YMCA property at the request of the Public Works Department.**

**RECOMMENDATION**

*The City Commission: 1) Approve the request of Public Works to vacate the unimproved portions of Northeast 22nd Avenue, Northeast 21st Avenue and their connector, Northeast 13th Terrace, retaining an overall utility easement; and 2) authorize the Planning Department to circulate a petition to the Plan Board to vacate the unimproved portions of Northeast 22nd Avenue, Northeast 21st Avenue and their connector, being Northeast 13th Terrace, waiving the right to retain an overall 50' utility easement in exchange for a 20' utility easement, granted by The North Central Florida Young Men's Christian Association, Inc.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**071145.****Settlement of Worker's Compensation Claim - Billy Thomas (NB)**

**This item involves the full and final settlement of Billy Thomas' worker's compensation claim, which will include all future medical and indemnity payments. The total settlement amount is \$39,650 and represents a significant cost advantage to the City.**

**RECOMMENDATION**

*The City Commission authorize Special Counsel to prepare and execute the appropriate documents for a lump-sum settlement of the Worker's Compensation claim of Mr. Thomas, in the amount of \$39,650.*

**This Matter was Approved as Recommended on the Consent Agenda.**

**GENERAL MANAGER FOR UTILITIES, CONSENT AGENDA ITEMS****071157.****Engineering Services for Oakmont Reclaimed Water Pump Station Project (B)**

**Staff recommends approval of the final ranking of the engineering firms and authorization to negotiate a contract in accordance with the Consultants Competitive Negotiations Act (CCNA) for engineer design services for the**

**Oakmont Reclaimed Water Pump Station Project.**

**RECOMMENDATION**     *The City Commission: 1) approve the ranking of engineering firms in the given order of preference for the engineering design of the Oakmont Reclaimed Water Pump Station Project; 2) authorize the General Manager, or his designee, to initiate contract negotiations with the top ranked firm in accordance with the CCNA; and 3) authorize the General Manager, or his designee, upon successful negotiations, to execute a contract with the top ranked firm, subject to approval of the City Attorney as to form and legality, in an amount not to exceed budgeted amounts for the project.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**CITY ATTORNEY, CONSENT AGENDA ITEMS**

**071150.**     **Eugene Gamble, Jr. vs. City of Gainesville, a Florida municipality and Christopher L. Perry; Alachua County Circuit Court; Case No.: 01-08-CA-1200 (B)**

**RECOMMENDATION**     *In the case styled Eugene Gamble, Jr. vs. City of Gainesville, a Florida municipality and Christopher L. Perry; Alachua County Circuit Court Case No.: 01-08-CA-1200, the City Commission 1) authorize the City Attorney to represent the City of Gainesville and City employee(s) acting in the course and scope of their employment, with the consent and waiver of potential conflict by the City Commission and by said City employee(s), and; 2) the City Commission authorize the City Manager to execute a consent and waiver of potential conflict on behalf of the City.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**CLERK OF THE COMMISSION, CONSENT AGENDA ITEMS**

**071158.**     **City Commission Minutes (B)**

**RECOMMENDATION**     *The City Commission approve the minutes of April 2, 2008; April 3, 2008; April 7, 2008; and April 14, 2008; as circulated.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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071158c\_20080428.pdf

**071156.****Special Meetings (B)****RECOMMENDATION**

*The City Commission cancel and schedule meetings as follows:*

*Cancel - May 19, 5:00 PM*

*Cancel - June 16, 6:00 PM*

*Schedule - May 28, 6:00 PM - Fire Assessment*

*- 2nd Reading of Ordinance and Initial Assessment Resolution*

*Schedule - June 26, 6:00 PM - Fire Assessment Resolution*

*Schedule - June 30, 6:00 PM - Fire Assessment Resolution*

**This Matter was Approved as Recommended on the Consent Agenda.**

071156\_20080428.pdf

**071164.****Resignation of Citizens' Advisory Committee for Community Development Member Lauren Poe (B)****RECOMMENDATION**

*The City Commission accept the resignation of Lauren Poe from the Citizens' Advisory Committee for Community Development effective May 21, 2008 and extends its appreciation for his services.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**EQUAL OPPORTUNITY DIRECTOR, CONSENT AGENDA ITEMS****COMMITTEE REPORTS, CONSENT AGENDA ITEMS****EQUAL OPPORTUNITY COMMITTEE, CONSENT****070716.****GRU Utility Rates (B)****RECOMMENDATION**

*The City Commission: 1) accept the recommendation from the Equal Opportunity Committee to leave GRU's rate design as it currently is; and 2) remove this item from the referral list.*

**This Matter was Approved as Recommended on the Consent Agenda.**

070716\_20080428.pdf

## COMMUNITY REDEVELOPMENT AGENCY, CONSENT ITEMS

### 070921.

#### **Depot Avenue Rail Trail Improvements (B)**

**This item involves the addition of signage to the Depot Avenue Rail Trail.**

**RECOMMENDATION**      *CRA to the City Commission: Adopt the CRA rail trail signage for implementation on the City's rail trail system.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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### **Passed The Consent Agenda**

**A motion was made by Commissioner Lowe, seconded by Commissioner Mastrodicasa, including all the preceding items marked as having been adopted on the Consent Agenda. The motion carried by the following vote:**

Votes: Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan  
Absent: Edward Braddy

### **END OF CONSENT AGENDA**

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### **ADOPTION OF THE REGULAR AGENDA**

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*Commissioner Lowe moved and Commissioner Donovan seconded to adopt the Regular Agenda, as modified.*

*(VOTE: 6-0, Commissioner Braddy - Absent, MOTION CARRIED)*

#### **MODIFICATIONS:**

- 1. File #071118 - Land Surplus for Alachua County Historic Trust Matheson Museum, Inc. - (Revised language in text file and back-up submitted).*
- 2. File #071159 - Evaluation of Biomass-Fueled Generation Facility Proposals - (Revised recommendation and new power point submitted).*
- 3. File #070213 - Planned Development Amendment - Sam's Club - (Back-up submitted and a proposed substitution from attorney of affected party).*

4. File #070722 - Voluntary Annexation - Butler Plaza and Vicinity Area - (Revised legal description submitted and revised recommendation to: "Adopt the ordinance on second reading as amended") and waive the rules to hear prior to first reading of the ordinances.

## CLERK OF THE COMMISSION

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### 071155.

#### City Commission Election 2009 (NB)

[Play Video](#)

**RECOMMENDATION**      *The City Commission schedule March 24th as the election date and April 14 for the run-off (if needed).*

**A motion was made by Commissioner Henry, seconded by Commissioner Lowe, that this matter be Approved as Recommended. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan  
Absent: Edward Braddy

## CHARTER OFFICER UPDATES

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### 071016.

#### Depot Park Update and Development Action Plan (B)

**This item involves the Depot Park Update and Development Action Plan.**

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*CRA Manager Anthony Lyons, Cade Museum Consultant Don Adams, CRA Project Coordinator Matt Dube and GRU Project Engineer Patty Hart gave presentations.*

**RECOMMENDATION**      *The CRA to the City Commission: 1) Designate the CRA as the lead agency for the construction of the park and recreation elements on the site and for the depot building rehabilitation and authorize the CRA to assume leadership of the Depot Park Team, to be comprised of CRA, GRU, Public Works and Parks, Recreation and Cultural Affairs staff; 2) Approve "City's Best Interest" as an option for procuring remediation services and authorize staff to modify the project documents accordingly; 3) Address the approximately \$4 million capital funding gap for park and recreation improvements; 4) Establish late-2009 as the target completion date for remediation and start date for constructing the*

remaining park and recreation improvements; 5) Direct the City Manager to fund landscape improvements from Stormwater Management Utility funds in and around the stormwater ponds instead of using park development funds; 6) Direct the City Manager to secure adequate funding to start the Phase 2 reconstruction of Depot Avenue between South Main Street and SE 2nd Street by late-2009 and to determine funding needs to address arsenic remediation on the park site; 7) Address the approximately \$500,000 funding gap for restoring the Depot Building and authorize staff to pursue beginning the rehabilitation while the building is in storage in 2008; and 8) Accelerate funding of park projects by making funds equal to the remaining UDAG grant proceeds (total of \$809,879) available in fiscal year 2009 instead of 2013.

**A motion was made by Mayor-Commissioner Pro Tem Bryant, seconded by Commissioner Mastrodicasa, that this matter be Approved as Recommended. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan  
Absent: Edward Braddy

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## CITY MANAGER

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### 071118.

#### **Land Surplus for Alachua County Historic Trust Matheson Museum, Inc. (B)**

**This item involves the surplus and sale of City land to the Alachua County Historic Trust Matheson Museum, Inc. to address conforming lot issues with the SE 6th Street McGalliard Cottages.**

[Play Video](#)

*Parks, Recreation and Cultural Affairs Director Steve Phillips and Dr. Mark Barrow gave presentations.*

*Dr. Barrow introduced new Matheson Museum Director Jessica Akin.*

*AMENDMENT: Include an appraisal of the signs mentioned in the presentation (Porcelain blue sign that was on the Fernadina to Cedar Key Railroad that says Gainesville and 2 sets of large metal letters that were on the 6th Street Depot that spell out Gainesville); and 2) ask the City Manager to work that into the agreement.*

**RECOMMENDATION**      *Recommended Motion: The City Commission: 1) declare*

*approximately 0.10-acre portion of Tax Parcel 12689-000-000, as surplus and sell the land at the fair market value of \$19,950; 2) authorize the City Manager to execute Purchase and Sale Agreements, subject to approval as to form and legality by the City Attorney, for the portion of Tax Parcel 12689-000-000 to the adjacent property owner, Alachua County Historic Trust Matheson Museum, Inc.; 3) authorize the City Manager to prepare Special Warranty Deeds, subject to approval by the City Attorney as to form and legality; and 4) authorize the Mayor to execute, and the Clerk to attest, the Special Warranty Deed to convey the 0.10-acre portion of Tax Parcel 12689-000-000, to the Alachua County Historic Trust Matheson Museum, Inc.*

*Alternative Motion: The City Commission deny the sale of the portion of property adjacent to the two McGalliard cottages.*

**A motion was made by Mayor-Commissioner Pro Tem Bryant, seconded by Commissioner Lowe, that this matter be Approved as Amended. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan

Absent: Edward Braddy

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### **071146.**

**Proposal to Change the Formula Used to Calculate the City's Contribution to Retiree's Health Insurance Premiums (B)**

**This Item involves a request for the City Commission to hear a presentation regarding changes to the Retiree Health Insurance Program**

[Play Video](#)

*Risk Management Director Steve Varvel, Assistant to the General Manager Karen Johnson, Finance Director Mark Benton, Assistant City Attorney Charles Hauck, and Administrative Services Director Becky Rountree gave presentations.*

*Chair Hanrahan recognized International Association of Firefighters President Jeff Lane, CWA President Jerry Coughlin, Lieutenant Will Halvosa; Retirees Bob Mitchell, Richard Williams, Jeff Bramm, Kim Simpson, Glenda Currie and Dianna Vogel; and Walter Willard who spoke to the matter.*

*NOTE: Commissioner Braddy entered the meeting room at 4:04 PM.*

*MOTION (CONTINUATION MOTION): Commissioner Lowe moved and Commissioner Mastrodicasa seconded to continue this item to the June 9, 2008 City Commission Meeting and include request for information as follows:*

*1) Options for annual inflation adjustments; 2) examples of impacts on individuals in*

*different classifications; 3) context in regards to benefits analysis; 4) continue discussions with the interested stakeholders; 5) establish timeframe and schedule and who would be involved in the discussions or who could be invited to participate (City Manager send out a memo); 6) the context of Amendment One and a more explicit comparison to the Florida Retirement System (FRS); and 7) consider underlying principles (assumptions).*  
(VOTE: 7-0, MOTION CARRIED)

**RECOMMENDATION**      *The City Commission: 1) hear a presentation from staff regarding the proposed Retiree Health Insurance Program and Trust 2) approve the proposed Retiree Health Insurance Program and Trust with new formula 3) authorize the City Attorney to draft and the City Clerk to advertise the Ordinance necessary to terminate the existing Retiree Health Insurance Program and Trust, and create a new Retiree Health Insurance Program and Trust using the assets, or a portion thereof, of the existing Trust to fully fund the New Program and Trust.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Mastrodicasa, that this matter be Continued for June 9, 2008. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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## **071120.**

### **Citizen Survey Results (B)**

**The City of Gainesville has received the results of our citizen survey, conducted by the National Research Center (NRC). The results of the 2008 Citizen Survey were compiled into three reports, which are hereby presented to the City Commission.**

[Play Video](#)

*Strategic Planner Lila M. Stewart gave a presentation.*

**RECOMMENDATION**      *The City Commission receive a presentation from staff and the final reports prepared by the National Research Center (NRC).*

#### **Heard**

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**CITY ATTORNEY**

**CITY AUDITOR**

**COMMITTEE REPORTS (PULLED FROM CONSENT)**

**OUTSIDE AGENCIES**

**COMMUNITY REDEVELOPMENT AGENCY**

**MEMBERS OF THE CITY COMMISSION**

**COMMISSION COMMENTS (if time available)**

**RECESS - 5:00 PM**

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**RECONVENE - 5:49 PM**

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**PLEDGE OF ALLEGIANCE (5:30pm)**

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**PROCLAMATIONS/SPECIAL RECOGNITIONS**

