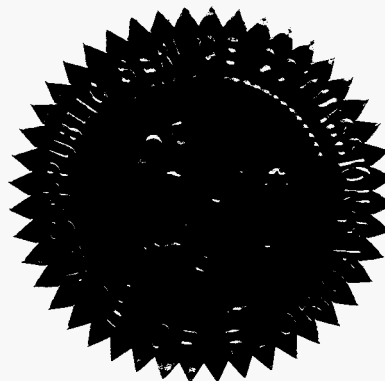


BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of:

DOCKET NO. 090451-EM

JOINT PETITION TO DETERMINE
NEED FOR GAINESVILLE RENEWABLE
ENERGY CENTER IN ALACHUA COUNTY,
BY GAINESVILLE REGIONAL UTILITIES
AND GAINESVILLE RENEWABLE ENERGY
CENTER, LLC.



VOLUME 2

Pages 174 through 389

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PROCEEDINGS: HEARING

COMMISSIONERS
PARTICIPATING: CHAIRMAN NANCY ARGENZIANO
COMMISSIONER LISA POLAK EDGAR
COMMISSIONER NATHAN A. SKOP
COMMISSIONER DAVID E. KLEMENT
COMMISSIONER BEN A. "STEVE" STEVENS II

DATE: Monday, May 3, 2010

PLACE: Betty Easley Conference Center
Room 148
4075 Esplanade Way
Tallahassee, Florida

REPORTED BY: JANE FAUROT, RPR
Official FPSC Reporter
(850) 413-6732

APPEARANCES: (As heretofore noted.)

DOCUMENT NUMBER-DATE

FLORIDA PUBLIC SERVICE COMMISSION MAY -5 2010

FPSC-COMMISSION CLERK

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P R O C E E D I N G S

(Transcript follows in sequence from
Volume 1.)

COMMISSIONER STEVENS: We will reconvene on the technical hearing. Let's see here. Number 7, preliminary matters, the stipulated exhibits, and Staff's Composite Exhibit.

MR. SAYLER: Yes, Chairman. Staff would recommend that the following exhibits be moved into the record. First is the Supplemental Comprehensive Exhibit List, which is this sheet here, be marked and identified and moved into the record as Number 33.

Staff's Stipulated Exhibits, which are Exhibit Numbers 64 through 68, the Intervenor's Stipulated Exhibit Number 69, and then Staff's Stipulated Exhibit Number 70, for all of these to be identified, marked, and moved into the record.

(Exhibits 33, 64-68, 69 and 20 marked for identification and admitted into the record.)

COMMISSIONER STEVENS: Do we need to vote on that?

COMMISSIONER EDGAR: No.

COMMISSIONER STEVENS: We're good with that? Now, what about the rest of the exhibits?

MR. SAYLER: Staff will also request that the

1 other exhibits listed or the other listed exhibits be
2 identified and marked as numbered, and the ones
3 pertaining to witness testimony and things will be
4 moved into the record following their testimony.

5 And as far as the public hearing exhibits,
6 staff suggests that any of these exhibits proffered
7 during the public testimony, they have already been
8 numbered and now is the appropriate time to see if
9 there are any objections to moving -- they have been
10 identified, see if there's any objections to them being
11 moved into the record at this time.

12 **COMMISSIONER STEVENS:** Mr. Wright, I think we
13 had an objection on number -- was it 82?

14 **MR. WRIGHT:** I believe it's 82. It's the
15 exhibit proffered by Mr. Windham. I do continue to
16 object on behalf of GRU and GREC LLC. This is really
17 in the nature of late-coming expert testimony and,
18 accordingly, it is not proper, clearly, as coming in as
19 part of the public testimony, part of the hearing. He
20 just said point this, point that, look at my URLs.

21 Clearly, we had no opportunity to conduct
22 anything like meaningful cross-examination or review of
23 it. And, accordingly, I would object to the exhibit in
24 its entirety. At least to the summary documentation.
25 I think that there was also a description of his --

1 let's see. I don't have any problem with his work
2 history. He and I worked together on the staff in the
3 1980s, but the other stuff includes -- includes other
4 URL links, and my concern is that someone might go to
5 those URL links and attempt to cite that. It's clearly
6 something we have not had the opportunity to do and,
7 accordingly, since I think it's both late-coming expert
8 testimony that we haven't had a chance to vet or
9 conduct discovery on and because of the extensive
10 citations to URLs it should not be admitted.

11 **COMMISSIONER STEVENS:** Okay. Mary Anne.

12 **MS. HELTON:** Mr. Chairman, we might want to
13 first hear from the intervenors and see if they have
14 any thoughts on whether they believe Mr. Windham's
15 Exhibit Number 82, the second part should be admitted
16 into the record, hear their arguments before I make a
17 suggestion.

18 **COMMISSIONER STEVENS:** Ms. Stahmer or Ms.
19 Deevey.

20 **MS. STAHMER:** We would appreciate it if you
21 would explain to us what the import of having them
22 admitted as exhibits would be, because there were a
23 number of things, for instance, statements that were
24 read by persons other than the author of the statement,
25 and if these statements once admitted have the status

1 of testimony, if one hasn't been able to question the
2 author of the statement, then I might have some
3 reservations about having such things admitted.

4 So what is the import of admitting them into
5 evidence?

6 **MS. HELTON:** I'd be happy to answer that, but
7 I think -- it looks like Mr. Wright is wanting to make
8 one additional statement.

9 **COMMISSIONER STEVENS:** Mr. Wright, go ahead.

10 **MR. WRIGHT:** I hope that I was going to say
11 the same thing that Ms. Helton was going to say. And
12 that is, that as regards the information contained in
13 letters that was read in, that is hearsay. Hearsay is
14 admissible to corroborate, but not sufficient in and of
15 itself in Florida administrative proceedings to support
16 a finding of fact. Accordingly, it is admissible, and,
17 you know, we don't have any objection to anything else
18 that was talked about or said coming in, just Mr.
19 Windham's was so extensive and really so technical that
20 we have a problem with that.

21 **MS. HELTON:** I do agree with what Mr. Wright
22 said with respect to hearsay evidence. I have been
23 trying to kind of watch and look at what other
24 statements or documents have come in with the public
25 witness testimony as we have heard it this morning, and

1 I do believe that with the exception of Mr. Windham's
2 that it is appropriate. It is statements either from
3 the witnesses themselves or statements that they
4 made -- decided to bring here that are general in
5 nature.

6 But when I look at Mr. Windham's documents, I
7 think that Mr. Wright has correctly characterized it as
8 often a string of UL -- I may be saying this wrong.

9 **COMMISSIONER STEVENS:** URL.

10 **MS. HELTON:** URL addresses. And I'm assuming
11 that if you were to go to those addresses on the
12 Internet it would take you to another website. It
13 seems to me because of the nature of what Mr. Windham
14 has proffered that it is not appropriate to be admitted
15 into the record here.

16 **COMMISSIONER STEVENS:** So the objection
17 stands. Okay.

18 **MS. HELTON:** But to make sure that I
19 understand, too, then all other public testimony
20 exhibits will be admitted into the record. In
21 addition, all exhibits that Mr. Sayler mentioned
22 earlier that have been stipulated to between the
23 parties, those will also be admitted into the record.

24 **COMMISSIONER STEVENS:** Yes, ma'am. And I
25 believe -- Mr. Sayler, are we on prefiled testimony and

1 exhibits, or are we through that?

2 **MR. SAYLER:** Just for point of clarification,
3 so public testimony Exhibits Numbers 71 through 81 are
4 moved into the record.

5 **COMMISSIONER STEVENS:** Yes.

6 (Exhibits 71 through 81 admitted into the
7 record.)

8 **MR. SAYLER:** Hearing Exhibit 82 with regards
9 to Mr. Windham's summary of work and research
10 background is moved into the record, but his URLs
11 document is not moved into the record.

12 **COMMISSIONER STEVENS:** Correct.

13 (Excerpt of Exhibit 82 admitted into the
14 record.)

15 **MR. SAYLER:** All right. Let's see. It is
16 our understanding -- well, at this juncture it's our
17 understanding that GRU/GREC has an additional hearing
18 exhibit to identify and move into the record, and I'll
19 look to Mr. Wright for that.

20 **COMMISSIONER STEVENS:** Mr. Wright.

21 **MR. WRIGHT:** Thank you, Commissioner. If I
22 could --

23 **COMMISSIONER STEVENS:** Yes, sir.

24 **MR. WRIGHT:** -- just for clarification with
25 respect to Mr. Windham's two-pager, would I be correct

1 that the two URL -- three URLs that are referenced in
2 the middle of Page 2 are not citeable.

3 **COMMISSIONER STEVENS:** That's my
4 understanding.

5 Mr. Sayler.

6 **MR. SAYLER:** That's my understanding, as
7 well.

8 **COMMISSIONER STEVENS:** Okay.

9 **MR. WRIGHT:** Thank you, Commissioner. I was
10 trying to do about three things at once, and I just
11 wanted to make sure I had that right.

12 **COMMISSIONER STEVENS:** Yes, sir.

13 **MR. WRIGHT:** Thank you.

14 Commissioner, we do have available to be
15 distributed, after conferring with staff, a copy of the
16 affidavit of publication of notice of this hearing that
17 GRU published. It includes -- the exhibit actually
18 includes my cover memo as filed with the Commission as
19 well as the self-authenticating affidavit of
20 Mr. Earnest Blake of the *Gainesville Sun*, as well as a
21 copy of the newspaper notice itself, and we would ask
22 that that be received into evidence as Exhibit 83.

23 **COMMISSIONER STEVENS:** Yes, sir.

24 **MR. WRIGHT:** Pardon? May Mr. LaVia approach
25 to distribute or other arrangements?

1 **COMMISSIONER STEVENS:** We will have staff do
2 that for you.

3 **MR. WRIGHT:** Thank you.

4 **COMMISSIONER STEVENS:** Yes, sir.

5 Erik, will this be 83?

6 **MR. SAYLER:** Yes, sir.

7 **COMMISSIONER STEVENS:** Okay.

8 **MR. SAYLER:** And my understanding, it's the
9 newspaper noticing for this additional hearing.

10 **COMMISSIONER STEVENS:** Yes, sir.

11 **MR. SAYLER:** Or Affidavit of Publication as
12 it's titled on the cover sheet.

13 **COMMISSIONER STEVENS:** Mr. Wright, are there
14 additional hearing exhibits?

15 **MR. WRIGHT:** That's the only other one that
16 would come up as a preliminary matter, Commissioner.
17 We will take, as they come up, the premarked exhibits
18 of our witnesses.

19 **COMMISSIONER STEVENS:** Okay.

20 Mr. Sayler, are we on the stipulation of
21 issues?

22 **MR. SAYLER:** Well, with regard to Exhibit 83,
23 is that being moved into the record at this time?

24 **COMMISSIONER STEVENS:** Yes.

25 (Exhibit 83 marked for identification and

1 admitted into the record.)

2 **MR. SAYLER:** All right. Staff will note that
3 Issue 1 was stipulated in the prior hearing and
4 approved by the Commission at the December 16th
5 hearing. So at this time there are no other proposed
6 stipulation with respect to the issues. There may be
7 other stipulations with regard to exhibits that will
8 take place during the course of this hearing, but at
9 this time I don't have anything to bring forward.

10 **COMMISSIONER STEVENS:** Okay. And are there
11 any more preliminary matters?

12 **MR. SAYLER:** Staff is not aware of any other
13 preliminary matters, but I would look to the parties
14 whether they have any additional preliminary matters.

15 **COMMISSIONER STEVENS:** Yes, ma'am.

16 **MS. STAHER:** Thank you. Intervenor Stahmer
17 speaking.

18 Through some confusion, since we're
19 proceeding pro se, and we have not been before this
20 body before, and we are not as familiar with the
21 procedures, I think we made an error in failing to
22 bring forward copies of some of our exhibits that were
23 stipulated to by petitioners. We do have them with us,
24 but they are with -- some of them are with other
25 documents as well that we are going to in the course of

1 the proceedings also try to get admitted. So I would
2 like to at least make a reservation with regard to
3 those documents, since I'm not able right now to just
4 hand you the single sheets, but at the time that we may
5 try to --

6 **COMMISSIONER STEVENS:** I believe through the
7 proceeding if you bring those exhibits to our
8 attention, and if there's not an objection, then they
9 will be accepted.

10 Is that appropriate, Ms. Helton?

11 **MS. HELTON:** I understood Ms. Stahmer to talk
12 about just having the exhibits for everyone to view
13 during the course of cross-examination, and it sounds
14 like that she does not have those for everyone to look
15 at. Is that correct?

16 **MS. STAHMER:** Well, I think in terms of the
17 ones that have been stipulated to, we have copies that
18 could be distributed and disks, but I think some of
19 them have been folded in with other documents, because
20 we regarded them part of, you know, a package, a
21 relevant whole.

22 **COMMISSIONER STEVENS:** Have they been
23 stipulated?

24 **MS. STAHMER:** Some of them have been.

25 **MS. HELTON:** If they have been stipulated and

1 admitted into the record, then they are part of the
2 record. With respect to those that they may bring up
3 that have not been stipulated to or they wish to make
4 part of the record, I suggest that we deal with those
5 on a case-by-case basis as they come up during the
6 course of cross-examination. And then any objections
7 to those types of exhibits, Professor Ehrhardt tells us
8 those objections should be contemporaneous to the
9 exhibit being mentioned, and then it's the Commission's
10 typical practice at the conclusion of the testimony or
11 cross-examination for a particular witness then to deal
12 with whether the exhibits should be admitted or not.

13 **COMMISSIONER STEVENS:** Okay. Thank you.

14 **MS. STAHMER:** Thank you.

15 **COMMISSIONER STEVENS:** Opening statements.
16 I'll go ahead and read this. GRU and GREC together
17 have up to five minutes, and the intervenors each have
18 up to five minutes. I will start with -- yes, ma'am.
19 And the lights are up here. Okay.

20 And I'll start with Ms. Stahmer.

21 **MR. SAYLER:** Mr. Chairman, generally the
22 utility goes first --

23 **COMMISSIONER STEVENS:** I'm sorry.

24 **MR. SAYLER:** -- because it's their case and
25 their burden to carry, so --

1 **COMMISSIONER STEVENS:** All right. There we
2 go. Thank you.

3 **MR. WRIGHT:** If I may --

4 **COMMISSIONER STEVENS:** Yes, sir.

5 **MR. WRIGHT:** -- before you start the clock,
6 may we have -- I have some talking points as a
7 demonstrative exhibit. I do not intend to ask that it
8 be entered. They are on these foam boards here.
9 Mr. LaVia, with your permission, would turn them around
10 and also just give a handout to you and all parties,
11 staff and everyone, of those talking points. It is
12 kind of a road map to my opening statement.

13 **COMMISSIONER STEVENS:** Okay. Yes, sir.
14 Perfect.

15 **MR. WRIGHT:** If he can do that, and then I'm
16 ready to roll.

17 **COMMISSIONER STEVENS:** Ready?

18 **MR. WRIGHT:** Yes, sir.

19 **COMMISSIONER STEVENS:** Thank you.

20 **MR. WRIGHT:** Go?

21 **COMMISSIONER STEVENS:** Ready, set, go.

22 **MR. WRIGHT:** Thank you.

23 **COMMISSIONER STEVENS:** Thank you.

24 **MR. WRIGHT:** Good afternoon, Commissioners.
25 On behalf of Gainesville Regional Utilities

1 and Gainesville Renewable Energy Center, LLC, I want to
2 thank you very much for this opportunity to present
3 additional evidence and testimony to you addressing the
4 concerns that you raised at your February 9th agenda
5 conference. Particularly, I want to thank Commissioner
6 Klement and Stevens for being here today.

7 At your February 9th conference, the
8 Commissioners' questions and concerns centered on four
9 primary issues. I'll take these in order.

10 First, is the biomass fuel supply
11 sustainable? The answer is yes. The evidence will
12 show that there is ample biomass fuel available,
13 particularly wood waste and other low value material to
14 reliably and sustainably fuel the project with minimal
15 or no impacts on existing users.

16 The evidence supporting this conclusion is
17 overwhelming. You will hear from Mr. Richard
18 Schroeder, who has more than 30 years of experience
19 working in forestry and biomass fuel supply in Florida.
20 His conclusions are based on his own work and analyses,
21 as well as his review of numerous studies, including
22 those by the University of Florida's Institute of Food
23 and Agricultural Sciences, or IFAS, the Navigant study,
24 and studies released just two months ago by the Florida
25 Division of Forestry. All of these studies conclude

1 that there is more than enough biomass fuel for the
2 project as well as for all existing users and for
3 additional biomass fueled power generation beyond that.

4 Second, Commissioners asked about risk
5 mitigation. GRU understands that there are risks
6 inherent in every decision it makes. There are risks
7 of proceeding with an action and risks of not
8 proceeding with it. After a long public process with
9 extensive citizen involvement, the Gainesville City
10 Commission considered all the risks of proceeding with
11 the Gainesville Renewable Energy Center project and all
12 the risks of not proceeding and concluded that going
13 forward with the project is the least risky action
14 Gainesville can take for its future. Even using very
15 conservative assumptions, the net benefits of the
16 project significantly exceed the potential benefits of
17 not proceeding with the project.

18 On top of these risk mitigation benefits,
19 going forward with the project as proposed will provide
20 additional economic development benefits of roughly
21 600 million net present value and more than 700 direct
22 local jobs in the Gainesville, Alachua County, and
23 north central Florida economy. Again, the risk of not
24 proceeding is far greater than the risk of going
25 forward.

1 Third, with respects to the Commissioners'
2 questions regarding carbon and renewable energy
3 regulation, the evidence will show that carbon
4 regulation and renewable energy regulation is highly
5 likely, and on top of that, even without such
6 regulatory mandates, the Gainesville community wants to
7 reduce its greenhouse gas footprint and its CO2
8 emissions.

9 Fourth, with respect to the Commissioners'
10 questions regarding the role of the Commission and
11 weighing the statutory criteria, Mr. Myron Rollins, a
12 veteran of a dozen, literally, need determination cases
13 before this Commission since 1981, and Mayor Pegeen
14 Hanrahan will address this issue.

15 In any need determination, the Commission is
16 to take into account all of the specified statutory
17 criteria and also other matters within its jurisdiction
18 that it deems relevant. The evidence shows that the
19 project meets all the statutory criteria, but it's also
20 important to note that the Commission can, may, and has
21 granted determinations of need when only one or two of
22 the statutory criteria were specifically satisfied. In
23 one case even without a strict reserve margin need for
24 a decade the Commission approved a need for a power
25 plant.

1 Commissioners, the evidence shows that the
2 GREC project meets all the statutory need criteria. It
3 meets GRU's need for reliable baseload capacity in
4 2013, and it will improve both GRU's and Peninsular
5 Florida's baseload renewable generation profile and
6 reserve margins. It's the most cost-effective
7 long-term expansion path for GRU. Delaying the project
8 costs GRU and its customers. It will reduce
9 Gainesville's dependency on fossil fuels from 91
10 percent in 2013 down to 54 percent in 2023. In
11 addition, the fuel resources will come from local fuel
12 supplies, not from imported fossil fuels. It's the
13 most cost-effective renewable option, and there are no
14 other renewable or conservation measures that could
15 mitigate the need for this project.

16 With respect to other relevant matters within
17 the Commission's jurisdiction, we would urge you to
18 consider the public interest aspects of the GREC
19 project consistent with the Commission's overarching
20 declaration in Section 366.01, which is this: The
21 regulation of public utilities is declared to be in the
22 public interest and this chapter shall be deemed to be
23 an exercise of the police power of the state for the
24 protection of the public welfare and all the provisions
25 hereof shall be liberally construed for the

1 accomplishment of that purpose.

2 The Gainesville Renewable Energy Center
3 presents to you the Gainesville community's vision of
4 Gainesville's energy future, a future that is
5 sustainable in the long-term, increasingly renewable.
6 The project will increase renewable energy production
7 in Florida by more than 10 percent. Increasingly
8 energy independent, less dependent on imported fuels,
9 it keeps tens of millions of dollars in the north
10 central Florida economy, it promotes additional
11 economic growth and 700 direct jobs. You have the
12 discretion and the authority to consider all of these
13 factors, the enumerated statutory criteria, and the
14 public interest aspects, and we urge you to support
15 Gainesville's vision of its future and to approve the
16 determination of need for the Gainesville Renewable
17 Energy Center.

18 Thank you very much.

19 **COMMISSIONER STEVENS:** Thank you, Mr. Wright.

20 Ms. Stahmer.

21 **MS. STAHMER:** Thank you. I will try to make
22 my points briefly.

23 As an intervenor, I became involved in this
24 case because I was very concerned about what I saw
25 regarding the entire process by which the City

1 Commission and GRU came to commit itself and the
2 ratepayers of GRU and our community in Gainesville to
3 what I think is going to be a colossal fiscal mistake
4 and is going to burden our community for at least
5 30 years if not much longer.

6 There are so many speculative elements in
7 this project, much of it gambling with our natural
8 resources as well as our fiscal resources. There is no
9 immediate need for additional capacity. We think that
10 although this is a public utility, the fact that it can
11 make money by increasing its production of energy has
12 distorted the entire process. And so now the mindset
13 is how can we make more money and that should be the
14 first objective, rather than focusing on the
15 essentials, which is to maintain the fiscal integrity
16 and security of a municipal facility that belongs to
17 the people who own it and for whom that utility should
18 be managed for their primary benefit.

19 And if along the way it's possible to also
20 share benefits with other people beyond the assigned
21 area of the utility, that's not to be begrudged, but
22 it's not to become a rationale for turning a utility
23 project, a municipal utility project into what sounds
24 like a jobs program on one hand. Given the enormous
25 cost that we have to absorb for building this project,

1 a profit gain for the company that is primarily behind
2 this. It will be saddling the community with expenses
3 it does not need to incur because it has plenty of
4 capacity to meet in the long run, at least until 2023.
5 And we think with the adoption of additional DSM,
6 demand-side management controls and conservation
7 policies, it would be possible to even move that 2023
8 date further into the future as to when we would really
9 need to build something new.

10 We still have a number of good facilities.
11 We have invested a tremendous amount of money into
12 retrofitting at least one of them, and yet a few, still
13 within the time span of paying for that retrofit, GRU
14 and the City feel that they have to, rather than allow
15 us to absorb that debt and take advantage of that
16 retrofit and the benefits that will accrue to us both
17 environmentally as well as fiscally, send us over the
18 cliff with a huge investment and indebtedness that will
19 go beyond that \$500,000 initial cost because, of
20 course, there will be the expenses of paying for the
21 fuel, and it is a contract we cannot change, we cannot
22 get out of it.

23 If it turns out to be a bad deal, then we
24 have this white elephant sitting on public land and we
25 won't be able to dismantle it. And the only useful

1 thing to do with it would then be possibly pouring in
2 even more money to alter it so that it can burn or fuel
3 something else.

4 So for all of those reasons, I implore the
5 Public Service Commission to right the balance and the
6 focus and evaluation of this project and assist our
7 city and utility in understanding that their first
8 obligation is to the community that owns the utility
9 not to the rest of the world.

10 Thank you.

11 **COMMISSIONER STEVENS:** Thank you, Ms.
12 Stahmer.

13 Ms. Deevey.

14 **MS. DEEVEY:** Thank you.

15 I believe that the GREC project should not be
16 approved by the Public Service Commission, and I have
17 two general areas of concern here.

18 One is that GRU has not shown there is a need
19 for any new generator. The utility has consistently
20 ignored low cost options which would sharply decrease
21 peak demand in 2013, and slow or eliminate the growth
22 of peak demand through 2030. While GRU has implemented
23 popular and very impressive conservation programs that
24 reduce consumption of energy and also reduce peak
25 demand, it has not taken advantage of the success of

1 these programs to delay costly new capacity, which
2 generally is advertised as one of the reasons for
3 undergoing, as the citizens in Gainesville have done, a
4 rather expensive program of conservation.

5 Furthermore, GRU's own consultants have
6 pointed out that there are many load management
7 features that could reduce demand substantially over
8 the next ten years, which would improve reliability and
9 eliminate what looks to be a large burden on
10 ratepayers, the burden that GREC will entail.

11 As the PSC staff noted in its review of the
12 evidence for the first portion of this hearing, the
13 applicant has made no studies of load management or
14 other demand-side programs that could further reduce
15 the need for capacity for a generator to serve its
16 retail customers.

17 On March 4th of this year, the prehearing
18 officer, Commissioner Skop, ruled that nongenerational
19 options should be considered in relationship to Issue
20 5. That Issue 5 asks for consideration of conservation
21 and renewable energy technologies, but if there are
22 other options, nongenerational options that could
23 reduce demand, they also should and can be considered.
24 And I believe there is an important one that has been
25 recommended by consultants, and that is to stop selling

1 energy to Alachua and Clay. And if they do that,
2 immediately their peak demand will drop by 49 megawatts
3 in 2013, and continue to be much lower because it will
4 slow -- the growth of demand, peak demand, is quite
5 slow because -- in Gainesville. If we drop these, then
6 a very small, only a very small addition of capacity
7 would be required up through the time that we have to
8 face the issue of retiring the coal plant.

9 GREC and GRU have consistently throughout
10 this program refused to recognize or failed to
11 recognize that there is a difference between risks to
12 the utility and risks to its ratepayers. They are not
13 the same. The utility will survive and continue to
14 produce energy. The ratepayers, however, face the
15 risks of higher costs. And I think it's very important
16 to maintain this distinction, because I am also
17 concerned, and I think we all are, about the many
18 contingencies which are assumed in order to obtain a
19 rather rosy scenario of future financial benefits that
20 has been offered to this -- in testimony.

21 I'm particularly concerned about one
22 question, the cost of fuel. Many of the claims the
23 petitioners make about the financial benefits have to
24 do with the fact that they believe that they are
25 using --intend to use low cost fuel residues, logging

1 residues, and things like that, and that the cost will
2 remain low even if renewable portfolio standards
3 adopted by the state or the federal government greatly,
4 massively increase the demand for wood in the area, and
5 I really don't think that's true. Certainly, it is an
6 assumption at this point. They have not proved it. It
7 has not been investigated in any of the hearings up
8 till now, and I hope that we can look into that more
9 critically today.

10 Thank you.

11 **COMMISSIONER STEVENS:** Thank you, Ms. Deevey.

12 We're now on to the call of witnesses and the
13 oath. Are all of the witnesses here? Can we do this
14 at once or one at a time?

15 **MR. WRIGHT:** Commissioner, Madam Chairman,
16 Commissioner Stevens, I believe that all five of our
17 witnesses were present when Chairman Argenziano
18 administered the oath. I will verify that with each of
19 them as she or he takes the stand.

20 **COMMISSIONER STEVENS:** Perfect. Thank you,
21 Mr. Wright.

22 Witnesses are permitted five minutes to
23 summarize their testimony. There's no intervenor,
24 staff, or rebuttal testimony.

25 Mr. Wright.

1 **MR. WRIGHT:** Thank you, Commissioner Stevens.
2 Gainesville Regional Utilities and GREC LLC
3 would call Mayor Pegeen Hanrahan as our first witness.

4 **COMMISSIONER STEVENS:** Thanks for being here.

5 **MAYOR HANRAHAN:** Thank you, Commissioner.
6 Thank you, Madam Chair. I have been sworn.

7 **COMMISSIONER STEVENS:** Thank you.

8 PEGEEN HANRAHAN

9 was called as a witness on behalf of Gainesville Regional
10 Utilities and GREC, and having been duly sworn, testified
11 as follows:

12 DIRECT EXAMINATION

13 **BY MR. WRIGHT:**

14 **Q.** Good afternoon, Mayor Hanrahan.

15 **A.** Good afternoon. My name is Pegeen Hanrahan,
16 and I'm Gainesville's Mayor until the 20th of May.
17 After 12 years of service I have been term limited. I
18 want to really thank each and every one of you for your
19 service to our state. It's clearly evident to me and I
20 think to any observant and objective Floridian how hard
21 you are working and how much you truly care about doing
22 a good job in your role. So I thank each and every one
23 of you for that.

24 **Q.** I'm sorry, Madam Mayor, I do have a couple of
25 preliminary things --

1 **A.** Oh, I'm sorry.

2 **Q.** -- to cover before you go into your summary.

3 **A.** Go right ahead.

4 **Q.** Mayor Hanrahan, did you prepare and cause to
5 be filed in this proceeding Supplemental Direct
6 Testimony consisting of 18 pages?

7 **A.** Yes, sir, I did.

8 **Q.** And are you aware that we, as your counsel
9 team, prepared certain errata and caused that to be
10 filed with the Commission?

11 **A.** Yes.

12 **MR. WRIGHT:** Commissioner Stevens as Chair, I
13 just note for the record that we have filed the errata,
14 and I don't think there's any need -- and what we filed
15 included revised testimony pages, so I don't think
16 there's any need to go through line-by-line at this
17 time if that's satisfactory?

18 **COMMISSIONER STEVENS:** Yes, sir. I agree
19 with you. Thank you.

20 **MR. WRIGHT:** Thank you.

21 **BY MR. WRIGHT:**

22 **Q.** And, Mayor Hanrahan, did you also prepare and
23 caused to be filed Exhibits Numbered PH-1 through PH-5?

24 **A.** Yes, I did.

25 **MR. WRIGHT:** And I would just note for the

1 record, Commissioner Stevens, those have been marked in
2 Staff's Exhibit List, which is itself Exhibit 33, as
3 Exhibits 34 to 38, so they would stand presently as
4 marked for identification.

5 **COMMISSIONER STEVENS:** Yes, sir. Thank you.

6 **BY MR. WRIGHT:**

7 **Q.** And subject to the errata we filed, you have
8 no other changes or corrections to your testimony, do
9 you?

10 **A.** No, I don't.

11 **Q.** And do you adopt this as your sworn testimony
12 to the Florida Public Service Commission in this
13 proceeding?

14 **A.** Yes, I do.

15 **MR. WRIGHT:** Thank you.

16 If there's no objection, Commissioner
17 Stevens, I would respectfully ask that Mayor Hanrahan's
18 testimony be entered into the record as though read.

19 **COMMISSIONER STEVENS:** Yes, sir.

20 **MR. WRIGHT:** Thank you.

