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Pensacola, Florida 32520

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ORIGINAL

GULF POWER
A SOUTHERN COMPANY

May 16, 2000

Ms. Blanca S. Bayo, Director
Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee FL 32399-0870

Dear Ms. Bayo:

RE: Docket No. 991790-EG

Enclosed are an original and fifteen copies of Gulf Power Company's Demand Side Management Program Standards.

Sincerely,

Susan D. Ritenour

Susan D. Ritenour
Assistant Secretary and Assistant Treasurer

lw

cc: Beggs and Lane
Jeffrey A. Stone, Esquire

AFA
APP
CAF
CMU
CTR
EAG
LEG 1
MAS
OPC
RRR
SEC 1
WAW
OTH

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Approval of Demand-Side Management Plan of Gulf Power Company

Docket No. 991790-EG

Certificate of Service

I HEREBY CERTIFY that a copy of the foregoing has been furnished this 17th day of May 2000 by U.S. Mail or hand delivery to the following:

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991790-EG

2000 Demand Side Management Plan

Program Standards

Docket No. 991790-EG
May 17, 2000

GULF POWER

A SOUTHERN COMPANY

Gulf Power Company
GoodCents Select
Program Standards

Program Description

This program is designed to provide Gulf Power's customers with a means of conveniently and automatically controlling and monitoring their energy purchases in response to prices that vary during the day and by season in relation to the Company's cost of producing or purchasing energy.

The GoodCents Select system allows the customer to control the amount of electricity purchased for heating, cooling, water heating, and other selected loads; to purchase electric energy on a variable spot price rate; and to monitor at any time, and as often as desired, the use of electricity and its cost in dollars, both for the billing period to date and on a forecast basis to the end of the period. The various components of the GoodCents Select system installed in the customer's home, as well as the components installed at Gulf Power, provide constant communication between customer and utility. The combination of the GoodCents Select system and Gulf's innovative variable rate concept will provide consumers with the opportunity to modify their usage of electricity in order to purchase energy at prices that are somewhat lower to significantly lower than standard rates a majority of the time. Further, the communication capabilities of the GoodCents Select system allow Gulf to send a critical price signal to the customer's premises during extreme peak load conditions. The signal results in

a reduction attributable to predetermined thermostat and relay settings chosen by the individual participating customer.

Program Objective

The program objectives for GoodCents Select are:

- Reduce the need for additional facilities required to meet peak period conditions.
- Increase the utilization of existing facilities during off-peak periods and to measure the changes in energy consumption patterns resulting from customer use of advanced energy management features in conjunction with variable pricing.
- Enhance customer perception of the value of service by providing an alternative which allows greater understanding of and control over electricity consumption.
- Provide an alternative pricing structure which more accurately reflects the time varying cost of providing electric service.
- Increase customer acceptance and satisfaction associated with an alternative pricing structure.

Customer Eligibility

The GoodCents Select Program is available to all single family, owner occupied residences who meet certain equipment requirements. These customers must be eligible for the Rate Schedule RS (residential service).

Program Standards

The RSVP (residential service variable pricing) rate is for customers who volunteer to participate in Gulf Power Company's Residential GoodCents Select Program.

The customer must agree to participate in the GoodCents Select Program for a minimum of one year.

The customer's electrical equipment and appliances must be in acceptable operating condition. Gulf Power Company will not be responsible for the repair, maintenance, or replacement of the customers electrical equipment or appliances.

The customer will provide reasonable access for installing, maintaining, inspection, testing, and/or removal of the GoodCents Select equipment.

The customer will pay an additional charge to share the cost of the GoodCents Select equipment. This charge, based on equipment costs, will be added to the customer's monthly bill as a program participation charge.

Gulf Power Company
Geothermal Heat Pump Program
Program Standards

Program Description

Gulf Power's Geothermal Heat Pump program is designed to overcome existing market barriers, specifically, lack of consumer awareness, knowledge and acceptance of this technology. This program will promote efficiency levels well above current market conditions, specifically those units with an Energy Efficiency Ratio (EER) of 13.0 or higher.