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**071116. National Historic Preservation Month (B)**

[Play Video](#)

**RECOMMENDATION**      *City of Gainesville Planning and Development Planner D. Henrichs to accept the proclamation.*

**Heard**

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**071165. Remembering the Legacy of the Negro League Month - May 2008 (B)**

[Play Video](#)

**RECOMMENDATION**

*Cox Communication Vice Presidents Kenneth Sneed and Rick Mulligan and Vice President/General Manager Mike Giampeitro to accept the proclamation.*

**Heard**

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**CITIZEN COMMENT (6:00pm) - Please sign on sign-up sheet**

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**Kali Blount**

*Affordable Housing.*

**Walter Willard**

*Various Issues.*

**Pat Fitzpatrick**

*Homeless issues and addiction. See following File #070887.*

**070887.**

**Citizen Comment - Pat Fitzpatrick (B)**

**RECOMMENDATION**

*The City Commission hear comments from Pat Fitzpatrick and place back-up submitted on file.*

**Placed on File**

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**Jerry Williamson**

*GPD Issues.*

**Kent Sokmensuer**

*Historic District Issues - See following File #071179.*

**071179.**

**Citizen Comment - Kent Sokmensuer (B)**

**RECOMMENDATION**

*The City Commission hear comments from Kent Sokmensuer regarding Historic District issues and place back-up*

*submitted on file.*

**Placed on File**

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**Tom Cunilio**

*Homeless Issues.*

**Gabe Kaimowitz**

*Butterfly Project - See following File #071149.*

**071149.**

**Possible Designation of Gainesville as "Butterfly City" (B)**

**RECOMMENDATION**

*The City Commission ask the City Manager to research this issue and place back-up submitted on file.*

**Placed on File**

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**PUBLIC HEARINGS**

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**WAIVER OF RULES**

*The rules were waived by adoption of the agenda to hear File #070722 first under Public Hearings.*

**ORDINANCES, 2ND READING- ROLL CALL REQUIRED**

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**070722.**

**VOLUNTARY ANNEXATION - BUTLER PLAZA AND VICINITY AREA (B)**

**Ordinance No. 0-07-117**

**An Ordinance of the City of Gainesville, Florida, annexing a portion of the City of Gainesville Reserve Area, commonly known as the Butler Plaza and Vicinity Area, and Butler Plaza Southwest Area, pursuant to Chapter 90-496, Special Act, Laws of Florida, as amended by Chapter 91-382 and Chapter 93-347, Special Acts, Laws of Florida, known as the Alachua County Boundary Adjustment Act; making certain findings; including within the corporate limits of the City of Gainesville, Florida, that certain compact and contiguous area, as more specifically described in this ordinance, generally located south of the vicinity of SW 20th Avenue, west of SW 34th Street and the City limits, north of**

SW Archer Road and the City limits, and east of the vicinity of Interstate 75; providing for inclusion of the area in Appendix I of the City Charter; providing for land use and zoning regulations; providing for persons engaged in any occupation, business, trade or profession within the area; providing for the application of a fire services special assessment to the area; providing directions to the City Manager and Clerk of the Commission; providing a severability clause; and providing effective dates.

[Play Video](#)

*Strategic Planning Manager Karen Billings and Attorney Ron Carpenter gave presentations.*

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance on second reading, as amended.*

**A motion was made by Commissioner Lowe, seconded by Mayor-Commissioner Pro Tem Bryant, that this matter be Adopted on Final Reading, as amended (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

Absent: Scherwin Henry

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## **070820.**

### **STREET VACATION - POLICE DEPARTMENT AREA (B)**

#### **Ordinance No. 0-08-06, Petition 122SVA-07PB**

**An ordinance of the City of Gainesville, Florida, to vacate, abandon and close a certain portion of the right-of-way of N.W. 7th Place between N.W. 4th Street and N.W. 5th Street, and a portion of N.W. 5th Street located south of the CSX Railroad right-of-way to a point 10 feet south of the northeast corner of Lot 26 of Brush's Addition to Gainesville, as more specifically described in this Ordinance; reserving a public utilities easement; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

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**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Donovan, that this matter be Adopted on Final Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

Absent: Scherwin Henry

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**070906.****PLANNED DEVELOPMENT AMENDMENT - OAKBROOK WALK (B)****Ordinance No. 0-08-10, Petition No. 132PDA-07PB**

**An ordinance of the City of Gainesville, Florida; amending Ordinance Nos. 3248, 3378 and 000618 that rezoned certain property to planned development district, commonly known as "Oakbrook Walk PD"; generally located in the vicinity of the 1000-1200 block of SW 14th Avenue, north side and 1331 S.W. 13th Street; by allowing the contraction of the development plan and adopting a revised development plan, as more specifically described in this ordinance; adopting revised development plan maps and a revised development plan report; preserving certain conditions and restrictions; providing for penalties; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

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**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Donovan, seconded by Commissioner Lowe, that this matter be Adopted on Final Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan  
Absent: Scherwin Henry

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**070907.****REZONING - OAKBROOK WALK (B)****Ordinance No. 0-08-11, Petition No. 88ZON-07PB**

**An ordinance of the City of Gainesville, Florida, amending the Zoning Map Atlas and rezoning certain property within the City, as more specifically described in this Ordinance, from "Planned Development" to "UMU-1: Urban mixed use district 1"; located in the vicinity of 1331 SW 13th Street; retaining the Special Area Plan for Southwest 13th Street Overlay District classification; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

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**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Mastrodicasa, that this matter be Adopted on Final Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

Absent: Scherwin Henry

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## WAIVER OF RULES

*The rules were waived by consensus to hear the following items before the Sam's Club Ordinance and the GRU Biomass presentation.*

1. *File #071151 - EO Advertising Campaign;*
2. *File #071122 - Re-appointment of Bob Freeman to the East Gainesville SPROUT Project Task force; and*
3. *File #071079 - Annual Performance, Salary and Benefits Review for the Equal Opportunity Director.*

## EQUAL OPPORTUNITY DIRECTOR

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### **071151.**      **EO Advertising Campaign (B)**

[Play Video](#)

*Equal Opportunity Director Jimmie Williams and Public Information Officer Bob Woods gave presentations.*

**RECOMMENDATION**      *the City Commission: 1) hear a presentation from staff on the EO Advertising Campaign.*

**Discussed**

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## ADVISORY BOARDS/COMMITTEES (APPOINTMENTS/REPORTS)

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### **071122.**      **Re-appointment of Bob Freeman to the East Gainesville SPROUT Project Task**

**Force (NB)**

**This item involves re-appointing member Bob Freeman to the East Gainesville SPROUT Project Task Force whose terms expired April 11, 2008.**

[Play Video](#)

**RECOMMENDATION**      *The City Commission re-appoint member Bob Freeman to the East Gainesville SPROUT Project Task Force for an additional three year term ending April 28, 2011.*

**A motion was made by Mayor-Commissioner Pro Tem Bryant, seconded by Commissioner Henry, that this matter be Approved as Recommended. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

**SCHEDULED EVENING AGENDA ITEMS**

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**071079.      Annual Performance, Salary, and Benefits Review for the Equal Opportunity Director (B)**

[Play Video](#)

*MOTION: Approve a 2.61% salary increase for the Equal Opportunity Director retroactive to his anniversary date.*

*Chair Hanrahan recognized Walter Willard who spoke to the matter.*

**RECOMMENDATION**      *The City Commission review the salary and benefits of the Equal Opportunity Director and make any changes deemed appropriate.*

**A motion was made by Mayor-Commissioner Pro Tem Bryant, seconded by Commissioner Henry, that this matter be Approved as shown above (See Motion). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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**ORDINANCES, 1ST READING- ROLL CALL REQUIRED**

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**070213. PLANNED DEVELOPMENT AMENDMENT - SAM'S CLUB (B)****Ordinance No. 0-07-96, Petition No. 4PDA-07PB**

**An Ordinance of the City of Gainesville, Florida; amending Ordinance No. 3558 as amended by Ordinance No. 971051, that adopted the Planned Development commonly known as "Sam's Club", located in the vicinity of 2801 Northwest 13th Street; providing for certain additions to the existing Sam's Club and permitting a gasoline fueling station under certain conditions; adopting revised development plan maps and a revised planned development report; amending and adopting additional conditions and restrictions; providing for penalties; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

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*STAFF PRESENTATION: Planning Manager Ralph Hilliard gave a presentation.*

*PETITIONER PRESENTATION: Agents for the Petitioner Ron Carpenter, Peter Such and Bernard Kinney gave presentations.*

*AFFECTED PARTY PRESENTATION: Attorney Mac McCullers, Noise Consultant Rob Lilkendey, and Amy Richard gave presentations.*

*MOTION (AMENDMENT): Commissioner Donovan moved and Commissioner Bryant seconded to approve Condition 6, as written by the staff with the amendments that: 1) The noise consultant would be selected by the City although paid for by the developer; and 2) that compliance would not just include 15-3 [c], but the City's entire Noise Ordinance, as it may be amended from time to time.*

*NOTE: Attorney Ron Carpenter requested deleting the language "operational modifications, including, but not limited to, limiting the hours of loading dock operations".*

*Mayor Hanrahan suggested that the question be divided.*

*CITIZEN COMMENT TO THE MOTION: Chair Hanrahan recognized Ron Nichols, Walter Willard, Rob Brinkman and Joe Richard who spoke to the matter.*

*DIVIDE THE PREVIOUS QUESTION MOTION: The previous question was divided without objection.*

*FIRST PART OF THE DIVIDED QUESTION: Commissioner Donovan moved and Commissioner Bryant seconded to approve Condition 6, as written by staff, with Commissioner Donovan's amendments.  
(4-3, Commissioners Braddy, Bryant and Henry - No; MOTION CARRIED)*

*SECOND PART OF THE DIVIDED QUESTION (AMENDMENT): Commissioner Donovan moved and Commissioner Bryant seconded to approve Condition 6, as written by the staff with the amendments that: 1) The noise consultant would be selected by the City although paid for by the developer; and 2) that compliance would not just include 15-3 [c], but the City's entire Noise Ordinance.*

*(VOTE: 6-1, Commissioner Bryant - No, MOTION CARRIED)*

**RECOMMENDATION**      *The City Commission: 1) approve petition 4PDA-07PB; and  
2) adopt the proposed ordinance.*

**A motion was made by Commissioner Henry, seconded by Commissioner Donovan, that this matter be Approved (Petition) and Adopted on First Reading (Ordinance), as amended. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy and Pegeen Hanrahan  
Nay: Rick Bryant

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## **RESOLUTIONS- ROLL CALL REQUIRED**

## **PLAN BOARD PETITIONS**

## **DEVELOPMENT REVIEW BOARD PETITIONS**

## **UNFINISHED BUSINESS**

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## GENERAL MANAGER FOR UTILITIES

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### **071159. Evaluation of Biomass-Fueled Generation Facility Proposals (B)**

**Staff submits its evaluation of the binding proposals received from the three top-ranked respondents pursuant to GRU's Request for Proposals for a Biomass-Fueled Generation Facility for City Commission review.**

[Play Video](#)

*GRU Assistant General Manager for Strategic Planning Ed Regan gave a presentation.*

*WAIVER OF RULES: Commissioner Henry moved and Commissioner Lowe seconded to waive the rules to extend the meeting to 11:10 PM.  
(VOTE: 7-0, MOTION CARRIED)*

*NOTE: This item was continued to the May 12, 2008 regular City Commission Meeting.*

#### **RECOMMENDATION**

*The City Commission: 1) Approve the ranking of proposals received in response to the Request for Proposals for a Biomass-Fueled Generation Facility; 2) authorize the General Manager, or his designee, to negotiate and execute a contract with Nacogdoches Power, LLC for a long term purchase power agreement for a 100 MW net capacity, 100% biomass fueled facility to be constructed at the Deerhaven site, subject to approval of the City Attorney as to form and legality; and 3) if the General Manager is unable to negotiate an acceptable contract with the highest ranked proposer, the General Manager/Designee may then negotiate with the next highest ranked proposer in order; and 4) authorize staff to procure various services, equipment and materials in conjunction with the project within approved budget limitations, as required.*

#### **Continued**

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## COMMISSION COMMENT

## CITIZEN COMMENT (If time available)

**ADJOURNMENT - 11:10 PM**

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Kurt M. Lannon, Clerk of the Commission

# **City of Gainesville**

*City Hall  
200 East University Avenue  
Gainesville, Florida 32601*



## **Meeting Minutes**

**Monday, May 12, 2008**

**1:00 PM**

**City Hall Auditorium**

## **City Commission**

*Mayor Pegeen Hanrahan (At Large)  
Mayor-Commissioner Pro Tem Rick Bryant (At Large)  
Commissioner Jeanna Mastrodicasa (At Large)  
Commissioner Scherwin Henry (District 1)  
Commissioner Ed Braddy (District 2)  
Commissioner Jack Donovan (District 3)  
Commissioner Craig Lowe (District 4)*

*Persons with disabilities who require assistance to participate in this meeting are requested to notify the Office of Equal Opportunity at 334-5051 or call the TDD phone line at 334-2069 at least two business days in advance.*

## CALL TO ORDER - 1:04 PM

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## ROLL CALL

Present: Edward Braddy, Pegeen Hanrahan, Rick Bryant, Craig Lowe, Jack Donovan, Jeanna Mastrodicasa and Scherwin Henry

## INVOCATION

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*The City Commission observed a moment of silence.*