21
22
23
24
25

1 BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2 SUPPLEMENTAL TESTIMONY OF PEGEEN HANRAHAN, P.E.
3 ON BEHALF OF
4 GAINESVILLE REGIONAL UTILITIES AND
5 GAINESVILLE RENEWABLE ENERGY CENTER, LLC
6 DOCKET NO. 090451-EM
7 MARCH 15, 2010
8

9 **Q. Please state your name and business address.**

10 A. My name is Pegeen Hanrahan, and I am the Mayor of the City of Gainesville.
11 My business address is 200 East University Ave., Gainesville, FL 32601.
12

13 **Q. Please discuss your role within the City of Gainesville.**

14 A. I am in my twelfth year of elective service with the City of Gainesville, and was
15 re-elected Mayor in March 2007. As Mayor, I preside at Gainesville City
16 Commission meetings, serve as the Chair of the City Commission's Audit,
17 Finance and Legislative Committee and serve as a representative of the City, not
18 only at the local level, but also at the state, national and international level.
19

20 **Q. What is your educational background?**

21 A. I have Bachelor's and Master's degrees in Environmental Engineering from the
22 University of Florida. I also have a B.A. in Sociology from the University of
23 Florida. I am a registered Professional Engineer in Florida.
24

1 **Q. Did you previously file direct testimony in this docket?**

2 **A. Yes.**

3

4 **Purpose and Summary of Testimony**

5 **Q. What is the purpose of your supplemental testimony?**

6 **A. I am testifying on behalf of Gainesville Regional Utilities ("GRU"), which is the**
7 **utility arm of the City of Gainesville ("City"), and Gainesville Renewable**
8 **Energy Center, LLC ("GREC LLC") in support of our joint petition for**
9 **determination of need for the Gainesville Renewable Energy Center ("GREC" or**
10 **"GREC Project"), a 100 MW biomass-fueled electrical power plant that will be**
11 **constructed on the site of GRU's Deerhaven Generating Station.**

12 **The purpose of my supplemental testimony is to address several of the**
13 **Public Service Commission's ("PSC") questions raised during the February 9 ,**
14 **2010 Agenda Conference regarding:**

15 **(a) the PSC's role in this need determination proceeding for a renewable,**
16 **biomass-fueled power plant that will serve Gainesville's city-owned**
17 **electric system and our customers and citizens;**

18 **(b) the City of Gainesville's need for the GREC biomass facility and**
19 **other policy objectives;**

20 **(c) the risks associated with GREC and risk mitigation actions taken by**
21 **GRU and the City of Gainesville in connection with GREC;**

22 **(d) the likelihood of carbon dioxide and other greenhouse gas ("GHG")**
23 **emission regulations and the potential impacts of these regulations on the**
24 **City and the Gainesville community; and**

1 (e) the consistency of the City of Gainesville's policy with respect to
 2 federal and state CO₂ emissions reduction policy proposals.

3

4 **Q. Are you sponsoring any exhibits to your testimony?**

5 A. Yes. I am sponsoring the following exhibits:

6 Exhibit No. ____ [PH-1] Resumé of Pegeen Hanrahan, P.E.

7 Exhibit No. ____ [PH-2] Gainesville, Florida One Community's Strategy to
 8 Reduce Global Warming

9 Exhibit No. ____ [PH-3] U.S. Mayors Climate Protection Agreement

10 Exhibit No. ____ [PH-4] Alachua County Environmental Protection
 11 Advisory Committee - Review of the Gainesville
 12 Regional Utilities Proposal for a New Coal-Fired
 13 Power Plant

14 Exhibit No. ____ [PH-5] Economic Impact Analysis of Gainesville
 15 Renewable Energy Center (GREC) Proposed
 16 Biomass Power Project in Alachua County and
 17 Surrounding Counties

18

19 **Q. Please summarize the main conclusions of your testimony.**

20 A. In response to questions about the PSC's role in this need determination
 21 proceeding, I believe that the PSC should consider and give substantial weight
 22 to the City's balance of many objectives in choosing to proceed with GREC.

23 The City's objectives are broader than just electric generation.

24

1 The first objective is improved reliability. The average age of our current
2 generating fleet is 28 years. Our largest unit, Deerhaven 2, which provides most
3 of the community's around the clock base load power, is nearly 30 years old.
4 GREC will provide additional base load generation for improved reliability.

5
6 Second, GREC will also provide much needed fuel diversity. Over 60 percent
7 of our energy is produced using coal. It has been pointed out to us numerous
8 times by bond rating agencies Standard and Poor's and Moody's Investors
9 Service that we are too heavily reliant on coal. This can be found in nearly
10 every bond financing report since I have been Mayor. GREC will provide much
11 needed fuel diversity reducing our dependence on fossil fuels, especially coal.

12
13 Third, GREC will allow us to provide long-term cost stability for our customers.
14 Our customers need stable electric prices in order to budget and plan. GREC
15 will remove volatility in the cost of fossil fuels, and potential significant
16 increases in costs due to regulatory compliance.

17
18 As a municipal utility, GRU has public policy objectives that are different than
19 those of an investor-owned utility. These include:

- 20 • reducing our reliance on fossil fuels;
- 21 • reducing our risks from fossil fuel price volatility and potential
22 supply disruptions;
- 23 • reducing our risks from future carbon and green house gas
24 regulatory costs;

- 1 • meeting our community's pledge to reduce green house gas
2 emissions pursuant to the U.S. Mayors' Climate Protection
3 Agreement, which I executed on behalf of the City pursuant to
4 the unanimous vote of the Gainesville City Commission;
- 5 • reducing risks to customers from future renewable energy
6 mandates; and
- 7 • promoting economic development in the Gainesville community
8 and north central Florida by adding tax revenues and well-paying,
9 permanent jobs as a result of GREC.

10 In short, just as the PSC carries out its regulatory duties in the public interest,
11 GRU and the City carry out our responsibilities to serve the overall public
12 interest. I respectfully ask that the PSC consider all of our generation needs as
13 well as our public policy objectives in its decision to grant the requested
14 determination of need for GREC.

15

16 **Q. What are the economic impacts of GREC on the north central Florida**
17 **region?**

18 A. A recent study performed by Dr. Julie Harrington, Exhibit No. ____ [PH-5]
19 indicated that the economic benefits would be quite substantial. Her study
20 included the effects on the twenty-four (24) Florida counties within a 75 mile
21 radius of the GREC, using the Florida Impact Analysis for Planning model
22 (IMPLAN) used extensively by state and local government agencies to evaluate
23 legislative and policy initiatives across both public and private sectors. The

1 table below summarizes the results of this study, including effects both during
 2 construction and ongoing operation and maintenance of the plant.

3

Parameter	Direct Jobs	Indirect & Induced Jobs	Total Jobs	Average Annual Salary (\$2010)
Full Time Equivalent Jobs During Construction Period	547	567	1,114	\$48,628
Permanent Jobs During Ongoing Operations	204	529	733	\$42,444
Total Annual Income During Ongoing Operations (\$2010)	\$31,114,216			
Total Present Value (NPV \$2010 including construction period)	\$608,226,320			

4
 5 One of the findings of the study was that the investment in GREC had a benefit
 6 to cost ratio of 1.8 to 1 compared to investing in a generic trade business in the
 7 GREC region. The average salary for all jobs created by GREC (including
 8 direct, indirect, and induced jobs) found in the study is expected to be well
 9 above average for the GREC region.

10

11 **The PSC's Role in Determining Need for GREC**

12 **Q. During the February 9, 2010 Agenda Conference, Commissioners Edgar**
 13 **and Skop asked questions regarding the PSC's role in this particular need**
 14 **determination for the biomass-fueled GREC Project proposed in this case.**
 15 **[TR P2, 9, 12, 36, 41-43, 57, 70] What is your understanding of the PSC's**
 16 **role in need determination cases?**

Revised Supplemental Testimony of Pegeen Hanrahan

1 A. Under the PSC's need determination statute, the PSC is the "exclusive forum"
2 for determining need for proposed electrical power plants that are of a certain
3 size and technology. As a 100 MW steam generating unit, GREC is subject to
4 the mandatory jurisdiction of the Power Plant Siting Act. In these cases, the PSC
5 is charged to consider a list of statutory criteria, plus other matters within its
6 jurisdiction. Ultimately, after taking into account the various factors and criteria,
7 the PSC makes its determination as to whether a proposed plant is needed based
8 on whether it fulfills at least one of the criteria considered.

9
10 **Q. How do you believe the PSC should evaluate Gainesville's petition for**
11 **determination of need for GREC?**

12 A. I believe that the PSC should give careful consideration to the fact that this is a
13 need determination for a renewable energy power plant proposed by a municipal
14 utility serving its customers, who are also its citizens. I believe that this
15 evaluative framework is appropriate for Gainesville's proposal because we –
16 GRU and the Gainesville City Commission – are directly subject to local
17 electoral control and because the Gainesville City Commission is interested in
18 maximizing the long-term benefits to our customers, citizens, and community
19 rather than maximizing shareholder returns. I and my fellow Commissioners
20 serve as GRU's Board of Directors and as such have fiduciary responsibility for
21 the utility and we are keenly aware of our fundamental commitment to provide
22 reliable electric service at a reasonable cost. GRU is a AA-rated utility by
23 Standard and Poor's and Moody's Investor Services – one of only 20 of the
24 2,000 municipal utilities in the US that carries this high bond rating. I believe

1 that the PSC should, as a matter of policy, give great consideration to these
2 factors, and to the extensive public deliberations that occurred over a 7-year
3 period that resulted in the decision to move forward with GREC.

4

5 **Q. You stated that the City Commission held extensive public deliberations in**
6 **arriving at your decision to select GREC. Please summarize those activities**
7 **briefly.**

8 A. Our 7-year-long process that led to the selection of GREC has been summarized
9 in previous testimony and in the Need for Power Application (Section 8.0 of
10 Exhibit No. 27). There have been 37 publicly televised meetings, dozens of
11 workshops and other public meetings, mail-outs and informational notices
12 published in The Gainesville Sun, and other public outreach activities. We
13 gathered information from many resources and considered input from many
14 individuals and groups, including the Alachua County Environmental Protection
15 Advisory Committee (EPAC), a citizen committee that recommended expanding
16 our energy conservation programs, expansion of our solar programs, and a 100
17 MW biomass plant. This and other extensive citizen participation have led to
18 GRU implementing extensive conservation programs and solar feed-in tariff
19 programs, and developing GREC. The EPAC report is provided as Exhibit No.
20 __ [PH-4].

21

22 **Q. Did the City Commission consider that adding GREC in 2013 would result**
23 **in reserve margins greater than GRU's minimum reserve margin for**

Revised Supplemental Testimony of Pegeen Hanrahan

1 **planning purposes, and that adding GREC in 2013 could cause customers'**
2 **bills to increase in the near-term?**

3 A. Yes. These factors were considered explicitly and publicly. I would emphasize
4 that GREC is expected to decrease GRU's customers' costs over the long-term.

5

6 **Q. Was the Gainesville community informed that GREC would go into service**
7 **prior to GRU's anticipated need for capacity to maintain reserve margin**
8 **requirements?**

9 A. Yes. Throughout the public planning process I've discussed, GRU's projected
10 resource needs from a reserve margin perspective were communicated to our
11 community at a number of meetings.

12

13 **Q. Members of the PSC discussed the question of the City Commission's**
14 **accountability to Gainesville's citizens. Do you believe that local electoral**
15 **control provides adequate protection for your citizens and electric**
16 **customers?**

17 A. Yes. This is the nature of public power: we are subject to local control, and
18 electoral response can be fairly immediate. With GREC, if – contrary to our
19 expectation – our customers' bills were to increase more than is acceptable to our
20 citizens in light of the benefits provided by the Project, we will hear about it in
21 the next election cycle. Gainesville holds elections every single year. So far,
22 eleven Commissioners have voted unanimously in support of GREC over the
23 years, including myself and sitting Commissioners Craig Lowe, Jack Donovan,
24 Thomas Hawkins, Lauren Poe, Jeanna Mastrodicasa, and Sherwin Henry, and

1 previous Commissioners Rick Bryant, Ed Braddy, Warren Nielsen, and Chuck
2 Chestnut.

3

4 **Q. Please describe Gainesville's commitments under the U.S. Mayors Climate
5 Protection Agreement.**

6 A. As discussed in my prefiled direct testimony (which was subsequently adopted
7 by Vice Mayor Sherwin Henry), in 2005 City of Gainesville leaders, along with
8 cities across the US, pledged to reduce green house gas emissions, particularly
9 carbon dioxide. I signed the U.S. Mayors Climate Protection Agreement on
10 behalf of and with the unanimous approval of the Gainesville City Commission
11 (Exhibit No. 30, also provided as Exhibit No. __ [PH-3]). In quantitative terms,
12 the Mayors Climate Protection Agreement calls for reducing carbon emissions
13 to 7 percent below 1990 levels by 2012. The 7 percent reduction is consistent
14 with the 2012 reduction target set forth in the Kyoto Protocol. As our plans
15 have evolved, we will meet the 2012 goals in late 2013 when GREC comes on
16 line.

17

18 For the City of Gainesville, the 7 percent reduction target using 1990 as the
19 baseline results in a target carbon emissions of 1,791,701 (as measured in
20 equivalent metric tons of CO₂ per year). For reference, total 2008 carbon
21 emissions were 1,992,979 (as measured in equivalent metric tons of CO₂ per
22 year). Our overall strategy for reducing carbon emissions is discussed in Exhibit
23 No. __ [PH-2]. GREC is a critical component of our strategy to reduce carbon
24 emissions.

1

2 We also expect to progress beyond the 2012 goals, consistent with the longer-
3 term targets of the Kyoto Protocol and consistent with the goals set for Florida by
4 Governor Crist's Executive Order No. 07-127, i.e., to be on a path to attain
5 significant additional reductions between now and 2050. In qualitative terms, I
6 want to stress that the City and the Gainesville community take our pledge under
7 the Mayors Climate Protection Agreement with the utmost seriousness.

8

9 **Q. How will the City of Gainesville meet its CO₂ emissions reduction goals if the**
10 **GREC Petition for Determination of Need is not approved?**

11 A. Without GREC, it would be very difficult to meet our CO₂ emissions reduction
12 goals, and any alternative methods of doing so would be much more expensive.

13

14 **Risks and Risk Mitigation**

15 **Q. During the February 9, 2010 Agenda Conference, several members of the**
16 **PSC expressed interest in understanding more about GRU's risk mitigation**
17 **activities in connection with GREC. [TR P6, L4, P29, L7, P37, L14, P50, L9]**
18 **In your previous discussion, you mentioned several of the risks facing**
19 **Gainesville and your electric customers that you believe GREC will mitigate.**
20 **Please summarize those risks, and any other risks that GRU and its**
21 **customers either face or are protected against by GREC.**

22 A. As I stated above, the risks that GREC mitigates include our risk exposure to
23 likely GHG regulation and renewable energy mandates, and the risks of fossil
24 fuel price volatility and supply disruptions. Additionally, the supplemental

1 testimony of Ed Regan discusses several risks that we have been able to protect
2 against, or mitigate, through favorable terms in our power purchase contract with
3 GREC LLC.

4
5 Of course there are risks inherent in any major decision, because we do not have
6 perfect information about the future. Such risks are present in any decision to
7 construct any power plant, or any other significant capital project. Fuel costs can
8 change and markets can change, and any decision can – eventually, in
9 hindsight – turn out well or not so well. After many public meetings and with
10 volumes of public input, we evaluated all the risks that we could identify and
11 considered them carefully and thoroughly in order to develop mitigation strategies.
12 As I see it, moving forward with GREC is a quantifiable minimum risk, while
13 doing nothing poses much greater risks to GRU and the Gainesville community.

14
15 **Q. Do you believe that the risks mitigated outweigh the risks taken?**

16 A. Yes, absolutely and unequivocally. As Mr. Regan testifies, the expected risk-
17 mitigation benefits of GREC far exceed the worst-case possible costs.

18
19 **Q. What about the risks that GRU and GRU's customers face if GREC is not
20 constructed as proposed?**

21 A. The downside risk of not proceeding with GREC is far greater than the risk we
22 face if we do proceed with GREC. If GREC is not constructed as proposed by
23 GRU and GREC LLC, we will still be committed to mitigating the risks of fuel
24 price volatility and supply disruptions, carbon legislation and renewable energy

1 mandates, generation reliability, long term costs to customers and meeting our
2 pledge under the U.S. Mayors Climate Protection Agreement. Without GREC,
3 we will incur greater costs, be exposed to greater risks and lose substantial
4 benefits to our local economy.

5

6 **Potential Climate Change Regulation and Renewable Energy Mandates**

7 **Q. Why do you believe that GRU and the City of Gainesville need to put into**
8 **place plans that will mitigate the financial effects of carbon constraining**
9 **regulations or mandates to produce a portion of your community's**
10 **electrical needs from renewable sources of energy?**

11 **A.** Not only are regulatory mandates very likely, but the Gainesville City
12 Commission is responding to the interests and values expressed by our
13 community. The sustained level of federal and state legislative initiatives, the
14 fact that 35 states have already adopted renewable or clean energy standards or
15 goals, and the continued pressure from world opinion indicate that the
16 probability of legislation mandating carbon constraints and renewable portfolio
17 standards is not only high, but that the train for greenhouse gas regulation has
18 already left the station.

19

20 Witness Regan's testimony will review in detail the current status of federal and
21 state legislation related to carbon regulation and renewable portfolio standards in
22 detail. Later in my testimony I will explain how GREC supports existing
23 Florida policies, established by the Florida legislature, that it is in the public
24 interest to promote the use of renewable energy.

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I say the train has left the station because EPA has received authorization and is proceeding to regulate greenhouse gases as pollutants. The U.S. Supreme Court has ruled that CO₂ is a pollutant under the Clean Air Act, and therefore the U.S. EPA has the authority and the responsibility to regulate it. U. S. EPA has announced its intent to regulate carbon. Here are a few details from the EPA's website:

“On December 7, 2009, the Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases--carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆)--in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare. On April 2, 2007, in *Massachusetts v. EPA*, 549 U.S. 497 (2007), the Supreme Court found that greenhouse gases are air pollutants covered by the Clean Air Act. The Court held that the Administrator must determine whether or not emissions of

1 greenhouse gases from new motor vehicles cause or contribute to
2 air pollution which may reasonably be anticipated to endanger
3 public health or welfare, or whether the science is too uncertain
4 to make a reasoned decision. In making these decisions, the
5 Administrator is required to follow the language of section 202(a)
6 of the Clean Air Act. The Supreme Court decision resulted from
7 a petition for rulemaking under section 202(a) filed by more than
8 a dozen environmental, renewable energy, and other
9 organizations.”

10 Regardless of legislative mandates and environmental regulations, the
11 Gainesville City Commission, after years of public discussion, is pursuing the
12 expressed interests of our community to reduce our contribution to climate
13 change, to increase our energy independence and freedom from supply
14 disruptions, and to create local wealth in the form of jobs and investment in our
15 community.

16

17 **Q. Is the City of Gainesville’s policy with regards to CO₂ emissions reductions**
18 **consistent with federal policy?**

19 **A.** Yes. As I discussed in response to the last question, there is continued reason to
20 believe that CO₂ will be regulated, whether through congressional action or EPA
21 rulemaking. Our community’s efforts to reduce CO₂ emissions are therefore
22 consistent with federal policy.

23

1 **Q. Is the City of Gainesville’s policy with regards to renewable energy and**
2 **CO₂ emissions reductions consistent with the policy objectives set forth by**
3 **the Florida Legislature?**

4 A. Yes. Our policy is consistent with the objectives set forth by the Legislature in
5 Florida Statutes. Those policy goals include promoting the development of
6 renewable energy in Florida, diversifying the fuel mix of Florida's electricity
7 supply, reducing the State's dependence on natural gas and fuel oil, minimizing
8 the volatility of fuel costs, encouraging investment in Florida, and improving
9 environmental conditions by reducing emissions produced from conventional
10 electricity generation. GREC will promote these public-interest purposes for
11 Gainesville and our citizens as well as for the State as a whole.

12

13 **Q. Why should the Florida Public Service Commission approve the GREC**
14 **Petition for Determination of Need when GRU’s own projections indicate**
15 **capacity is not needed until 2023?**

16 A. GRU’s application was based on a number of factors about which I’ve already
17 spoken, and not based strictly on a need for system reserve margins. These
18 factors include improved reliability; fuel diversity; long-term price stability for
19 customers; less reliance on fossil fuels; reducing risks from fossil fuel price
20 volatility and potential supply disruptions; reducing risks from future carbon and
21 greenhouse gas regulatory costs; meeting our community's commitment to
22 reduce greenhouse gas emissions pursuant to the U.S. Mayors Climate
23 Protection Agreement; promoting economic development through increased tax
24 revenues and adding more than 700 jobs; and mitigating risks from future

1 renewable energy mandates. GREC is the most cost-effective renewable
2 resource available to GRU, and as a base load resource, helps us improve
3 reliability.

4
5 **Q. Will GREC provide benefits to the State of Florida as a whole?**

6 A. Yes. The benefits that the City of Gainesville will realize through GREC carry
7 over to the entire State. In particular, any utility that purchases a share of GREC
8 during its initial 10 years of operation will share the same benefits as GRU
9 related to fuel diversity, CO₂ emissions reduction, energy independence, and
10 increased use of renewables. Over its operating life, GREC will contribute to
11 statewide energy independence, reduced CO₂ emissions, improved
12 environmental conditions and fuel diversity, while providing economic stimulus
13 in the form of jobs in the region.

14
15 **Q. Please summarize your testimony, including what action you are asking the
16 PSC to take in this case.**

17 A. GRU and the City of Gainesville thoroughly considered and carefully evaluated
18 many alternatives, with extensive public deliberation and voluminous public
19 input before selecting the Gainesville Renewable Energy Center Project and
20 petitioning for the PSC's determination of need. We exist to serve the public
21 interest of the Gainesville community, and Gainesville needs GREC not only to
22 meet our long-term needs for a reliable, environmentally sound power supply,
23 but also to meet our goals of energy independence and sustainability; to mitigate
24 the risks of climate change and renewable energy standards regulation; to

1 mitigate the risks of fuel price volatility and supply disruptions; and to promote
2 economic growth in the Gainesville community and north central Florida
3 through the substantial investment and the more than 700 jobs that will be
4 created by GREC.

5
6 The PSC should recognize, as we do, that every risk that is mitigated by GREC
7 is a risk that Gainesville and our citizens are exposed to if GREC is not
8 constructed and operated as proposed in our petition, and that every benefit that
9 is provided by GREC is lost, or at best diminished, if GREC is not built and
10 operated. If GREC is not constructed, we will still be committed to meeting our
11 pledge under the U.S. Mayors Climate Protection Agreement, and we will still
12 be committed to doing what we can to mitigate the risks I have discussed today.
13 Without GREC, we will incur greater costs, be exposed to greater risks, and lose
14 substantial benefits to our local economy.

15

16 Accordingly, I respectfully ask that the PSC grant the requested determination of
17 need for GREC.

18

19 **Q. Does this conclude your testimony?**

20 **A. Yes.**

21

22

1 **BY MR. WRIGHT:**

2 Q. Mayor Hanrahan, would you please summarize
3 your testimony?

4 A. Yes, I'll be happy to. The City Commission
5 and our leadership at Gainesville Regional Utilities are
6 in firm belief that this is the best solution for our
7 community at this time, and we have also heard the same
8 thing from our bond rating agencies, which I or a member
9 of our staff can clearly address. They and we believe
10 that it's important for us to address new generation and
11 adding variety to our fuel mix, and that this helps our
12 financial strength and certainly helps keep our
13 electricity prices stable into the future.

14 Our city commission does have a number of
15 broad policy objectives which include improving the
16 reliability of our system, reducing our reliance on
17 fossil fuels, reducing our risk from fuel price
18 volatility and potential supply disruptions, as well as
19 from regulatory mandates such as carbon regulation and
20 renewable energy standards.

21 Meeting our pledge to reduce greenhouse gases
22 is something that we have done pursuant to the U.S.
23 Conference of Mayors Climate Protection Agreement, which
24 I executed on behalf of the City pursuant to a unanimous
25 vote of our city commission. We also, as you have

1 heard, are focused on promoting economic development
2 within our community and throughout north central
3 Florida.

4 GRU and the City of Gainesville have
5 thoroughly considered and carefully evaluated many, many
6 generating alternatives to help achieve all of these
7 objectives. We have had extensive public deliberations
8 now going back about seven years, and we have had a huge
9 amount of public input related to both our conservation
10 options, our generation options, and our petitioning to
11 you for our determination of need. So I'm going to
12 touch on that in a little bit more detail.

13 We are focused on having a reliable baseload
14 power supply which is an important distinction which I
15 think we will talk about in a moment, and focused also
16 on independence and sustainability. Biomass does help
17 us address fuel price volatility around natural gas and
18 coal and supply disruptions that do help serve our
19 customers in terms of cost savings. Two-thirds of the
20 energy we produced last year was from coal and another
21 25 percent was from natural gas. Securing a new fuel
22 source gives us diversity that our bond rating agencies,
23 both Standard and Poor's and Moody's, have addressed to
24 us directly on numerous occasions. I have been present
25 at those meetings.

1 I want to note at this point, too, that there
2 are more than 2,000 public utilities across the United
3 States and only about 20 have a bond rating agency of AA
4 or higher, and GRU is among them. It's an important
5 distinction that we are a very fiscally cautious utility
6 and we pride ourselves on that. But they are concerned
7 about the fact we are so reliant on fossil fuel and that
8 as we move toward a carbon regulated future, we are
9 suffering from having too many eggs in one basket.

10 At the February 9th Agenda Conference we heard
11 concern about risk, but there is also a risk to doing
12 nothing. As we see it, moving forward with this project
13 is a quantifiable risk, while doing nothing poses a
14 greater risk that is unknown to our customers and to our
15 community. Our commission and you all have
16 appropriately raised questions about the risks, but we
17 believe that every risk is mitigated by this project.
18 If it's not constructed, we are fully exposed to risks
19 including volatility in prices and future regulation.

20 My training as an environmental engineer and
21 experience as an elected official tell me that it's
22 generally much more cost-effective to make changes
23 carefully, planfully, and strategically rather than when
24 you're forced into it during a crisis.

25 We also do intend to produce economic growth

1 in our community. This is a common goal of elected
2 bodies. We anticipate there will be about 700 jobs.
3 And I can refer to Dr. Harrington's (phonetic) studies
4 specifically in response to your questions over a
5 24-county area, and this is something that our state
6 clearly and sorely needs at this time.

7 Accordingly, and for all the reasons mentioned
8 today, I respectfully ask that you grant this need
9 determination for the biomass project and affirm the
10 decision that was made in our community now by more than
11 11 directly elected public officials after years of
12 careful debate, analysis, and input.

13 Thank you, Chair Argenziano, and to each of
14 you. We appreciate your service to our state.

15 **COMMISSIONER STEVENS:** Thank you, Mayor; and
16 thank you for your public service.

17 Are there any questions from the intervenors?

18 **MS. STAHER:** Yes, there are. Thank you.

19 **COMMISSIONER STEVENS:** Okay.

20 **MS. STAHER:** Intervenor Stahmer.

21 CROSS EXAMINATION

22 **BY MS. STAHER:**

23 **Q.** Madam Mayor, good afternoon.

24 With regard to the fiscal integrity of the
25 utility, an issue you brought up with regard to the bond

1 rating question, can you tell us what the outstanding
2 long-term debt is for the electric utility and then for
3 GRU as a whole? Ballpark.

4 **A.** Madam Chair, Ms. Stahmer, it's in the hundreds
5 of millions of dollars, perhaps approaching 800 or so.
6 I don't know the exact number.

7 **Q.** I do have an exhibit that can be distributed.
8 It is joint, so -- with other documents. It's the last
9 two pages.

10 **A.** Perhaps you could testify to that,
11 Ms. Stahmer, if you would like.

12 **Q.** The clerk will be showing you, I believe, a
13 document.

14 **COMMISSIONER STEVENS:** Mr. Wright.

15 **MR. WRIGHT:** We need a copy.

16 **MS. STAHMER:** Oh, yes. I do have copies
17 here. I'm sorry. It is the last two pages of this
18 document, so if it gets admitted, I realize it would
19 just be the last two pages and not necessarily the
20 other pages unless and until --

21 **MS. HELTON:** Perhaps, Mr. Chairman, Ms. Walsh
22 could distribute it to everybody, and we could mark the
23 last two pages for identification purposes at this
24 time. Exhibit Number -- and, I'm sorry, I've lost
25 my -- 84.

1 **MS. STAHER:** Thank you.

2 **BY MS. STAHER:**

3 **Q.** Madam Mayor, have you received copy of it yet?

4 **A** Yes, I do have a copy.

5 **Q.** Do you recognize --

6 **COMMISSIONER STEVENS:** Ms. Stahmer, can you
7 hold on until we get copies, too, please.

8 **MS. STAHER:** Oh, I'm sorry. I was just
9 trying to lay the foundation and see if she recognized
10 it.

11 **COMMISSIONER STEVENS:** Thank you. Now, Ms.
12 Stahmer, is this the "Building, Living, Thinking" first
13 page, and then the second page?

14 **MS. STAHER:** Yes. It is from the GRU annual
15 report 2007/2008.

16 **COMMISSIONER STEVENS:** Mr. Wright, are you
17 there?

18 **MR. WRIGHT:** I am here, yes, sir. Thank you
19 for asking.

20 **MS. HELTON:** So just for purposes of the
21 record, I'm sorry --

22 **COMMISSIONER STEVENS:** Yes, ma'am.

23 **MS. HELTON:** -- Mr. Chairman, but I've worked
24 enough briefs to know that it is really helpful to keep
25 the record clear and the exhibits clear. So what I

1 have done is I have pulled off the last two pages, and
2 I'm going to mark them Exhibit Number 84. So maybe if
3 we can do that to keep it separate from the other part
4 of the package that might be the better way to do it.

5 **COMMISSIONER STEVENS:** Yes, ma'am. Thank
6 you, Ms. Helton. Number 84.

7 **MS. STAHMER:** Thank you.

8 (Exhibit Number 84 marked for
9 identification.)

10 **COMMISSIONER STEVENS:** I'm sorry, Ms.
11 Stahmer, go ahead.

12 **MS. STAHMER:** May I proceed? I didn't know
13 if Mr. Wright had an objection.

14 **MR. WRIGHT:** (Indicating no.)

15 **MS. STAHMER:** Thank you.

16 **BY MS. STAHMER:**

17 **Q.** As you see, this is a page from the 2007/2008
18 Annual Report for GRU. It was the most recent one I was
19 able to find on-line, and you will see towards the -- a
20 little bit below the middle of the page which discusses
21 liabilities and net assets, or lists them for GRU, it
22 has total long-term debt listed there.