## CONSENT AGENDA

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*Commissioner Lowe moved and Commissioner Mastrodicasa seconded to adopt the Consent Agenda, as modified.*

*(VOTE: 6-0, Commissioner Braddy - Absent, MOTION CARRIED)*

### *MODIFICATIONS:*

- 1. File #071172 - Ratification of Agreement between the FOP Gator Lodge 67 and the City of Gainesville - (Back-up submitted).*
- 2. File #071182 - City Commission Minutes - The minutes from April 16, 2008 were removed for an amendment.*

## CITY MANAGER, CONSENT AGENDA ITEMS

### **071160.**

#### **RTS Administration Modular Building Project (B)**

**This item involves a request for approval to have a Modular Building for RTS Administration next to the RTS Operations building at 100 SE 10th Avenue.**

#### **RECOMMENDATION**

*Recommended Motion: The City Commission: 1) approve the RTS administration modular building; and 2) direct staff to continue with the planning/design efforts.*

*Alternative Recommendation A: The City Commission: 1) deny staff recommendation; and 2) direct staff to look for another location to accommodate RTS administration offices.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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071160b\_200805121300.pdf

**071161.****Release of Easement (B)**

**This item involves the release of a Drainage Easement in exchange for an additional Drainage Easement.**

**RECOMMENDATION**

*Recommended Motion: The City Commission: 1) approve the relocation of the existing Drainage Easement and 2) authorize the Mayor to execute a Release of Easement subject to approval by the City Attorney as to form and legality, upon receipt of the new Drainage Easement from HCA Health Services of Florida, Inc.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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071161f\_200805121300.pdf

**071163.****Comet Halley Sculpture and Sunburst Marker (B)**

**This item involves a request to accept Elizabeth Indianos' Comet Halley Sculpture and Sunburst Marker for the Gainesville Solar Walk.**

**RECOMMENDATION**

*Recommended Motion: The City Commission approve the request to accept the Art in Public Places Trust recommendation of Elizabeth Indianos' Comet Halley Sculpture and Sunburst Marker for the Gainesville Solar Walk.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**071172.****Ratification of Agreement between the Fraternal Order of Police (FOP) Gator Lodge 67, Inc. Bargaining Unit and the City of Gainesville for October 1, 2007 through September 30, 2010 (B)**

**This item proposes the ratification of the Agreement between the City of Gainesville and the Fraternal Order of Police Gator Lodge 67 Bargaining Unit.**

**RECOMMENDATION**

*The City Commission ratify the Agreement between the City of Gainesville and the Fraternal Order of Police Gator Lodge 67 Bargaining Unit extending the Agreement through September 30, 2010.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**071174.**

**Request to Increase Demolition Purchase Order with Florida Concrete Recycling, Inc. (NB)**

**This item requests City Commission approval for the increase of the demolition purchase order to pay for the demolition of five houses before September 30, 2008.**

**RECOMMENDATION**

*The City Commission authorize the City Manager or designee to increase the purchase order to cover the expenses of pending demolitions.*

*Alternative Recommendation: The City Commission deny the request to increase the demolition purchase order with Florida Concrete Recycling, Inc.*

**This Matter was Approved as Recommended on the Consent Agenda.**

**071183.**

**Annexation of Parcel Number 06708-000-000 (B)**

**This is the submission of petition for voluntary annexation for the above referenced parcel number, which is located in the vicinity of SW 20th Avenue, SW 34th Street, SW 24th Avenue and the City limits, and SW 38th Terrace.**

**RECOMMENDATION**

*The City Commission: 1) receive the petition for annexation; and make findings that it contains the signature of the property owner or authorized agents; 2) direct the City Manager to analyze the area; and 3) authorize the City Attorney to prepare and the Clerk of the Commission to advertise ordinances relating to the annexation of the area, if appropriate.*

*Alternative Recommendation: The City Commission deny acceptance of the petition.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**071184.**

**Annexation of Parcel Numbers 06720-000-000 and 06721-000-000 (B)**

**This is the submission of petition for voluntary annexation for the above referenced parcel numbers, which are located in the vicinity of SW 20th**

Avenue, the vicinity of SW 34th Street, SW 24th Avenue and the City limits, and SW 38th Terrace.

**RECOMMENDATION**

*The City Commission: 1) receive the petition for annexation; and make findings that it contains the signature of the property owners or authorized agents; 2) direct the City Manager to analyze the area; and 3) authorize the City Attorney to prepare and the Clerk of the Commission to advertise ordinances relating to the annexation of the area, if appropriate.*

*Alternative Recommendation: The City Commission deny acceptance of the petition.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**071185.**

**Annexation of Parcel Numbers 06708-001-000, 06710-000-000, 06716-000-000, 06717-000-000, 06718-000-000, 06719-000-000, 06752-000-000, 06756-001-000, and 06756-002-000 (B)**

**This is the submission of petitions for voluntary annexation for the above referenced parcel numbers, which are located in the vicinity of SW 20th Avenue, the vicinity of SW 34th Street, SW 24th Avenue and the City limits, and SW 38th Terrace.**

**RECOMMENDATION**

*The City Commission: 1) receive the petitions for annexation; and make findings that it contains the signature of the property owners or authorized agents; 2) direct the City Manager to analyze the area; and 3) authorize the City Attorney to prepare and the Clerk of the Commission to advertise ordinances relating to the annexation of the area, if appropriate.*

*Alternative Recommendation: The City Commission deny acceptance of the petitions.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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**071186.**

**Annexation of Parcel Numbers 06708-002-000 and 06709-000-000 (B)**

**This is the submission of petition for voluntary annexation for the above referenced parcel numbers, which are located in the vicinity of SW 20th Avenue, the vicinity of SW 34th Street, SW 24th Avenue and the City limits, and SW 38th Terrace.**

**RECOMMENDATION**

*The City Commission: 1) receive the petition for annexation;*

*and make findings that it contains the signature of the property owners or authorized agents; 2) direct the City Manager to analyze the area; and 3) authorize the City Attorney to prepare and the Clerk of the Commission to advertise ordinances relating to the annexation of the area, if appropriate.*

*Alternative Recommendation: The City Commission deny acceptance of the petition.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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## **GENERAL MANAGER FOR UTILITIES, CONSENT AGENDA ITEMS**

## **CITY ATTORNEY, CONSENT AGENDA ITEMS**

## **CLERK OF THE COMMISSION, CONSENT AGENDA ITEMS**

### **071182.**

#### **City Commission Minutes (B)**

##### **RECOMMENDATION**

*The City Commission approve the minutes of April 16, 2008; April 21, 2008; April 28, 2008; and May 1, 2008; as circulated.*

**This Matter was Approved as Recommended on the Consent Agenda.**

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071182c\_20080512.pdf

## **Passed The Consent Agenda**

**A motion was made by Commissioner Lowe, seconded by Commissioner Mastrodicasa, including all the preceding items marked as having been adopted on the Consent Agenda. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan  
Absent: Edward Braddy

## **EQUAL OPPORTUNITY DIRECTOR, CONSENT AGENDA ITEMS**

## **COMMITTEE REPORTS, CONSENT AGENDA ITEMS**

## **COMMUNITY DEVELOPMENT COMMITTEE, CONSENT**

## COMMUNITY REDEVELOPMENT AGENCY, CONSENT ITEMS

### END OF CONSENT AGENDA

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### ADOPTION OF THE REGULAR AGENDA

[Play Video](#)

*Commissioner Mastrodicasa moved and Commissioner Donovan seconded to adopt the Regular Agenda, as modified.*

*(VOTE: 6-0, Commissioner Braddy - Absent, MOTION CARRIED)*

#### *MODIFICATIONS:*

- 1. File #071169 - SEGRI Special Area Plan - (Power Point Presentation Submitted).*
- 2. File #071068E - Blues Creek Unit 5 - (Replacement Power Point Submitted).*
- 3. File #070213 - Sam's Club - Planned Development Amendment - (Ordinance Withdrawn).*

## CHARTER OFFICER UPDATES

### CLERK OF THE COMMISSION

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*NOTE: The minutes of April 16, 2008 were amended and approved as follows:*

*AMENDMENT : Commissioner Henry moved and Commissioner Bryant seconded that the motion for File #070210, Hatchet Creek Development, Item 7, staff's Condition Z-5 would include the language that the age make-up of the development would consist of 80% age 55 and above and 20% younger families.*

*(VOTE: 6-0, Commissioner Braddy - Absent, MOTION CARRIED)*

## CITY MANAGER

### GENERAL MANAGER FOR UTILITIES

[Play Video](#)

#### **071159.**

#### **Evaluation of Biomass-Fueled Generation Facility Proposals (B)**

**Staff submits its evaluation of the binding proposals received from the three**

**top-ranked respondents pursuant to GRU's Request for Proposals for a Biomass-Fueled Generation Facility for City Commission review.**

[Play Video](#)

*GRU Assistant General Manager for Strategic Planning and Finance & Analysis Compliance Manager Kevin Crawford, GRU Utility Forester Joe Wolf gave presentations.*

*CITIZEN COMMENT: Chair Hanrahan recognized Walter Willard, Harald Kegelmann, Frederick Peterkin, Dian Deevey, Ed Brown, Dave Bruderly, Nancy Sever, Sally Dickinson, Rob Brinkman, Joshua Dickinson and Tom Bussing who spoke to the matter.*

*NOTE: Commissioner Braddy entered the meeting room at 2:05 PM.*

*MAIN MOTION: Commissioner Braddy moved and Commissioner Mastrodicasa seconded to approve the recommendation.*

*AMENDMENT TO MAIN MOTION: 1) Include in the negotiations a contractual binding back door out at the site certification point; and 2) have legal staff include an enforcement mechanism for forest stewardship in the contractual process.*

*NOTE: Commissioner Donovan requested that staff bring back a report comparing the DSM practices of Gainesville and Tallahassee.*

**RECOMMENDATION**

*The City Commission: 1) continue the discussion on Evaluation of Biomass-Fueled Generation Facility Proposals; 2) approve the ranking of proposals received in response to the Request for Proposals for a Biomass-Fueled Generation Facility; 3) authorize the General Manager, or his designee, to negotiate and execute a contract with Nacogdoches Power, LLC for a long term purchase power agreement for a 100 MW net capacity, 100% biomass fueled facility to be constructed at the Deerhaven site, subject to approval of the City Attorney as to form and legality; and 4) if the General Manager or his designee is unable to negotiate an acceptable contract with the highest ranked proposer, the General Manager/Designee may then negotiate with the next highest ranked proposer in order; and 5) authorize staff to procure various services, equipment and materials in conjunction with the project within approved budget limitations, as required.*

**A motion was made by Commissioner Braddy, seconded by Commissioner Mastrodicasa, that this matter be Approved as Amended. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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**CITY ATTORNEY**

**CITY AUDITOR**

**EQUAL OPPORTUNITY DIRECTOR**

**COMMITTEE REPORTS (PULLED FROM CONSENT)**

**RECREATION, CULTURAL AFFAIRS AND PUBLIC WORKS COMMITTEE**

**PERSONNEL & ORGANIZATION STRUCTURE COMMITTEE**

**PUBLIC SAFETY COMMITTEE**

**AUDIT, FINANCE AND LEGISLATIVE COMMITTEE**

**ADVISORY BOARDS/COMMITTEES (APPOINTMENTS/REPORTS)**

**OUTSIDE AGENCIES**

**COMMUNITY REDEVELOPMENT AGENCY**

[Play Video](#)

**071169. SEGRI Special Area Plan (B)**

[Play Video](#)

*CRA Project Coordinator and Neighborhood Planner Kelly Huard; and Land Planners with Wilson-Miller Scott Swearingen and Rachel Booth gave presentations.*

*Assistant City Manager Fred Murry made comments.*

**RECOMMENDATION**      *The City Commission: 1) Hear presentation from Wilson-Miller and provide input as necessary; 2) Accept the proposed SEGRI Special Area Plan; and 3) Direct staff to*

*finalize the proposed SAP and initiate the process for the SAP's adoption into the City of Gainesville Land Development Code.*

**A motion was made by Commissioner Henry, seconded by Commissioner Lowe, that this matter be Approved as Recommended. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Rick Bryant and Pegeen Hanrahan

Absent: Edward Braddy

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## **MEMBERS OF THE CITY COMMISSION**

## **COMMISSION COMMENTS (if time available)**

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## **RECESS - 4:59 PM**

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## **RECONVENE - 5:06 PM**

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## **PLEDGE OF ALLEGIANCE (5:30pm)**

[Play Video](#)

## **Gator Detachment of the Marine Corp League**

[Play Video](#)

## **PROCLAMATIONS/SPECIAL RECOGNITIONS**

[Play Video](#)

### **071177.**

**City of Gainesville's Citizens' Academy 2008 Graduates (NB)**

[Play Video](#)

*Marketing and Communications Specialist Kate Parmelee and City of Gainesville's Citizens' Academy 2008 Speaker Randy Wells gave presentations.*

### **RECOMMENDATION**

*The City Commission: 1) recognize accomplishments of*

*Gainesville 101, Spring 2008 City of Gainesville Citizens' Academy graduates; and 2) hear brief comments from the class speaker on what they have learned.*

**Heard**

**071121.**

**National Emergency Medical Services Week 2008 (B)**

[Play Video](#)

**RECOMMENDATION** *Gainesville Fire Rescue Special Operations Chief Don Sessions to accept the proclamation.*

**Heard**

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**071203.**

**National Water Safety Month - May 2008 (B)**

[Play Video](#)

**RECOMMENDATION** *City of Gainesville Recreation Supervisor Jeff Moffitt, UF Synchro Coach Betsy Caza, Gainesville Gravitass Representative Andrea Cornelius, PK Yonge Coach Mike Davidson, and Makos Representative Perrin Foerster to accept the proclamation.*

**Heard**

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**071204.**

**National Day of Prayer - May 1, 2008 (B)**

[Play Video](#)

**RECOMMENDATION** *Oak Park Baptist Church Pastor Danny Austin to accept the proclamation.*

**Placed on File**

071204\_200805121300.pdf

**071205.**

**International Internal Audit Awareness Month - May 2008 (B)**

[Play Video](#)

**RECOMMENDATION** *Institute of Internal Auditors North Central Florida Chapter John Byrd, CIA and Jessica Haug, CIA to accept the proclamation.*

**Heard**

071205\_200805121300.pdf

**071206.****National Foster Care Month - May 2008 (B)**[Play Video](#)**RECOMMENDATION***Partnership for Strong Families Representative Dana Bobb to accept the proclamation.***Heard**

071206\_200805121300.pdf

**071207.****Code Enforcement Officer Appreciation Week - June 2-6 (B)**[Play Video](#)**RECOMMENDATION***City of Gainesville Code Enforcement Officer Lorie Podolsky and Diana Osborn and Field Collector Heather Watson to accept the proclamation.***Heard**

071207\_200805121300.pdf

**071208.****Memorial Day - May 26, 2008 (B)**[Play Video](#)**RECOMMENDATION***Gator Detachment of the Marine Corp League to accept the proclamation.***Heard**

071208\_200805121300.pdf

**071178.****Recognition of Mr. Phil Emmer for his contribution to the Reichert House (NB)**[Play Video](#)*Community Relations Coordinator Tony Jones, Phil Emmer, and Pace Center for Girls Board Members Kathy Southwick and Susan Spain gave presentations.***RECOMMENDATION***The City Commission recognize Mr. Phil Emmer for his contribution to the Reichert House.***Heard**

**CITIZEN COMMENT**

[Play Video](#)

**Zachary Andrews**

*Gainesville Housing Authority Hot Water.*

**Jeff McAdams**

*FOP Contract.*

**Walter Willard**

*Various Issues.*

**Tom Cunilio**

*Unanimous Vote on Biomass Plant.*

**Pat Fitzpatrick**

*Homeless Issues.*

**Robert Pearce**

*Cabot Koppers Issues.*

**Gabe Kaimowitz**

*Butterfly Garden.*

**Francesca**

*Airport Noise.*

**Kevin Claney**

*Airport Noise.*

**Harald Kegelmann**

*Solar Energy.*

**Mark Adams**

*Airport Noise.*

**Mike Mogan**

*North Main Street Business Owners - Alternative One-Stop Center.*

**Wendy Noon**

*Scholarships, golf carts and \$100 laptops.*

**WAIVER OF RULES**

*The rules were waived by consensus to recognize the service of Commissioner Ed Braddy and Commissioner Rick Bryant at 6:30 PM.*

**071201.**

**Commissioners Ed Braddy and Rick Bryant (NB)**

[Play Video](#)

*Chair Hanrahan recognized Mrs. Bryant and Olivia Bryant, Burt Weathers, Harald Kegelmann, Michelle Bryant-Barr, Tom Cunilio, Mark Goldstein and Jeff McAdams who spoke to the matter.*

**RECOMMENDATION**

*The City Commission hear comments from Commissioners Ed Braddy, Mayor Commissioner Pro-Tem Rick Bryant, the Mayor, City Commissioners and the public.*

*NOTE: It is anticipated that the Commission will waive the Rules and hear this item at 6:30 PM.*

**Heard**

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**PUBLIC HEARINGS**

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**ORDINANCES, 1ST READING- ROLL CALL REQUIRED**

[Play Video](#)

**070904.**

**COMPREHENSIVE PLAN AMENDMENT - URBAN MIXED-USE 1 FUTURE LAND USE CATEGORY - BUILDING HEIGHT (B)**

**Ordinance No. 0-08-07; Petition 105CPA-07 PB**

**An ordinance of the City of Gainesville, Florida, amending the Future Land Use Element of the City of Gainesville 2000-2010 Comprehensive Plan, amending the**

Urban Mixed-Use-1 category within Policy 4.1.1 by deleting the current allowance for an additional 2 stories of building height by Special Use Permit and deleting an unnecessary reference to the Land Development Code; providing directions to the city manager; providing a severability clause; providing a repealing clause; and providing an effective date.

[Play Video](#)

*Chief of Comprehensive Planning Dean Mimms and Planning Manager Ralph Hilliard gave presentations.*

*Chair Hanrahan recognized Ken Davis, Mark Goldstein, and David Coffey who spoke to the matter.*

**RECOMMENDATION**      *The City Commission (1) approve Petition 105CPA-07 PB and (2) adopt the proposed ordinance.*

**A motion was made by Commissioner Henry, seconded by Mayor-Commissioner Pro Tem Bryant, that this matter be Approved (Petition) and Adopted on First Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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#### **071154.**

#### **COMPREHENSIVE PLAN AMENDMENT – FUTURE LAND USE ELEMENT – NEW LAND USE CATEGORY, “BUSINESS INDUSTRIAL” (B)**

##### **Ordinance No. 0-06-122; Petition 116CPA-07 PB**

**An ordinance of the City of Gainesville, Florida, amending the Future Land Use Element of the City of Gainesville 2000-2010 Comprehensive Plan by adding a new land use category, “Business Industrial,” to policy 4.1.1, specifying conditions and limitations; providing directions to the city manager; providing a severability clause; providing a repealing clause; and providing an effective date.**

[Play Video](#)

*Planning Manager Ralph Hilliard gave a presentation.*

**RECOMMENDATION**      *The City Commission (1) approve Petition 116CPA-07 PB and (2) adopt the proposed ordinance.*

**A motion was made by Commissioner Henry, seconded by Mayor-Commissioner Pro Tem Bryant, that this matter be Approved (Petition) and Adopted on First Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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#### **070744.**

#### **APPENDIX A - SCHEDULE OF FEES - UTILITIES (B)**

**Ordinance No. 0-08-16**

**AN ORDINANCE AMENDING CHAPTER 27, ARTICLE 1, SUBSECTION 27-15(d) OF THE CODE OF ORDINANCES OF GAINESVILLE, FLORIDA RELATING TO RECONNECTION OF UTILITY SERVICE; AMENDING APPENDIX A, UTILITIES SECTION (7), SUBSECTION b(4)(i) SERVICE CHARGES BY INCREASING THE DELINQUENT DISCONNECTION FEE AND ELIMINATING THE SAME DAY RECONNECTION FEE FOR REQUESTS MADE DURING NORMAL WORKING HOURS; PROVIDING A REPEALING CLAUSE; PROVIDING DIRECTIONS TO THE CODIFIER; PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING AN IMMEDIATE EFFECTIVE DATE.**

[Play Video](#)

*Customer Operations Director Cindy Andrade gave a presentation.*

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Donovan, seconded by Mayor-Commissioner Pro Tem Bryant, that this matter be Adopted on First Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

Backup for #070744 Delinquent Policy Review Jan 8 081.pdf  
Backup for #070744 Delinquent Policy Review Revised Jan 30 2008.pdf  
Attachment to Item #070744 Delinquent Policy Referral Mar 19 2008.pdf  
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**071180.****ORDINANCE SETTING 2009 CITY ELECTION DATES (B)****Ordinance No. 0-08-20**

**An ordinance of the City of Gainesville, Florida, setting March 24 as the date for the 2009 regular city election and April 14 as the date for the 2009 run-off election, if necessary; providing a severability clause; providing a repealing clause; and providing an immediate effective date. (B)**

[Play Video](#)

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Henry, seconded by Commissioner Lowe, that this matter be Adopted on First Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

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070623.**FIRE SPECIAL ASSESSMENT (B)****Ordinance No. 0-08-13**

**AN ORDINANCE OF THE CITY OF GAINESVILLE, FLORIDA; RELATING TO THE PROVISION OF FIRE SERVICES, FACILITIES, AND PROGRAMS THROUGHOUT THE INCORPORATED AREAS OF GAINESVILLE, FLORIDA; AUTHORIZING THE IMPOSITION AND COLLECTION OF FIRE SERVICES ASSESSMENTS AGAINST PROPERTY; PROVIDING CERTAIN DEFINITIONS INCLUDING A DEFINITION FOR THE TERM "FIRE SERVICES ASSESSMENT"; ESTABLISHING A PROCEDURE FOR IMPOSING FIRE SERVICES ASSESSMENTS; PROVIDING THAT FIRE SERVICES ASSESSMENTS CONSTITUTE A LIEN ON ASSESSED PROPERTY UPON ADOPTION OF ASSESSMENT ROLL; PROVIDING THAT THE LIEN FOR A FIRE SERVICES ASSESSMENT COLLECTED PURSUANT TO LAW SHALL, UPON PERFECTION, ATTACH TO THE PROPERTY ON THE PRIOR JANUARY 1, THE LIEN DATE FOR AD VALOREM TAXES; PROVIDING THAT A PERFECTED LIEN SHALL BE EQUAL IN RANK AND DIGNITY WITH THE LIENS OF ALL STATE, COUNTY, DISTRICT, OR MUNICIPAL TAXES AND ASSESSMENTS AND SUPERIOR IN DIGNITY TO ALL OTHER PRIOR LIENS, MORTGAGES, TITLES, AND CLAIMS; AUTHORIZING THE IMPOSITION OF INTERIM ASSESSMENTS; PROVIDING A PROCEDURE FOR THE COLLECTION OF FIRE SERVICES ASSESSMENTS; PROVIDING FOR SEVERABILITY; PROVIDING DIRECTIONS TO THE CODIFIER AND PROVIDING AN IMMEDIATE EFFECTIVE DATE.**

Play Video

*Assistant City Manager Paul Folkers, Fire Chief Bill Northcutt and Administrative Services Director Becky Rountree gave presentations.*

*Chair Hanrahan recognized Richard Williams who spoke to the matter.*

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Donovan, that this matter be Adopted on First Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe and Pegeen Hanrahan  
Nay: Edward Braddy and Rick Bryant

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## WAIVER OF RULES

*The rules were waived by consensus to hear File #071197 at 8:30 PM.*

### 071197.

#### **Project on Streamlining Gainesville Government (B)**

**This item will be to discuss opportunities to streamline Gainesville government.**

#### [Play Video](#)

*Former GRU Assistant General Manager for Utilities Karen Johnson gave a presentation.*

*Chair Hanrahan recognized Rob Brinkman, Paula Stahmer, Dian Deevey and Jimmy Harnsberger who spoke to the matter.*

#### RECOMMENDATION

*The City Commission: 1) hear a report from staff regarding a project on streamlining Gainesville Government; and 2) establish a timetable and responsible parties to implement those recommendations that are approved.*

#### **Discussed**

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071197\_comm\_20080512.pdf

## ORDINANCES, 2ND READING- ROLL CALL REQUIRED

### **070213.**

#### **PLANNED DEVELOPMENT - SAM'S CLUB (B)**

##### **Ordinance No. 0-07-96, Petition No. 4PDA-07PB**

**An Ordinance of the City of Gainesville, Florida; amending Ordinance No. 3558 as amended by Ordinance No. 971051, that adopted the Planned Development commonly known as "Sam's Club", located in the vicinity of 2801 Northwest 13th Street; providing for certain additions to the existing Sam's Club and permitting a gasoline fueling station under certain conditions; adopting revised development plan maps and a revised planned development report; amending and adopting additional conditions and restrictions; providing for penalties; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

#### RECOMMENDATION

*The City Commission adopt the proposed ordinance.*

#### **Withdrawn**

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070213A\_MOD\_20080428.pdf  
070213\_CITCOM\_20080428.pdf  
070213\_200805121300.pdf

## RESOLUTIONS- ROLL CALL REQUIRED

### PLAN BOARD PETITIONS

[Play Video](#)

#### **071162.** Street Vacation for Regional Transit System (B)

**Petition 40SVA-08PB. City of Gainesville/Public Works Department, agent for Regional Transit System. Vacate, abandon and close that portion of Veitch Street bounded by the north right-of-way line of Southeast 10th Avenue to a point 230.89 feet west of Southeast 4th Street.**

[Play Video](#)

*City Planner Bedez Massey gave a presentation.*

*Chair Hanrahan recognized Richard Williams who spoke to the matter.*

**RECOMMENDATION** *City Plan Board to City Commission - The City Commission approve Petition 40SVA-08PB, subject to the condition that the Gainesville Regional Utilities (GRU) easement (150'*

*powerline easement) be maintained over existing facilities.  
Vote 7-0.*

*Staff to City Plan Board - Approve Petition 40SVA-08PB, subject to the condition that the Gainesville Regional Utilities (GRU) easement (150' powerline easement) be maintained over existing facilities.*

*Alternate Recommendations*

*The City Commission approve Petition 40SVA-08PB as submitted.*

*The City Commission deny Petition 40SVA-08PB.*

**A motion was made by Commissioner Braddy, seconded by Commissioner Henry, that this matter be Approved (Petition) with Conditions. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