23 **A.** Yes. And I had indicated I thought it was
24 around 800 million. The total liabilities of the
25 electric system alone are 724 million, so I don't think

1 I did too bad.

2 Q. Within that regard, what impact is it likely
3 to have on our community to be adding at a minimum
4 another \$500 million of debt to the load that we are
5 already carrying?

6 A. Madam Chair, it is not a debt. It is a
7 contract for service.

8 Q. Well, I like that rationale, and next time I
9 need a loan, I would appreciate it if you came with me
10 to the bank and I could say, well, you know, that
11 mortgage --

12 MR. WRIGHT: I object. This is argumentative
13 at least.

14 COMMISSIONER STEVENS: It is.

15 MS. STAHMER: I'm not trying to be
16 argumentative. I appreciate counsel --

17 COMMISSIONER STEVENS: Mr. Stahmer, can you
18 ask a question, please?

19 MS. STAHMER: Well, I'm simply trying to have
20 the Mayor make some more clarifying distinction,
21 because it seems to me since it's termed as debt, for
22 one thing, it's something the community and the
23 ratepayers together or separately are on the hook for
24 in one way or another.

25 COMMISSIONER STEVENS: Mr. Wright.

1 **MR. WRIGHT:** Again, that was a declarative
2 statement. It was in the nature of testimony. It is
3 not sworn testimony, so it is not evidence. But, you
4 know, the first part was an argumentative invitation
5 for the Mayor to go to the bank with her. If she has a
6 question, she should ask the question. Thank you.

7 **COMMISSIONER STEVENS:** Thank you, Mr. Wright.
8 Please ask a question.

9 **BY MS. STAHMER:**

10 **Q.** Well, my question is asking her why she
11 doesn't regard it as debt inasmuch as it is listed as
12 debt on the City's own document?

13 **A.** Madam Chair, it is not listed as debt on this
14 document. And, in fact, it is not legally debt. If the
15 project doesn't produce any energy, we owe nothing, so
16 it is not debt. As to be distinguished, for example, if
17 we were to build our plant, a plant ourselves, we would
18 go to the bond rating agencies, we would work with those
19 issuers of bonded indebtedness, and it would be debt.
20 But that is a strong distinction, and I would make note
21 of the difference between the two.

22 **Q.** Well taken. But suppose this thing is built
23 and it doesn't produce energy or it's not as efficient
24 as we had expected, doesn't it still remain a burden in
25 some way for the City?

1 **A.** No. In fact, I think what the question
2 demonstrates is one of the great benefits of the project
3 as it has been structured is that the liability that
4 accrues associated with not producing energy is actually
5 a liability for the private sector company, but not for
6 the City. The City is only paying for the energy that
7 the plant produces.

8 **Q.** Are you saying that once it's -- let's assume
9 it is built and it starts producing energy, that the
10 ratepayers are not obligated on defraying that
11 \$500 million cost?

12 **A.** We are only obligated to pay for the energy
13 that the plant produces.

14 **Q.** And none of the initial \$500 million is going
15 to be subsumed or captured in those costs?

16 **A.** Well, obviously, you know, what we have
17 negotiated with the private sector company is that we
18 will pay them an agreed-to rate, but that's the beauty
19 of them building the plant versus us building the plant
20 is if for any reason the plant goes down, there's a
21 problem in terms of producing energy, we are not liable
22 for that.

23 **Q.** For clarification, do you mean we're not
24 liable for paying them for energy they are not
25 delivering?

1 **A.** That's exactly right.

2 **Q.** But what you about that building that is going
3 to be sitting on public land?

4 **A.** I'm unclear.

5 **Q.** My question really comes from a sincere lack
6 of understanding, given what some of the answers are,
7 because of things that have been said in the few
8 Commission meetings that address the financial structure
9 of this project. We were told it would cost
10 \$500 million. Are you saying that we have -- that the
11 ratepayers in no way are going to be paying back in some
12 way or defraying the expense of building the power
13 plant?

14 **A.** I think I have adequately answered the
15 question. The City has a contract for purchase of power
16 at a negotiated set of conditions, but if power is not
17 produced from the power plant for any reason, we're not
18 paying the costs.

19 **CHAIRMAN ARGENZIANO:** Excuse me one moment.

20 **COMMISSIONER STEVENS:** Madam Chair.

21 **CHAIRMAN ARGENZIANO:** Thank you.

22 And what I would just like to express is that
23 you guys are here, you know the process, and sometimes
24 our intervenors are not practiced attorneys and don't
25 know the process. And if I can just ask this, because

1 I think what she's asking you, and I didn't hear an
2 answer to, was who's paying the capital construction of
3 the building? I think that's what she's asking. Will
4 the people of that area be the ones to pay it? You are
5 answering energy, she is asking capital construction.

6 **THE WITNESS:** Yes. The capital cost of the
7 construction will be borne by a private corporation,
8 Gainesville Renewable Energy Company, LLC.

9 **CHAIRMAN ARGENZIANO:** Did that adequately
10 answer your question?

11 **MS. STAHER:** Halfway.

12 **BY MS. STAHER:**

13 **Q.** And will the rates that we are charged for the
14 power that they produce, assuming everything goes
15 smoothly, be structured in a way to help pay back the
16 expenses incurred in building the facility?

17 **A.** Yes, that's standard.

18 **Q.** So the ratepayers will be obliged, then -- we
19 will be compensating the builder, whether it's American
20 Renewables or a successor, for those costs in some way
21 ultimately?

22 **A.** Yes, assuming that the power is produced from
23 the plant.

24 **Q.** I understand. So it is ultimately a
25 \$500 million debt perhaps amortized over 30 years or

1 whatever, plus the additional cost of fuel and providing
2 the power?

3 **A.** It's not a debt to the City of Gainesville.

4 **Q.** You mean it's not a debt to the City, but it
5 will be an obligation to the ratepayers, won't it,
6 people who are buying the power?

7 **MR. WRIGHT:** Commissioner, I think the Mayor
8 has answered this question at least three times.

9 **COMMISSIONER STEVENS:** Okay.

10 Ms. Helton.

11 **THE WITNESS:** Madam Chair, it's also -- I
12 feel like I should just let you all know, I suspect
13 that Ms. Stahmer and Ms. Deevey have had more
14 experience in this room than I have. So I'm not adept
15 at understanding where I can say, you know, I'm not
16 sure what else you are looking for here.

17 **MS. STAHMER:** Just for your own information,
18 Madam Mayor, these proceedings -- not today, but this
19 case is the first time that I have been here. I have
20 never been here for any other reason to observe or to
21 participate, but I will move on.

22 I think, however, the question that I'm
23 questioning is illustrative of some of the concerns
24 that people like me and others have had, because it has
25 been difficult to ascertain exactly what the burden

1 will be on the ratepayers for this project.

2 **BY MS. STAHRMER:**

3 Q. Were you present during the two Commission
4 meetings of April 28th and May 12th, 2008, when a
5 presentation was made and the Commission discussed the
6 comparative merits of the three top bidders in response
7 to the RFP that GRU had sent out, Sterling Planet,
8 Covanta, and Nacogdoches?

9 A. Madam Chair, I believe I was likely present.
10 I would have to go back and review the minutes of any
11 specific meeting to know for sure that I was there. As
12 has been indicated, we have had literally dozens of
13 different meetings in regard to our energy supply
14 decisions, and I believe I have been at all of the
15 critical meetings, but I have also had two children in
16 the last four years and so have had some legitimate
17 excuses sometimes not to be present.

18 Q. Well, I'm talking in particular when GRU over
19 the course of two meetings made the presentation to the
20 City Commission and to the public about those three bids
21 that came in response to the RFP. There were other
22 bids, as well, I realize, but these were the three
23 finalists. And GRU made a presentation about how it had
24 evaluated the bids, and then there was a lengthy
25 discussion that extended over two meetings as to the

1 relative merits.

2 **A.** I believe I likely was present. The minutes
3 kept by the Clerk of the Commission would verify for
4 sure.

5 **Q.** Okay. In that regard, I would like to show
6 you another document.

7 **MR. WRIGHT:** May I just ask is this part of
8 the lengthier document that we previously got?

9 **MS. STAHER:** It is. Thank you.

10 And it begins -- first there is a, you know,
11 contract for biomass fuel generation and that goes on
12 for about -- on the screen when you print these off
13 they have numbers, but I think it goes -- the last page
14 of that is biomass plant risk assessment, but that's
15 not the one. It's the next one, which is just two
16 pages, which says general manager regular item, 071159,
17 evaluation of biomass fuel generation proposals, City
18 Commission, April 28th, 2008. And it is just two
19 pages.

20 **COMMISSIONER STEVENS:** It's just two pages?

21 **MS. STAHER:** Yes.

22 **COMMISSIONER STEVENS:** Okay.

23 **MS. STAHER:** And I apologize, these things
24 are all tied together.

25 **COMMISSIONER STEVENS:** Mr. Sayler, will that

1 be Exhibit 85?

2 **MR. SAYLER:** It would be identified as
3 Exhibit 85.

4 **COMMISSIONER STEVENS:** And, Mr. Wright, do
5 you have that?

6 **MR. WRIGHT:** I'm looking for it.

7 **COMMISSIONER STEVENS:** Yes, sir. I believe
8 it looks like this.

9 **MR. WRIGHT:** Yes, I do have that one. Using
10 my favorite expression from the Florida Power and Light
11 Company rate case, I'm not sure about this, but I may
12 want to do what we call preserve optional completeness.
13 I notice this is apparently a cover sheet and Page 16
14 of a document. And I don't have the other document,
15 and I don't want something coming in out of context.
16 So I'd like the opportunity to look at the whole
17 document.

18 **COMMISSIONER STEVENS:** Yes, sir, absolutely.

19 **MR. WRIGHT:** Thank you.

20 **COMMISSIONER STEVENS:** Do the Commissioners
21 have it?

22 Ms. Helton.

23 **MS. HELTON:** Mr. Chairman, I think that is
24 appropriate. And maybe, too, if here we can again pull
25 out these two pages just for purposes of clarity of the

1 record and identify them separately, as Mr. Sayler
2 said, which I think is Number 85, which I have *The*
3 *Evaluation of Biomass Fuel Generation Proposals*,
4 presentation to the Gainesville City Commission,
5 April 28th, 2008. And then Page 16 is the next page,
6 which on the top of it, it is titled *Comparisons of*
7 *Proposals*.

8 **COMMISSIONER STEVENS:** Yes, ma'am.

9 **MS. STAHER:** If I may, for Mr. Wright's
10 information, this exhibit is available at the City
11 website as one of the documents that was presented
12 during the course of the April 28th and May 12th City
13 Commission meetings discussing this. Thank you.

14 (Exhibit Number 85 marked for
15 identification.)

16 **BY MS. STAHER:**

17 **Q.** And with regard to the second page, Madam
18 Mayor, I'd ask you to look at the various proposals.
19 The top line has the name and then the total cost that
20 was cited for the Nacogdoches power proposal, which
21 was --

22 **A.** It appears as if it was greater than
23 \$300 million.

24 **Q.** Does that comport with your memory?

25 **A.** I did not have any specific recollection of

1 this slide before you presented it today, but I don't
2 doubt that I have seen it before.

3 Q. Okay. And is Nacogdoches -- was Nacogdoches
4 the one that was chosen that evening?

5 A. Yes.

6 Q. And is it essentially the predecessor party to
7 the current contract the City has entered into with
8 GREC, American Renewables and GREC?

9 A. Yes.

10 Q. Thank you.

11 A. I'm not sure at this time what the proposed
12 size of the plant was, if it was also 100 megawatts or
13 not. I know we talked about various different potential
14 plant capacities at the time.

15 Q. I will try to check that for you. Thank you.
16 It is a good point, but I believe it was a 100-megawatt
17 proposal also at that time.

18 Do you remember how those two meetings
19 concluded, the April 28th and the May 12th, with regard
20 to the choice among the bidders?

21 A. The City Commission voted, I believe,
22 unanimously to move forward with Nacogdoches, would be
23 my recollection.

24 Q. And to the best of your knowledge, do you
25 recall when this particular project as GREC was

1 discussed at a commission meeting?

2 **A.** You mean when the separate LLC was formed
3 and -- is that what you're referring to?

4 **Q.** When particulars about the project and -- you
5 don't need remember the specific date, but if you have
6 some ideas as to what extent it was discussed after that
7 evening?

8 **A.** There were a number of subsequent public
9 meetings and, of course, for me and likely for the rest
10 of the members of the commission, I meet with the
11 utility director, Mr. Hunsinger, for about an hour and a
12 half one-on-one each week and about two hours along with
13 the other five direct reports to the Commission every
14 other week. So he and I have discussed it on dozens of
15 different occasions, if that's the question. But there
16 were several other public meetings in which the
17 Commission has discussed both the proposal, the
18 negotiation, and so on. There were several meetings.

19 **MS. STAHER:** I have another exhibit here,
20 and, unfortunately, I only have one page, because I
21 didn't anticipate using it. It is a document produced
22 by petitioners in response to an interrogatory served
23 by Ms. Deevey. And it provides a list of dates and
24 commission meetings and the topics, and this would just
25 be a short question, but what would be the best way to

1 show this to the Mayor?

2 **COMMISSIONER STEVENS:** Ms. Stahmer, it would
3 be best if we could ask our staff to make copies and
4 pass it out to Mr. Wright, the Mayor, and ourselves.

5 **MS. STAHMER:** Okay. That's fine.

6 **COMMISSIONER STEVENS:** So I think we need a
7 minute.

8 **MS. STAHMER:** Well, then, for the time being
9 I will suspend my questions. I only had a short one
10 with regard to that, and I know that Ms. Deevey has
11 some questions she wishes to ask.

12 **COMMISSIONER STEVENS:** Ms. Deevey.
13 Thank you. Ms. Stahmer, thank you.

14 **MS. DEEVEY:** So I gather the idea is that I
15 should begin questioning the witness, and then when you
16 have made a decision on this exhibit, we can -- I'll
17 let her ask --

18 **COMMISSIONER STEVENS:** Yes, ma'am.

19 **MS. DEEVEY:** Thank you.

20 **COMMISSIONER STEVENS:** Absolutely.

21 **MS. DEEVEY:** All right.

22 CROSS EXAMINATION

23 **BY MS. DEEVEY:**

24 Q. Mayor Hanrahan, I noticed that on Page 8 of
25 your prefiled testimony, Lines 12 through 17, you

1 mention one of the information sources, resources that
2 was used by you and others to make decisions about this
3 biomass plant. Would you read that sentence, please,
4 beginning on the end of Line 12 through the middle of
5 Line 17?

6 **A.** Yes. It reads: We gathered information from
7 many resources and considered input from many
8 individuals and groups, including the Alachua County
9 Environmental Protection Advisory Committee, EPAC, a
10 citizen committee that recommended expanding our energy
11 conservation programs, expansion of our solar programs,
12 and a 100 megawatt biomass plant.

13 **Q.** Now, the report from that committee is one of
14 your exhibits, is that not true?

15 **A.** Yes, it is.

16 **Q.** Have you read that report?

17 **A.** Yes, I have.

18 **Q.** So you are prepared to testify about its
19 contents?

20 **A.** Well, since you are the author of that report,
21 I suspect you would do a better job at that than I
22 would, Ms. Deevey, but I'll do my best.

23 **Q.** Okay. Then I want to move forward to your
24 testimony on Page 10 where you discuss the U.S. Mayors
25 Climate Protection Agreement and, which beginning on

1 Page 9 you point out that you signed. And would you
2 read the section -- I think you have already said it,
3 but, basically, on Page 11 when you say in quantitative
4 terms what this agreement does?

5 **A.** Yes. It reads: In quantitative terms, the
6 Mayors Climate Protection Agreement calls for reducing
7 carbon emissions to 7 percent below 1990 levels by 2012.

8 **Q.** Yes, and do you remember when that was first
9 broached, that idea of reducing emissions?

10 **A.** Well, the City of Gainesville joined Cities
11 for Climate Protection and EKLI (phonetic) in the late
12 '90s, in about 1998 or so. I participated in many of
13 their meetings, and am now a member of their board of
14 directors. So that was our first orientation toward
15 carbon emission reduction.

16 **Q.** Yes. Would you turn to Page, let's see, 73 of
17 171 of your exhibits. That is Page 4-2 of that report
18 from the Environmental Protection Advisory Committee.
19 It's called the EPAC Report.

20 **MR. WRIGHT:** Commissioner, I'm sorry. There
21 were several numbers spoken in quick succession, and I
22 didn't quite catch the page that we are looking for.

23 **MS. DEEVEY:** It's 73 of the Exhibit PH-4.

24 **MR. WRIGHT:** Thank you.

25 **MS. DEEVEY:** And 4-2 of the EPAC Report.

1 **MR. WRIGHT:** I have it.

2 **COMMISSIONER STEVENS:** Thank you, Mr. Wright.
3 Thank you, Ms. Deevey.

4 **MS. DEEVEY:** Okay. Oh, I'm sorry. I should
5 have -- oh, that's right.

6 **BY MS. DEEVEY:**

7 **Q.** One of the items on which this whole -- I
8 think most of this chapter is devoted to consideration
9 of offsets and of a predecessor claim by GRU in its
10 original IRP for the coal plant issued in 2005, is that
11 they had offsets which would reduce -- help to reduce
12 the emissions down to a level of 1990, and this was
13 reviewed. And I would like you to read the items
14 beginning on the bottom of that page, Item 2. This is
15 one of the key findings of the EPAC Report review. Yes,
16 Number 2.

17 **A.** I'm sorry, you want me to read that?

18 **Q.** Yes.

19 **A.** Certainly. It says: GRU claims that, quote,
20 unquote, offsets can balance some of these increases in
21 CO2 emissions, but these claims are not valid. I think
22 this is in reference to the previous coal plant proposal
23 which the City Commission subsequently voted down.

24 **Q.** Yes, it is. I didn't want to ask you to read
25 vast quantities, but would you continue to the next page

1 and finish that paragraph?

2 **A.** Certainly. It says: Most of the claims
3 reflect a misunderstanding of offsets and how they are
4 acquired. GRU's erroneous calculations include counting
5 some past GHG reductions twice, and so on. Do you want
6 me to continue?

7 **Q.** Yes. Please read the whole paragraph.

8 **A.** Okay. And mistakenly I don't -- I think I
9 should say I am reading your words, I believe.

10 **Q.** Yes, you are.

11 **A.** So I feel a little unusual about this, and I
12 don't agree with any of them, but I'll certainly read it
13 into the record.

14 **Q.** If I were to read them, I would be accused of
15 being a witness.

16 **A.** Okay. GRU's -- I hope I will able to give you
17 my perspective on them, though.

18 GRU's erroneous calculations include counting
19 some past GHG reductions twice and mistakenly crediting
20 itself with preventing methane emissions from the
21 Alachua County landfills. GRU failed to recognize the
22 importance of the eligibility requirements for quote,
23 unquote, additionality or for the duration of carbon
24 sequestration. GRU claims offsets in excess of
25 255,000 tons of carbon dioxide, but EPAC concludes that

1 only about 33 tons may be valid.

2 Q. Okay. There is a continuing discussion for
3 many pages in this document, but as it is your exhibit,
4 I may refer to it in the closing brief. But I would
5 like to mention something that apparently has confused
6 the witnesses, Mr. Regan, until this day, and that is --

7 MR. WRIGHT: I object. This is
8 argumentative. She is accusing my witness of being
9 confused.

10 MS. DEEVEY: There is a concept which --

11 MR. WRIGHT: There needs to be a question.

12 COMMISSIONER STEVENS: Right. Ms. Helton?

13 MS. DEEVEY: May I continue?

14 COMMISSIONER STEVENS: Is there a question?

15 MS. DEEVEY: Yes. There is a concept
16 called --

17 COMMISSIONER STEVENS: I have an objection.
18 Let me handle the objection, please.

19 MS. HELTON: I don't think I have heard a
20 question yet, Mr. Chairman.

21 COMMISSIONER STEVENS: I did not either, but
22 I was --

23 MS. DEEVEY: Okay.

24 BY MS. DEEVEY:

25 Q. Are you familiar, Mayor, with the concept of

1 additionality as it is applied in connection with
2 credits for CO2 emissions or for crediting it with Kyoto
3 goals?

4 **A.** I'm somewhat familiar with it. What I would
5 respond in reference to the statement that you asked me
6 to read and with respect to that concern is that
7 Gainesville Regional Utilities uses federal guidelines
8 for its carbon accounting procedures. They are
9 conducted by professional staff who have expertise in
10 following those protocols, and I believe that they have
11 followed the federal protocols for carbon accounting
12 correctly.

13 **Q.** Do you believe that those protocols were
14 followed in the tables that you have submitted in
15 connection with the Mayor's plan for reducing emissions
16 to 7 percent, or are those protocols followed in some
17 other connection with GRU's emissions of CO2?

18 **A.** The same protocols were followed. But now
19 there are continuous updates to those, to the carbon
20 accounting that Rob Clement (phonetic) produces for the
21 utility using the Department of Energy's 1605(b)
22 standard, and those are the protocols that I believe
23 were also used for producing the most recent updated
24 carbon reduction estimates, which have been provided by
25 the utility. I cannot speak to the validity of the

1 information that was provided more than five years ago
2 in the EPAC report, however.

3 **MS. DEEVEY:** Let the record show, please,
4 that we requested the petitioners to allow us to put in
5 evidence the most recent report by consultants to GRU
6 documenting the compliance with what is called 1605(b),
7 showing their CO2 emissions, and they have refused to
8 allow us to put this in evidence.

9 **COMMISSIONER STEVENS:** Commissioner Skop.

10 **MS. DEEVEY:** Thank you.

11 **COMMISSIONER SKOP:** Thank you, Mr. Chairman.

12 Just as, I guess, as a point of order, it
13 seems to me when there is objections maybe they are not
14 going as smoothly as they should. And I know we are
15 time constrained. We have a lot to do here. So just
16 to the parties, Ms. Deevey, Ms. Stahmer, Mr. Wright --
17 Mr. Wright, you're an attorney, so you're doing it
18 correctly -- but if there is an objection from
19 Mr. Wright, just let him speak to the objection, and
20 you can respond briefly. But please wait your turn so
21 the Chairman, whoever it is at the time, can sort that
22 out, and we can make a ruling as to the objection,
23 whether it be sustained or overruled. And I think that
24 would go a lot smoother for all of us. Thank you.

25 **COMMISSIONER STEVENS:** Thank you,

1 Commissioner Skop.

2 Mr. Wright.

3 **MR. WRIGHT:** I would simply like to clarify
4 that we did not agree to the stipulated admission of
5 the 1605(b) report. That was all we did not agree to.

6 **COMMISSIONER STEVENS:** Yes, sir. Thank you.

7 Ms. Deevey, did that complete your questions?

8 **MS. DEEVEY:** I have some more, but I don't
9 think they are that important, and we are short of
10 time, so I will conclude my questions.

11 **COMMISSIONER STEVENS:** Okay. I believe we
12 have Exhibit Number 86. Does everybody have a copy of
13 a -- entitled Docket Number 090451-EM, Response to
14 Intervenor Deevey's First Set of Interrogatories? And,
15 Ms. Stahmer, I believe you had a question on that.

16 (Exhibit 86 marked for identification.)

17 **MS. STAHMER:** Yes, I did. Thank you. If I
18 may proceed.

19 CONTINUED CROSS EXAMINATION

20 **BY MS. STAHMER:**

21 **Q.** Madam Mayor, I assume you have a copy of that
22 now?

23 **A.** Yes, I do.

24 **Q.** And I draw your attention to the lines towards
25 the end of the list of dates. You'll see that in the

1 blue area it does say 4/28 and 5/12/2008.

2 **COMMISSIONER STEVENS:** We don't have a
3 colored copy.

4 **MS. STAHMER:** Excuse me?

5 **COMMISSIONER STEVENS:** There is not a colored
6 copy. I think you said blue area.

7 **MS. STAHMER:** Oh, I'm sorry.

8 **BY MS. STAHMER:**

9 **Q.** Well, as you go down the list from the top
10 towards the bottom you will come upon the dates of
11 4/28/2008 and 5/12/2008.

12 **A.** Uh-huh.

13 **Q.** And there is the notation that these were city
14 commission meetings, and in those two meetings
15 evaluation of the biomass fuel generation plant was
16 discussed. Is that correct?

17 **A.** Yes, that's what the document shows.

18 **Q.** And then further down you'll see on 4/16/09
19 there was a commission meeting about the stewardship
20 incentive plan. I think that had to do with
21 sustainability issues, is that correct?

22 **A.** Yes. And that particular item I know also was
23 heard on multiple occasions in the regional utilities
24 committee, which I did not serve on at the time, but
25 three of our Commissioners heard that in much greater

1 detail in smaller sessions, yes.

2 Q. And then on May 7th, 2009, there was a
3 meeting. And do you remember what happened on that
4 date?

5 A. I believe that was the date in which the City
6 Commission unanimously ratified the contract with GREC,
7 is my recollection of that meeting date's significance.

8 Q. Thank you. And do you remember what the
9 contract price was at that time?

10 MR. WRIGHT: Excuse me. I just need to
11 caution the witness not to reveal confidential
12 information. The question as asked is answerable, but
13 if the question becomes what was the contract price,
14 that is confidential.

15 COMMISSIONER STEVENS: Thank you. Thank you,
16 Mr. Wright.

17 THE WITNESS: Certainly, the contract
18 information was provided to the elected officials, and
19 we did review it prior to the vote, if that's the
20 question. At least I can speak for myself, I'm sorry,
21 that I did.

22 BY MS. STAHMER:

23 Q. You don't recall the contract amount being
24 stated in the? Presentation at that meeting?

25 A. I believe that that was a matter that was

1 handled as a confidential matter.

2 Q. Do you remember seeing the newspaper report in
3 the *Gainesville Sun* the next day?

4 A. Not specifically. I read the *Gainesville Sun*
5 every day, as you might imagine, but I don't recall that
6 specific day.

7 COMMISSIONER STEVENS: Madam Chairman.

8 CHAIRMAN ARGENZIANO: I'm not sure if you're
9 trying to get to what is confidential information. And
10 if you are, we --

11 MS. STAHER: I don't think it is.

12 CHAIRMAN ARGENZIANO: Okay.

13 MS. STAHER: But I am looking for the --
14 it's not in this one. That is a question perhaps we
15 can raise for Mr. Regan at another point, since he was
16 also participating in those meetings. So that is the
17 end of my questioning for the Mayor. Thank you.

18 COMMISSIONER STEVENS: Thank you, Ms.
19 Stahmer.

20 Mr. Sayler or Ms. Brown.

21 MR. SAYLER: Mr. Chairman, if you would give
22 me a moment or two to kind of organize my questions, so
23 I can reduce a number of them.

24 COMMISSIONER STEVENS: Take five minutes?
25 Take five.

1 **COMMISSIONER KLEMENT:** I can talk.

2 **COMMISSIONER STEVENS:** Okay. Go ahead,
3 Commissioner Klement.

4 **COMMISSIONER KLEMENT:** I have a few questions
5 for the Mayor, if I may.

6 **COMMISSIONER STEVENS:** Okay.

7 **COMMISSIONER KLEMENT:** Thank you, Mayor. Do
8 you have knowledge of how long it typically takes to
9 build a generating plant from first concept to turning
10 it on?

11 **THE WITNESS:** Well, my experience with this
12 plant is that it was under discussion before I was
13 elected Mayor in May -- I took office in May of 2004,
14 and the initial discussions about a new baseload
15 generating unit had started in 2003. I had served
16 prior to that and had been term limited in '02. And so
17 from the earliest discussions to today it has been
18 about seven years, and then it will be about three
19 years under construction assuming, which is I realize
20 is a great assumption, that we make it through the
21 Public Service Commission's deliberations and then
22 before the Governor and Cabinet, as well. And DEP
23 obviously has permitting. But my perception is from
24 first conception to turning on the switch, it's
25 probably on the order of ten years.

1 Well, that was maybe an overestimate. That
2 takes into account Gainesville's unique desire to
3 discuss things until we have every opportunity. I
4 think that, you know, at the bare minimum to get
5 through the regulatory process and to get through a
6 public decision-making process and to go to
7 construction would probably be on the order of at least
8 five or six years if you truncated the public
9 discussion.

10 **COMMISSIONER KLEMENT:** Perhaps we can get
11 some specific answer from either the other witnesses or
12 the staff, you know, but that's a good range. Well,
13 I'm trying to understand, given the fact that questions
14 are raised about the need factor since you won't need
15 it for capacity until 2023. This takes it back.
16 You're starting to talk about it 20 years from 2003,
17 and you wouldn't have needed it, according to what we
18 have read, until 2023. What is the reason for -- what
19 is the real reason for starting so early on this
20 project?

21 **THE WITNESS:** Well, Commissioner Klement, I
22 think that is an excellent -- what you raise is an
23 excellent point, and it is I think an important --
24 there are a couple of important distinctions layered in
25 there.

1 Number one, there are different types of
2 energy generating capacity. And today, as you heard
3 testimony about earlier, you know, we could run our
4 power plants full on and meet our own need even on the
5 coldest day of the winter or the hottest day of the
6 summer. We don't generally do that. In fact, we have
7 a contract with Progress Energy to purchase 50
8 megawatts of firm baseload capacity because it's more
9 economical than running the inefficient, out-of-date
10 natural gas generating units that do exist in our
11 fleet.

12 But, you know, at the last hearing we talked
13 about automobile analogies. It is kind of like having
14 a -- you know, my parents had an old Dodge Rambler. If
15 you needed to take it down to the Winn-Dixie, it would
16 get you there, but you wouldn't take it to Miami, for
17 goodness sakes. So, you know, there are different
18 types of generating need.

19 The other thing that I would mention is that
20 we view it from the perspective of what happens when
21 our Deerhaven Unit is down, which, you know, we bring it
22 down on a planned basis once a year, but it goes down
23 on an unplanned basis increasingly because it's also
24 increasingly older and in need of unanticipated
25 repairs. So there are different types of planning that

1 goes into all of that. And, clearly, I am not an
2 expert at that, but I do rely on experts to give us
3 their best estimate of what we need to be doing.

4 **COMMISSIONER KLEMENT:** Was the decision to
5 move ahead with this tied to the City's decision to
6 sign the Mayors Climate Protection Agreement in 2005 so
7 you could meet that pledge?

8 **THE WITNESS:** Well, this is my response to
9 that. To be clear, we had already been underway in
10 terms of a baseload power discussion. We had come to
11 the public policy decision, I think rightly so, which
12 was later affirmed by this body that we should not be
13 increasing our reliance on coal. That we were already
14 over-reliant on coal. There was a robust discussion
15 happening here in this room, I believe, that I think
16 was an appropriate discussion. And so we made the
17 determination that that was not in our best interest.

18 As I think you may have already heard
19 testimony on, we subsequently moved from the Rate
20 Impact Measure Test to the Total Resource Cost Test in
21 order to enhance our conservation. And our customers,
22 about 10 percent of them, have taken advantage of one
23 of our many different conservation programs. We
24 adopted net metering for solar. We adopted a solar
25 feed-in tariff. You know, I view this as part of an

1 overall package of efforts that we have made. And we
2 have made some other decisions on the general
3 government side, as well, like resynchronizing all of
4 our traffic lights. We didn't do that to meet the
5 climate protection agreement; we did it because people
6 are sick of sitting in traffic, but it had emission
7 reduction benefits, as well. And I would put this sort
8 of in the same category.

9 We need a new baseload power plant, somebody
10 who will provide us baseload power. You know, we are
11 getting it from Progress now, but this has the further
12 benefit of making it possible for us to meet what we
13 believe is a very ambitious carbon reduction goal that
14 we voluntarily, along with other -- 80 other mayors in
15 Florida, I might note, including most of our major
16 cities, signed the same agreement.

17 **COMMISSIONER KLEMENT:** Okay. Regarding the
18 price, without going into anything confidential, I
19 don't think I'm aware of anything confidential. But I
20 read -- between reading the record and what I have
21 heard today, I have seen figures go from an initial 200
22 million to 300 million to 500 million, and why is --
23 did the cost go up that much in four years, five years?

24 **THE WITNESS:** Commissioner Klement, my own
25 response to that is that, you know, today we have been

1 hearing 200 and 300 and 500. Those are unfamiliar
2 figures from the perspective of -- because we are not
3 logging that as debt on our books. We have entered
4 into an agreement for delivery of a product at a price
5 that we are comfortable with. And so I think it would
6 be better for me to defer to somebody who can respond
7 to your -- I think it's a valid question. I'm curious
8 to hear the answer myself, but I'm not in the best
9 position -- person to respond to it.

10 **COMMISSIONER KLEMENT:** Do you know further to
11 the question that the intervenors were -- the line of
12 questions, why on the handout, the number -- Exhibit
13 Number 85 where the three, the three proposals were
14 considered, but Nacogdoches is the highest, and that
15 was the one that was selected. Why?

16 **THE WITNESS:** My recollection -- I'm going to
17 defer to the staff, because they are trying to
18 communicate with me and I'm not sure what they are
19 saying. My recollection, and I think that we could get
20 a clearer answer, one of the proposers, I think, was
21 not as tested in terms of their demonstrating they
22 actually had plants operating or under construction. I
23 think that that was the Sterling Plant proposal.
24 Covanta, I think, was a well respected responder, but
25 I'm not certain all of the details of -- what we had

1 put out there was actually a broad request for lots of
2 different types of proposals. We sort of said, tell
3 us, you know, whatever you can do that will help us
4 meet our energy -- renewable energy goals and our, you
5 know, most effective cost considerations, and so on.
6 And it was multiple different issues that went into
7 that decision-making process, but I think that you
8 would get a more to-the-point response if we asked the
9 staff who actually reviewed each of the proposals in
10 greater detail.

11 **COMMISSIONER KLEMENT:** That's a good idea.

12 And I know -- excuse me for interrupting, but I know
13 that we will be able to ask those. I have one more,
14 and this is an attempt to get your insight and I
15 probably will ask that of them, too. As I heard this
16 asserted this morning, would more rigorous conservation
17 measures by the City eliminate or delay the need for
18 this plant?

19 **THE WITNESS:** I believe it would perhaps
20 delay the need. In fact, I believe when we first
21 started working on the proposal, the anticipation was
22 that we would need new baseload generation by 2013,
23 because that is actually the year that the Progress
24 contract goes away. I think, you know, that is -- you
25 know, we could have that discussion. My perception is

1 that it has been pushed out into the future somewhat
2 because of two things, both conservation and maybe more
3 significantly the weakening economy, and the fact that,
4 you know, everybody is cutting back and there's less
5 growth than we had projected. So those are certainly
6 factors. I think it's worth mentioning that between
7 now and 2023 we are actually taking about 148 megawatts
8 off-line because it has reached its natural lifetime
9 and has been fully depreciated. So, you know, there
10 are all kinds of considerations that go into, you know,
11 when do you actually need this plant.

12 **COMMISSIONER KLEMENT:** Okay. Thank you.

13 That's all, Mr. Chairman, for now.

14 **COMMISSIONER STEVENS:** Madam Chair.

15 **CHAIRMAN ARGENZIANO:** Just to -- I think
16 Commissioner Skop had his hand up. I may have jumped
17 it. I apologize.

18 **COMMISSIONER STEVENS:** Ladies first.

19 **CHAIRMAN ARGENZIANO:** Just to -- thank you.
20 Just to piggyback off the last question, did you say
21 that you felt there were conservation methods that
22 could take place that would delay or mitigate the
23 project?

24 **THE WITNESS:** Well, I'm -- I mean, I have my
25 own personal bias because, you know, my husband and I

1 tend to live very cautiously with our own utility
2 bills. Our average customer uses over 800 kilowatt
3 hours a month, and last month my bill was 423. So if
4 you ask me, yes, people could be conservative. We have
5 had really good response to the programs we have put
6 out there, from the low income energy efficiency
7 program, which has helped people reduce their bills on
8 average 20, 25 percent, to the business incentives,
9 which have been tremendously accepted in the business
10 community and have seen substantial investment. We are
11 excited about what I would editorialize as one the few
12 good things the Legislature did around energy this past
13 session, which is the adoption of the property assessed
14 clean energy. We hope to be one of the first
15 communities to fully try to deploy that. So, yes, I
16 think there are a lot of good things that we could do.

17 **CHAIRMAN ARGENZIANO:** Okay. And that was
18 part of the question. I think you also said, and if
19 you could just tell me if I'm right or wrong, that you
20 felt that there was less of a need, people were moving
21 out, there was -- is that what you said?

22 **THE WITNESS:** Well, Gainesville has been
23 actually one of the fastest growing metro areas in the
24 state. We have -- you know, like Tallahassee, we are
25 somewhat buffeted from the terrible economy because of

1 the big institutions. So we haven't actually seen a
2 loss in population in our own community, but we have
3 seen a decreasing rate of increase, if you know what
4 I'm talking about.

5 **CHAIRMAN ARGENZIANO:** Yes. In the
6 percentage, and that's what I wanted, to clarify what
7 you were saying, because one of the things that I'm
8 supposed to look at as a Commissioner is the -- and I
9 guess it's right in front of me, the Commission shall
10 also expressly consider the conservation measures taken
11 by or reasonably available to the applicant or its
12 members, which might mitigate the need for the proposed
13 plant and other matters within its jurisdiction which
14 it deems relevant. And I think that's part of the
15 reason Commissioner Klement was asking you that. And I
16 just wanted to make it clear, because that is one of
17 the things I have to look at as a Commissioner, if
18 conservation could mitigate or postpone the need to do
19 something.

20 **THE WITNESS:** Yes. And what I would just
21 respectfully note, though, is that among all of the
22 generating utilities in Florida, we are already the
23 most energy efficient in terms of average kilowatt
24 hours per customer, and we also are one of the few that
25 use the TRC rather than the RIM test, if I understand

1 correctly. So I think, you know, we're a poster child
2 for what we hope others will do, and we wish to
3 continue to be that.

4 **CHAIRMAN ARGENZIANO:** Absolutely. We
5 appreciate that. I know I do. I think it's great that
6 you do. Thank you for answering the question.

7 **COMMISSIONER STEVENS:** Commissioner Skop.

8 **COMMISSIONER SKOP:** Thank you, Mr. Chair.
9 And good afternoon, Mayor Hanrahan.

10 I just have a few questions. And, again,
11 part of the Commission's job is to adhere to the
12 statutory criteria. I know there are some arguments
13 made as to the economic development aspects, and I
14 appreciate those, but, again, I think it's the purview
15 of the Commission to be skeptical and to ask difficult
16 questions, and I'm sure that you will be able to answer
17 these. And I think today has been a little bit more
18 informative to answering some of the questions and
19 concerns I had, and I think some of the questions that
20 I'm going to propound upon you I will get some
21 additional clarity on that.

22 But, just briefly, I think you touched upon
23 this before, but I believe in your prefiled
24 supplemental testimony you spoke regarding the U.S.
25 Mayors Climate Protection Agreement. Can you briefly

1 summarize that again?

2 **THE WITNESS:** Yes. Basically, it was adopted
3 by more than 1,000 cities across the U.S, including
4 most of the largest cities in the U.S. and also in
5 Florida, to try to reduce our carbon emissions to 7
6 percent below 1990 levels by the year 2012. If the
7 plant is brought on-line in 2013, according to the
8 standards that we use, we will meet that goal by 2013.

9 **COMMISSIONER SKOP:** All right. Thank you.
10 And this was a voluntary agreement, correct?

11 **THE WITNESS:** Yes, sir.

12 **COMMISSIONER SKOP:** Okay. And this agreement
13 was authorized pursuant to a resolution passed by the
14 City Commission?

15 **THE WITNESS:** That's correct.

16 **COMMISSIONER SKOP:** Okay. And does that have
17 a binding effect, or GRU is not a signatory to that, so
18 what is the binding effect, if any, on the city and
19 GRU?

20 **THE WITNESS:** It's a policy document from the
21 Commission that the staff has very, I think,
22 responsibly sought to meet the policy direction of the
23 elected officials. It has no regulatory effect. It's
24 a, you know, it's a statement of goodwill.

25 **COMMISSIONER SKOP:** Aspirational?

1 **THE WITNESS:** That's exactly right.

2 **COMMISSIONER SKOP:** I just wanted to turn
3 your attention to the current generation capacity of
4 GRU for a second, because this is the one where I'm
5 trying to fill in the piece here, and I'm missing
6 something, and I'm trying to understand why that is.
7 So, hopefully, we can work through this. Does the City
8 Commission essentially function as the board of
9 directors for GRU?

10 **THE WITNESS:** Yes, sir.

11 **COMMISSIONER SKOP:** Okay. And subject to
12 check, would you agree that with the exception of the
13 South Energy Center, a small distributed generation
14 turbine that entered service last May, that GRU's
15 installed generation capacity hasn't changed since
16 2001?

17 **THE WITNESS:** That I believe was probably
18 when the Kelly repowering took place. Well, we have
19 seen some growth from our solar net metering and our
20 solar feed-in tariff, but in terms of central plant,
21 you're absolutely right, yes, sir.

22 **COMMISSIONER SKOP:** All right. Great. Thank
23 you. And thank you for that clarification. I had not
24 considered that because I thought that would be
25 incremental. I guess having served as an elected

1 official, I think in your resume you spoke for 12
2 years, can you offer any explanation as to why GRU
3 currently has an abundance of excess capacity well
4 above its reserve margin?

5 **THE WITNESS:** Well, I'll tell you my
6 perception, but as you know, our staff can probably
7 answer with a more technically correct response, but
8 I'll explain it as I understand it in sort of
9 layperson's terms.

10 We have a number of old gas combustion
11 turbines that we -- they operate, we use them when
12 necessary, but they aren't by any means the state of
13 the art, and we expect them to retire, again, within
14 the next ten years. And so those are counted, I think,
15 appropriately and correctly toward our reserve margin,
16 but they certainly are not something that we would run
17 on an economical basis day-in and day-out.

18 And my understanding from our staff, you
19 know, they like to let us know when we are within that,
20 quote, unquote, danger zone in the hottest part of the
21 summer or the coldest part of the winter. And this
22 January we went into that reserve margin of 15 percent
23 because you all know how cold it was this year. So
24 that is kind of my lay understanding of it.

25 And, again, for example, we had an unplanned

1 outage at our oldest baseload unit at Deerhaven this
2 spring that took us offline, and we had to buy more
3 power from the IOUs around, which, you know, frankly,
4 we'd rather not be held hostage by, if I can use a term
5 of art.

6 **COMMISSIONER SKOP:** Okay. All right. Thank
7 you for that, and that helps clarify some aspects. You
8 previously mentioned about the power purchase
9 agreements that GRU entered into, and I guess that was
10 for an agreement to purchase 49 megawatts of capacity
11 in 2008, and I think that has since been increased to
12 110 megawatts from 2009 to present.

13 **THE WITNESS:** I'm going to look at the staff.
14 I know that there is a summer amount and there is a
15 year-round amount, and I think it adds up to 100, but I
16 wouldn't absolutely swear to that.

17 **COMMISSIONER SKOP:** Okay. And that's
18 basically because the cost of purchasing that power at
19 the margin is cheaper than the economic dispatch of the
20 old combustion turbines.

21 **THE WITNESS:** That's exactly right.

22 **COMMISSIONER SKOP:** Okay. All right. Great.
23 Thank you. And, I guess, hopefully, these last two on
24 this line of questioning will help me understand
25 something better. Did entering into the U.S. Mayors

1 Climate Protection Agreement impact GRU's ability to
2 fully utilize its generating assets because of
3 emissions?

4 **THE WITNESS:** I don't believe so. I mean, if
5 we were trying to use different generating assets just
6 to meet that agreement, we'd probably reduce our
7 running on coal, and we have not done that because it
8 is after our ownership in the nuclear plant in Levy
9 County. Aside from that, it's our most economical
10 unit. So we have not made decisions to meet our
11 climate protection goals that are not in our best
12 economic interest, and we have not reduced our own
13 generating capacity.

14 The contract from Progress is actually a mix
15 of natural gas, coal, and nuclear, and so I don't know
16 how they count that. But, again, that's the kind of
17 thing that our folks who work in the carbon accounting
18 take a look at what they are dispatching and make an
19 estimate.

20 **COMMISSIONER SKOP:** Thank you. And then did
21 entering into the U.S. Mayors Climate Protection
22 Agreement impact GRU's ability to generate and sell all
23 of its excess capacity at the margin through off-system
24 sales?

25 **THE WITNESS:** No. No, sir. Huh-uh.

1 **COMMISSIONER SKOP:** All right. Does GRU
2 contribute to funding the budget for the City of
3 Gainesville?

4 **THE WITNESS:** Yes, sir. I think you're loyal
5 Gator, and a loyal Gainesvillian, and certainly a
6 ratepayer and been an active citizen, and you know that
7 it does, my dear.

8 **COMMISSIONER SKOP:** Okay. All right. I'm
9 just trying not to, you know, be -- you know, get the
10 questions out there. But with respect to the EPAC
11 analysis, I'll just kind of cut to the chase, it
12 explained how the revenue transfer to the general fund
13 exists and under what circumstances and how the City
14 stands to benefit from off-system sales, not
15 necessarily its wholesale, but three percent of any
16 revenue that GRU generates from off-system sales.

17 With respect to the new generation, which I'm
18 not interested, I'm worried about the existing
19 generation, is GRU fully utilizing its ability to
20 deploy its assets to make money for the city? I know
21 that they have entered into the climate change
22 agreement. I've got that. I know that that is
23 designed to curtail emissions. But what I'm really
24 concerned about is that there is a good faith effort to
25 dispatch the generating assets and to seek recovery,

1 or, you know, produce revenue from that, because at the
2 end of the day the taxpayers and the ratepayers have
3 already paid for those assets, and I hate to see them
4 go idle.

5 **THE WITNESS:** Yes. And I think that is a
6 legitimate question. You know, I'll allow the staff to
7 respond to it because I think they will provide a
8 more thorough response than I would. I will tell you
9 anecdotally that I have never -- you know, in general,
10 people accuse GRU of being too aggressive in terms of
11 making sure that they are, you know, making every
12 dollar that they can. So I wouldn't guess that that
13 would be a typical criticism, but I would say that they
14 have been, you know, thoughtful and planful about how
15 do you balance all of the community's needs.

16 And I think you have gotten a good view this
17 morning of the diverse interests and needs that we have
18 been trying as best as we are able to respond to. And
19 I think that our staff reflects the policy direction
20 and the community orientation as best as they are able
21 given the constraints that they have.

22 **COMMISSIONER SKOP:** Thank you. And you have
23 done a very good job of answering my questions and
24 reading my mind, because a lot of the questions have
25 fallen by the wayside, and there's really no need to go

1 into the minutia of the EPAC analysis. Which, again,
2 when it was prepared, I mean, it concluded that GRU had
3 excess capacity. But I think that your testimony in
4 identifying the fact that the older combustion turbines
5 at Kelly are problematic and have high heat rates, and
6 not really economically dispatched, but moreover, I
7 think in the testimony I read that there seems to be
8 some sort of uncertainty regarding the efficiency at
9 the Kelly combined cycle unit, which really hasn't
10 panned out the way that many hoped it would, or it
11 seems to have some operational problems. Is that
12 correct?

13 **THE WITNESS:** I think, Commissioner Skop,
14 you're really narrowing in on exactly where the issues
15 are, but I think it would be the better part of valor
16 for me to allow the technical staff to answer your
17 technical questions.

18 **COMMISSIONER SKOP:** Okay. Just a couple of
19 more questions, Madam Chair.

20 **CHAIRMAN ARGENZIANO:** Mr. Chair.

21 **COMMISSIONER SKOP:** Mr. Chair, sorry. I
22 can't tell. The gavel has been moved so far today, I
23 can't tell who's holding it.

24 But, Mr. Chair, Madam Mayor, just some quick
25 questions regarding the underlying contract. The

1 transparency of the contract has been brought into
2 question by Ms. Cooper, Mr. Bussing, and other members
3 of the community. And I know as the prehearing officer
4 I've had to rule on confidentiality, the redacted
5 information, and Florida law is very broad and provides
6 blanket protection. But in the interest of
7 transparency, do you feel that the City of Gainesville
8 could have required full transparency of the contract
9 as a prerequisite for entering into the contract
10 itself, not necessarily the background information?

11 **THE WITNESS:** Well, I'll tell you what the
12 staff has communicated to me, and I think to be very,
13 very clear, all of you in your capacity as Public
14 Service Commissioners, and Senator Argenziano certainly
15 knows from her very long experience in public service
16 that information comes to elected officials in lots of
17 different ways. What folks see here when the cameras
18 are running is a small portion of what's happening in
19 terms of your preparation for the meeting, your
20 briefing by staff, and by citizens who come to see you,
21 who stop you at the grocery store, who send you e-mail,
22 and so on.

23 And, you know, we certainly were thoroughly
24 briefed. You know, I can speak for myself, and I know
25 that they seek to be even-handed, because they will get

1 in trouble if they are not, that we were thoroughly
2 briefed on all of the contract provisions. And there
3 were certain areas that we honed in on that we had
4 specific concerns on that either were sent to committee
5 or they were discussed between, say, myself and the
6 utility director, or myself and the attorney, or the
7 auditor, or something else.

8 But the concern that I would have about
9 putting the whole thing out there and allowing anybody
10 to see it on the Internet as they can with every other
11 document that we vote on is that it would put out there
12 to the forestry producers exactly what we were willing
13 to pay for forestry products. And I would suggest that
14 that would -- you know, we sure wouldn't get a better
15 price than what was put out there. And that was the
16 real concern, I think, the legitimate concern that we
17 had. And, you know, I don't know if I can be real
18 specific, but I will tell you that I think that the
19 contract is working as we had intended it to work.

20 **COMMISSIONER SKOP:** Okay. And I appreciate
21 that. I can understand specifically on the variable
22 fuel cost that would be something that otherwise you
23 would be held hostage. I was referring more to the
24 generic information that appears to be kind of blanked
25 out like --

1 **THE WITNESS:** That's exactly right.

2 **COMMISSIONER SKOP:** All right. Just a couple
3 of more questions. The Public Service Commission, to
4 be clear, does not regulate GRU's rates, correct?

5 **THE WITNESS:** That's right. I mean, I'm sure
6 you all get complaints occasionally, but I think you
7 refer them right on back to us, which is fine.

8 **COMMISSIONER SKOP:** That leads me to my next
9 question, and it's probably perhaps the most
10 provocative question, so don't take offense, but I'm
11 trying to do my job and be skeptical. But GRU's own
12 documents in this proceeding indicate that GRU customer
13 bills will increase notwithstanding the fact that GRU
14 is expected to sell 50 percent of the biomass power to
15 other utilities. So, accordingly, under the proposed
16 petition, GRU customers will have to pay for new
17 generation that is being sold and exported elsewhere in
18 the near term. And based on the above -- I guess my
19 question would be, frankly, this: Isn't this
20 effectively a tax on GRU ratepayers in support of
21 economic development?

22 **THE WITNESS:** Well, let me answer actually
23 with your own staff report, which I was thoroughly
24 impressed at the work that your staff has done, I
25 think, with rather deep input from some of you. And on

1 the -- this is the original staff report that came out
2 on the 28th of January, 2010. And on Page 21 of that
3 Table 6.2 it compares the costs in 20-some-odd -- I
4 think there were 26 or 28 initial scenarios run in
5 terms of comparing this cost to the other reasonable
6 options we had available to us. I think that's the
7 right table. No, I'm sorry. It's the previous page,
8 Page 20. They compared the GREC proposal to a
9 combustion turbine, to combined cycle, to pulverized
10 coal with and without carbon capture. And it looked at
11 all of those, you know, depending on what the price of
12 fuel was doing, depending on whether or not there was
13 CO2 regulation.

14 I think subsequent to that, again, on your
15 behalf in an abundance of caution your staff has asked
16 for and our staff has provided more than 100 different
17 cost scenarios. And it's everything from do you sell
18 none of this excess capacity to do you sell it all, is
19 there carbon regulation, is there no carbon regulation?
20 And in the first cases that we ran, the only scenario
21 that was more cost-effective than this proposal was the
22 scenario of a coal plant with no carbon regulation.

23 Now, as I already said, we agree with you
24 all, but doing a coal plant in this state at this time
25 is not a great idea. And, you know, we could all

1 speculate about carbon regulation. I think Mr.
2 Brinkman (phonetic) spoke about the fact that Lisa
3 Jackson, the EPA Administrator, has written a letter to
4 Senator Rockefeller telling him that she intends to
5 move forward with regulating stationary sources in 2011
6 under the authority of the Clean Air Act.

7 You know, we could look at a do-nothing
8 alternative, but my understanding is that everything we
9 have looked at is in comparison to the do-nothing
10 alternative. And, again, we ultimately are likely to
11 have to purchase baseload power off the grid if we
12 don't build it ourself. We're doing that today.

13 **COMMISSIONER SKOP:** I understand. And, I
14 mean, I think that today's line of questions help
15 clarify exactly why that is, because previously it
16 didn't jump off the paper. I mean, we had to kind of
17 probe and understand the CT situation and look at the
18 heat rates.

19 **THE WITNESS:** Yeah.

20 **COMMISSIONER SKOP:** I think what concerns me,
21 you know, is two-fold. And I will just ask you to
22 speak briefly to it. Obviously, the City has taken a
23 position that, you know, there is opportunity costs and
24 risks associated with doing something and not doing
25 something. But in the EPAC report, I believe, on Page

1 88 it talked about one of the key findings, I believe,
2 was a wait-and-see option. And, you know, typically in
3 the state of Florida a combined cycle plant, a large
4 one, that one of our major IOUs would do could be
5 brought to the Commission in a need determination,
6 approved, and built within four years. So it seems to
7 me that there is, you know, a lead time, but certainly
8 not a ten-year lead time of getting baseload generation
9 in, whether it be biomass or whether it be, you know,
10 combined cycle.

11 So it seems to me on the timing aspect, what
12 was the City Commission's perspective in maybe not just
13 pushing this out a little bit further such that, you
14 know, it's more commensurate with the need of the City
15 and not having to sell off the excess electricity.
16 Because 100 megawatts of biomass is a large capacity,
17 if not probably the largest in the nation.

18 **THE WITNESS:** Yes. You're absolutely right
19 about a number of points there. First of all, you are
20 right about the point that a gas CT can be built a lot
21 quicker than a solid fuel facility of any type. The
22 concern about a gas CT, though, is about the
23 fluctuation in the price of fuel, as I'm sure you know.
24 And so that was our concern. I mean, that is, you
25 know, frankly, probably the next best option, but that

1 option has the risk associated with what's going to
2 happen in the fuel market. So that was the reason that
3 we were not oriented toward natural gas is just because
4 of the unpredictability and the wild fluctuations that
5 can occur in terms of the cost to the customer. There
6 was a second part of your question which I think I lost
7 track of.

8 **COMMISSIONER SKOP:** That's fine. Let me move
9 on to two aspects.

10 **THE WITNESS:** Okay.

11 **COMMISSIONER SKOP:** With respect to risk
12 mitigation, I have looked at the response to Staff's
13 Fourth Set of Interrogatories 80 through 106, and Page
14 14. I won't bore you with the details or looking at
15 the page, but it basically -- actually, on Page 13, and
16 basically on that page it showed the excess capacity to
17 maintain reserve margin. It shows it, obviously, high
18 in the current years until 2023. And that's on the
19 assumption that 50 percent of the remarket of
20 non-renewed wholesale power, and I think you guys sell
21 wholesale power to not only Clay, but Alachua. Again,
22 does the City foresee risk in the fact that those
23 wholesale power contracts won't be renewed, because if
24 they aren't renewed it seems to me that the capacity
25 deficit -- I mean, the capacity excess goes up even

1 higher.

2 **THE WITNESS:** I think that's a fair
3 consideration. You know, my perception is that this
4 tranche of energy will be well marketable. You know,
5 we have talked about carbon regulation, but there is
6 also just the desire for folks to green their
7 portfolio. We have had a lot of positive conversations
8 with our sister municipal utilities that have
9 particular interest around these same issues.

10 You know, we hope that some day the
11 Legislature does take up some consideration of a
12 renewable portfolio standard, because that certainly
13 has been adopted in more than 20 states in the nation.
14 And we see -- you know, if it's adopted at the federal
15 level without having been adopted in Florida, then I
16 think we will miss opportunities for the job
17 development here in our state and the other benefits.
18 I mean, I'm preaching to the choir, I imagine, on that.
19 So there are other considerations that I believe will
20 make this very marketable power.

21 **COMMISSIONER SKOP:** Okay. And then two final
22 points, Madam Mayor. On Page 17 of your Prefiled
23 Supplemental Testimony you talk about, on Lines 7 and
24 8, utilities purchasing a share of GREC during its
25 first ten years of operation. And one thing I noticed

1 the other day when I had the motion hearing for the
2 nondisclosure agreement, in some of the nondisclosure
3 agreements that have been executed by GREC with the
4 various municipalities that GREC and GRU seek to sell
5 power to, the way those agreements were styled, it was
6 not only to purchase power, it may even be purchasing a
7 percentage ownership interest in the assets. Is that
8 still in play or in consideration, because that could
9 mitigate risk, to some degree?

10 **THE WITNESS:** I'm going to have to defer the
11 response to that to a subsequent speaker. I'm not
12 specifically knowledgeable of that.

13 **COMMISSIONER SKOP:** I think we are almost
14 done. Two more questions.

15 **THE WITNESS:** Okay.

16 **COMMISSIONER SKOP:** It has gone far smoother.
17 One other concern or risk that I have, trying to get
18 some handle on, in response to Interrogatory Number
19 117, they look at the scenario that might exist if the
20 project were delayed either by permitting, or
21 construction, or something that may even be outside the
22 control of the Commission at this stage. And it looks
23 as if the rec market may or may not develop. So worst
24 case scenario, if you will, if things go wrong and you
25 have construction delays and no rec market. Selling

1 part of the generation at market value, again, would
2 raise rates significantly to the average customer on
3 the order of, you know, over \$13 a month in some cases
4 for the near term. Is GRU actively pursuing mitigating
5 that risk by engaging in good faith to negotiate with
6 the municipal counterparties to lock up that sale? I'd
7 feel a lot comfortable about this if I had signed
8 contracts right now.

9 **THE WITNESS:** My perception is that they have
10 been. There are other considerations about potential
11 delays. And I'll tell you, frankly, I was at the
12 meeting in February, and I think you all did exactly
13 the right thing to hold this second set of hearings so
14 that you could thoroughly understand all of these risks
15 and benefits.

16 But one of the other things that I'm frankly
17 very concerned about is that the federal government
18 currently will offer American Renewables as a private
19 entity a production tax credit worth 30 percent of the
20 capital costs. And, you know, if we don't get this
21 done and if they don't extend that, which I think you
22 probably know they are contemplating, then that has an
23 impact, as well. So we are very motivated to try to
24 get contracts locked up, both with fuel suppliers and
25 with folks willing to purchase it. I know that

1 American Renewables has been working very hard on that.
2 I can tell you that we have been working hard on that
3 with our municipal counterpart or our municipal other
4 cities that have generating assets and might be needing
5 power.

6 Frankly, every time I meet with the
7 leadership of the University of Florida, I ask them to
8 consider buying power from GRU rather than from
9 Progress, which is where they buy their power. I put
10 the good word in every time I get the chance. So there
11 are lots of things that are constantly at play and we
12 continue to have those conversations.

13 **COMMISSIONER SKOP:** To your point about
14 getting clarity as it pertains to the convertible
15 investment tax credit, again, I think clarity now has
16 addressed some of the concerns I have. Again, if the
17 Commission deems it appropriate to move forward with
18 the decision, and certainly sooner rather than later is
19 important to capturing that convertible nature of the
20 investment tax credit, because to do otherwise,
21 basically, the GRU ratepayers are exposed to that risk.
22 Because if they miss that window for whatever reason,
23 the monthly bill is going up incrementally higher as a
24 result of missing that opportunity. So I share that
25 concern.

1 And just the last question, traffic
2 considerations. I think that it was mentioned today,
3 subject to check, that the 100 megawatts will require
4 approximately 137 semi-truckloads of residual wood
5 waste a day, seven days week to keep the plant running
6 at its full capacity. Does that sound right?

7 **THE WITNESS:** I don't know the specific
8 number, but I will ask the staff if they know the
9 number.

10 **COMMISSIONER SKOP:** Okay. I'll get to that.
11 I guess ask Mr. Regan. It may not be necessary. And
12 the concern that I'm having is that it's my
13 understanding, and I actually learned this at a rest
14 stop going home one evening, but, apparently, the City
15 of Gainesville through its MTO and Florida Statute has
16 established truck routes and restrictions within the
17 City of Gainesville, is that correct?

18 **THE WITNESS:** Yes, that is correct.