071162\_200805121300.pdf

071162A\_200805121300.pdf

071162\_200806231300.pdf

## DEVELOPMENT REVIEW BOARD PETITIONS

[Play Video](#)

### **071068.**

**Blues Creek Subdivision, Unit 5, Phases 2 and 3 (B)**

**Petition 76SUB-07DB. Legislative Matter No. 000000. Eng, Denman & Associates, Inc., agent for Blues Creek Development. Design plat approval of Unit 5, Phases 2 and 3 of Blues Creek Subdivision, for 44 lots on 36.7 acres MOL, having a density of 1.19 dwelling units per acre. Located at the 7900 Block of NW 78th Road.**

[Play Video](#)

*STAFF PRESENTATION: City Planner Bedez Massey and Public Works Environmental Coordinator Mark Garland gave presentations.*

*PETITIONER PRESENTATION: Agents for the Petitioner Carl Salifrio, David Depew and Attorney Patrice Boyes gave presentations.*

*CITIZEN COMMENT: Chair Hanrahan recognized Michael Turco, Rob Brinkman and Sue Gruner who spoke to the matter.*

*FIRST MOTION: Commissioner Bryant and Commissioner Braddy seconded to approve the Alternative Recommendation that the City Commission approve Petition 76SUB-07DB, as submitted.*

*(VOTE: 2-5, Commissioner Braddy and Bryant - Yes; Commissioners Donovan, Henry, Lowe, Mastrodicasa, and Mayor Hanrahan - No, MOTION FAILED)*

*WAIVER OF RULES: Commissioner Lowe moved and Commissioner Henry seconded to waive the rules to extend the meeting to 11:15 PM.  
(VOTE: 7-0, MOTION CARRIED)*

*WAIVER OF RULES: Commissioner Lowe moved and Commissioner Henry seconded to waive the rules to extend the meeting to 11:30 PM.  
(VOTE: 7-0, MOTION CARRIED)*

*WAIVER OF RULES: Commissioner Lowe moved and Commissioner Henry seconded to waive the rules to extend the meeting to 11:45 PM.  
(VOTE: 7-0, MOTION CARRIED)*

*WAIVER OF RULES: Commissioner Lowe moved and Commissioner Henry seconded to waive the rules to extend the meeting to 12:00 Midnight.  
(VOTE: 7-0, MOTION CARRIED)*

*SECOND MOTION (MAIN MOTION): Commissioner Lowe moved and Commissioner Mastrodicasa seconded to deny the petition.  
(VOTE: 5-2, Commissioners Braddy and Bryant, No, MOTION CARRIED)*

**RECOMMENDATION**

*Development Review Board to City Commission - The City Commission deny Petition 76SUB-07DB. Vote 3-2 (Abstain: Clay Sweger).*

*Staff to Development Review Board - This petition shall comply with all applicable regulations, as well as all adopted conditions and recommendations.*

*Alternate Recommendations*

*The City Commission approve Petition 76SUB-07DB as submitted.*

*The City Commission approve Petition 76SUB-07DB with staff conditions and recommendations.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Mastrodicasa, that this matter be Denied (Petition). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe and Pegeen Hanrahan  
Nay: Edward Braddy and Rick Bryant

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071068D\_200804141300.pdf  
071068\_DRBMIN\_20080414.pdf  
071068\_BOYES\_TRANS1\_20080414.pdf  
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071068E\_20080512.1300.pdf

## SCHEDULED EVENING AGENDA ITEMS

### UNFINISHED BUSINESS

#### [071199.](#) Commissioner Ed Braddy - Apartment Complex Maps (B)

[Play Video](#)

**RECOMMENDATION**      *The City Commission refer the issue of Apartment Complex Maps to the Public Safety Committee for appropriate action.*

**A motion was made by Commissioner Braddy, seconded by Mayor-Commissioner Pro Tem Bryant, that this matter be Referred to the Public Safety Committee, due back on November 12, 2008. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

071199\_20080512.pdf

#### [071200.](#) Annual Performance, Salary and Benefits Review for the Clerk of the Commission (NB)

[Play Video](#)

*retroactive to his anniversary date.*

**RECOMMENDATION**     *The City Commission review the salary and benefits of the Clerk of the Commission and make any changes deemed appropriate.*

**A motion was made by Mayor-Commissioner Pro Tem Bryant, seconded by Commissioner Henry, that this matter be Approved as shown above (See Motion). The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

## COMMISSION COMMENT

### Commissioner Scherwin Henry

*Department of Corrections Workers.*

### Commissioner Rick Bryant

*See following file #080001.*

### **080001.**     **Budgetary Information - New Program Spending (NB)**

**RECOMMENDATION**     *The City Commission request that staff bring back a list of new programs and spending associated with those programs as part of the budget consideration.*

**A motion was made by Mayor-Commissioner Pro Tem Bryant, seconded by Commissioner Braddy, that this matter be Referred to the City Manager, due back on June 2, 2008. The motion carried by the following vote:**

**Votes:** Aye: Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Craig Lowe, Edward Braddy, Rick Bryant and Pegeen Hanrahan

### Commissioner Jack Donovan

- 1. Educational Grants - Jobs related to the forestry industry.*
- 2. Commission Comment issue.*

## CITIZEN COMMENT (If time available)

## ADJOURNMENT - 12:01 PM

[Play Video](#)

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Kurt M. Lannon, Clerk of the Commission

# **City of Gainesville**

*City Hall  
200 East University Avenue  
Gainesville, Florida 32601*



## **Meeting Minutes**

**Thursday, May 7, 2009**

**1:00 PM**

**City Hall Auditorium**

## **City Commission**

*Mayor Pegeen Hanrahan (At Large)  
Mayor-Commissioner Pro Tem Scherwin Henry (District 1)  
Commissioner Lauren Poe (District 2)  
Commissioner Jack Donovan (District 3)  
Commissioner Craig Lowe (District 4)  
Commissioner Thomas Hawkins (At Large)  
Commissioner Jeanna Mastrodicasa (At Large)*

*Persons with disabilities who require assistance to participate in this meeting are requested to notify the Office of Equal Opportunity at 334-5051 or call the TDD phone line at 334-2069 at least two business days in advance.*

## CALL TO ORDER - 1:26 PM

[Play Video](#)

## ROLL CALL

Present: Pegeen Hanrahan, Craig Lowe, Jack Donovan, Jeanna Mastrodicasa, Scherwin Henry, Lauren Poe and Thomas Hawkins

## INVOCATION

[Play Video](#)

*The City Commission observed a moment of silence.*

## CONSENT AGENDA

[Play Video](#)

*Commissioner Lowe moved and Mayor-Commissioner Pro Tem Henry seconded to adopt the Consent Agenda, as modified.*

*(VOTE: 7-0, MOTION CARRIED)*

### *MODIFICATIONS:*

- 1. File #080958 - ProjectDox Electronic Plan Review and Permitting - Sole Source - (New Recommendation).*
- 2. File #081018 - Election Date 2010 - (Pull from the Consent Agenda and place on the Regular Agenda for discussion).*
- 3. File #081039 - Advisory Board and Committee Appointments - (Pull from the Consent Agenda and place on the Regular Agenda for discussion).*
- 4. File #080938 - City Commission Rules/Government Efficiency - (Pull from the Consent Agenda and place on the Regular Agenda for discussion).*

## CITY MANAGER, CONSENT AGENDA ITEMS

### **080958.**

#### **Declare ProjectDox Electronic Plan Review and Permitting as Sole Source (B)**

**This item involves a request for the City Commission to waive the competitive bid process and a request to authorize the Building Official to enter into contract negotiations with Avolve Software for the purchase of electronic plan review software.**

#### **RECOMMENDATION**

*Recommended Motion: The City Commission: 1) waive the competitive bid process and declare the ProjectDox plan*

review and electronic permitting software as a "sole source,";  
2) approve the purchase of ProjectDox software from Avolve Software for a not to exceed price of \$400,000; and 3) authorize Staff to enter into contract negotiations with Avolve Software, and if successful, the City Manager will execute a contract, subject to the approval of the City Attorney as to form and legality.

*Alternative Recommendation A: The City Commission: deny the waiver of the competitive bid process. There is no fiscal impact.*

*Alternative Recommendation B: The City Commission: require the competitive bid process for the purchase of this software with fiscal impact to be determined.*

**This Matter was Approved as Recommended on the Consent Agenda.**

080958a\_Avolve PPt\_20090507.pdf  
080958b\_Staff PPt\_20090507.pdf  
080958c\_Cost Chart\_20090507.pdf

#### **080984.**

#### **Evergreen Cemetery Fee Structure (NB)**

**This item involves a request to the City Commission to instruct the City Attorney to amend the Code of Ordinances Chapter 7, Sections 7-8 and 7-9, so that the entire Evergreen Cemetery fee structure is placed in Appendix A of the Code of Ordinances.**

#### **RECOMMENDATION**

*The City Commission instruct the City Attorney to amend the Code of Ordinances Chapter 7, Sections 7-8 and 7-9, for the purpose of placing the entire Evergreen Cemetery fee structure in Appendix A.*

#### *Alternative Recommendation*

*The City Commission not instruct the City Attorney to amend the Code of Ordinances, Chapter 7, sections 7-8 and 7-9, for the purpose of placing the entire Evergreen Cemetery fee structure in Appendix A.*

**This Matter was Approved as Recommended on the Consent Agenda.**

#### **080990.**

#### **Combined Communications Center Interlocal Agreement (B)**

**This item presents an amendment to the Interlocal Agreement between the City of Gainesville, the Alachua County Sheriff and Alachua County for the Combined Communications Center.**

**RECOMMENDATION**      *The City Commission approve the Interlocal Agreement as amended.*

*Alternative Recommendation A:  
The City Commission direct staff to communicate any concerns of the City Commission to the Executive Board and report back to the City Commission.*

**This Matter was Approved as Recommended on the Consent Agenda.**

080990\_CCC Interlocal Agreement\_20090507.pdf  
080990A\_CCC Interlocal Agreement\_20090507.pdf  
080990\_agreement\_20090507.pdf

**080992.**

**American Recovery and Reinvestment Act of 2009 Funded Projects (NB)**

**This item is a request to authorize the City Manager to award construction bids and to execute construction contracts and related documents.**

**RECOMMENDATION**      *Recommended Motion: The City Commission authorize the City Manager to: 1) award the bids for the three American Recovery and Reinvestment Act of 2009 funded projects (the 6th Street Rail Trail, the Milling and Resurfacing of NE 8th Avenue, and the NW 34th Street sidewalk) to the lowest responsive, responsible bidder, provided the bid awards are within the approved and available funding for each project; and 2) execute the construction contracts and related documents, subject to approval by the City Attorney as to form and legality.*

*Alternative Recommendation: The City Commission deny the request and direct the City Manager to proceed with the three American Recovery and Reinvestment Act of 2009 funded projects (the 6th Street Rail Trail, the Milling and Resurfacing of NE 8th Avenue, and the NW 34th Street sidewalk) with the City Commission to approve the award of the construction bids.*

**This Matter was Approved as Recommended on the Consent Agenda.**

**080993.**

**Purchase of Additional Laser Imaging Detection and Ranging (LiDAR) data from Program Data Solutions (B)**

**This item is a request for the purchase of additional LiDAR data from a Florida Division of Emergency Management contract in order to facilitate a number of water management program activities in Gainesville and its surrounding areas and is a contract for add-on services to a previously approved project.**

**RECOMMENDATION**      *Recommended Motion: The City Commission: 1) approve the purchase of additional LiDAR data collection, processing and quality assurance from PDS; and 2) authorize the City Manager to issue a purchase order not to exceed \$49,913, subject to review and approval by the City Attorney as to form and legality.*

**This Matter was Approved as Recommended on the Consent Agenda.**

080993\_MOU\_20090507.PDF

**080995.**

**FY09 General Government Debt Issue (NB)**

**This item describes the proposed process for FY09 General Government borrowing.**

**RECOMMENDATION**      *The City Commission direct the City Manager to prepare and distribute an RFP for a bank loan for the FY09 debt issue and authorize the City Manager, Administrative Services Director, and Finance Director to retain the required professional services to implement this debt issue.*

**This Matter was Approved as Recommended on the Consent Agenda.**

**081014.**

**Recovery Act: Edward Byrne Memorial Justice Assistance Grant Application (NB)**

**This item requests City Commission authorization to apply for and accept Recovery Act: Edward Byrne Memorial Justice Assistance Grant funds (Stimulus - General) in the amount of 158,000 for two full-time Intervention Specialists for the Reichert House (\$97,000) and for 12 digital in-car cameras (\$61,000) for use by patrol.**

**RECOMMENDATION**      *The City commission authorize the City Manager to: 1) apply to the Recovery Act: Edward Byrne Memorial Justice Assistance Grant (Stimulus - General) program for \$158,000 in grant funds; and 2) execute the grant application, grant award, and any other necessary documents, pending review by the City Attorney as to form and legality.*

*Alternate Recommendation:*

*The City Commission declines the opportunity to apply for and receive grant funds from the Recovery Act: Edward Byrne Memorial Justice Assistance (Stimulus - General) in the amount of \$158,000.*

**This Matter was Approved as Recommended on the Consent Agenda.**

**081015.****Edward Byrne Memorial Justice Assistance Grant Application (NB)**

**This item requests City Commission authorization to apply for and accept Edward Byrne Memorial Justice Assistance Grant funds (General) in the amount of \$30,000 for the Tutorial Assistance for At-Risk Youth, \$24,000 for the Sexual Predator and Offender Tracking Program and \$20,000 for the SAFE-T Kiosk.**