19 **COMMISSIONER SKOP:** So semis can't go through
20 traffic, cannot transverse the city, they have to skirt
21 around it?

22 **THE WITNESS:** Well, the main road that we
23 discourage them from using is University Avenue. I
24 mean, they like to do it for sightseeing purposes,
25 quite frankly.

1 **COMMISSIONER SKOP:** Okay.

2 **THE WITNESS:** You can imagine the sights.

3 **COMMISSIONER SKOP:** I'm not going to touch
4 that one.

5 **THE WITNESS:** We'll just leave it there.

6 **COMMISSIONER SKOP:** Okay.

7 **THE WITNESS:** But the concern that we have is
8 about pedestrian safety and automobile safety, and so
9 we discourage use of University Avenue, of Main Street.
10 They are more than welcome on 39th Avenue. I mean,
11 this plant is north of the city, and so, you know, I-75
12 is direct, you know.

13 **COMMISSIONER SKOP:** This is my point. Since
14 there is no through traffic generally, and if trucks do
15 go by, I assume it's to see the stadium and not other
16 things, but of the fuel sites is obviously located in
17 Newberry, Southern Wood Products, or whatever it is,
18 and, you know, obviously there is a lot of congestion
19 on West Newberry Road coming into town.

20 **THE WITNESS:** Certainly.

21 **COMMISSIONER SKOP:** You know, that's
22 bumper-to-bumper traffic as it is. The City has been
23 very proactive in traffic calming and diverting
24 traffic. So would it be safe to assume that most of
25 the fuel coming from the west side of town would have

1 to transit up either on I-75 or up through High Springs
2 and come back down through I-75 to Alachua and --

3 **THE WITNESS:** Well, I think probably 39th
4 Avenue might be a more direct route from Newberry, I-75
5 to -- or, you know, you can actually go from Newberry
6 north toward Alachua and then cut onto 39th, and
7 then -- I mean, I wouldn't rely on me for their traffic
8 planning, but I'm just suggesting that there are -- you
9 know, there are ways of getting from Newberry to the
10 Deerhaven plant without going through the core of the
11 City. In fact, I don't think any sensible driver,
12 whether you are in a semi tractor-trailer or in your
13 Prius, whether or not you would go through the core of
14 the City to make that route. I wouldn't.

15 **COMMISSIONER SKOP:** So for the most part it
16 seems like North 441 will be the corridor through the
17 City of Alachua. Is there any impact on Alachua or
18 Alachua as they would call it?

19 **THE WITNESS:** Yeah. Alachua has some
20 concerns about the impact to 441. I would sort of note
21 that they have become a hub for distribution centers,
22 and they have, you know, made many decisions that have
23 truck traffic impact. And I think that they are
24 correct to be concerned about the cumulative effect,
25 and that's certainly something that we have had

1 conversations with them about. And we are seeking to
2 mitigate those concerns as best as we are able.

3 **COMMISSIONER SKOP:** Thank you, Madam Mayor.
4 Thank you for your time and the clarity that you have
5 brought to the concerns I had.

6 **THE WITNESS:** Thank you. And I realize
7 you've put in extra hours on this, Commissioner Skop,
8 and I think you've, you know, certainly sought to
9 protect the interests of our citizens. We appreciate
10 you for that.

11 **COMMISSIONER STEVENS:** Anything else,
12 Commissioners?

13 Commissioner Klement.

14 **COMMISSIONER KLEMENT:** Yes. One final
15 question from me for the Mayor.

16 I read your testimony, I read the testimony
17 of the other staff people who we'll hear from later. I
18 just wanted to hear from you vocally. The criteria of
19 the Power Plant Siting Act that you think this project
20 meets, I think you said in your testimony that if it
21 meets just one. Does it meet one or does it meet more
22 than one?

23 **THE WITNESS:** Well, Commissioner Klement, I'm
24 going to read the exact language from the statute,
25 403.519(3), and then I'll go through it briefly. I

1 know that this is dragging on, but it says: "The
2 Commission shall take into account the need for
3 electric system reliability and integrity; the need for
4 adequate electricity at a reasonable cost; the need for
5 fuel diversity and supply reliability; whether the
6 proposed plant is the most cost-effective alternative
7 available; and whether renewable energy sources and
8 technologies as well as conservation measures are
9 utilized to the extent reasonably available. The
10 Commission shall also expressly consider the
11 conservation measures taken by or reasonably available
12 to the applicant or its members which might mitigate
13 the need for the proposed plant and other matters
14 within its jurisdiction which it deems relevant."

15 I think Commissioner Argenziano raised those
16 specific issues moments ago. Certainly, we believe
17 adding new baseload power that we control adds
18 reliability and integrity. I mentioned that we run
19 more than 28 scenarios, and the only one that is a more
20 reasonable cost is coal without carbon regulation.
21 Fuel diversity and supply reliability, we've told you
22 that today we are more than 90 percent reliant on
23 fossil fuels, mostly coal, two-thirds coal, 25 percent
24 natural gas. Whether it's the most cost-effective
25 alternative available, I think we have addressed that.

1 Whether renewable energy sources and technologies,
2 that's obvious, it's 100 percent renewable, and it's
3 considered so by any regulation or any consideration
4 anyone might give it. Conservation measures, I have
5 already told you we use the Total Resource Cost Test,
6 and we are the most energy efficient generating utility
7 in the state of Florida. And whether we have taken
8 conservation measures, I would submit and you all are
9 the experts, your staff are the experts, your Staff did
10 recommend approval of this proposal, and I think they
11 came under fire recently, and I think Commissioner
12 Argenziano did a great job of defending them. They
13 recommended approval for this proposal. And I'm
14 reading through the list saying I think it meets every
15 single one, but I will leave that to your judgment.
16 That's why the Governor in his, I think, good wisdom,
17 put you all where you are.

18 **COMMISSIONER STEVENS:** Commissioners.

19 **COMMISSIONER KLEMENT:** Thank you. That's
20 all.

21 Thank you, Mr. Chairman.

22 **COMMISSIONER STEVENS:** Mr. Sayler.

23 **MR. SAYLER:** Thank you, Mr. Chairman. I
24 appreciate the indulgence of time. Phillip is going to
25 be passing out an exhibit which has been stipulated by

1 parties. I will discuss that exhibit in just a moment.
2 And to save time, I'll just ask a few preliminary
3 questions of Madam Mayor, if that's all right while
4 Phillip is passing those out.

5 **COMMISSIONER STEVENS:** Yes, sir.

6 **MR. SAYLER:** All right. I was going to say
7 good morning, but it's good afternoon.

8 **THE WITNESS:** At least it is not good evening
9 yet.

10 **MR. SAYLER:** Yes.

11 **COMMISSIONER STEVENS:** It's getting close.

12 CROSS EXAMINATION

13 **BY MR. SAYLER:**

14 **Q.** Thank you for your testimony today. My name
15 is Erik Sayler. I'm an attorney for the Commission. I
16 just have a couple of clarifying questions regarding
17 testimony which is designed to help address some of the
18 questions either raised here today or at the agenda
19 conference.

20 The first question I have is, it was mentioned
21 that GRU has a purchased power agreement with Progress
22 that's going to expire in 2013. If for some reason GREC
23 wasn't on-line by 2013, or this project wasn't approved,
24 or some reason that occurred, could GRU renegotiate or
25 extend that contract with Progress or potentially seek

1 another PPA with another provider?

2 **A.** We certainly could seek another PPA, and I
3 suspect we likely would seek to do so either with
4 Progress or anyone else that would offer an economical
5 resource under acceptable conditions. My understanding
6 from the staff is that we are not certain that that is
7 likely to play out in that way at this time. And, in
8 fact, Commissioner Skop I think correctly asked a
9 question about the City of Alachua contract. Progress
10 bid against us in responding to that contract, and so we
11 sometimes have adverse interests that may come into play
12 in any negotiation. And so we would most certainly, I
13 think, seek to replace that contract with other firm
14 baseload power through some other provider, but I think
15 it's speculative at this time to tell you whether or not
16 we would be successful in that endeavor.

17 **Q.** But it's a possibility.

18 **A.** Certainly, yes, indeed.

19 **Q.** Would you also agree that decisions made by
20 both current and former Commissioners and soon to be
21 former mayors will affect the GRU community for years to
22 come?

23 **A.** Yes, sir, absolutely. As I think indicated by
24 the record, I have served 12 years in an elected
25 capacity. I also served six years as an engineer for

1 Alachua County. I was born and raised in Gainesville.
2 I'll likely be buried at Evergreen Cemetery, so -- which
3 is owned by the City of Gainesville, too. I don't think
4 you all regulate them, I hope. There's probably another
5 board for that. But, yes, sir, you are absolutely
6 right, and I think we all take our responsibilities very
7 seriously in that regard.

8 Q. And I'm sure the fine citizens of Gainesville
9 appreciate your service.

10 A. Some do and some don't, but we could talk
11 about that, too.

12 Q. The nature of politics. Does the purchased
13 power agreement between the City and GRU with GREC LLC
14 contain any provisions that would allow a future city
15 commission to revisit the cost-effectiveness of the GREC
16 project or its effect of GREC on the rate impact on the
17 ratepayers?

18 A. That is a question I am -- I have certainly
19 reviewed the contract. I can't answer that myself in
20 full detail. I would defer to the staff. I will tell
21 you that there are provisions for things such as being
22 able to purchase the plant itself at the end of its
23 30-year time horizon, and so on. But in terms of being
24 able to renegotiate the agreement midterm, I don't
25 believe that that's included, but I would defer to the

1 staff on that matter.

2 Q. All right. Would that be Mr. Regan or --

3 A. I suspect Mr. Regan could do a good job of
4 that, yes.

5 Q. All right. Now, turning to this handout that
6 everyone has, staff would like to note that it is an
7 exhibit that has been stipulated by the utility and the
8 intervenors. It contains several things, only part of
9 which I'm going to go over with you today. It's
10 entitled Cumulative Present Worth Analysis, but it also
11 includes the rate impact, and these were developed from
12 interrogatory responses that staff asked the utility and
13 the utility updated for this proceeding.

14 And if you will turn to the back three pages
15 of it, where it says residential monthly bill impact
16 versus no new construction. And I would also like to
17 note that the very last page is another chart which
18 shows the rate impact of the GREC facility over the life
19 of the project, and that was submitted by GRU, and as
20 part of an agreement we included both charts so you can
21 have for both comparison --

22 MR. SAYLER: And, Commissioners, that is the
23 chart that is paper-clipped to the packet. I would
24 like to see if that can be identified as Exhibit 87,
25 and Cumulative Present Worth Analysis/Rate Impact.

1 **COMMISSIONER STEVENS:** Yes, sir.

2 **MR. WRIGHT:** All right.

3 (Exhibit Number 87 marked for
4 identification.)

5 **BY MR. SAYLER:**

6 **Q.** Mayor Hanrahan, are you familiar with these
7 charts and this exhibit?

8 **A.** I am, yes.

9 **Q.** And there are essentially two scenarios that I
10 would like to talk about. One is under the base case
11 market resale scenario, which Commissioner Skop
12 referenced earlier, the initial rate impact in 2014 of
13 the GREC project would be a \$13.40 a month increase to
14 ratepayers, is that correct?

15 **A.** This is the one that you are referring to as
16 new base market resale?

17 **Q.** Yes. New base -- no, it's the black line.
18 It's the -- yes, new base market resale.

19 **A.** Is that with or without resale of the power?

20 **Q.** That is with partial resale of the power, or
21 it's with resale of the power at market rates.

22 **A.** Well, what I can tell you is that when our
23 staff provided us their analysis about the most likely
24 rate impact for the average utility customer, it was on
25 the order of \$4 a month. So unless something has

1 changed, and I don't -- you know, I have not been told
2 by staff that it has, their best analysis is that when
3 the plant comes on-line in 2014 that the average
4 customer will see a rate increase of about \$4 a month.

5 Q. Okay. Let me clarify. The new base case --
6 the base case scenario is assuming that there is no
7 carbon regulation, and the market resale assumes that
8 the 50 megawatts of power that GRU is not going to be
9 using for its native load will be able to be resold on
10 the market either through FMPA, or TEA, or some other
11 scenario. At the prior hearing you will notice the
12 black line that is dashed, that was the old base case,
13 meaning no carbon regulation, no resale, and that impact
14 was in the neighborhood of almost \$19. And now we have
15 updated the numbers to include the likelihood that GRU
16 would actually resell that -- be able to get some resale
17 from that capacity, but still without carbon regulation.
18 And kind of that upper limit under that scenario in
19 2014, the chart shows \$13.40. But would you agree that
20 that is what the chart shows?

21 A. I would agree that that is what the chart
22 shows. I would not necessarily agree that that is a
23 reasonable scenario.

24 Q. Okay. And then under the best case scenario,
25 which is the green line, which is -- excuse me, is the

1 blue line, which is the new, or it's the carbon
2 regulation full resale or the contract resold at full
3 price. That shows a \$3.22 increase in 2014 for
4 customers. Do you agree that?

5 **A.** Yes, that's what the chart shows.

6 **Q.** All right.

7 **A.** Could I make a point about the chart, though

8 --

9 **Q.** Sure. Please.

10 **A.** -- if you'll indulge me for a moment. What I
11 think is kind of interesting is that this is a chart
12 that, I believe, our staff entered into the record. And
13 this is the chart that I understand that the PSC staff
14 provided.

15 **Q.** Yes.

16 **A.** And what is interesting is that the portion
17 that is shown in the full disclosure for the full
18 contract period is this piece. What you don't get if
19 you look at that is that from there the cost/benefit
20 accrual continues to really dramatically grow. So I
21 would, you know -- I think the term skeptical has been
22 used from the dais. I would be skeptical about why you
23 only showed the toughest portion of the contract period
24 instead of the whole contract period.

25 **Q.** As I mentioned to Mr. Wright, it's really just

1 the same chart that was introduced at the hearing in
2 December and just updated with the new numbers under the
3 appropriate scenario. And as both charts come from
4 record, but they both still have the same initial rate
5 impact, which is -- the worst case scenario is 13.40 and
6 the best case is \$3.22. But you are right, over time it
7 decreases. So I apologize if that's testifying. I'm
8 just trying to clarify.

9 And the last question or almost the last
10 question. When you were making your decision to approve
11 this project, were you aware of these potential rate
12 impacts, the upper limit and the lower limit?

13 **A** I believe that we were provided a range of
14 rate impacts. Again, my understanding was that our
15 staff's best analysis was that they anticipated
16 something around the \$4 range for our typical customer.
17 But as with anything, this is the type of chart that
18 they put before us in any public hearing that we have
19 sort of this is under a high fuel price scenario, this
20 is under a low fuel price scenario, this is under a
21 regulated carbon market, this is under an unregulated
22 carbon market. And we, of course, also understand that
23 the average customer doesn't always reflect the customer
24 who might be calling us on the phone complaining about
25 their bill impact.

1 **Q.** Absolutely. Do you recall what the upper and
2 lower limits of that range were?

3 **A.** I believe this is an accurate representation
4 of them.

5 **Q.** All right. And then the last two questions.
6 On Page 7 and 8 of your testimony you state that GRU has
7 a AAA bond rating --

8 **A.** AA.

9 **Q.** AA, sorry. Excuse me.

10 **A** I wish we had a AAA. You could give them a
11 call and suggest that.

12 **Q.** I don't think they would take my suggestion.
13 And you also state in your testimony that this
14 Commission should give great consideration to GRU's bond
15 rating, is that correct?

16 **A.** Yes. And I will say that as Mayor I have met
17 with both Moody's and Standard and Poor's on multiple
18 occasions, probably a minimum of three or four times
19 each, and in virtually every one of those meetings they
20 have said we are concerned about what happens to this
21 utility in the event of carbon regulation, that you have
22 not hedged your bets against carbon regulation, and you
23 need to look at how you can best do that.

24 **Q.** All right. How would the approval or denial
25 of the GREC project effect GRU's bond rating?

1 **A** I don't know that I could speculate as to how
2 it would affect the bond rating. What I would be
3 inclined to suggest is that if we fail to plan for
4 eventual carbon regulation when the administrator of the
5 EPA is writing letters to members of the U.S. Senate
6 indicating that she intends to begin regulating
7 stationary sources, we would be somewhat derelict in our
8 duty. Beyond that, as I have indicated, our populous,
9 including certainly, I believe, almost all of the
10 citizens who have appeared before you today both for and
11 against, have indicated -- mostly against, frankly --
12 have indicated their desire for us to play a role in
13 what we believe to be a national and international point
14 of concern and perhaps crisis. So, you know, we have
15 taken it seriously, even though as was correctly pointed
16 out, what we have done to date does not have force of
17 regulatory impact, it does have policy direction impact.

18 **MR. SAYLER:** Well, thank you very much for
19 answering staff's questions. I appreciate your time.

20 And, Commissioners, Mr. Chairman, staff has
21 no further questions.

22 **COMMISSIONER STEVENS:** Thank you, Mr. Sayler.
23 Commissioner Skop.

24 **COMMISSIONER SKOP:** Thank you, Mr. Chairman.
25 Madam Mayor, just three quick questions on points that

1 were raised. On staff's handout that has been marked
2 for identification as Exhibit 87, I think there was an
3 attached sheet that showed the complete graph. I
4 didn't catch the end of your question, but it did, I
5 think, address the concern about the complete picture
6 as opposed to just showing a snapshot in time that
7 shows the downside and not show any of the out-term
8 benefits.

9 **THE WITNESS:** Yes. And I think you can
10 appreciate why I would want you to see the whole graph
11 and not just the portion.

12 **COMMISSIONER SKOP:** Absolutely. With respect
13 to that chart, just one final question as it pertains
14 to that. I think the upper bound on that reflects what
15 would happen if they are not able to complete the
16 project in time to get -- to take advantage of the
17 convertible investment tax credit because rates would
18 go up incrementally above that, and certainly that is a
19 worst-case scenario.

20 Has there been any thought, or has GRU given
21 any thought given its current capacity situation to
22 further mitigating the risk by trying to sell not
23 50 percent, but more than 50 percent of the output to
24 any municipal utilities in the first ten years?

25 **THE WITNESS:** I'm going to allow the staff to

1 respond to that question, because I don't know all of
2 the scenarios that they have mapped out as potential
3 possibilities.

4 **COMMISSIONER SKOP:** Okay. And then with
5 respect to bond rating, certainly based on your
6 testimony both credit rating agencies, Moody's and
7 Standard and Poor's that you have spoken to have looked
8 at what GRU needs to do to hedge itself from -- in
9 terms of fuel diversity. In terms of the risk
10 associated with the project -- and, again, GRU has
11 mitigated risk by only paying for what is generated
12 from the proposed unit, but still it's buying all the
13 100-megawatt output. So in that regard has there about
14 been any concern expressed by the bond rating agencies
15 as to what would happen if GRU could not sell that
16 additional energy and therefore rates would go up to
17 its ratepayers?

18 **THE WITNESS:** I believe we have had
19 conversations about the viability of resale of the
20 contracted power. And, again, the same -- you know,
21 it's probably a pretty small world of public utility
22 bond raters, and they talk to Orlando and they talk to
23 Jacksonville and Tallahassee and everyone else, and I
24 think it's their perception that this is very
25 marketable power, that we will not have a hard time

1 getting rid of it.

2 **COMMISSIONER SKOP:** Okay. And by doing this
3 project with a third party off the balance sheet that
4 actually protected the credit rating of the City
5 substantially because a self-build would expose the
6 City to --

7 **THE WITNESS:** You are exactly right,
8 Commissioner Skop. I think that they believe that we
9 are mitigating risk by keeping that debt off of our
10 books and putting the risk over fuel procurement and
11 all of the other issues onto our counter-party.

12 **COMMISSIONER SKOP:** Okay. And then to your
13 knowledge -- just one final question -- with respect to
14 the company coming in at some future point in time and
15 trying to renegotiate with the City based on, you know,
16 fuel costs or some unforeseeable circumstance, would it
17 be your perspective as the outgoing mayor that the City
18 would hold firm to the agreement that was entered into
19 in good faith and hold the parties to that?

20 **THE WITNESS:** You know, I suspect it would be
21 an evaluation at that time as to the upsides and the
22 downsides of reopening the contract. I mean,
23 occasionally -- in fact, earlier you were asking about
24 our transfer to the general fund, and that has actually
25 just been renegotiated to be more stable for both the

1 utility and general government. And so when you can
2 see a benefit on both sides to rediscussing something,
3 I think that's when the parties come to the table. But
4 if one is greatly benefiting and wanting to leave
5 things as they are, there's no motivation to move back
6 to negotiation.

7 **COMMISSIONER SKOP:** Thank you.

8 **THE WITNESS:** Thank you.

9 **COMMISSIONER STEVENS:** Mr. Wright, redirect.

10 **MR. WRIGHT:** Yes, Commissioner Stevens.

11 Thank you.

12 **COMMISSIONER STEVENS:** Yes, sir.

13 REDIRECT EXAMINATION

14 **BY MR. WRIGHT:**

15 **Q.** You were asked a number of questions about --
16 some questions about balance sheet and financing, and I
17 have a couple of follow-ups on that, Mayor Hanrahan.

18 Did Gainesville Regional Utilities -- did the
19 City of Gainesville consider self-building a biomass
20 plant?

21 **A.** We did. And we went through, I think, a
22 pretty thorough discussion of the pros and cons, I mean,
23 as I think you have seen from some of our testimony, you
24 know, we prefer to own our own generating assets. But
25 in this case there were a couple of reasons, not the

1 least of which was the federal tax credit that we are
2 not as a public utility eligible for at this time. That
3 takes 30 percent off the capital cost of the plant. The
4 fact that, you know, this company has worked with other
5 peer municipalities like Austin, Texas, to do the same
6 thing that they were able to deal with the fuel
7 procurement and other things that we felt like, you
8 know, that was something that we would be better off
9 having someone else deal with that side of the balance
10 sheet. At the end of the analysis that was the decision
11 that we all agreed to.

12 Q. Just so the record is clear, I believe in a
13 recent response to Commissioner Skop you indicated that
14 there would not be debt with the current power purchase
15 agreement structure, correct?

16 A. That's correct.

17 Q. Would GRU incur debt to build the plant had it
18 chosen the self-build option?

19 A. Yes, of course.

20 Q. With the power purchase agreement as
21 structured between GRU and GREC LLC, will GRU or its
22 customers pay anything for the plant before it is
23 commercially operational?

24 A. No. I don't believe we pay until there is
25 power produced from the plant.

1 **Q.** If the Gainesville Renewable Energy Center
2 facility is not available to produce electricity, would
3 GRU's customers be obliged to pay anything?

4 **A.** No, sir. We only pay for delivered power.

5 **Q.** If the facility were to cost GREC LLC more
6 than expected, would the price to GRU's customers be any
7 greater than the contractually defined prices?

8 **A.** No, sir. We and they are bound by the
9 contract that we have agreed to.

10 **Q.** Ms. Deevey asked you some questions about
11 Pages 73 and 74 of the EPAC report, which is part of
12 your Exhibit PH-4. I think that also makes it Exhibit
13 37 in the hearing record.

14 **A.** I have it.

15 **Q.** Thank you. She moved on, but you made a
16 reference in a response to not agreeing with everything
17 that was there, and I just wanted to ask you is there
18 anything in particular there that you want to articulate
19 a disagreement with?

20 **A.** Well, first of all, I think she and I would be
21 in agreement that this report -- first, I want to
22 acknowledge it's an extraordinary body of work for
23 citizen volunteers to take on, and it had an important
24 impact on the dialogue. And, you know, as I read
25 through it again preparation for this hearing, you know,

1 if I were Ms. Deevey and Doctor Harlows (phonetic), and
2 the others who served on EPAC at the time, I would
3 frankly declare victory, because I think many of their
4 recommendations were accepted, in some cases
5 reluctantly, but accepted by GRU and by the City
6 Commission and have had, I think, the impact of
7 strengthening our community as a result.

8 And, frankly, as I read through it again I
9 thought, you know, she should have gotten a Ph.D. for
10 having done this amount of in-depth work and analysis.

11 That having been said, there were some
12 statements with respect to the carbon accounting in
13 particular, which I would not represent myself as an
14 expert on, but I do sit on the board of the premier
15 organization internationally that helps cities and
16 counties with carbon accounting, and there were some
17 statements in here that I categorically disagree with.

18 The City of Gainesville uses federally
19 approved standards and practices for doing its carbon
20 accounting. I believe it is done accurately, and I
21 don't believe anything has been double counted or
22 otherwise mishandled.

23 Q. Thank you. You were asked some questions
24 about energy conservation. I think some from the bench
25 and perhaps some from the intervenors. In one response

1 you indicated that GRU implemented -- has implemented
2 the Total Resource Cost Test. Is that correct so far?

3 **A.** Yes, that's correct.

4 **Q.** To your knowledge, and feel free to defer this
5 question to Mr. Regan, but to your knowledge are GRU's
6 projected energy conservation savings reflected in the
7 forecasts upon which this case is based?

8 **A.** Yes, they are.

9 **Q.** Commissioner Skop asked you a couple of
10 questions about changes in capacity and the addition of
11 the South Energy Center. My question for you right this
12 minute is has the Deerhaven 2 project been derated,
13 reduced in its operating capacity, do you know?

14 **A.** I'm going to have to defer to staff on that.

15 **Q.** Thank you. You were asked again by
16 Commissioner --

17 **A.** Are you talking about the retrofit project
18 where we actually put in the pollution control
19 equipment? That does have a parasitic load, I think, is
20 the term we use. It itself requires a fair amount of
21 energy to meet the new CAIR and CAMR standards and other
22 standards that it was installed to handle. Was that the
23 question?

24 **Q.** I think so. Does your answer imply that the
25 unit's actual rated capacity as of today following

1 completion of what you just described as the retrofit
2 project is less than it was before?

3 **A.** Yes, I believe it is, because it takes power
4 to remove the pollutants from the power plant as you can
5 imagine.

6 **Q.** Commissioner Skop asked you some questions
7 about bill impacts and the relationship between possible
8 bill impacts and sales of the facility's output, the
9 GREC facility's output to others. Does GRU expect to
10 sell power to either the four municipalities or others
11 at the full contract price that it pays to GREC?

12 **A.** I believe our intent is to sell it at the full
13 contract price or better if we can get it.

14 **Q.** I think that it was Ms. Stahmer who asked you
15 a question that posed the proposition that risks to the
16 utility are different from risks to ratepayers. In the
17 case of GRU, the City of Gainesville, and Gainesville's
18 customers, are those risks different, or the same, or
19 what?

20 **A.** You know, GRU is wholly-owned by the citizens
21 of the City of Gainesville. It is a municipally-owned
22 utility. It does not -- you know, the risks and the
23 benefits of GRU accrue to our citizens and our
24 ratepayers. And I don't, you know, know how else to
25 answer that.

1 **MR. WRIGHT:** Thank you.

2 And that was all the redirect I had,
3 Commissioner. Madam Chairman, thank you very much.

4 **COMMISSIONER STEVENS:** Thank you, Mr. Wright.
5 Thank you, Mayor. One second.

6 Mr. Saylor, do we have exhibits to move into
7 the record?

8 **MR. SAYLER:** Yes.

9 **COMMISSIONER STEVENS:** Then hold on just a
10 second. Commissioner, did you have a question? I'm
11 sorry I missed that.

12 **COMMISSIONER SKOP:** Yes. Thank you, Mr.
13 Chair.

14 **COMMISSIONER STEVENS:** Sure.

15 **COMMISSIONER SKOP:** Just one follow-up, Madam
16 Mayor. With respect to the debt, and I know that
17 GRU -- actually I have seen her on TV, if she is still
18 there, many times, GRU is very proactive about
19 refinancing their debt and saving the City money. But
20 has anyone taken a look at the imputed debt as a result
21 of PPA, or power purchase agreement in terms of the
22 GREC project, whether the bond credit rating agencies
23 would impute debt to GRU?

24 **THE WITNESS:** I'm not familiar with that
25 term, so I will defer to the staff on that matter.

1 **COMMISSIONER SKOP:** All right. Thank you.

2 **COMMISSIONER STEVENS:** Good question.

3 Mr. Sayler, we have exhibits to move into the
4 record?

5 **MR. SAYLER:** I believe so.

6 **COMMISSIONER STEVENS:** Mr. Wright.

7 **MR. SAYLER:** I believe Schef has some first.

8 **COMMISSIONER STEVENS:** Okay.

9 **MR. WRIGHT:** Just following the order of
10 exhibits, I would move the admission of Exhibits 34
11 through 38 as set forth on Exhibit 33, which is the
12 Staff's Exhibit List.

13 **COMMISSIONER STEVENS:** So moved without
14 objection.

15 (Exhibit Numbers 34 through 38 admitted into
16 the record.)

17 **COMMISSIONER STEVENS:** Mr. Sayler.

18 **MR. SAYLER:** Ms. Stahmer has three exhibits
19 that she proffered and then staff has one exhibit, so
20 it's best to turn to the Intervenors.

21 **COMMISSIONER STEVENS:** Ms. Stahmer, do you
22 move those exhibits?

23 **MS. STAHMER:** Yes, I do.

24 **MR. WRIGHT:** Mr. --

25 **COMMISSIONER STEVENS:** Sir.

1 **MR. WRIGHT:** With respect to what has been
2 identified as 85, and I apologize, I need a second,
3 Commissioner, but hopefully no more than that.

4 We don't object to 84 or 86. I do object to
5 85 in its present form. As I indicated earlier, I wish
6 to preserve optional completeness. We will endeavor to
7 get a copy of the complete document.

8 My proffer to you, sir, is that the complete
9 document reflects the complete evaluation of the
10 various competing proposals rather than taking this one
11 sheet out of context, and Mr. Regan would be available
12 to answer questions on that. So I would respectfully
13 ask that this not be admitted at all now. It can be
14 taken up in toto in completeness when Mr. Regan is on
15 the stand.

16 **COMMISSIONER STEVENS:** Ms. Helton, I think
17 that is an appropriate way to go to get the --

18 **MS. HELTON:** Yes, sir. Mr. Wright did make
19 the suggestion at the time that Exhibit Number 85 came
20 up that he was interested in looking at the exhibit in
21 total, and if he can -- it sounds like he can have it
22 made available when one of his witnesses come to the
23 stand, so I think that is an appropriate way to handle
24 that.

25 **COMMISSIONER STEVENS:** Okay.

1 **MR. WRIGHT:** I may need just a little leeway
2 on getting it available, but Mr. Regan is not until
3 witness number four, so I think I can handle it. Thank
4 you.

5 **COMMISSIONER STEVENS:** We have got plenty of
6 time.

7 **MR. WRIGHT:** Yes, sir.

8 **COMMISSIONER STEVENS:** Thank you, Mr. Wright.
9 (Exhibits 84 and 86 admitted into the
10 record.)

11 **COMMISSIONER STEVENS:** Mr. Sayler.

12 **MR. SAYLER:** Staff would move Exhibit 87.

13 **COMMISSIONER STEVENS:** So moved without
14 objection.

15 (Exhibit Number 87 admitted into the record.)

16 **COMMISSIONER STEVENS:** Good there. Madam
17 Mayor, thank you so much for your time and thank you
18 for your service.

19 **THE WITNESS:** Thank you. You have been
20 extraordinarily detailed on this. We appreciate what
21 you're doing.

22 **COMMISSIONER STEVENS:** Yes, ma'am.

23 **CHAIRMAN ARGENZIANO:** Mr. Chair.

24 **COMMISSIONER STEVENS:** Yes, ma'am.

25 **CHAIRMAN ARGENZIANO:** Just to say the same

1 thing. For all your years of dedicated public service
2 and your apparent respect for the constituents, whether
3 you agree or not, is just so much appreciated.

4 **THE WITNESS:** Thank you. And back at you.

5 **COMMISSIONER STEVENS:** Again, without
6 objection. If we could take a five-minute recess. Ten
7 minutes.

8 (Recess.)

9 **COMMISSIONER STEVENS:** Mr. Wright, your next
10 witness, I believe.

11 **MR. WRIGHT:** Yes, sir. It's Mr. Richard M.
12 Schroeder whom we call to the stand.

13 **COMMISSIONER STEVENS:** And, Mr. Schroeder,
14 you have been sworn in?

15 **THE WITNESS:** Yes, I have.

16 **COMMISSIONER STEVENS:** Okay.

17 Thereupon,

18 RICHARD M. SCHROEDER

19 was called as a witness on behalf of Gainesville Regional
20 Utilities and Gainesville Renewable Energy Center, LLC, and
21 having been duly sworn, testified as follows:

22 DIRECT EXAMINATION

23 **BY MR. WRIGHT:**

24 Q. Mr. Schroeder, did you prepare and cause to be
25 filed in this proceeding Supplemental Direct Testimony

1 consisting of 36 pages?

2 **A.** Yes, I did.

3 **MR. WRIGHT:** And, Commissioner Stevens, as
4 with Mayor Hanrahan, there were like three minor
5 corrections to Mr. Schroeder's testimony. We have
6 filed that as errata including replacement pages with
7 an appropriate revised --

8 **COMMISSIONER STEVENS:** Yes, sir.

9 **MR. WRIGHT:** -- header on that, and with your
10 leave we won't proceed further on that.

11 **COMMISSIONER STEVENS:** That's fine. Thank
12 you.

13 **BY MR. WRIGHT:**

14 **Q.** Beyond those corrections that have been filed
15 as your errata, do you have any other changes or
16 corrections to your testimony?

17 **A.** No, I didn't.

18 **Q.** And do you adopt this as your sworn testimony
19 to the Florida Public Service Commission in this
20 proceeding?

21 **A.** Yes, I did.

22 **Q.** Did you also prepare or assemble and cause to
23 be filed in this proceeding exhibits that were
24 denominated in your filing as RMS-1 through RMS-15?

25 **A.** Yes, I did.

1 **MR. WRIGHT:** Chairman Stevens, I would note
2 that those have been numbered Exhibits 39 through 53 on
3 the Staff's Composite Exhibit List. At this time I
4 would, if there is no objection, move the admission --
5 move that Mr. Schroeder's testimony be entered into the
6 record as though read.

7 **COMMISSIONER STEVENS:** So moved without
8 objection. Yes, sir.

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1 BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2 SUPPLEMENTAL TESTIMONY OF RICHARD M. SCHROEDER
3 ON BEHALF OF
4 GAINESVILLE REGIONAL UTILITIES AND
5 GAINESVILLE RENEWABLE ENERGY CENTER, LLC
6 DOCKET NO. 090451-EM
7 MARCH 15, 2010
8

9 **Q. Please state your name and business address.**

10 A. My name is Richard M. Schroeder. My business address is 3520 NW 43rd St.,
11 Gainesville, FL 32606.

12
13 **Q. By whom are you employed and in what capacity?**

14 A. I am the owner and founder of BioResource Management, Inc. (BioResource
15 Management) and I serve as the President.

16
17 **Q. Please describe your responsibilities in that position.**

18 A. I have administrative, financial, operations and marketing oversight for the
19 Company.

20
21 **Q. Please describe the types of projects that BioResource Management works
22 on.**

23 A. BioResource Management is a leading forestry, agricultural, and organics
24 recycling company with recent and current projects located throughout the Gulf

1 South and Eastern US. We specialize in connecting agricultural, forestry, and
2 urban biomass supplies with a variety of end users. We assist in the
3 development of new projects by evaluating biomass feedstock availability,
4 assisting with biomass conversion and logistical and material handling
5 considerations, and managing biomass feedstock production and delivery.

6

7 **Q. What is the relationship between BioResource Management and GREC**
8 **LLC?**

9 A. BioResource Management is providing consulting services to GREC LLC
10 related to assessing the biomass resource availability in the GREC wood basket.
11 In addition, BioResource Management is assisting GREC LLC in executing its
12 fuel procurement strategy and negotiating with potential biomass suppliers.

13

14 **Q. Please state your educational background and professional experience.**

15 A. I received my Bachelor of Science in Forestry degree and my Master of
16 Agriculture degree from the University of Florida, and I have a Master of
17 Business Administration from Nova University.

18

19 Prior to founding BioResource Management, I held a number of positions in the
20 Florida forestry and agriculture industry. I have over thirty years' experience in
21 planning, developing, and operating bioenergy facilities throughout the US.

22 Relevant experience includes:

- 23 • Conducting biomass resource assessments: I worked with the Florida
24 Division of Forestry for eight years, serving as a County Forester,

1 Reforestation Coordinator, and Forest Products Specialist. During that
2 time, the Arab Oil embargo created interest and demand in developing
3 wood energy, and in 1980 I became the Wood Energy Coordinator for
4 the State of Florida. During that time, the FL Division of Forestry began
5 to develop the means, methods and calculations for determining long-
6 term sustainable supplies for wood energy projects. We conducted wood
7 supply studies on behalf of private companies seeking to build wood
8 energy facilities, and public agencies such as prisons and hospitals to
9 design, build and operate wood-fired facilities. One of the first biomass
10 power plants in the state, the 7 MW power plant in Monticello, Florida,
11 was assisted by myself and the FL Division of Forestry during their
12 development and financing.

- 13 • I later helped to start one of the first urban wood recycling centers in
14 Florida. As part-owner I oversaw delivery of recycled urban wood to the
15 forest products industries and other facilities. During that time we were
16 employed under contract with companies exerting major efforts to
17 develop biomass energy in the state. Our company conducted the first
18 wood supply studies for the Ridge Generating Station in Auburndale,
19 Florida, a 40 MW facility fueled by biomass and other materials, and for
20 Okeelanta Corporation, a 75 MW (now 125 MW) biomass facility in
21 South Bay, Florida. We were involved in the development of long-term
22 contracts with suppliers, the presentation of the supply to potential
23 lenders and owners, and were part of the successful financing,
24 construction and operation of these facilities.

- 1 • Later, I was part of the company that delivered biomass to these
2 facilities; in a four year period we delivered over three million tons of
3 biomass to these facilities in Florida.
- 4 • As part of that experience, we became a part of a national renewable
5 energy firm, and worked on developing supplies and operations for
6 stand-alone independent power producers. We successfully created the
7 wood supply infrastructure for a 17 MW biomass facility in
8 Massachusetts, an 18 MW biomass facility in New York, and assisted in
9 the development of other projects throughout the US, in the United
10 Kingdom and Puerto Rico. In all, I have been part of developing the
11 supplies for many biomass energy projects, of which five were financed,
12 constructed, and are still operating; three of which are in Florida.

13

14 **Q. What is the purpose of your testimony in this proceeding?**

15 **A. The purpose of my testimony in this proceeding is to address questions raised by**
16 **the Commissioners during the February 9, 2010 Agenda Conference related to**
17 **the availability and sustainability of the biomass material resource. I will discuss**
18 **the availability and sustainability of the biomass fuel resource in north central**
19 **Florida in general, and specifically within the Gainesville Renewable Energy**
20 **Center (GREC) wood basket. I will discuss the competition for woody, biomass**
21 **material, including describing both the existing and potential biomass users in**
22 **the region as well as describing the existing and potential suppliers of biomass**
23 **material. I will discuss the quantity and types of different biomass materials that**
24 **GREC will utilize in its process, the procurement strategy Gainesville**

1 Renewable Energy Center, LLC (GREC LLC) will employ to acquire its
2 required biomass fuel, and the status of GREC LLC's negotiations with potential
3 biomass suppliers.

4

5 Unless specifically noted otherwise, all citations within my testimony will refer
6 to the transcript from the February 9, 2010 Agenda Conference, Item 5. The
7 citations will be referenced using the following format of [TR"XX" L"YY"-
8 "ZZ"], which will refer to page "XX", lines "YY" to "ZZ".

9

10 **Q. Please describe what is meant by the term "GREC wood basket".**

11 **A.** The GREC wood basket refers to the geographic area from which the facility
12 can economically obtain biomass material. That is, it refers to the area where the
13 cost of transporting biomass material is not so high as to preclude its use as fuel
14 for the project. Other terms commonly used with the same meaning as wood
15 basket include supply area or supply shed.

16

17 **Q. Are you sponsoring any exhibits to your testimony?**

18 **A.** Yes. I am sponsoring the following exhibits:

- 19
- Exhibit No. __ [RMS-1], which is a copy of my resume;
 - Exhibit No. __ [RMS-2] is a biomass resource assessment report
21 prepared by Don Post and Tom Cunilio entitled "Biomass Options for
22 GRU – Part II";

- 1 • Exhibit No. __ [RMS-3] is a report prepared for GRU by Black &
2 Veatch entitled “Supplementary Study of Generating Alternatives for
3 Deerhaven Generating Station”;
- 4 • Exhibit No. __ [RMS- 4] is a report prepared for GRU by ICF
5 Consulting entitled “City of Gainesville Electricity Supply Needs”;
- 6 • Exhibit No. __ [RMS- 5] is a biomass feasibility study prepared by the
7 Institute of Food and Agricultural Sciences (IFAS), University of
8 Florida, entitled “Economic Availability of Alternative Biomass Sources
9 for Gainesville, Florida”;
- 10 • Exhibit No. __ [RMS- 6] is a report prepared for the Florida Public
11 Service Commission by Navigant Consulting entitled “Florida
12 Renewable Energy Potential Assessment”;
- 13 • Exhibit No. __ [RMS- 7] is a report prepared by the Institute of Food
14 and Agricultural Sciences (IFAS), University of Florida entitled
15 “Economic Impacts of Expanded Woody Biomass Utilization on the
16 Bioenergy and Forest Products Industries in Florida”;
- 17 • Exhibit No. __ [RMS- 8] is a report prepared for the Florida Department
18 of Agriculture and Consumer Services, Division of Forestry by the
19 University of Florida, School of Forest Resources and Conservation and
20 the North Carolina State University, Department of Forestry and
21 Environmental Resources entitled “Woody Biomass for Electricity
22 Generation in Florida: Bioeconomic Impacts under a Proposed
23 Renewable Portfolio Standard (RPS) Mandate”;

- 1 • Exhibit No. __ [RMS- 9] is a report prepared by the University of
2 Florida, School of Forest Resources & Conservation and the University
3 of Florida, Food & Resource Economics Department for the FL
4 Department of Agriculture and Consumer Services, Division of Forestry
5 and the Florida Department of Environmental Protection entitled
6 “Woody Biomass Economic Study” (includes the cover letters from
7 Commissioner of Agriculture Charles H. Bronson to Governor Charlie
8 Crist, Senate President Jeff Atwater and House Speaker Larry Cretul);
- 9 • Exhibit No. __ [RMS-10] is a presentation related to a pending biomass
10 assessment report being prepared for GREC LLC by BioResource
11 Management;
- 12 • Exhibit No. __ [RMS-11] is a forest sustainability sheet that describes
13 the minimum sustainability standards and the GRU forest stewardship
14 incentive program;
- 15 • Exhibit No. __ [RMS-12] is the Petitioners’ response to Staff’s
16 Interrogatory 91;
- 17 • Exhibit No. __ [RMS-13] is the Petitioners ’response to Staff’s
18 Interrogatory 92;
- 19 • Exhibit No. __ [RMS-14] is the Petitioners’ response to Staff’s
20 Interrogatory 93; and
- 21 • Exhibit No. __ [RMS-15] is a letter of intent between GREC LLC and
22 Wood Resource Recovery, LLC, stating that the parties intend to execute
23 a ten-year supply agreement for 300,000 green tons per year of urban
24 wood waste.

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Sustainable Woody Biomass Resources in north central Florida

Q. Chairman Argenziano voiced concern about the sustainability [of the biomass resource] especially with competition [TR22 L4-7]. As an employee of the Florida Division of Forestry for eight years, the first Wood Energy Coordinator for the State of Florida, and as an expert in the procurement of biomass material for biomass energy facilities for the last 25 years, do you believe that GREC LLC will be able to sustainably procure the biomass material needed to fuel its facility?

A. Yes. There is more than enough woody biomass material, on a long-term, sustainable basis, to provide all of the fuel supply needs of GREC, without adversely affecting the environment or impacting any existing biomass user. In fact, there is sufficient woody biomass available, again on a long-term, sustainable basis, to provide all of the needs of existing users and to provide sufficient biomass fuel for a total of 200 to 250 MW of new biomass generating capacity in the area.

Q. Do you believe that the addition of GREC will improve the health of the region's forests?

A. Yes. Biomass energy facilities, like GREC, create a market for low-value biomass material like forest residues and pre-commercial thinnings. Currently, forest residues are burned in the open with no emissions controls or are left in the forest. Pre-commercial thinning involves removing smaller, less desirable

1 trees at a younger age to allow the remaining trees better access to nutrients and
2 sunlight, thereby increasing their productivity.

3

4 Perhaps the most important benefit to the region's forests that biomass energy
5 facilities provide is additional jobs in the industry and increased revenue to
6 landowners. This allows landowners to keep "forests in forest" and helps
7 maintain the rural nature of north central Florida which is so highly valued.

8

9 **Q. Chairman Argenziano asked if the PSC staff had copies of the biomass
10 assessment studies referenced during the December 16 hearing [TR23 L2-
11 3]. Has GRU/GREC produced any biomass assessment reports to the
12 Commission?**

13 **A.** Yes. Subsequent to the February 9th Agenda Conference, GRU/GREC produced
14 a number of biomass assessment reports to the Commission. The biomass
15 resource assessment studies that GRU and GREC produced include the
16 following studies:

- 17 1. "Biomass Options for GRU – Part II" - Post, Don M. and Cunilio, Tom
18 C. - November 21, 2003 – Exhibit No. __ [RMS 2];
- 19 2. "Supplementary Study of Generating Alternatives for Deerhaven
20 Generating Station" – Black & Veatch Corp. – March 2004 – Exhibit
21 No. __ [RMS 3];
- 22 3. "City of Gainesville Electricity Supply Needs" – ICF Consulting –
23 March 1, 2006 – Exhibit No. __ [RMS 4]; and

- 1 4. "Economic Availability of Alternative Biomass Sources for Gainesville,
2 Florida" – Carter, Douglas R., School of Forest Resources and
3 Conservation Institute of Food and Agricultural Sciences (IFAS)
4 University of Florida – October 2007 – Exhibit No. __ [RMS 5].
5
- 6 In addition to the studies commissioned by GRU, a number of other
7 recent evaluations have been completed that provide further context and
8 information, including:
9
- 10 5. "Florida Renewable Energy Potential Assessment" - Navigant
11 Consulting, Inc. – December 30, 2008 – Exhibit No. __ [RMS 6];
12
- 13 6. "Economic Impacts of Expanded Woody Biomass Utilization on the
14 Bioenergy and Forest Products Industries in Florida" – Hodges, Alan
15 W., Stevens, Thomas J., and Rahmani, Mohammad, University of
16 Florida, Institute of Food and Agricultural Sciences, Food and Resource
17 Economics Department – February 23, 2010 (revised) – Exhibit No. __
18 [RMS 7];
- 19 7. "Woody Biomass for Electricity Generation in Florida: Bioeconomic
20 Impacts under a Proposed Renewable Portfolio Standard (RPS)
21 Mandate" – Rossi, Fredrick J., Carter, Douglas R., and Abt, Robert C.,
22 University of Florida, School of Forest Resources and Conservation, and
23 North Carolina State University, Department of Forestry and
24 Environmental Resources – March 1, 2010 – Exhibit No. __ [RMS 8];
and

1 This study concluded that just within that restricted radius, 340,000 tons/yr of
2 logging residues and other sources of wood waste were available. They also
3 noted that 175,000 tons/yr of stumps and 260,000 tons/yr of dedicated woody
4 crops were available in the same radius. Stumps have been excluded from the
5 GREC fuel supply, while dedicated woody crops are only allowed if of native
6 species. If we assume our total wood basket to be an area of 75-mile radius,
7 then this 25 mile radius represents about only 11 percent of the total wood
8 basket.

9
10 The next two studies, the Black & Veatch Corporation and ICF Consulting
11 studies [RMS-3] and [RMS-4], represent approximately 400 pages of work
12 addressing everything from an evaluation of generation technologies, to demand
13 side management and long-term fossil fuel price projections. The biomass fuel
14 portions of the two studies amount to only about a dozen pages as these were
15 prepared by engineering consultants, not foresters or biomass experts. These
16 studies both base their biomass supply work on Post and Cunilio, and
17 supplement it with sources of information from Oak Ridge National Laboratory
18 and the National Renewable Energy Laboratory. No original data collection was
19 conducted by either study. The Black & Veatch study reports that nearly 1,900
20 dry tons per day are available within 50 miles of GREC, which is an
21 extrapolation of national data. The ICF study did not constrain itself to a specific
22 radius, but rather developed biomass supply curves as a function of travel
23 distance.

24

1 Finally, the Carter, Langholtz, and Schroeder study [RMS-5] was completed in
2 late 2007. Carter is with the UF School of Forestry and Resource Conservation,
3 as was Langholtz at the time, although he is now an employee at the Oak Ridge
4 National Laboratory. This study evaluated the distribution of a number of forest-
5 derived biomass resources, as well as urban wood waste. It evaluated the cost of
6 obtaining the materials, as well as costs associated with processing it to suitable
7 specifications for boiler fuel, and ultimately transporting it to the Deerhaven
8 site. It also evaluated competition for wood resources by potential, separate
9 facilities to be developed (they have not actually materialized) in Jacksonville
10 and Tallahassee. The study concluded that there was sufficient biomass fuel to
11 easily supply 120 MW of power across the three facilities, and that indeed there
12 was sufficient biomass material to comfortably supply a 100 MW facility in
13 Gainesville.

14
15 **Q. How do the other reports relate to the feasibility and long-term**
16 **sustainability of the supply for GREC?**

17 **A.** The remaining studies, [RMS-6] through [RMS-9], were conducted with a
18 statewide focus, and although they do not address the supply situation for any
19 specific location within the state they do provide some perspective on the
20 potential for biomass energy. First, the Florida Renewable Energy Potential
21 Assessment [RMS-6] completed by Navigant is a comprehensive, thoroughly
22 researched evaluation of all potential types of renewable energy for the state.
23 The study's treatment of biomass fuel included everything from crop residues
24 and manure, to logging residues and other forestry sources, to dedicated energy

1 crops and urban wood waste. Their conclusion is that the technical potential
2 (which may be well above the actual, practical potential given current
3 conditions) for biomass energy in Florida is in the range of 5,960-13,750 MW.
4 Narrowing the biomass focus to fuels of interest to GREC, the study concludes
5 that the technical potential for electrical generation from logging residues is
6 354-566 MW; intensification of pine production on 10 percent of planted pine
7 acreage is 592-948 MW; and from urban wood waste not currently being
8 recycled is 175-290 MW. In other words, this is a total technical potential in
9 Florida of 1,121-1,804 MW considering just these very accessible resources.

10

11 The last three documents were released in February/March 2010 by the Florida
12 Department of Agriculture and Consumer Services, Division of Forestry and the
13 Florida Department of Environmental Protection, and consider the implications
14 of implementation of a renewable portfolio standard (RPS) in Florida. The
15 Hodges, et al. study [RMS-7] evaluated economic impacts, i.e., GDP and
16 employment etc., and assumed the sufficient availability of woody biomass, and
17 as such does not directly contribute to the issue of biomass supply. The Rossi,
18 et al. study [RMS-8] provides an evaluation of impacts of the RPS on the
19 existing timber industry, as well as on the productive landscape in the state.
20 This study used a regional timber model to estimate supply, demand, and timber
21 prices throughout the state during the decade long scale-up of the RPS. Full
22 implementation of the RPS is assumed to translate to a contribution by woody
23 biomass of 15 percent of all of Florida's 2020 generation, relative to the current
24 354 MW (0.6 percent of all FL generation). The conclusions of both the Rossi,

1 et al. study and the Hodges et al. study are summarized in the Woody Biomass
2 Economic Study published by the Florida Department of Agriculture [RMS-9].

3
4 They conclude that to implement a 7 percent RPS for Florida would require
5 approximately 1,000 MW of biomass energy generation and that this amount
6 would be more than feasible given the state's forest resources, with little
7 disruption to the timber supply of the existing forest products industry. This
8 level of biomass generation could be fueled by urban wood waste and logging
9 residue, with minimal or no use of merchantable timber ([RMS-8], p. 30, Table
10 4.4). They further conclude that it would be additionally beneficial to the state
11 economy and timber producers and associated forestry operations in particular.
12 As Charles Bronson, the Commissioner of the Florida Department of
13 Agriculture and Consumer Services, stated in the cover letter that accompanied
14 these reports, "a significant amount of renewable energy can be developed
15 through the utilization of woody biomass, while still keeping the forest resources
16 of Florida sustainable and current forest industries strong."

17
18 In summary, this sustainable level of biomass power would require, by 2025, an
19 additional 10 million tons of fuel per year, or ten times GREC's annual need
20 alone. GREC's annual fuel requirements, 1,000,000 tons, will be a fraction of
21 this total amount of necessary biomass material that the Florida Division of
22 Forestry report has found can be implemented sustainably and without adverse
23 consequence to existing biomass users. Furthermore, this level of biomass power

1 would facilitate increases in the total revenue landowners receive for their
2 products and increase chances of keeping “forests in forest” ([RMS-9], p.2).

3

4 **Q. Are there any findings within these reports that would lead you to conclude**
5 **that there is not enough biomass material within an economic distance to**
6 **sustainably fuel GREC for the life of the facility?**

7 A. No, the conclusions of all the biomass assessment reports clearly indicate that
8 sufficient biomass material is generated and available within an economically
9 feasible distance of the project.

10

11 **Q. Have you and your associates conducted an independent assessment of the**
12 **biomass resource availability within the GREC wood basket? If so, what is**
13 **your conclusion about the availability of biomass fuel within the GREC**
14 **wood basket?**

15 A. We are presently conducting an independent assessment of the biomass resource
16 availability within the GREC wood basket. Our preliminary conclusion is that
17 there is more than enough available biomass material within the GREC wood
18 basket to sustainably supply GREC, at an economic price level, for the life of
19 the facility, without adversely impacting existing users.

20

21 **Q. Chairman Argenziano raised a concern about GREC being able to**
22 **sustainably acquire the necessary biomass fuel at an economic rate [TR22**
23 **L15-19]. Please address the Chairman’s concerns.**

1 A. After reviewing the aforementioned biomass assessment reports, as well as
2 conducting my own independent assessment of the biomass resource within the
3 GREC wood basket, I conclude that GREC LLC will be able to sustainably
4 acquire the necessary biomass material at an economic rate for a number of
5 reasons. *First*, forest inventory data indicate that utilization of the region's
6 forests is at or below sustainable levels, and that in fact, growth is currently
7 exceeding the volumes harvested by the timber industry. *Second*, GREC is able
8 to utilize a great deal of material that other biomass users cannot, namely
9 logging residues and other low-value material such as pre-commercial thinnings;
10 inventory data indicates an abundance of this material is present in the region.
11 In addition, there is a great deal of unutilized material originating from urban,
12 mill, and industrial sources that can be captured by the project. Approximately
13 30 percent of GREC's fuel will come from non-forest resources, such as urban
14 wood from landscaping activities, tree removal for right of ways or public areas,
15 and vegetative storm debris. In fact, GREC LLC has signed a letter of intent
16 with Wood Resource Recovery for the supply of 300,000 green tons per year of
17 urban wood waste [RMS-15]. *Third*, GREC is in a geographically advantaged
18 position. It is at a considerable distance from other major users of low-value
19 wood thus minimizing competition for nearby material and it has a better
20 softwood forest capacity to draw from than many of the existing biomass users
21 in the region. *Fourth*, the north central Florida forest resource has provided
22 steadily increasing volumes of material from the same land base over the last
23 several decades. Analyses by researchers show that timber harvested at the age
24 of 25 in 2010 will yield, on average, four times the biomass volume of a 50-year

1 old stand of timber harvested in 1940. Information related to the increased
2 productivity of the forest resource is presented in the presentation on
3 BioResource Management's independent assessment of the biomass resources in
4 the GREC wood basket [RMS-10].

5

6 **Q. Over the course of the 20th century, and still continuing today, the demand**
7 **for a variety of forest products has increased harvest pressure on the**
8 **region's forest resources. Please comment on how the forestry industry and**
9 **forest landowners have responded to this increasing demand.**

10 **A.** Over the past six decades, southern pine productivity has advanced a great deal.
11 In simple terms, landowners in the Southeast have been able to produce more
12 wood in less time on less land. This advance in productivity is well-documented
13 in the peer reviewed literature, and indeed shows many similarities to the
14 progress exhibited in increased yields with agricultural crops. Large gains in
15 southern pine productivity have arisen from silvicultural practices like
16 appropriate site preparation and weed control during the early years. These two
17 practices allow the newly established plantation the opportunity to take full
18 advantage of the soil profile, while shielding them from intense competition
19 from herbs, grasses, and hardwoods. Fertilization has also become a valuable
20 silvicultural practice in many areas, where one or two well-timed applications of
21 a critical nutrient such as phosphorous over the course of an 18-22 year rotation
22 can markedly improve performance.

23

1 As with agricultural crops, plant breeding through selection of superior
2 specimens has not only resulted in faster growth, but has improved other traits
3 such as fiber quality and tree form. Seedlings produced now are into the third
4 generation of improvement, and historically each successive generation of
5 improvement has resulted in productivity increases of 8 to 12 percent. This has
6 been accomplished without genetic modification or introduction of exotic
7 species. The result of the genetic and cultural advances in southern pine
8 production mean that stands established today can grow twice as much volume
9 in about half the time as those planted in the 1950s. Interestingly, this result has
10 paralleled the growth of the forest products industry in Florida, whose
11 production has doubled from 10 million tons per year in 1948 to 20 million
12 today. The forestry industry and forest landowners have historically responded
13 to increased demand by getting better at growing trees, and I believe they will
14 do so in the future as well.

15

16 **Q. Chairman Argenziano asked if the biomass material needed for GREC can**
17 **be sustainably supplied without negatively impacting existing biomass users**
18 **in north central Florida [TR23 L11-14]. Please address the Chairman's**
19 **question.**

20 **A. After reviewing the independent biomass assessment reports that GRU/GREC**
21 **provided to the Commission, as well as conducting my own independent**
22 **assessment of the biomass resource within the GREC wood basket, I can**
23 **confidently state that there is good evidence that GREC's biomass procurement**
24 **will be sustainable and will not negatively impact the existing biomass users in**

1 north central Florida. When I refer to "forest inventory data" in my testimony I
2 am referring to inventory data obtained from the USDA Forest Service's Forest
3 Inventory and Analysis (FIA) database. This is an ongoing inventory of the
4 nation's forest resources that has been conducted for at least fifty years and is the
5 definitive source of forest inventory data in the US. It is an impressive
6 undertaking that has few or no peers in other countries, either industrialized or
7 developing. In summary, the FIA database establishes a grid pattern of
8 permanent inventory plots on the landscape that are revisited and measured
9 every 5 years; in Florida alone this grid includes a few thousand sample plots.
10 FIA data forms part of the basis for our independent supply study conducted for
11 GREC as well as for the other studies mentioned above.

12

13 A second data source employed in our assessment and others is the USDA
14 Forest Service's Timber Products Output (TPO) database. This is a semi-annual
15 survey of wood using facilities that is also nationwide in scope. The TPO
16 survey measures the volume of timber that is purchased by mills, as well as the
17 type and quantity of products that those mills generate, including residuals.

18

19 A third data source that BioResource employs in its supply evaluation is the
20 National Land Cover Dataset (NLCD) maintained by the US Geological Survey.
21 The NLCD is derived from recent satellite imagery, and is a high-resolution
22 (0.25 acre) dataset that classifies the landscape into a variety of forest,
23 agricultural, developed, and other categories that form the basis for biomass
24 generation in the supply area. In our experience ground-truthing this data, we

1 have found the NLCD to be extremely reliable at correctly identifying the land
2 cover types most important to biomass supply.

3

4 In order to estimate supplies of urban sources, we utilize US Census tract data.
5 Population estimates from the Census Bureau for 2007 are used, and we apply
6 per-capita urban wood generation rates obtained from the literature, as do most
7 other assessments. Our operational experience enables us to refine this baseline
8 estimate according to population density and geographic considerations.

9

10 Finally, it is important to note that all of the above data is spatially explicit.
11 That is, the biomass generation estimates are pinpointed within the landscape
12 such that we are able to identify from which specific area material is originating.
13 This avoids using statewide averages that often distort local generation
14 estimates, and allows us to better predict costs as well as our ability to capture
15 the material generated.

16

17 Combining the tools and datasets mentioned above, with our knowledge and
18 experience in the biomass industry, allows me to confidently state that there is
19 excellent evidence that GREC's biomass procurement can be sustainable and
20 will not negatively impact the existing biomass users in north central Florida.