**RECOMMENDATION**

*The City Commission authorize the City Manager to: 1) apply to the Edward Byrne Memorial Justice Assistance Grant program for \$74,000 in grant funds; and 2) execute the grant application, grant award, and any other necessary documents, pending review by the City Attorney as to form and legality.*

*Alternate Recommendation*

*The City Commission declines the opportunity to apply for and receive grant funds from the Edward Byrne Memorial Justice Assistance Grant in the amount of \$74,000.*

**This Matter was Approved as Recommended on the Consent Agenda.**

**081017.****Second Amendment to the FY 2008-2009 CDBG and HOME Annual Action Plan (B)**

**This is a request for the City Commission to approve a second amendment to the FY 2008-09 CDBG and HOME Annual Action Plan to allow for the utilization of additional federal HUD program funds; all of the elements of the City's original FY 2008-09 Annual Action Plan are hereby incorporated into this supplemental document.**

**RECOMMENDATION**

*The City Commission: 1) approve the second amendment to the FY 2008-2009 CDBG and HOME Program Annual Action Plan; and 2) authorize the City Manager or designee to prepare and submit the second amendment to the FY 2008-2009 Annual Action Plan, including all understandings and insurances contained, to the U.S. Department and Urban Development (HUD) for financial assistance under the Community Development Block Grant Recovery Program (CDBG-R) and Homelessness Prevention and Rapid Re-Housing Program (HPRP); and to act on behalf on the City of Gainesville in all matters pertaining to the CDBG-R and HPRP Programs; and 3) authorize the City Manager to execute the appropriate HUD documents for the receipt of the HPRP and CDBG-R funds.*

**This Matter was Approved as Recommended on the Consent Agenda.**

081017\_Second Amendment\_20090507.pdf

**081019.**

**Recovery Act: Edward Byrne Memorial Justice Assistance Grant (JAG)  
Program FY 2009 Formula Program: Local Solicitation (B)**

**The City Commission approve the use of \$448,816 from the Recovery Act:  
Edward Byrne Memorial Justice Assistance Grant (JAG) funds and will  
authorize the grant application for these funds.**

**RECOMMENDATION**

*The City commission authorize the City Manager to: 1) apply to the Recovery Act: Edward Byrne Memorial Competitive Grant Program for \$448,816 in grant funds; and 2) execute the grant application, grant award, and any other necessary documents, pending review by the City Attorney as to form and legality.*

**This Matter was Approved as Recommended on the Consent Agenda.**

081019\_ByrneStimPkgLoc\_20090507.pdf

**081021.**

**Recovery Act: Edward Byrne Memorial Competitive Grant (JAG) (NB)**

**This item requests City Commission authorization to apply for the Recovery Act: Edward Byrne Memorial Competitive Grant for a total amount of \$344,426 for two years. One purpose of Recovery Act funding is to preserve and create jobs to promote economic recovery. The Gainesville Police Department has identified two proposals addressing this purpose to be submitted to the U.S. Department of Justice for consideration.**

**RECOMMENDATION**

*The City commission authorize the City Manager to: 1) apply to the Recovery Act: Edward Byrne Memorial Competitive Grant Program for \$344,426 in grant funds; and 2) execute the grant application, grant award, and any other necessary documents, pending review by the City Attorney as to form and legality.*

*Alternate Recommendation*

*The City Commission decline the opportunity to apply for and receive grant funds from the Recovery Act: Edward Byrne Memorial Competitive Grant Program in the amount of \$344,426.*

**This Matter was Approved as Recommended on the Consent Agenda.**

**081041.**

**Prioritization of the City of Gainesville's Projects submitted for the Federal**

**Transportation Reauthorization Bill Funding (NB)**[Play Video](#)**RECOMMENDATION**

*The City Commission: 1) approve the prioritization of the City of Gainesville's federal transportation reauthorization appropriation requests as recommended by staff; and 2) authorize the Mayor to draft a letter to transmit the priority list to the federal delegation.*

*Alternative Recommendation*

*The City Commission: 1) reprioritize the attached list of federal transportation authorization appropriation requests and direct staff to utilize the revised list in the federal appropriation request process; and 2) authorize the Mayor to draft a letter to transmit the priority list to the federal delegation.*

**This Matter was Approved as Recommended on the Consent Agenda.**

**080517.****Public Waterways Designation Agreement for Potano Paddling Trail (B)**

**This item involves a request for the Mayor to execute a Public Waterways Designation Agreement for Potano Paddling Trail.**

**RECOMMENDATION**

*Recommended Motion: The City Commission authorize the Mayor and Clerk of the Commission to execute the agreement, subject to approval of the City Attorney as to form and legality.*

*Alternative Recommendation: The City Commission not authorize the Mayor and Clerk of the Commission to execute the agreement.*

**This Matter was Approved as Recommended on the Consent Agenda.**

080517\_MAP\_20081106.pdf  
080517\_RESOLUTION\_20081106.PDF  
080517\_resolution\_20081106.pdf  
080517\_Resolution\_20090521.pdf  
080517\_Agreement\_20090521.pdf  
080517\_agreement\_20090507.pdf

**GENERAL MANAGER FOR UTILITIES, CONSENT AGENDA ITEMS**

**CITY ATTORNEY, CONSENT AGENDA ITEMS**

**CLERK OF THE COMMISSION, CONSENT AGENDA ITEMS**

**080997.****City Commission Minutes (B)**

**RECOMMENDATION**     *The City Commission approve the minutes of April 13, 2009 (Workshop); and April 16, 2009 (Regular Meeting); as circulated.*

**This Matter was Approved as Recommended on the Consent Agenda.**

080997\_workshop\_20090507.pdf  
080997\_reg\_minutes\_20090507.pdf

**081034.****Budget Meeting Change Request (B)**

**RECOMMENDATION**     *The City Commission cancel the meeting scheduled for Wednesday, July 29, 2009 (see attached e-mail) and add FY 2010-General Government Budget to meeting topics already scheduled for the Tuesday, July 28, 2009, meeting; allowing the meeting to continue through the afternoon and evening as requested.*

**This Matter was Approved as Recommended on the Consent Agenda.**

081034\_request\_20090507.pdf

**081038.****Resignation of Gainesville Human Rights Board Member Horacio Sierra and Gainesville/Alachua County Cultural Affairs Board Member Vivian Filer (B)**

**RECOMMENDATION**     *The City Commission accept the resignations of Gainesville Human Rights Board Member Horacio Sierra and Gainesville/Alachua County Cultural Affairs Board Member Vivian Filer effective immediately and extends its appreciation for their services.*

**This Matter was Approved as Recommended on the Consent Agenda.**

081038\_Resignations\_Sierra and Filer.pdf

**EQUAL OPPORTUNITY DIRECTOR, CONSENT AGENDA ITEMS****COMMITTEE REPORTS, CONSENT AGENDA ITEMS****EQUAL OPPORTUNITY COMMITTEE, CONSENT****080788.****Revision to Chapter 8 of the Gainesville Code of Ordinances (B)**

**RECOMMENDATION**     *The City Commission: 1) authorize the City Attorney to draft*

*and the Clerk of the Commission to advertise revisions to Chapter 8 of the Gainesville Code of Ordinances relating to gender identity regarding public shared shower or dressing facilities as it relates to area businesses and community organizations; and 2) remove this item from the referral list.*

**This Matter was Approved as Recommended on the Consent Agenda.**

080788\_Chapter 8\_20090415.PDF  
080788\_draft ordinance\_20090507.PDF

## COMMUNITY DEVELOPMENT COMMITTEE, CONSENT

### 070980.

#### **Solar Panels vs. Removing Tree Canopy (B)**

**This item refers to existing City of Gainesville Land Development Code provisions which may conflict with the City Commission's desire to foster economic development opportunities related to the implementation of the Solar Feed in Tariff.**

#### RECOMMENDATION

*Community Development Committee to the City Commission: direct staff to: 1) generate a petition to the Plan Board allowing the development of solar fields by right within areas of the City designated Agricultural with appropriate dimensional, environmental and life/safety/health requirements; 2) generate a related omnibus petition to the Plan Board at a future time to accommodate solar development relative to other pertinent provisions of the City of Gainesville Land Development Code and; 3) remove this referral item from the Community Development Committee referral list.*

**This Matter was Approved as Recommended on the Consent Agenda.**

070980A\_Memo To CDC\_20090226pdf.pdf  
070980B\_Regulation\_20090226.pdf  
070980a\_CDC 2-26 Minutes\_20090507.pdf  
070980b\_Memo\_20090507.pdf  
070980c\_Energy Regulation\_20090507.pdf

## REGIONAL UTILITIES COMMITTEE, CONSENT

### 070360.

#### **GRU Rate Structure, Item #070360 (NB)**

#### RECOMMENDATION

*The Regional Utilities Committee (RUC) recommends that the City Commission remove this item from the referral list.*

**This Matter was Approved as Recommended on the Consent Agenda.**

070360\_20070827.pdf  
070360A\_20070827.pdf  
RUC Rate Structure Presentation October 9 2007.pdf  
Backup for GRU Rate Structure Item 070360 Oct 9.pdf

**080222.****GRU Incentives for the Enterprise Zone Referral Item #080222 (NB)**

**RECOMMENDATION**     *The City Commission approve removing this item from the referral list.*

**This Matter was Approved as Recommended on the Consent Agenda.**

Backup for #080222 Enterprise Zone 2 11 09.pdf

**080419.****Review of GRU's 10-Year Plan - Referral Item #080419 (NB)**

**RECOMMENDATION**     *The Regional Utilities Commission (RUC) recommends that the City Commission remove this item from the referral list.*

**This Matter was Approved as Recommended on the Consent Agenda.**

**Passed The Consent Agenda**

**A motion was made by Commissioner Lowe, seconded by Mayor-Commissioner Pro Tem Henry, including all the preceding items marked as having been adopted on the Consent Agenda. The motion carried by the following vote:**

**Votes:** Aye: Jeanna Mastrodicasa, Thomas Hawkins, Craig Lowe, Jack Donovan, Lauren Poe, Scherwin Henry and Pegeen Hanrahan

**AUDIT, FINANCE & LEGISLATIVE COMMITTEE, CONSENT****COMMUNITY REDEVELOPMENT AGENCY, CONSENT ITEMS****END OF CONSENT AGENDA**

## ADOPTION OF THE REGULAR AGENDA

[Play Video](#)

*MOTION: Commissioner Lowe moved and Mayor-Commissioner Pro Tem Henry seconded to adopt the Regular Agenda, as modified.*

*(VOTE: 7-0, MOTION CARRIED)*

### *MODIFICATIONS:*

- 1. File #081036 - Evaluation of Biomass-Fueled Generation Facility Proposals (Revised ppt. submitted).*
- 2. File #080701 - Summer Heat Wave 2008 Final Report Update - (Withdraw from the agenda).*
- 3. New Item - File #090003 - Approval of Additional HOME Program Funds to Gainesville Community Ministry, Inc. to provide Emergency Relocation Assistance (Add to the agenda).*
- 4. File #080748 - Urban Services Report for Tax Parcel Numbers 07176-020-000 and 07176-020-001 (Idylwild/Serenola Area) - (Continue this item to the June 18, 2009 City Commission Meeting).*
- 5. Mayor's Committee Assignments - (Add to the Regular Agenda).*

## CHARTER OFFICER UPDATES

## GENERAL MANAGER FOR UTILITIES

[Play Video](#)

### **081036.**

#### **Evaluation of Biomass-Fueled Generation Facility Proposals (B)**

**On May 12, 2008 the City Commission authorized the General Manager to negotiate and execute a purchased power agreement (PPA) for the output of a nominally 100 mega-watt (MW) net power plant, fueled with biomass and located on the Deerhaven Power Plant site. Negotiations have been successfully concluded, but because of adjustments to the initial proposal to reflect changing fuel prices, demand for electricity, and power plant construction costs, the General Manager has decided to advise the City Commission of these negotiated changes, their economic implications and to submit the executed PPA to the Commission for final approval.**

[Play Video](#)

*General Manager for Utilities Bob Hunzinger, Assistant General Manager for Strategic Planning Ed Regan, and American Renewables Representative Jim Gordon*

*gave presentations.*

*Chair Hanrahan recognized Rob Brinkman and Walter Willard who spoke to the matter.*

**RECOMMENDATION**

*The City Commission 1) receive a presentation from the General Manager and staff regarding the Power Purchase Agreement (PPA) between the City and Gainesville Renewable Energy Center, LLC for power generated by the nominal 100MW biomass generating plant; 2) approve the executed PPA; and, 3) authorize the General Manager or his designee to execute such documents and take all steps as may be necessary to implement the terms of the PPA, including but not limited to filing of all required applications with jurisdictional governmental bodies and agencies; and, the lease of and easements over portions of the Deerhaven Generating Station site necessary for the construction and operation of the biomass generating plant.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Poe, that this matter be Approved as Recommended. The motion carried by the following vote:**

**Votes:** Aye: Craig Lowe, Jack Donovan, Lauren Poe, Scherwin Henry, Jeanna Mastrodicasa, Thomas Hawkins and Pegeen Hanrahan

081036\_MOD\_Revised\_Biomass\_ppt\_20090507.pdf

**RECESS - Approximately 2:45 PM**

**RECONVENE - Approximately 2:47 PM**

**CLERK OF THE COMMISSION**

**081018.**

**Election Date 2010 (NB)**

[Play Video](#)