21

22 **Q. Did your independent assessment estimate the potential supply of different**
23 **types of biomass material that are currently available within the GREC**

1 **wood basket? If so, please provide your estimate for how much of each type**
2 **of biomass material is currently available within the GREC wood basket.**

3 A. Yes, our independent assessment estimated the potential supply of different
4 types of biomass material that are currently available within the GREC wood
5 basket. We estimate annual sustainable generation rates for four general biomass
6 categories within the GREC wood basket as follows:

- 7 • 1,600,000 green tons of biomass material from logging residues,
- 8 • 540,000 green tons of biomass material from pre-commercial thinnings,
- 9 • 3,300,000 green tons of coarse and fine residue from primary wood-
10 using mills, and
- 11 • 410,000 green tons of biomass material from various types of urban
12 wood waste.

13 This totals to 5.85 million green tons of biomass material from these four
14 categories generated annually within the GREC supply area; *note that this does*
15 *not include any pulpwood or other types of higher-value forestry products.* With
16 GREC needing approximately 1,000,000 green tons of biomass material per
17 year, there is a safety factor of almost 6 times.

18

19 Additional information on the estimates provided above is presented in the
20 BioResource Management presentation [RMS-10].

21

1 **Q. Isn't it true that replanting rates within the region's forests have declined**
2 **over the last decade and shouldn't that cause concern about GREC LLC's**
3 **ability to sustainability supply GREC?**

4 **A. It is true that replanting rates have declined over the last decade, but I do not**
5 **believe that this causes a concern about GREC LLC's long-term ability to**
6 **sustainability supply GREC. Since about 2000, harvested pine acreage has not**
7 **been met with an equivalent replanting rate. It could be interpreted that this land**
8 **is perhaps being taken out of forestry production (maybe by as much as 90,000**
9 **to 100,000 acres annually) and that critical supply shortfalls are looming for**
10 **existing and proposed facilities.**

11

12 The theory that land use is changing at this level is inconsistent with other
13 highly reputable third-party indicators such as FIA data that report Florida's
14 forests gaining 910,000 acres over the decade 1995-2005. While I believe that
15 tree planting data is less reliable than FIA, for numerous reasons, part of the
16 explanation likely lies in the fact that many forest landowners in the area are not
17 selling pulpwood due to prices that have been flat in real terms for the past 20
18 years. Rather than harvesting when their timber reaches pulpwood size, many
19 landowners are allowing their stands to grow to sawtimber size prior to harvest
20 in order to achieve a better return on their investment.

21

22 Therefore, the conclusion should not be that land use is changing, but rather that
23 rotations have lengthened and replanting rates are not a good indicator of
24 biomass availability. I am confident that there is a large volume of additional

1 biomass, beyond what is currently being utilized today, that can be sustainably
2 used for renewable energy facilities like GREC.

3

4 Finally, I want to note that the Minimum Sustainability Standards contained in
5 the GREC power purchase agreement (see [RMS-11]) specifically state that
6 biomass material will not be accepted from those suppliers who do not replant
7 harvested acres, a standard that no other biomass-using facility in Florida has
8 agreed to.

9

10 **GREC's Fuel Requirements and Sustainability Aspects of the PPA**

11 **Q. Please describe the amount of the biomass material that GREC LLC will**
12 **need to procure annually.**

13 A. Annually, GREC LLC will need to procure approximately 1 million green tons
14 of biomass material depending on the moisture content of the wood. GREC LLC
15 anticipates that the average moisture content of its biomass material will be
16 between 45 and 50 percent moisture. If the average moisture content is less than
17 anticipated, GREC LLC will need to procure less than 1 million green tons per
18 year of biomass material.

19

20 **Q. Chairman Argenziano asked what the primary source of fuel would be for**
21 **GREC [TR27 L5-7]. Please describe the different types of biomass material**
22 **that GREC will utilize.**

23 A. GREC will utilize many different types of biomass material for its operations.
24 GREC will not use as fuel any form of treated, painted, or coated wood;

1 municipal solid waste; construction and demolition debris; coal; petroleum coke;
2 or tires. All of GREC's biomass material will be clean, woody biomass material.

3 The different types of biomass material primarily consist of:

- 4 • In-forest residue and slash
 - 5 – Tops, limbs, whole tree material and other residues from soft-
 - 6 and hardwoods that result from traditional silvicultural harvests
- 7 • Mill residue
 - 8 – Saw dust, bark, shavings and kerf waste from the cutting/milling
 - 9 of whole green trees; fines from planing kiln-dried lumber; wood
 - 10 waste material generated by primary wood products industries
 - 11 such as round-offs, end cuts, sticks, pole ends, and reject lumber
 - 12 as well as residue material from the construction of wood trusses
 - 13 and pallets
- 14 • Pre-commercial tree trimmings and understory clearings
 - 15 – Material resulting from timber stand improvement operations:
 - 16 tops, limbs, and whole tree material that result from the removal
 - 17 of a percentage of the standing volume in order to improve
 - 18 growing conditions for the remaining stand and to reduce the
 - 19 hazard of wildfires. Forest understory that includes hardwood
 - 20 trees, bushes, and saplings
- 21 • Storm, fire and disease debris
 - 22 – Tops, limbs, whole tree material and other residues that are
 - 23 damaged due to storm and fire events as well as infectious
 - 24 diseases or insect pest outbreaks

- 1 • Urban wood waste
 - 2 – Tree crowns and trunks generated by landscaping contractors
 - 3 and power line/roadway clearance contractors that have been
 - 4 cleared for right-of-way maintenance; woody material generated
 - 5 from the conversion of rural land to urban or suburban uses; and
 - 6 the woody fraction of yard waste collected by municipalities
- 7 • Recycled industrial wood
 - 8 – Wood derived from used pallets; packing crates and dunnage
 - 9 disposed by industrial users.
- 10 • Agricultural residues
 - 11 – Peanut shells, rice hulls and other vegetative material

12 In summary, the biomass material that GREC will utilize is either urban or mill
13 waste wood or the lowest-value biomass material from forestry and agricultural
14 operations.

15

16 **Q. What is currently happening with much of the biomass material you**
17 **described above?**

18 A. This varies widely depending on the type of biomass material. Use of urban
19 waste wood is generally limited to the landscape mulch market, although some
20 is used as boiler fuel in area facilities. Some urban material is also landfilled or
21 illegally dumped, as is usually the case with storm debris. Most mill residues,
22 like bark and other coarse residues, are utilized as landscape mulch or boiler fuel
23 while fine mill residues, like sawdust and planer shavings, are mostly used as
24 animal bedding in north Florida horse farms. With respect to in-forest material,

1 logging residue is generally piled and open-burned in the field; at present
2 thinnings have little value, and as a result forest stands in the region are often
3 not thinned, although the material is generally used as boiler fuel if it is
4 harvested and marketed.

5

6 **Q. Is GREC able to utilize different tree species and ages in its operations?**

7 A. Yes. GREC is indifferent with respect to the species and age of the biomass
8 material. The major driving force from a fuel perspective for a biomass energy
9 facility like GREC is the moisture content of the wood. The drier the biomass
10 material, the higher the heating value of the biomass material and the less
11 biomass material GREC needs to consume.

12

13 **Q. Please describe the importance of GREC being able to utilize the different
14 types of biomass material you have described above.**

15 A. The ability to use a variety of biomass materials allows GREC to maintain a
16 diverse portfolio, and this affords the project a number of important advantages.
17 First, the diversity of fuel sources buffers the project from price fluctuations by
18 any single type of biomass material or supplier; second, it allows the project to
19 opportunistically utilize very low cost material such as storm debris; third, it
20 allows GREC to avoid directly competing with current users by utilizing waste
21 or residual material rather than logs used for higher-value products.

22

1 **Q. Are you familiar with the minimum sustainability standards and the**
2 **stewardship incentive plan contained within the power purchase agreement**
3 **between GRU and GREC LLC?**

4 A. Yes I am. In fact, Dr. Matthew Langholz, an employee of mine at that time
5 participated in the Ad-hoc Forestry Committee that GRU convened to assist
6 with the development of these standards and the incentive plan, along with
7 environmentalists, academics, forestry professionals and regulators.

8

9 **Q. Please summarize the minimum sustainability standards and the**
10 **stewardship incentive plan contained within the power purchase agreement**
11 **between GRU and GREC LLC.**

12 A. The Minimum Sustainability Standards applying to forest-derived material have
13 the following key features, and will be overseen by certified professional
14 foresters:

- 15 1. All biomass fuel must be obtained from forests in compliance with Best
16 Management Practices (water resources protection)
- 17 2. Biomass fuel cannot be obtained from the conversion of natural forests
18 to plantations (biodiversity/native ecosystem protection)
- 19 3. Stumps cannot be utilized for fuel (soil fertility maintenance)
- 20 4. No material from nonnative species except eradication projects can be
21 utilized (native ecosystem protection)
- 22 5. Land from which biomass has been harvested must be replanted within 3
23 years (forest cover sustainability)

1 The Forest Stewardship Incentive Payment provides landowners with a financial
2 incentive to go beyond the Minimum Sustainability Standards via the adoption
3 of third-party stewardship certification programs. This payment will provide
4 growers with a guaranteed price premium to those receiving certification from
5 the Florida Division of Forestry Stewardship Program or the Forest Stewardship
6 Council. Additional information related to the minimum sustainability standards
7 and the incentive program is presented in Exhibit No. __ [RMS-11].

8

9 **Q. In your opinion, will these minimum sustainability standards and the**
10 **incentive plan encourage superior silvicultural practices that will result in**
11 **better managed, healthier forests for the region?**

12 **A.** Yes, the minimum sustainability standards and the incentive plan will encourage
13 superior silvicultural practices. These two features of the power purchase
14 agreement raise the bar for those supplying biomass material to GREC
15 compared to other projects or even existing forest products industries. These
16 provisions will not only improve forest health, they will also help protect
17 Florida's water resources and native habitats for wildlife species.

18

19 **Q. Are you aware of any existing biomass users or proposed biomass users,**
20 **including the proposed biomass energy facilities in north central Florida,**
21 **that have agreed to minimum sustainability standards such as the ones that**
22 **GREC LLC has agreed to?**

23 **A.** No. We know of no facility in the state of Florida that has agreed to
24 sustainability standards like those included in the GREC agreement.

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Biomass Supply Needs of Existing Users

Q. Are you familiar with the biomass facilities listed in the table labeled *Response to Interrogatory 91*? If so, please explain whether you view these facilities as potential competitors to GREC for biomass material or as potential suppliers.

A. Yes, I am familiar with the biomass facilities listed in the table labeled *Response to Interrogatory 91* [RMS-12] and I do not view these facilities as potential competitors but rather as potential suppliers of mill residue. These facilities are primarily sawmills, chip-n-saw mills and pole mills that are located between 1 and 59 miles from the GREC site. In my opinion, GREC will not be competing directly with these facilities for biomass material as these facilities process harvested round wood solely, whereas GREC will use a wide range of wood waste as detailed above for its primary biomass fuel. In making lumber or poles, these mills will produce residues which can be utilized as fuel for the GREC facility. Currently, most of these residues are being utilized by other users, but I expect that a small percentage of this material will be supplied to GREC.

Q. Are you familiar with the biomass facilities listed in the table labeled *Response to Interrogatory 92*? If so, please explain whether you view these facilities as potential competitors to GREC for biomass material.

A. Yes, I am familiar with the biomass facilities listed in the table labeled *Response to Interrogatory 92* [RMS-13] and I do not view these facilities as potential competitors. These facilities are primarily pulp mills, with the exception of

1 Applying County Pellets, which is a pellet manufacturer and two other facilities
2 which are electrical generators. One of these electrical generators is extremely
3 small in size and has frequent shutdowns, while the other facility is fairly small
4 and utilizes a wide range of fuels that GREC will not use for fuel, including tires
5 and landfill gas. As for the pulp mills and the pellet mill, in my opinion, they are
6 not potential competitors to GREC for biomass material since they are primarily
7 utilizing round pulpwood as their processes require a specific species and age of
8 biomass material. As mentioned above GREC will utilize a wide range of lower-
9 value wood as its primary fuel.

10

11 **Q. Besides utilizing different types of biomass material, are there any other**
12 **reasons why you believe that these facilities are not potential competitors to**
13 **GREC?**

14 **A. Yes. Many of the facilities listed in the table labeled *Response to Interrogatory***
15 **92 receive a majority of their biomass material from one large private forest**
16 **owner under a long-term contract. It is also unlikely that GREC would contract**
17 **with these same private land owners for a significant portion of their biomass**
18 **material. Therefore, not only is GREC not targeting the same type of biomass**
19 **material as these facilities, GREC is negotiating with completely different**
20 **landowners/suppliers of biomass material than these facilities have previously**
21 **contracted with.**

22

23

1 **Q. Do you believe that GREC will have a negative impact on the existing**
2 **biomass users in north central Florida?**

3 A. No, I do not. In addition to the reasons stated above, as stated earlier, the recent
4 reports submitted by the Florida Department of Agriculture and Consumer
5 Services, Division of Forestry, and the Florida Department of Environmental
6 Protection ([RMS-7], [RMS-8], and [RMS-9]), conclude that a 7 percent RPS
7 would have little impact to the existing forest products industry and Florida's
8 forest would remain sustainable. It is important to point out that the biomass
9 energy capacity needed to meet this sustainable 7 percent RPS is many times the
10 capacity of GREC. Therefore, the impact from GREC alone should have very
11 little to no impact on the existing forest products industry.

12

13 **Potential Biomass Supply Needs of Future Users**

14 **Q. Are you familiar with the proposed biomass projects listed in the table**
15 **labeled *Response to Interrogatory No. 93*? If so, please explain whether these**
16 **facilities will compete with GREC for biomass material.**

17 A. Yes, I am familiar with the proposed biomass projects listed in the table labeled
18 *Response to Interrogatory No. 93* [RMS-14]. It is important to note that none of
19 the independent electric generating facilities listed in this table have power
20 purchase agreements as of the time that this testimony was prepared. For
21 independent electric generating facilities, a power purchase agreement with a
22 credit-worthy entity is the cornerstone of project development. At this time,
23 therefore, the further development of these projects remains speculative.
24 Nevertheless, if these facilities are successfully financed, built, and begin

1 operations, they will be able to utilize similar types of biomass material to fuel
2 their boilers and could therefore be considered potential competitors. However,
3 these facilities are over 70 miles away from GREC. Their respective wood
4 baskets will overlap somewhat, but they will not be directly competing for all of
5 their biomass material as they are not located directly next to each other. In
6 addition, it is important to point out that just because a project has filed, or
7 received, a permit from a regulatory agency is not a good indicator that a
8 particular project will actually be constructed and placed into operation. Many
9 other elements, especially for an independent power project that is planning to
10 sell its output, such as a financeable PPA with a credit-worthy offtaker, are
11 necessary before a project can begin construction.

12

13 **Q. Assuming a scenario where all of the currently proposed biomass projects**
14 **are constructed, do you believe that there is a sustainable amount of**
15 **biomass material available to support all of these projects?**

16 **A.** Yes, even if all of these facilities are constructed, I believe that there is enough
17 biomass material for GREC and all the others. However, it is highly unlikely
18 that all of the proposed biomass projects will be constructed for the reasons
19 stated above. My independent assessment of the biomass resources in the GREC
20 wood basket concluded that there is enough sustainably available biomass
21 material within the area for the development of between 200 and 250 MW of
22 biomass energy (including GREC).

23

1 As for the additional proposed biomass energy projects, the recent reports from
2 the Florida Department of Agriculture and Consumer Services, Division of
3 Forestry, and the Florida Department of Environmental Protection ([RMS-7],
4 [RMS-8], and [RMS-9]) state that more than twice the existing amount of
5 biomass energy capacity for Florida can be added without damaging Florida's
6 forest resources.

7

8 **Status of GREC Fuel Procurement**

9 **Q. Please describe GREC LLC's progress in securing woody biomass purchase**
10 **contracts, options, or agreements with prospective suppliers of woody**
11 **biomass.**

12 A. GREC LLC is actively discussing supply agreements with numerous local forest
13 landowners within the area of supply for the project. Collectively these
14 landowners represent more than 1 million acres and potentially generate over 3.1
15 million green tons per year of forestry material including logging residue, low-
16 grade thinning and other material. The negotiation of length, term, and amount
17 of material for each landowner varies and all parties require confidentiality
18 during the negotiation process. The targeted term is ten years and the targeted
19 total volume of GREC fuel from the supply agreements from these landowners
20 is 575,000 green tons annually.

21

22 For urban-derived biomass material, Wood Resource Recovery (WRR) and
23 GREC LLC have signed a letter of intent (LOI) to negotiate a ten year supply
24 agreement for 300,000 green tons of urban wood waste annually. This LOI is

1 included as Exhibit No. __ [RMS-15]. WRR is a Gainesville-based large urban
2 wood waste recycling company. WRR operates throughout the US managing
3 storm debris, and has handled over 1 million tons of woody biomass material per
4 year.

5
6 GREC LLC is also actively discussing supply agreements for other sources of
7 wood material including mill residue, agricultural land clearing tree debris, and
8 other sources. In addition, GREC LLC wants to maintain the ability to receive
9 opportunity fuels such as storm debris, diseased/damaged trees and tree debris
10 from large clearing projects, and therefore will not execute long-term contracts
11 for more than 90 percent of the estimated maximum supply requirement.

12

13 **Q. In your experience of assisting in the development and financing of biomass**
14 **energy facilities over the last thirty years, is it unusual for a biomass energy**
15 **facility at the development stage that GREC is at now, to not have binding**
16 **biomass supply agreements**

17 A. No. At the development stage that GREC is at now, it would be extremely
18 difficult and even disadvantageous for GREC LLC to execute competitive,
19 binding supply agreements with potential landowners/suppliers as GREC LLC is
20 still working on acquiring the necessary permits to construct and operate GREC.
21 As soon as it is clear that GREC will be successfully permitted, GREC LLC will
22 be able to execute binding supply agreements.

23

1 **Q. In your opinion, will GREC LLC be able to execute long-term supply**
2 **agreements for a majority of GREC's biomass supply needs before GREC**
3 **begins construction?**

4 **A. Yes.** From all of the biomass fuel discussions that GREC LLC is having with
5 landowners and suppliers of biomass material, I am confident that there is
6 sufficient interest among them to sign long-term biomass material supply
7 agreements with GREC LLC.

8
9 In addition, as Witness Levine testified to earlier, GREC LLC is planning on
10 pursuing a traditional project financing approach which would involve senior
11 long-term debt and additional equity as necessary, GREC's potential financing
12 partners will absolutely require that a majority of the necessary biomass material
13 to operate the facility be placed under long-term contract. The senior bank debt
14 will be secured by first priority liens on substantially all of the assets and
15 commercial agreements associated with, as well as a pledge of equity in, GREC.
16 During the due diligence phase of the financing process, GREC's potential
17 financing partners will hire an independent third-party to not only analyze the
18 GREC wood basket, but also review all of the long-term fuel contracts that
19 GREC LLC has executed.

20

21 **Q. Does this conclude your testimony?**

22 **A. Yes.**

1 **MR. WRIGHT:** Thank you. And I will just note
2 before he proceeds with his summary that the exhibits
3 have been marked for identification as indicated
4 Numbers 39 through 53.

5 **COMMISSIONER STEVENS:** Yes, sir. Thank you.
6 (Exhibit Numbers 39 through 53 marked for
7 identification.)

8 **BY MR. WRIGHT:**

9 **Q.** Mr. Schroeder, will you please summarize your
10 testimony.

11 **A.** Good afternoon, Commissioners. The purpose of
12 my testimony is to address questions regarding the
13 long-term availability of biomass material within the
14 North Central Florida region. In addition to speaking
15 about the general availability, I address within my
16 testimony the perceived competition from the existing
17 forest products industry as well as the potential
18 competition from proposed biomass users.

19 I am the founder and President of Bioresource
20 Management. We are a leading forestry, agriculture, and
21 organics recycling company located in Gainesville. I
22 have over 30 years experience in planning, developing,
23 and operating bioenergy facilities throughout the U.S.,
24 both in government and with private companies. During
25 my career I have been part of developing the supplies

1 for many biomass energy projects of which five were
2 ultimately financed, constructed, and are still
3 operating today, three of which are located in Florida.

4 My role in this project is the development of
5 reliable sustainable supplies. As part of that role I
6 have reviewed many reports written by various highly
7 reputable third-party entities between 2003 and 2010,
8 regarding the ability to economically and sustainably
9 fuel a biomass energy facility in Gainesville, Florida.
10 From these reports, and my company's independent study,
11 I have concluded that there is more than enough woody
12 biomass material on a long-term sustainable basis to
13 provide all the fuel supply needs of this project. This
14 can be done without adversely affecting the forest
15 resource or existing biomass users.

16 My conclusion agrees with all of those other
17 reports as well as with another report issued by the
18 Florida Division of Forestry two months ago. This
19 report stated that a level of biomass energy generation
20 of 1,000 megawatts, almost three times the level it
21 currently is, and ten times the size of this project
22 alone could be fueled exclusively by wood waste material
23 with minimal or no use of merchantable timber and with
24 minimal or no impacts to existing users of biomass
25 materials.

1 We further concluded that this biomass
2 generation would be additionally beneficial to the state
3 economy, timber producers, and associated forestry
4 operations and the overall health of the region's
5 forest. In the presentation attached to my testimony as
6 Exhibit RMS-10, I show that this project is located in
7 some of the highest densities of pine acreage in all of
8 the southeast. In fact, the project's 75-mile radius
9 supply area generates a total of 5.8 million green tons
10 of low value biomass material annually, giving this
11 proposed project a safety factor of almost six times the
12 volume it needs to successfully operate.

13 It's important to understand that the primary
14 source of biomass for this facility is urban wood waste
15 and forestry wood waste. Forestry wood waste material,
16 the lowest value biomass material from forestry
17 operations. This project will not target otherwise
18 merchantable timber. Therefore, this project will not
19 directly compete with the existing forest products
20 industry. This conclusion also agrees with the recent
21 Division of Forestry reports.

22 Concerns have been raised in previous
23 proceedings about the potential for the North Central
24 Florida region to be over-developed with biomass energy
25 facilities and that this could potentially harm the

1 region's forest resources. In my opinion, this is
2 highly unlikely. First, no other biomass energy project
3 is actually moving forward at this time in this area
4 other than this proposed facility. The reason is that
5 these are -- because the other proposals lack certain
6 critical components such as a financeable power purchase
7 agreement with a creditworthy customer like GRU.
8 Without financeable power agreements many so-called
9 announced projects never come to pass.

10 Second, my independent assessment concludes
11 that is there enough sustainably available biomass
12 material within the area for the development of
13 significantly more volumes than the amount required by
14 this project. But, finally, future biomass projects
15 will need to confront the existing demand/supply
16 landscape at the time they are ready to move forward.
17 They will simply not get built if there is not enough
18 material to supply them. In this way, in my experience
19 the construction of biomass projects is self-regulating.
20 In my opinion, it does not make sense to deny
21 construction of this project for which there is clearly
22 sufficient fuel simply because of a certain amount of
23 potential future projects.

24 My testimony also discusses the project's fuel
25 procurement strategies and the status of early

1 negotiations in procurement efforts. I am directly
2 involved in these efforts and this project is actually
3 farther along than many developers at this point in the
4 process. They have identified bonafide sources for all
5 of the wood requirements, have executed a substantial
6 letter of intent for the supply of approximately 30
7 percent of its fuel needs, and have letters of interest
8 or are on negotiating terms with major landowners in the
9 area whose timberland properties exceed one million
10 acres. From my experience, the timing and procurement
11 activities for this project is on schedule.

12 In conclusion, there is more than enough woody
13 biomass material on a long-term sustainable basis within
14 this project's supply area to provide all of the supply
15 needs of the facility without adversely impacting
16 existing users. This project will significantly
17 contribute to keeping the forest resources of Florida
18 healthy and sustainable, increase the revenue for local
19 landowners for their efforts, and increase the chances
20 of keeping forest land in forest land.

21 Thank you.

22 **COMMISSIONER STEVENS:** Thank you, Mr.
23 Schroeder.

24 **MR. WRIGHT:** We tender Mr. Schroeder for
25 cross-examination.

1 **COMMISSIONER STEVENS:** Thank you, Mr. Wright.

2 Ms. Stahmer, cross.

3 **MS. STAHER:** Thank you. I will defer to
4 Intervenor Deevey.

5 **COMMISSIONER STEVENS:** Ms. Deevey.

6 **MS. DEEVEY:** Thank you. I have a few
7 questions and I don't think they will take much time.

8 CROSS EXAMINATION

9 **BY MS. DEEVEY:**

10 **Q.** Are you familiar with a wood stumpage and
11 delivered price reporting publication called Timbermart
12 South that is published by the University of Georgia?

13 **A.** Yes, I am.

14 **Q.** Is this publication a recognized reporting
15 source for actual wood transaction in the southeastern
16 states?

17 **A.** Yes, it is.

18 **Q.** Is it true that most long-term purchase --
19 wood purchase or supply agreements are indexed against
20 stumpage or delivered reports like Timbermart South to
21 account for changes in competitive fiber pricing over
22 time?

23 **A.** No, it's not.

24 **Q.** Not true. Thank you.

25 What provisions -- huh, just a minute. What

1 provisions has American Renewables made to ensure that
2 any long-term contract escalation indexes remain
3 cost-effective if you do use them?

4 **A.** The pricing of biomass is related obviously to
5 some of those indices, but throughout the recent
6 history, let's say the last 30 years of wood fuel
7 procurement, they have been relatively stable compared
8 to nearly every other indices. As a matter of fact, the
9 price of conventional products as reported by Timbermart
10 South for the past 30 years has increased less than the
11 rate of inflation.

12 In our particular case, the biomass material
13 to be delivered to a facility like this has several cost
14 components. Cost components such as the labor of
15 harvesting, such components as the cost of transport, as
16 well as the cost of the material either from the
17 landowner, or in the case of a landfill, the tipping
18 fees that they receive. So all these components go into
19 the cost -- determining the cost of the biomass.

20 **Q.** Okay. Well, can you -- you will then, I
21 assume, be able to provide as a late-filed exhibit wood
22 purchase contracts that have a fixed delivery price over
23 a long-term and do not have an escalator or are tied to
24 an index?

25 **A.** Let me explain to you where we are as with

1 every other plant with the procurement process.

2 Q. I'm sorry, sir. It does not have to be with
3 this project; any that you have negotiated in the past
4 with someone else.

5 A. No.

6 Q. You cannot. You cannot file one that shows
7 the lack of an escalator or an index and for a
8 long-term, is that true?

9 A. Almost all of the -- all of the contracts I
10 have signed in the past have included inflation indexes.

11 Q. Thank you.

12 Numerous times in your testimony you state
13 that there is adequate biomass available to make this
14 deal cost-effective for the citizens of Gainesville, is
15 that correct?

16 A. Yes.

17 Q. Okay. Now, please look at Page 2 of Woody
18 Biomass Economic Study. This is your Exhibit RMS-9.
19 Look at the bottom of the page. Do you see where it
20 says -- Page 2 at the bottom. The second sentence from
21 the bottom. Do you see where it says, "Any clean
22 portfolio standard, or RPS mandate should also
23 incentivize tree planting, including short rotation
24 energy crops establishment proportional to the magnitude
25 of the mandate."

1 **A.** This is RMS-9, did you say?

2 **Q.** Yes. RMS-9, Page 2.

3 **A.** Okay. That's the letter, right?

4 **Q.** That is the woody biomass economic study, the
5 shortest of the three. It's listed on the exhibit as
6 Page 4 of 22.

7 **A.** Okay.

8 **Q.** I'm sorry.

9 **A.** Okay.

10 **Q.** Do you see the sentence second from the
11 bottom?

12 **A.** Uh-huh.

13 **Q.** It reads as I indicated?

14 **A.** Would you read the sentence that you are
15 referring to, again?

16 **Q.** Yes. Any clean portfolio standard or RPS
17 mandate should also incentivize tree planting, including
18 short rotation energy crops establishment on acreage
19 proportional to the magnitude of the mandate.

20 **A.** Okay.

21 **Q.** Okay. Look again on Page 4 of that, which
22 will be 7 of 22.

23 **A.** Okay.

24 **Q.** And this is the last sentence where it says,
25 "However, to sustainably achieve one percent to three

1 percent levels of electricity production from wood
2 sources, logging residues and urban wood waste have to
3 also be --" pardon me. "Logging residues and urban wood
4 waste have also to be utilized in addition to
5 merchantable timber and reforestation has to keep pace
6 with harvest removal. Beyond three percent of
7 electricity generation from wood sources, short
8 rotation energy crops need to fill an increasingly
9 larger share of the fuel mix."

10 Now, does American Renewables or GREC have any
11 firm financial commitments to incentivize tree planting
12 to support the sustainability of purchases of wood to
13 fuel the GRU plant?

14 **A.** First, I'd like to go back to your reference
15 to this study, the woody biomass study. They are
16 talking about a level of removables and a level of
17 production of woody biomass that far exceeds the
18 anticipated need for this plant. So for you to say,
19 well, does this apply to 100 megawatts the same way it
20 would apply to 1,000 megawatts, I would have to tell you
21 no.

22 Now, the second part of your question was does
23 this agreement with this particular project, GREC, have
24 any incentives. They actually have a requirement within
25 the contract that by sustainable forest management

1 practices trees must be part of a reforestation program,
2 and I believe you will find that in RMS-11, I think,
3 although I have a lot of stuff here.

4 Q. Yes. I infer from your answer that you do not
5 believe that there will be -- that a renewable portfolio
6 standard will, in fact, result in achieving a one to
7 three percent level of electricity production from wood
8 sources, even though they are talking about
9 significantly more, I believe, right now. Is that the
10 case? You don't believe that there will be such a
11 renewable portfolio standard or that it will be
12 implemented with the use of wood, is that the case?

13 MR. WRIGHT: Excuse me.

14 COMMISSIONER STEVENS: Mr. Wright.

15 MR. WRIGHT: I apologize, but I honestly
16 could not follow that question. There were a couple of
17 ors, it was compound, and there were some assertions
18 there. If the question could be stated more clearly.

19 COMMISSIONER STEVENS: Sure. Ms. Deevey, can
20 we restate, please.

21 BY MS. DEEVEY:

22 Q. I would ask the witness to clarify his recent
23 answer in terms of whether or not that implies that he
24 does not believe there will be a renewable portfolio
25 standard that will result in as much as one to

1 three percent of energy in the state produced from wood?

2 **A.** I didn't imply that it would not happen. I
3 didn't imply that it would. I think for this particular
4 project we are looking at the supply for a 100 megawatt
5 plant.