*Continued to the next City Commission Meeting (May 21, 2009).*

**RECOMMENDATION**

*The City Commission select April 13, 2010, for the 2010 City of Gainesville Election and authorize the City Attorney to draft and the Clerk of Commission to advertise an ordinance.*

**Continued**

081018\_MOD\_20090521.pdf

081018\_draftordinance\_20090604.pdf

**CITY MANAGER**

[Play Video](#)

**080701.** Summer HeatWave 2008 Final Report Update (NB)

**RECOMMENDATION**     *The City Commission receive the HeatWave update.*

**Withdrawn**

080701\_MOD-PPT\_20090115.PDF

080701\_Contingency Request\_20090507.PDF

**080897.** Presentation of the Site Plan for GPD's Campus Concept (B)

**This item involves an approval from the City Commission to proceed with development of the GPD Campus which includes the construction of a new Community Center and remodeling of an existing building into a Tactical Training Center**

[Play Video](#)

*GPD Lieutenant Art Adkins, Architect Ian Reeves and Police Chief Norm Botsford gave presentations.*

**RECOMMENDATION**     *The City Commission: 1) hear a presentation from staff; 2) approve the new site plan for GPD's Campus Plan; and 3) authorize staff to continue development with the architect for the proposed services.*

**A motion was made by Commissioner Hawkins, seconded by Mayor-Commissioner Pro Tem Henry, that this matter be Approved as Recommended. The motion carried by the following vote:**

**Votes:** Aye: Craig Lowe, Jack Donovan, Lauren Poe, Scherwin Henry, Jeanna Mastrodicasa, Thomas Hawkins and Pegeen Hanrahan

080897\_GPDSitePlanDesign\_041609.pdf

**080901.** State of Florida Legislative Update (B)

**The City Commission will be provided with an update of legislation filed during the Florida Legislature's 2009 Regular Session.**

[Play Video](#)

**RECOMMENDATION**     *The City Commission: 1) receive the legislative update; and 2) determine if issues presented necessitate the support or opposition of the City Commission.*

**Heard**

080901\_PowerPoint\_20090319.pdf  
080901\_Report\_20090319.pdf  
080901\_report\_20090507.pdf

**090003. Approval of Additional HOME Program Funds to Gainesville Community Ministry, Inc. to provide Emergency Relocation Assistance (B)**

**This item requests approval from the City Commission to allocate additional HOME Program funds to Gainesville Community Ministry, Inc. to provide emergency relocation assistance to displaced tenant households to find suitable replacement housing.**

*Assistant City Manager Fred Murry gave a presentation.*

**RECOMMENDATION**

*Recommended Motion: The City Commission: 1) approve the amendment to the current Gainesville Community Ministry, Inc. contract in the amount of \$42,000, subject to approval by the City Attorney; 2) authorize the City Manager to execute the amended contract with Gainesville Community Ministry, Inc.; and 3) authorize the Housing & Community Development Division to reallocate funds within its FY 2008-2009 HOME Program budget to fund the contract amendment to provide these services.*

**A motion was made by Mayor-Commissioner Pro Tem Henry, seconded by Commissioner Lowe, that this matter be Approved as Recommended. The motion carried by the following vote:**

**Votes:** Aye: Craig Lowe, Jack Donovan, Lauren Poe, Scherwin Henry, Jeanna Mastrodicasa, Thomas Hawkins and Pegeen Hanrahan

090003\_MOD Amendment\_20090507.pdf  
090003\_MOD Agreement\_20090507.pdf

## GENERAL MANAGER FOR UTILITIES

[Play Video](#)

**081035. Community Relations Annual Report (B)**

**This item is to provide a report on GRU's community relations activities.**

[Play Video](#)

*GRU Community Relations Director Nona Jones gave a presentation.*

**RECOMMENDATION**

*The City Commission hear a report from staff regarding community relations efforts for Gainesville Regional Utilities.*

**Heard**

081035\_annualreport\_20090507.pdf

**CITY ATTORNEY**

**CITY AUDITOR**

**EQUAL OPPORTUNITY DIRECTOR**

**COMMITTEE REPORTS (PULLED FROM CONSENT)**

**ADVISORY BOARDS/COMMITTEES (APPOINTMENTS/REPORTS)**

**OUTSIDE AGENCIES**

**MEMBERS OF THE CITY COMMISSION**

**COMMISSION COMMENTS (if time available)**

**RECESS - 4:53 PM**

[Play Video](#)

**RECONVENE - 5:42 PM**

[Play Video](#)

**PLEDGE OF ALLEGIANCE (5:30pm)**

[Play Video](#)

**PROCLAMATIONS/SPECIAL RECOGNITIONS**

[Play Video](#)

**081016.** City of Gainesville's Citizens' Academy Spring 2009 Graduates (NB)

[Play Video](#)

*Communications Manager Bob Woods and Citizen's Academy Graduate Daniel Blumberg gave presentations.*

**RECOMMENDATION** The City Commission: 1) recognize accomplishments of

*Gainesville 101: Spring 2009 City of Gainesville Citizens' Academy graduates; and 2) hear brief comments from the class speaker on what they have learned.*

**Heard**

**081029.**

**International Internal Audit Awareness Week - May 24-30, 2009 (B)**

[Play Video](#)

**RECOMMENDATION** *North Central Florida Institute of Internal Auditors President John Byrd, Vice President Jeanne Covington, and Board Member Brent Godshalk to accept the proclamation.*

**Heard**

081029\_Proc\_20090507.pdf

**081030.**

**Police Week - May 11-17, 2009 and Masonic Peace Officers' Memorial Day May 15, 2009 (B)**

[Play Video](#)

**RECOMMENDATION** *Gainesville Lodge #41 F&AM Ray M. Davis, Jr. to accept the proclamation.*

**Heard**

081030\_Proc\_20090507.pdf

**081031.**

**National Water Safety Month - May 2009 (B)**

[Play Video](#)

**RECOMMENDATION** *UF Synchro Coach Betsy Caza, PK Coach Mike Davidson, Gainesville Gaviatas Andrea Cornelius, and Makos Perrin Foerster to accept the proclamation.*

**Heard**

081031\_Proc\_20090507.pdf

**081032.**

**National Public Works Week - May 17-23, 2009 (B)**

[Play Video](#)

**RECOMMENDATION** *City of Gainesville Public Works Department Director Teresa Scott, P.E. to accept the proclamation.*

**Heard**

081032\_Proc\_20090507.pdf

**CITIZEN COMMENT (6:00pm) - Please sign on sign-up sheet**

[Play Video](#)

**Kali Blount**

1. *Alachua General Hospital (AGH).*
2. *Seminary Lane Apts.*

**Jerry Williamson**

*GPD Issues.*

**Gabriel Hillel**

*Butterfly City Project.*

**Phil Emmer**

1. *Complimentary remarks regarding Assistant General Manager for Strategic Planning Ed Regan.*
2. *The Reform Institute - See following file #090039.*

**090039.****Phil Emmer - Citizen Comment (B)****RECOMMENDATION**

*The City Commission hear comments from Phil Emmer and place back-up submitted on file.*

**Placed on File**

090039\_Phil Emmer\_20090507.pdf

**Elizabeth Howard**

*GPD and Prostitution Issues.*

**Kamili**

*GPD Issues.*

**Walter Willard**

*Various Issues.*

**Pat Fitzpatrick**

*Homeless Issues.*

## **PUBLIC HEARINGS**

### **ORDINANCES, 1ST READING- ROLL CALL REQUIRED**

[Play Video](#)

#### **080860. UTILITY SERVICE CHARGES (B)**

**Ordinance No. 0-09-11**

**AN ORDINANCE AMENDING APPENDIX A, SECTION UTILITIES (7) OF THE GAINESVILLE CODE OF ORDINANCES BY AMENDING CERTAIN SERVICE CHARGES AND DECREASING LATE FEE FOR COMBINED STATEMENT; PROVIDING A REPEALING CLAUSE; PROVIDING DIRECTIONS TO THE CODIFIER; PROVIDING A SEVERABILITY CLAUSE; AND, PROVIDING AN EFFECTIVE DATE IN ACCORDANCE WITH THE SCHEDULE PROVIDED HEREIN.**

[Play Video](#)

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Poe, that this matter be Adopted on First Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Craig Lowe, Lauren Poe, Scherwin Henry, Jeanna Mastrodicasa, Thomas Hawkins and Pegeen Hanrahan  
Absent: Jack Donovan

080860\_presentation\_20090402.pdf

080860\_ordinanceGRU\_20090507.pdf

080860\_ordinance\_20090521.pdf

#### **080988. UTILITY SERVICE CHARGES (B)**

**Ordinance No. 0-09-12**

**AN ORDINANCE AMENDING APPENDIX A, SECTION UTILITIES (3) WATER, OF THE GAINESVILLE CODE OF ORDINANCES BY INCREASING THE REFUNDABLE DEPOSITS, THE INSTALLATION AND REMOVAL FEE, AND THE MONTHLY BASE CHARGE FOR TEMPORARY SERVICE ON WATER METERS AND FIRE HYDRANTS; PROVIDING FOR TIME LIMITS; PROVIDING LANGUAGE FOR DAMAGE AND TAMPERING CHARGES; PROVIDING A REPEALING CLAUSE;**

**PROVIDING DIRECTIONS TO THE CODIFIER; PROVIDING A SEVERABILITY CLAUSE; AND, PROVIDING AN EFFECTIVE DATE IN ACCORDANCE WITH THE SCHEDULE PROVIDED HEREIN.**

[Play Video](#)

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Poe, that this matter be Adopted on First Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Craig Lowe, Lauren Poe, Scherwin Henry, Jeanna Mastrodicasa, Thomas Hawkins and Pegeen Hanrahan  
Absent: Jack Donovan

080988\_ordinancehydrantfees\_20090507.pdf  
080988\_ordinance\_20090521.pdf

**080748.**

**URBAN SERVICES REPORT FOR TAX PARCEL NUMBERS 07176-020-000 and 07176-020-001 (IDYLWILD/SERENOLA AREA) (B)**

**Ordinance 0-09-05**

**An Ordinance of the City of Gainesville, Florida; adopting an Urban Services Report which sets forth the plans to provide urban services to an area comprised of Tax Parcel Numbers 07176-020-000 and 07176-020-001, generally located south of Williston Road and the City Limits, west of SW 20th Terrace, north of SW 56th Avenue, and east of the City Limits; the area is proposed for annexation by the City of Gainesville pursuant to Chapter 90-496, Special Acts, Laws of Florida, as amended, known as the Alachua County Boundary Adjustment Act; providing directions to the City Manager, the City Attorney and the Clerk of the Commission; providing a repealing clause; providing a severability clause; and providing an immediate effective date.**

[Play Video](#)

*This item was continued to June 18, 2009.*

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Poe, that this matter be Continued (1st Reading) for June 18, 2009. The motion carried by the following vote:**

**Votes:** Aye: Craig Lowe, Lauren Poe, Scherwin Henry, Jeanna Mastrodicasa, Thomas Hawkins and Pegeen Hanrahan  
Absent: Jack Donovan

080748\_Petition\_20090205.pdf  
080748\_MOD\_Zahariev\_Pet\_20090205.PDF  
080748\_USR Ordinance\_20090507.pdf  
080748\_USR Exhibit A\_20090507.pdf  
080748\_MOD\_STAFF MEMO\_20090507.pdf

080545.**LAND DEVELOPMENT CODE (B)**

**Ordinance No. 0-08-82; Petition No. 120TCH-08 PB**

**An ordinance of the City of Gainesville, Florida, correcting minor scrivener's errors throughout the Land Development Code, by amending subsection 30-41(a)(4) relating to MU-1 and MU-2 zoning districts; by amending Table 2 of section 30-52 relating to principal structures within the residential low density districts; by amending subsection 30-98(m)(9) relating to wireless communication facilities; by amending subsection 30-112(a)(2) relating to historic preservation/conservation; by amending subsection 30-160(d)(33) relating to preliminary development plans; by amending subsection 30-318(b)(4)b relating to I-75 corridor signs; amending subsection 30-353(d) relating to the City Plan Board; by amending Appendix A, Section 6, relating to the Special Area Plan for University Heights; by amending Appendix A, Section 7 relating to the Special Area Plan for S.W. 13th Street, providing directions to the codifier; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

[Play Video](#)

*Planning Manager Ralph Hilliard gave a presentation.*

**RECOMMENDATION**

*The City Commission (1) approve Petition No. 120TCH-08 PB and (2) adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Poe, that this matter be Approved (Petition) and Adopted on First Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Craig Lowe, Lauren Poe, Scherwin Henry, Jeanna Mastrodicasa, Thomas Hawkins and Pegeen Hanrahan  
Absent: Jack Donovan

080545\_staff report\_20090507.pdf

080545\_Scrivener's Errors LDC\_20090507.pdf

080545\_ordinance\_20090521.pdf

**ORDINANCES, 2ND READING- ROLL CALL REQUIRED**

[Play Video](#)

080753.**PLANNED DEVELOPMENT - ONE COLLEGE PARK (B)**

**Ordinance No. 0-09-03, Petition No. 133PDV-08PB**

**An Ordinance of the City of Gainesville, Florida; rezoning certain lands within the City, as more specifically described in this ordinance, and amending the Zoning Map Atlas from "UMU-1: Up to 75 units/acre urban mixed-use district" and "RMU: Up to 75 units/acre residential mixed use district" to "Planned Development District"; located in the vicinity of the 1700 block between NW 1st Avenue and NW 2nd Avenue; commonly known as "One College Park"; to allow**

construction of a mixed use development including apartment units, hotel, commercial uses, and parking garage; adopting a development plan report and development plan maps; providing conditions and restrictions; providing for enforcement and penalties; providing a severability clause; and providing an immediate effective date.

[Play Video](#)

*Planning Manager Ralph Hilliard, Agent for the Petitioner David Coffey and Agent for the Petitioner Linda Portal gave presentations.*

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Mayor-Commissioner Pro Tem Henry, seconded by Commissioner Poe, that this matter be Adopted on Final Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Craig Lowe, Jack Donovan, Lauren Poe, Scherwin Henry, Jeanna Mastrodicasa, Thomas Hawkins and Pegeen Hanrahan

080753\_petition\_20090205.pdf  
080753\_layout map\_20090205.pdf  
080753\_staff ppt\_20090205.pdf  
080753\_petitioner ppt\_20090205.PDF  
080753\_color elevations\_20090205.pdf  
080753\_draft ordinance 20090416.pdf  
080753\_ordinance\_20090507.pdf

## **080841.**

### **LIFE SAFETY VIOLATIONS IN PLACES OF PUBLIC ASSEMBLY (B)**

#### **Ordinance No. 0-09-08**

**An ordinance of the City of Gainesville, Florida, amending Chapter 10 of the Code of Ordinances relating to Fire Prevention and Protection; changing the title of the fire department and the fire prevention bureau; adopting the Florida Fire Prevention Code and the Life Safety Code adopted by the State Fire Marshall; updating numerical references to the Florida Fire Prevention Code in Article II; creating and adding a new Article V, relating to assembly occupancy safety; providing for identification and training and responsibilities of crowd managers; requiring approved counting devices to ensure safe occupant loads; requiring an emergency evacuation alert network; providing for security of fire rescue connections; providing penalties; authorizing the name change of fire department to fire rescue department in the Code of Ordinances; providing directions to the codifier; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

[Play Video](#)

*Deputy Fire Chief Tim Hayes made comments.*

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Poe, seconded by Commissioner Mastrodicasa, that this matter be Adopted on Final Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Craig Lowe, Jack Donovan, Lauren Poe, Scherwin Henry, Jeanna Mastrodicasa, Thomas Hawkins and Pegeen Hanrahan

080841\_Public Assemblies\_20090416.pdf

080841\_ordinance\_20090507.pdf

**080939.**

**CLERK OF COMMISSION - CUSTODIAL RESPONSIBILITIES (B)**

**Ordinance No. 0-09-14**

**An Ordinance of the City of Gainesville, Florida amending Section 2-164 by changing the custodial responsibilities of the clerk of the commission and the fee charged for copying public records; providing a severability clause; providing a repealing clause; and providing an immediate effective date.**

[Play Video](#)

**RECOMMENDATION**      *The City Commission adopt the proposed ordinance.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Poe, that this matter be Adopted on Final Reading (Ordinance). The motion carried by the following vote:**

**Votes:** Aye: Craig Lowe, Jack Donovan, Lauren Poe, Scherwin Henry, Jeanna Mastrodicasa, Thomas Hawkins and Pegeen Hanrahan

080939\_Public Records Ord\_20090416.pdf

080939\_ordinance\_20090507.pdf

**RESOLUTIONS- ROLL CALL REQUIRED**

[Play Video](#)

**081013.**

**Acceptance of US Department of Transportation FAA - AIP Grant (No. 3-12-0028-29-2009) (B)**

**This item seeks the City of Gainesville acceptance of a 2009 US Department of Transportation FAA - AIP Grant to the Gainesville Regional Airport in the amount of \$2,400,000.00 for an Apron Rehabilitation project at the Gainesville Regional Airport.**

[Play Video](#)

*Planning and Development Services Director Erik Bredfeldt gave a presentation.*

*Chair Hanrahan recognized Walter Willard who spoke to the matter.*

**RECOMMENDATION**      *The City Commission: 1) hear a brief presentation from staff regarding this request; 2) adopt the proposed 2009 FAA - AIP Grant Resolution and authorize the Mayor and City Attorney*

*to execute said Grant Agreement and the City Clerk to certify said Grant Agreement; and, 3) execute the Indemnification Agreement subject to City approval by the City attorney as to form and legality.*

**A motion was made by Commissioner Hawkins, seconded by Commissioner Poe, that this matter be Adopted (Resolution) and Approved the Recommendation. The motion carried by the following vote:**

**Votes:** Aye: Craig Lowe, Jack Donovan, Lauren Poe, Scherwin Henry, Jeanna Mastrodicasa, Thomas Hawkins and Pegeen Hanrahan

081013a\_Resolution\_20090507.pdf  
081013b\_Indemnification Agreeemt\_20090507.pdf  
081013c\_Letter from GACRAA\_20090507.pdf  
081013d\_Federal Application\_20090507.pdf  
081013e\_K Thomas Email\_20090507.pdf  
081013\_resolution\_20090507.pdf

## PLAN BOARD PETITIONS

## DEVELOPMENT REVIEW BOARD PETITIONS

## SCHEDULED EVENING AGENDA ITEMS

## UNFINISHED BUSINESS

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### **080938. City Commission Rules/Government Efficiency (B)**

[Play Video](#)

*Legislative and Grants Coordinator Chris Cooper gave a presentation.*

**RECOMMENDATION**      *The City Commission: 1) approve amendments to the City Commission Rules as approved by the Audit, Finance and Legislative Committee; and 2) direct staff to draft a resolution implementing the amendments to be submitted for approval by the City Commission pending review by the City Attorney.*

**A motion was made by Commissioner Poe, seconded by Mayor-Commissioner Pro Tem Henry, that this matter be Approved as Recommended. The motion carried by the following vote:**

**Votes:** Aye: Craig Lowe, Jack Donovan, Lauren Poe, Scherwin Henry, Jeanna Mastrodicasa, Thomas Hawkins and Pegeen Hanrahan

080938\_revised rules\_20090330.PDF  
080938\_Summary\_20090330.PDF  
080938\_Commission Rules\_20090507.pdf  
080938\_Rules Resolution\_20090604.PDF

**081039.****Appointments to City Commission Advisory Boards and Committees (B)**

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*MOTION AMENDMENT: Approve the recommendation waiving the probationary period for Douglas B. Nesbit who was appointed to the Development Review Board (DRB).*

**RECOMMENDATION**

*The City Commission appoint the following:*  
*William E. Baruch to the Bicycle-Pedestrian Advisory Board for a Term to expire December 31, 2009;*  
*Alfredo E. Gonzalez to the Citizens Adv Comt for Community Development for a Vacancy to expire Nov. 1, 2010;*  
*Theodore Stover to the Citizens Adv Comt for Community Development for a Term to expire Nov. 1, 2011;*  
*Laurel Nesbit to the City Plan Board for a Vacancy to expire November 1, 2010;*  
*Douglas B. Nesbit to the Development Review Board for a Term to expire November 1, 2011;*  
*Colleen Rand to the Gainesville Code Enforcement Board for a Term to expire August 1, 2012;*  
*William T. Hammond to the Gainesville Energy Advisory Committee for a Term to expire Sept. 30, 2011;*  
*Erica J. Rodriguez Merrell to the Gainesville Human Rights Board for a Term to expire Feb. 22, 2012;*  
*Shel E. Packer to the Gainesville Human Rights Board for a Term to expire Feb. 22, 2012;*  
*Deborah L. Duffie to the Gvl/Alachua County Cultural Affairs Board for a Term to expire Sept. 30, 2012;*  
*Charlie W. Pedersen to the Nature Centers Commission for a Vacancy to expire Nov. 1, 2010;*  
*Jon Reiskind to the Nature Centers Commission for a Vacancy to expire Nov. 1, 2010;*  
*Ivor Kincaide to the Tree Advisory Board for a Term to expire January 1, 2012;*  
*Robert Simons to the Tree Advisory Board for a Term to expire January 1, 2012;*  
*Robert Simons to the Tree Board of Appeals for a Term to expire January 1, 2012; and*  
*Jon Reiskind to the Wild Spaces & Public Places Citizen Oversight Committee for a Term to expire May 7, 2012.*

**A motion was made by Commissioner Hawkins, seconded by Commissioner Lowe, that this matter be Approved as Amended. The motion carried by the following vote:**

Votes: Aye: Craig Lowe, Jack Donovan, Lauren Poe, Scherwin Henry, Jeanna Mastrodicasa, Thomas Hawkins and Pegeen Hanrahan  
081039\_Appointments.pdf

## COMMISSION COMMENT

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*NOTE: Mayor Hanrahan left the meeting room and Mayor-Commissioner Pro Tem Henry assumed the gavel.*

### Commissioner Thomas Hawkins

1. 100th Anniversary of the Thomas Center - February 9, 2010 - See following referral item #090023.

#### 090023.

##### Thomas Center - 100th Anniversary (NB)

**RECOMMENDATION**      *The City Commission refer the issue of recognizing the Thomas Center's 100th anniversary to the Recreation, Cultural Affairs and Public Works Committee.*

**A motion was made by Commissioner Hawkins, seconded by Commissioner Poe, that this matter be Referred to the Recreation, Cultural Affairs and Public Works Committee. The motion carried by the following vote:**

Votes: Aye: Craig Lowe, Jack Donovan, Lauren Poe, Scherwin Henry, Jeanna Mastrodicasa and Thomas Hawkins  
Absent: Pegeen Hanrahan

### Commissioner Lauren Poe

1. Neighborhood Charrette for the Materials Storage Facility at the 39th Avenue Public Works Compound - See following referral item #090024.
2. Materials Storage Centers around the City - staff to provide analysis, cost of a feasibility study - GRU and General Government staff to bring back a presentation.

#### 090024.

##### Funding for Charrettes for the Public Works Compound Redevelopment, North Main Street and the Grove Street Neighborhood (NB)

**RECOMMENDATION**      *The City Commission request that the City Manager: 1) Include in the upcoming budget cycle the issue of funding up to \$15,000 to \$20,000 for a charrette to be held on the redevelopment of the Public Works materials storage site; and 2) also include another charrette for the North Main Street Area from NW 8th Ave to NW 16th Ave, including the Grove*

*Street Neighborhood.*

**A motion was made by Commissioner Poe, seconded by Commissioner Hawkins, that this matter be Referred to the City Manager, due back on November 7, 2009. The motion carried by the following vote:**

**Votes:** Aye: Craig Lowe, Jack Donovan, Lauren Poe, Scherwin Henry, Jeanna Mastrodicasa and Thomas Hawkins  
Absent: Pegeen Hanrahan

**RECONSIDERATION OF CONSENT ITEM #081041**

*NOTE: Mayor Hanrahan re-entered the meeting room and assumed the gavel.*

*Commissioner Lowe moved and Commissioner Hawkins seconded to reconsider Consent item #081041 - See below.  
(VOTE: 7-0, MOTION CARRIED)*

**081041.****Prioritization of the City of Gainesville's Projects submitted for the Federal Transportation Reauthorization Bill Funding (NB)**

*AMENDMENT: Switched the priority of SW 62nd Blvd. from number one (1) to number two (2); making Depot Avenue number one (1) priority.*

**RECOMMENDATION**

*The City Commission: 1) approve the prioritization of the City of Gainesville's federal transportation reauthorization appropriation requests as recommended by staff; and 2) authorize the Mayor to draft a letter to transmit the priority list to the federal delegation.*

*Alternative Recommendation*

*The City Commission: 1) reprioritize the attached list of federal transportation authorization appropriation requests and direct staff to utilize the revised list in the federal appropriation request process; and 2) authorize the Mayor to draft a letter to transmit the priority list to the federal delegation.*

**A motion was made by Commissioner Lowe, seconded by Mayor-Commissioner Pro Tem Henry, that this matter be Approved as Amended. The motion carried by the following vote:**

**Votes:** Aye: Craig Lowe, Jack Donovan, Lauren Poe, Scherwin Henry, Jeanna Mastrodicasa, Thomas Hawkins and Pegeen Hanrahan

**Commissioner Jack Donovan**

## Mayor Pegeen Hanrahan

1. *Committee Assignments - See following file #090022.*
2. *Shands at Alachua General Hospital closing.*

### 090022.

#### **Mayor Pegeen Hanrahan - Committee Assignments (B)**

*AMENDMENT: Added Commissioner Hawkins and Commissioner Donovan as Canvassing Board members for the next election; and moved Commissioner Mastrodicasa from EDUCC to Recreation, Cultural Affairs and Public Works Committee. (Mayor's Committee Assignments Attached).*

**RECOMMENDATION**      *The City Commission confirm the Mayor's committee assignments.*

**A motion was made by Commissioner Lowe, seconded by Commissioner Hawkins, that this matter be Approved as Amended. The motion carried by the following vote:**

**Votes:** Aye: Craig Lowe, Jack Donovan, Lauren Poe, Scherwin Henry, Jeanna Mastrodicasa, Thomas Hawkins and Pegeen Hanrahan

090022\_COMMITTEES\_20090507.pdf

### **CITIZEN COMMENT (If time available)**

*There were no citizens who wished to speak during this time.*

### **ADJOURNMENT - 8:42 PM**

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Kurt M. Lannon, Clerk of the Commission