6 **Q.** Does American Renewables and GREC intend to
7 use short rotation energy crops as fuel?

8 **A.** No, they don't.

9 **Q.** Okay. Did I understand your testimony on Page
10 17, Lines 13 to 17, to say that American Renewables/GREC
11 LLC has a signed letter of intent to purchase 300,000
12 green tons of urban wood waste from Wood Resource
13 Recovery? Is this a firm contract or an intention to
14 negotiate a contract?

15 **A.** This is a letter of intent. It's a
16 clarification of terms that both parties are comfortable
17 with to move toward a binding contract.

18 **Q.** Is GRU willing to make the use of a minimum of
19 300,000 tons per year of urban wood waste as a condition
20 of certification in this docket before the Public
21 Service Commission?

22 **MR. WRIGHT:** Excuse me.

23 **COMMISSIONER STEVENS:** Yes, sir. Mr. Wright.

24 **MR. WRIGHT:** There were mixed concepts there.
25 Conditions and certification are applicable in the site

1 certification order to be issued by the siting board,
2 and she was asking a question about GRU. She can ask
3 the question, he can answer it, but there was a
4 confusion of terms.

5 **COMMISSIONER STEVENS:** Ms. Deevey, would you
6 like to restate?

7 **MS. DEEVEY:** I gather that there is -- that
8 many of the approvals for site certification do come
9 with conditions that the applicant agrees to. So I may
10 be using incorrect terminology, but my question is
11 would GRU/GREC agree to such a condition in the site
12 certification approval that requires them to use a
13 minimum of 300,000 tons per year of urban wood waste.

14 **COMMISSIONER STEVENS:** Mr. Wright.

15 Ms. Deevey, I think the GRU/GREC reference is
16 the issue?

17 **MR. WRIGHT:** No, sir. I really think she has
18 asked a question that is not really proper for this
19 witness. She has asked what we, as the petitioners,
20 might agree to, and I don't think that's a proper
21 question for Mr. Schroeder. And I'm not sure that I
22 have ever seen a condition of certification like that
23 in a need determination order from this Commission,
24 either.

25 **COMMISSIONER STEVENS:** Okay. Ms. Cibula.

1 **MS. CIBULA:** Again, I would ask her to
2 rephrase her question.

3 **COMMISSIONER STEVENS:** Can you help her
4 rephrase that question?

5 **MS. DEEVEY:** I'm trying.

6 **BY MS. DEEVEY:**

7 **Q.** I have asked whether the applicants will agree
8 to such a condition, and I believe you are saying you
9 cannot answer for them. Is that correct?

10 **A.** Yes. I'm not the applicant.

11 **Q.** Thank you. I know you aren't, but you are not
12 able to answer this. Okay.

13 On Page 22, Lines 7 to 12 of your testimony,
14 you gave estimates of annual biomass amounts that will
15 be available within the GREC wood basket. Are you
16 testifying that GREC LLC and GRU will not be purchasing
17 any pulpwood or other types of higher value forestry
18 products to fire the energy boilers?

19 **A.** What we have said in this study and in my
20 testimony and in the four studies, the last studies done
21 by the Department of Agriculture and IFAS and many of
22 the others is that this plant will not actively procure
23 those materials, first going after the lowest cost
24 biomass material, which is not your pulpwood or saw logs
25 or anything else. That being said, are you going to say

1 that there is, under all circumstances, a situation
2 where some of that wood may end up in the plant, the
3 answer is there may be.

4 Q. So you may be using merchantable timber such
5 as pulpwood.

6 A. (No audible response.)

7 Q. Okay. On Line 22, Page -- pardon me. On Page
8 22, Line 7 of your testimony you estimated that
9 1,600,000 tons of biomass will be available from logging
10 residues annually within this wood basket area. Are you
11 testifying that GREC and GRU will be purchasing a
12 substantial portion of its biomass needs from logging
13 residues?

14 A. Yes, I am.

15 Q. How much annually would be purchased, do you
16 know?

17 A. On RMS-10 I have given you a breakdown of the
18 approximate supply for this plant by biomass type. I
19 think you'll see that there is 575,000 tons of material
20 generated from forest land, although if you will give me
21 a moment I will double-check that.

22 Incidentally, Commissioners, we produced
23 RMS-10 to be in color. I don't know if you have color
24 copies, but we have color copies available for everyone
25 to give you because some of the graphics didn't come out

1 clearly in black and white.

2 If you will take a look at the target, and I
3 believe it is RMS-10, Page 5, it will tell you the
4 approximate range of materials that we're going to
5 procure for this project by type.

6 Q. So you will not -- you do not -- well, there
7 is no way to ensure for the customers of GREC or
8 Gainesville citizens that you will purchase a certain
9 minimum volume of logging residues?

10 A. We have one mandate -- I have one mandate as a
11 company with this project, and that's to get the lowest
12 cost biomass material delivered to the facility. That
13 facility will generally be using logging residues
14 because those materials currently either have no value
15 or a negative value both economically and
16 environmentally. So I would tell you we will focus on
17 that material.

18 Q. On Page 24, Lines 4 to 8 of your testimony,
19 you state that biomass material will not be accepted
20 from those suppliers who do not replant harvested acres.
21 How will American Renewables or GREC ensure that
22 replanting is done?

23 A. We will set up a stewardship program within
24 the facility that is going to monitor and manage the
25 source and the type of wood being received. I believe

1 that that is all described within the testimony, but we
2 will have full-time professionals that will go out and
3 find out, frankly, where the wood came from and what
4 happened next.

5 Q. And if you find that they violated the
6 requirements, what is the result?

7 A. The result of the requirement, of violating
8 the requirement is that you no longer take wood from
9 that particular landowner.

10 Q. Okay.

11 A In the case of the logger violating the
12 standard, it would be that you would longer take it from
13 that supplier. I believe you will find in our
14 experience of procuring wood and delivering wood for 10
15 to 15 years for these projects is that those
16 disincentives for someone interested in maintaining the
17 business and in keeping their business are sufficient.
18 They know that we are watching them for their practices.
19 They are not worth taking the chance of losing their
20 business not to conform to the practices.

21 Q. Okay. On Page 22 of your testimony, as we
22 have pointed out, you have always said that there is
23 plenty of other biomass available to supply the plant
24 that is to say not including pulpwood, and your
25 testimony on Page 24 references mandatory replanting of

1 trees from anyone who supplies fiber. Does your
2 testimony on Page 24 really mean that GREC and GRU will
3 be conducting clearcut operations on forests such that
4 they will need to replant?

5 **A.** Absolutely not. What that means is that there
6 are times when final harvest takes place. Final harvest
7 takes place when you have harvested all of the
8 components of the forest, not only including biomass,
9 but your higher value material. GREC does not either
10 demand or even request or in any way facilitate that
11 management decision process by the landowner. If,
12 however, that landowner decides that the final harvest
13 of timber is appropriate for his management, if he does
14 and if we receive wood as part of that final harvest, he
15 will replant.

16 **Q.** So that's a condition of your purchasing the
17 wood, that he replants if as a result of selling to you
18 and other purchasers the forest is gone?

19 **A.** Yes.

20 **Q.** Thank you. If combined wood sources costs
21 exceed a level that is, say, acceptable to the public,
22 how much of the increase in wood prices are borne by
23 American Renewables or GREC, and how much is at risk for
24 the ratepayers of Gainesville?

25 **A.** I don't know.

1 **Q.** Okay. On Page 14, Lines 21 to 24, you state
2 that full implementation of the RPS is assumed to
3 translate into a contribution of woody biomass of 15
4 percent of all Florida's 20/20 generation.

5 **A.** I believe, if you'll notice, what I'm doing is
6 summarizing the study report by Hodges.

7 **Q.** Okay. Do you know how many generators with a
8 capacity equivalent to GREC would be required to supply
9 that 15 percent of energy?

10 **A.** I'm not certain. I think it's ten, but I'm
11 not certain.

12 **Q.** Ten.

13 **A** Yes.

14 **MS. DEEVEY:** Yes. Well, thank you. That
15 completes my cross-examination.

16 **COMMISSIONER STEVENS:** Thank you, Ms. Deevey.

17 Thank you, Mr. Schroeder.

18 Mr. Sayler.

19 **MR. SAYLER:** Staff has a number of clarifying
20 questions for the witness. In an attempt to keep it
21 quick and fast, most of my questions are yes and no,
22 but if you feel the need to clarify, please feel free.
23 But I am just trying to cover a lot of ground really
24 quickly because time's a wastin'.

25 Thank you, Mr. Schroeder, for testifying

1 today. My name is Eric Sayler. I am an attorney with
2 the Commission.

3 CROSS EXAMINATION

4 **BY MR. SAYLER:**

5 Q. In your testimony you refer to the GREC wood
6 basket, and I believe that means the geographic area
7 from which the GREC facility can economically obtain
8 biomass material, is that correct?

9 A Yes.

10 Q. And at the last proceeding there was a map of
11 the State of Florida with a 75-mile radius around
12 Gainesville. Is that equivalent to the GREC woody
13 biomass or the GREC wood basket.

14 A. Yes. And we also included that in my RMS-10,
15 Page 3.

16 Q. Okay. So the GREC wood basket equates to the
17 75-mile radius around the GREC facility?

18 A. If I can clarify that for a moment. The
19 supply area of any one of these biomass plants is not a
20 perfect circle. The supply area of any biomass plant is
21 the proximity with which it can be hauled reasonably for
22 transport costs. What we do, to be honest with you, at
23 a different level in this is actually create a polygon
24 based on roads. And the polygon based on roads
25 determine the exact hauling time in minutes and then we

1 create that polygon. But for a lot of people who like
2 simplicity, we draw a circle on the map.

3 Q. Well, thank you. We appreciate the
4 simplicity, as well. And also the clarification.

5 According to your testimony, you have stated
6 that the GREC facility will need approximately
7 one million green tons of biomass a year, is that
8 correct?

9 A. That's correct.

10 Q. And at this time how much of that annual need
11 has been contracted for?

12 A. At that time all of it has been identified.

13 Q. It has all been identified, but --

14 A. Identified.

15 Q. But not contracted for?

16 A. We know who owns it; we know who has control
17 of it; we know who is probably willing to sell it; and
18 we are actively negotiating for those long-term
19 agreements.

20 Q. All right. Thank you. And I believe you
21 stated before in preparing your testimony you reviewed a
22 number of biomass studies which you have attached to
23 your testimony, correct?

24 A. That's correct.

25 Q. And two of the key studies were the ones

1 recently purchased March 1st, which were the woody
2 biomass for electricity generation in Florida, which is
3 RMS-8, and woody biomass economic study, which was
4 RMS-9, and both are attached to your testimony, is that
5 correct?

6 **A.** That's correct.

7 **Q.** All right. Now, were any of the reports or
8 studies, either these new ones or the older ones
9 case-specific to the GREC wood basket or the GREC
10 facility?

11 **A** The first one was. The second one was. The
12 third one was. The fourth one, I think, was. The
13 fifth -- the last two you mentioned were on a statewide
14 basis.

15 **Q.** Okay. And for clarification, that's on Page 9
16 and 10 of your testimony. That is RMS-2, RMS-3, RMS-4.

17 **A** And RMS-5, I think, which is the IFAS. I
18 called it the Carter Langholst (phonetic).

19 **Q.** All right. And it is correct to say that
20 those studies specifically evaluated the sustainability
21 of biomass for the GREC project, is that correct?

22 **A.** Yes, that's correct.

23 **Q.** All right. Now, I want to talk about the two
24 recent studies filed or published March 1st. Do any of
25 those studies show that there is more or less

1 sustainable biomass in the state of Florida?

2 **A.** The two studies that were done recently, the
3 first one was an economic study on the impact of
4 renewable portfolio standards. The one -- and I'm
5 uncertain of the numbers, but I know who wrote it.
6 Doctor Hodges did an economic study on potential
7 impacts, economic impacts of increasing woody biomass
8 production. That particular study took his scenarios
9 all the way up to 60 million tons a year of biomass and
10 predicted what that would look like through the
11 socioeconomic chain. His was not a prediction of
12 material being generated; his was a prediction of
13 economic impact.

14 The other study, the most recent study and the
15 one that Commissioner Bronson referred to that was
16 delivered March 1 was a study -- both a review of a lot
17 of the same material here as well as U.S. Forest Service
18 and TPO data and other databases that we use of what the
19 potential capacity would be to derive biomass power
20 using these residuals that we have been talking about.

21 I would say that that one corroborated our
22 estimates for the supply area of Gainesville. Again,
23 they were written on a statewide basis, but if you
24 extrapolate them they corroborate it.

25 **Q.** All right. Let me rephrase my question. Do

1 the newer studies and the reports show that there is
2 more sustainable biomass in Florida than the older
3 reports? I mean, are they finding more, or less, or are
4 they just getting more -- drilling down and being more
5 specific?

6 **A.** They are getting more granular, but the
7 results are pretty darn consistent.

8 **Q.** All right. And according to your testimony
9 and based upon your review of all the studies and
10 reports, in the GREC wood basket, I believe you stated
11 that there is about approximately 5.85 million green
12 tons of woody biomass, is that correct?

13 **A.** Yes. That's the low grade woody biomass.
14 That excludes the round wood being consumed for
15 traditional forest products.

16 **Q.** All right. And that also equates to
17 approximately 200 to 250 megawatts of biomass capacity?

18 **A.** No, that actually would equate to more. And I
19 have a reference there, I think, of 200 to 250, and what
20 I was doing was taking 50 percent of that.

21 **Q.** Okay. Explain that. Are you saying that the
22 5.85 million green tons of woody biomass represent more
23 potential megawatts than 200 to 250?

24 **A.** Yes.

25 **Q.** Approximately how much, ballpark?

1 **A** If this 100 megawatts is a million tons, that
2 would be 585 megawatts.

3 **Q.** All right. Thank you. I'm going to have
4 Phillip pass out this -- it is actually Interrogatory
5 97. It is already in the record. This is just really a
6 demonstrative exhibit. For completion, I have included
7 the entire Interrogatory 97, but really what I want you
8 to look at is the money page, which is at the bottom of
9 the page. There is a Bates stamp number that is 00526,
10 or it is Page 29 on the page. And this is an excerpt of
11 the this interrogatory response, and there's a fuller
12 one in the entire record. And I will also note that
13 GRU/GREC supplemented this interrogatory response on
14 April 28th, but it doesn't affect this chart that I
15 would like for you to refer to. Are you familiar with
16 this chart?

17 **A.** Yes, I am.

18 **Q.** All right. And this chart was prepared or the
19 affidavit was signed by Mr. Joshua Levine, is that
20 correct?

21 **A.** I believe it was, yes.

22 **Q.** All right. According to this chart, there are
23 five proposed biomass power plants within the GREC wood
24 basket, is that correct?

25 **A.** Well, you have one 153 road miles, another one

1 165. There will be some overlap, but they are not in
2 that 75-mile circle we were discussing earlier.

3 Q. All right. And those projects represent at a
4 low end 11 megawatts of energy to a high end of the 100
5 megawatts, which is the Hamilton County Renewable Energy
6 Center which is being proposed by American Renewables,
7 is that correct?

8 A. Yes. I haven't done the math, but I assume
9 that's right, yes.

10 Q. Okay. If you were to -- and I believe you
11 stated earlier that these wood baskets for all five
12 proposed biomass plants somewhat overlap with GREC's
13 wood basket. They are not equivalent, but they just
14 overlap, is that correct?

15 A The don't overlap a lot if they are 150 miles
16 away. I mean, when you think of two 75-mile radius,
17 there is not a lot of overlap there, but there a couple
18 here that are closer than that, and so some of their
19 supply area would overlap.

20 Q. Okay. And the ones that are closer are the
21 Ocala Equine Energy, representing 11 megawatts, and the
22 Hamilton County, which is 100 megawatts. Those are
23 respectively 49 and 57 miles away from GREC, is that
24 correct?

25 A. Yes. That's what it says, yes.

1 **Q.** And if all five of these power plants are
2 built, then that would represent, if you do the math,
3 327 megawatts of biomass in that area, is that correct?

4 **A.** In the area of the GREC supply area?

5 **Q.** Correct.

6 **A.** I don't know. I only see 111 that are within
7 75 miles, but I might be look at something different.

8 **Q.** Okay. Well, on this chart -- well, based upon
9 this chart, there's 327 megawatts, is that correct?

10 **A.** In the whole state, yes. Fair enough.

11 **Q.** All right. And other than the GREC facility,
12 there is only one other facility that has currently
13 signed a PPA agreement, and that's the FB Energy One,
14 and they signed it with Progress, is that correct?

15 **A.** FB Energy.

16 **Q.** It's Number 5 on the bottom.

17 **A.** Yes, I think they did. Yes.

18 **Q.** Thank you. And if GREC, along with these
19 other proposed biomass power plants are built, will that
20 have an upward -- would that add upward pressure on the
21 price of biomass within the GREC wood basket?

22 **A.** I don't believe so. Would you like me to
23 elaborate?

24 **Q.** Please.

25 **A.** Okay. When we do the procurement and even the

1 development of these projects over the past number of
2 years, we look at two key indicators as far as what the
3 sensitivity or elasticity of the price is going to be on
4 the wood. One is the overall generation rate of the
5 supply area. You're looking at a supply area, and a lot
6 of people -- I sort of talk to a lot of people about it
7 being an 11,000 square mile solar energy collector. You
8 find out what is being generated and then you say what
9 percentage of that am I going to need for this project,
10 and what percentage of it would be used for other
11 projects. And it gives you an idea of the total
12 generated versus the total requirements, and it gives us
13 a good idea as far as the elasticity. If you go into a
14 project and you need, say, 75 percent of what is being
15 generated, then you have a high likelihood of driving up
16 the cost of the biomass.

17 Our facility is looking at about basically a
18 six time multiple, 5.8 times the requirement that this
19 plan would need. My experience over the past years is
20 that that is a good number for not having much impact on
21 the pricing. But that being said, we have also seen
22 tremendous history, and there is a lot of work in here,
23 if you look at some of the studies done by Carter
24 Langholtz (phonetic), some of the other work done by the
25 Division of Forestry, and my RMS-10 that talks about

1 increased pine productivity, we are growing twice as
2 much pine per acre as we did 20 years ago. And so
3 unlike, in my opinion, a lot of fossil fuels, we have
4 the ability to grow more as the demand increases. And
5 so as the demand increases the supply does not remain
6 constant. And over the life of the facility they have a
7 tendency to levelize. So I would tell you that we have
8 very little elasticity in even the short or long-term on
9 these plants.

10 Q. Okay. And you mentioned that there is a
11 potential to grow woody biomass within the GREC wood
12 basket, is that correct?

13 A. That is correct.

14 Q. And how would that be accomplished?

15 A. If you will look at RMS-10, we talked about a
16 scenario of merely taking an extra thinning on pine
17 plantations by allowing us to harvest trees that would
18 be too small for conventional products. By taking that
19 extra thinning, we would gain an extra one and a half
20 green tons per acre per year. If we did that on ten
21 percent of the forest land here we would literally grow
22 all the extra wood we would need for this project.

23 Q. All right. Thank you. Just a few, a handful
24 of questions left.

25 According to your testimony and resume you are

1 the owner of Bioresource Management, LLC, correct?

2 **A.** It's Bioresource Management, Inc.

3 **Q.** Inc. Oh, excuse me. And GREC hired you as a
4 paid consultant to assess their biomass available in the
5 wood basket, is that correct?

6 **A.** That's correct.

7 **Q.** All right. And when did they hire you to do
8 that, to be a consultant?

9 **A.** We first began contracting with them in
10 January of this year.

11 **Q.** January of this year. All right. Okay. If
12 you will turn to Page 2 of your testimony, Lines 9
13 through 12. You testified that you are assisting GREC
14 in executing its fuel procurement strategy and
15 negotiating with potential biomass suppliers. Could you
16 just briefly elaborate on what you mean by executing its
17 fuel procurement strategy and negotiating with potential
18 biomass suppliers?

19 **A.** Yes. We are identifying, as I said, the
20 generators of the biomass. The generators of the
21 biomass are probably in two or three categories. One,
22 of course, is the landowner who has access to and
23 ownership of the biomass. Another one in the case of
24 urban wood waste are the urban wood waste collectors, as
25 well as the urban wood waste generators. Generators

1 being a city, like Gainesville. Collectors being wood
2 aggregation yards or wood recycling facilities.

3 We are also look at producers. Producers are
4 the guys who actually harvest the biomass residue. The
5 producers can also be a landowner, but a lot of them are
6 not. A lot of them are working nonlandowners. We
7 identify all of those particular people who have
8 interest in supplying the biomass and we go and talk to
9 them about what volumes they are handling and where they
10 are located and from there we develop a matrix. I'll
11 call it a list of what we think is the best case or the
12 optimum scenario for procuring wood for the project
13 based on distance, based on supply, based on the source.

14 Q. Thank you. If the GREC project is ultimately
15 approved, I know it has a few other stops past the
16 Commission, is it reasonable to say that you or your
17 company will financially benefit on an ongoing basis
18 from the GREC facility?

19 A. Well, I hope so. I mean, this is what we do.
20 This is what the company does. We procure wood for
21 biomass projects from here to New England and we also
22 help people that have biomass supplies find homes for
23 it. However, they have hired us to give us their expert
24 opinion and to give them our experience on it in an
25 objective fashion. I will tell this, and I have

1 mentioned it to someone else, we are perhaps a bit
2 unique in that we have not only predicted the supply of
3 biomass, we have actually had to live with it. On three
4 of those five projects I mentioned we not only predicted
5 the price and the supply of biomass, but we entered
6 long-term agreements to deliver at that price. So I
7 have had to live with my projections. And, therefore, I
8 have a tendency to be as real as I can.

9 Q. All right. Thank you. Just two more
10 questions.

11 On Page 7, 17, and 34, you refer to a company
12 Wood Resource Recovery, and I believe it's LLC, is that
13 correct?

14 A. I believe he is LLC, yes.

15 Q. All right. According to your resume, it said
16 that you were the president and co-founder of Wood
17 Resource Recovery, Incorporated; is that correct?

18 A. That is correct.

19 Q. Are those the same companies or are they
20 different?

21 A. They are different companies on the same site.

22 Q. Excuse me?

23 A. We founded Wood Resource Recovery, Inc. back
24 in the '80s. That was during the Solid Waste Management
25 Act, and we were one of the first wood waste recycling

1 sites. We sold it to a waste company, and I went and
2 did other things for approximately 15 years. That waste
3 company ended up selling it back to one of my former
4 partners, who created Wood Resource Recovery, LLC.

5 Q. Okay. And do you have any ongoing financial
6 relationship with the new successor company?

7 A. None whatsoever.

8 MR. SAYLER: All right. Well, thank you very
9 much for your time in answering staff's questions. I
10 appreciate it.

11 COMMISSIONER STEVENS: Commissioners, any
12 questions of Mr. Schroeder?

13 Redirect.

14 MR. WRIGHT: Thank you, Commissioner. Just a
15 few.

16 REDIRECT EXAMINATION

17 BY MR. WRIGHT:

18 Q. Ms. Deevey asked you some questions about the
19 hypothetical possibility of clear cutting. I recall you
20 gave an answer saying that at some point in time there
21 might be what you would refer to as a final harvest. I
22 wanted to ask you some follow-up questions about that.

23 If there were a final harvest, are we talking
24 about cutting down the remaining trees on the property?

25 A Yes.

1 **Q.** What would happen to the trunks, let's say, if
2 it was pulpwood or saw logs, what would happen to the
3 trunks of those trees?

4 **A.** All of those trees would be merchandise and
5 sold as the highest value product. As a matter of fact,
6 that final harvest are the highest value logs that go
7 for poles, plywood, and saw logs.

8 **Q.** So would those tree trunks we're talking about
9 be going to the Gainesville Renewable Energy Center?

10 **A.** No.

11 **Q.** What about the residues?

12 **A.** No. Yes, they would be, as part of the
13 process. Potentially we would be taking the tops and
14 the culls and the branches from that harvest.

15 **Q.** And what if in this context, assuming that the
16 forest residues were to come to the Gainesville
17 Renewable Energy Center, what if any obligation would
18 that landowner have to replant?

19 **A.** Under the sustainable practices that we have,
20 that landowner by bringing us the material from that
21 final harvest would be obligated to replant that site
22 within three years.

23 **Q.** Ms. Deevey also asked you some questions that
24 revolved around the idea that the Gainesville Renewable
25 Energy Center might use pulpwood, and my question for

1 you is simply this: In what cases, if any, would the
2 GREC, the Gainesville Renewable Energy Center, possibly
3 use otherwise merchantable timber?

4 **A.** In forestry there's a lot of cases where the
5 vast majority of the wood standing there is not
6 merchantable, but there may be a pulpwood tree. There
7 is also circumstances where fire, or disease, or insects
8 have killed potentially pulpwood trees. In those cases
9 we think it is not only possible, but desirable that we
10 would take that type of material to this plant.

11 **Q.** You were having some discussion with Mr.
12 Sayler regarding the GREC LLC's efforts at procuring --
13 toward procuring, making initial arrangements with
14 potential suppliers. Have you had any expressions of
15 interest or anything like that from landowners who might
16 supply product to the facility since you filed your
17 testimony?

18 **A.** Since we filed the testimony. I believe we
19 have additional letters of interest that were filed
20 afterward. I think we have got some letters -- I'm not
21 sure what the status of those are, but we have letters
22 from landowners right now that I think probably total
23 100,000 acres, and then we have got ongoing discussions
24 with other big landowners.

25 **Q.** Can you tell us who those landowners are to

1 whom you just referred?

2 **A.** At this point frankly I would not like to. As
3 I told you, our mission here is to get wood at the
4 absolute lowest price. Who we're discussing those with,
5 the terms and conditions of the sales, and the volumes
6 that they are committing to is something that to me is
7 part of that process of trying get the lowest cost
8 biomass to the project.

9 **Q.** Could I ask you to please -- and I think this
10 has been covered, but I was unclear as to exactly how it
11 got covered in your cross-examination by Ms. Deevey. If
12 I could ask you to please look at the list of reports
13 beginning on Page 9 of your testimony at Line 17.

14 **A** Okay.

15 **Q.** And then there a list I see of eight reports
16 that continues over onto the top of Page 11. If you
17 could please, just so the record is clear, go down the
18 list and identify which of those reports are specific to
19 the GREC area or wood basket and which are general to
20 Florida.

21 **A** Number one, which is RMS-2. These were all
22 specific to Gainesville. Number one, which is RMS-2.
23 Number two, which is RMS-3. Number three, which is
24 RMS-4. Number four, which is RMS-5 are all specific to
25 Gainesville. I think they total about 800 pages.

1 Q. Thank you. And does it follow that 6, 7, and
2 8 are for the state?

3 A. Yes. Yes, they are statewide.

4 Q. In your experience, does a landowner's forest
5 operations, a forest operator's interest in supplying
6 wood increase after the subject project is fully
7 permitted?

8 A. Yes. As a matter of fact, my experience with
9 procuring wood or procuring biomass for these projects
10 is that the earlier that you try to do it, basically,
11 the more people want what I would call a premium for the
12 option. You really need to time this exactly to the
13 development of the project so that people know you are
14 real and people know you are not just window shopping
15 for biomass, but that people understand that you have
16 other options and that if they do not wish to provide
17 you with material that you will go to another supplier.
18 There is a fine balance in doing that, and I think that
19 we are on track with this project.

20 Q. Thank you. I'd like to ask you to look at the
21 text at the bottom of Page 14 of your testimony, and
22 this relates back to some questions and answers that you
23 had with Ms. Deevey. I'm just trying to clarify this
24 for the record really. I look here and I see -- if you
25 could just read out loud the sentence that begins at the

1 end of Line 21 on Page 14 and continues to the middle of
2 Line 24.

3 **A** Okay. You want me to start on Line 20, is
4 that what you said?

5 **Q.** Line 21, with the word full.

6 **A** And this is on Page 14 of the testimony?

7 **Q.** Yes, sir.

8 **A.** Full implementation of the RPS -- am I at the
9 right place?

10 **Q.** Yes.

11 **A.** Full implementation of the RPS is assumed to
12 translate to a contribution by woody biomass of 15
13 percent of all of Florida's 20/20 generation relative to
14 the current 354 megawatts. The conclusions of both the
15 Rossi et al. study and the Hodges et al. study are
16 summarized in the Woody Biomass Economic Study published
17 by the Florida Department of Agriculture.

18 **Q.** Thank you. My recollection of your earlier
19 cross-examination was that you indicated that going from
20 the current level to 15 percent would represent
21 something like 10 plants the size of GREC, and I would
22 just like you to work through the arithmetic for us. If
23 354 megawatts represents 6/10ths of a percent, how many
24 megawatts is represented by 15 percent?

25 **A.** Of the total? I don't have that math in front

1 of me. I would have to look into it. But, I guess what
2 we were looking at was the next paragraph that said it
3 would require 1,000 megawatts of biomass energy
4 generation. And that 1,000 megawatts I thought was ten
5 sizes the size of our plant.

6 Q. The first part of the sentence beginning at 21
7 references on its face the RPS assuming to translate to
8 a contribution by woody biomass of 15 percent of all of
9 Florida's 20/20 generation.

10 A. That's huge.

11 Q. Okay. Using the numbers that are there, can
12 you tell us approximately what that is if 6/10ths of a
13 percent is 354?

14 A One percent is going to be 500. No, it isn't.
15 One percent is going to be 600, so six times 15 percent.
16 13,000? I don't know. I would have to do the math on a
17 sheet of paper. It's a lot of megawatts.

18 (Transcript continues in sequence with Volume 3.)
19
20
21
22
23
24
25


1 STATE OF FLORIDA)
2 : CERTIFICATE OF REPORTER
3 COUNTY OF LEON)
4

5 I, JANE FAUROT, RPR, Chief, Hearing Reporter
6 Services Section, FPSC Division of Commission Clerk, do
hereby certify that the foregoing proceeding was heard at
the time and place herein stated.

7 IT IS FURTHER CERTIFIED that I
8 stenographically reported the said proceedings; that the
9 same has been transcribed under my direct supervision; and
that this transcript constitutes a true transcription of my
notes of said proceedings.

10 I FURTHER CERTIFY that I am not a relative,
11 employee, attorney or counsel of any of the parties, nor am
I a relative or employee of any of the parties' attorney or
12 counsel connected with the action, nor am I financially
interested in the action.

13 DATED THIS 5th day of May, 2010.

14
15 
16 _____
17 JANE FAUROT, RPR
Official FPSC Hearings Reporter
(850) 413-6732