Program Objectives

The Residential Geothermal Heat Pump Program is designed to reduce the demand and energy requirements of new and existing residential customers through the promotion and installation of advanced and emerging geothermal systems. Geothermal heat pumps also provide significant benefits to participating customers in the form of reduced operating costs and increased comfort levels, and are superior to other available heating and cooling technologies with respect to source efficiency and environmental impacts.

Customer Eligibility

All Gulf Power served single and multi-family dwellings in new or existing homes are eligible for the program. All participants must be willing to have an existing

home energy audit or new home plan review completed to address proper HVAC sizing, proper installation and other conservation measures.

Program Standards

Job specifications and installation guidelines are as follows:

- Must be closed loop geothermal heat pump.
- The geothermal heat pump must meet the minimum efficiency of 13.0 EER at 90° entering water temperature (85° if 90° data is not published) and water flow of 3.0 gallons per minute per ton.
- Pressure and temperature (P/T) ports shall be installed on all loop systems.
- All piping for loop shall be PE 3408 polyethylene pipe with heat fused joints.
- Exposed polyethylene pipe shall be insulated with minimum 3/8 inch armaflex or equivalent to prevent condensation and potential moisture damage to surrounding materials.
- All loop piping is to be pressure tested above ground prior to placing in bore holes or trench.
- All vertical bore holes are to be grouted/sealed at surface penetrations or in accordance with standard water management requirements.
- Unit shall be set on sound deadening/vibration isolation pad.
- Equipment shall be sized according to Manual J or equivalent load calculation procedure.
- Equipment contractor shall provide manufacturer letter of certification to install ground source closed loop heat pumps.
- Loop contractor to provide manufacturer letter of certification in heat fusion, design (sizing), and installation of ground source closed loop systems.

- Loop contractor guarantees that loop temperature will not exceed design condition of 100 degree entering water temperature during normal cooling operations.

- Ducts shall be visually inspected for leakage. Any visible problem areas or leakage points shall be repaired or sealed.

Gulf Power Company
GoodCents/Energy Star Home
Program Standards

Program Description

The GoodCents/Energy Star Home Program is designed to enhance energy-efficient construction efforts made by the GoodCents Home Program since 1976. Gulf Power Company signed a Memorandum of Understanding with the Environmental Protection Agency (EPA) whereby this agreement provides Gulf Power Company the opportunity to offer the Energy Star Home Program to local builders and customers and correlates the performance of GoodCents homes to the nationally recognized Energy Star home. EPA Certification is either prescriptive or performance based.

Program Objectives

The objective of the GoodCents/Energy Star Home Program is as follows: Provide Gulf Power Company's residential builders and customers with guidance concerning EPA's Energy Star Home Program. The effect of the program will result in reductions in energy usage and peak demand, energy savings for the customer as well as environmental impact.

Customer Eligibility

The GoodCents/Energy Star Home Program is available to individuals or entities constructing new residential buildings within Gulf Power Company's service territory.

Program Standards

As an agent of EPA's Energy Star Program, a Gulf Power Company representative will work with prospective builders and customers by assisting in conducting field diagnostics and inspections necessary for EPA certification.

For EPA certification, a home must meet both GoodCents and Energy Star standards outlined in EPA's GoodCents Builder Option Package (BOP) designed for Gulf Power Company, or be certified by an accredited HERS (Home Energy Rating) rater.

Homes certified via the GoodCents BOP procedure require random field diagnostics, testing whole-house air infiltration and air-distribution system of a qualifying home. Diagnostics are to be completed by a representative of Gulf Power Company or a Gulf Power Company approved contractor.

Gulf Power Company will submit qualifying homes to EPA for certification. Upon EPA certification, Gulf Power Company will provide builder or customer with GoodCents and Energy Star certificates.

Gulf Power Company
GoodCents Energy Survey
Program Standards

Program Description

Formerly known as the Residential Audit, the GoodCents Energy Survey is an on-site service conducted by Gulf Power Company that provides residential customers with energy conservation advice that encourages the implementation of efficiency measures resulting in energy savings for the customer. This service is free of charge to the customer.

Program Objectives

The objective of the GoodCents Energy Survey are as follows:

- To involve the homeowner or person responsible for energy related decisions.
- Provide advice and promote the installation of cost-effective conservation features resulting in energy savings to the customer and a reduction in weather-sensitive peak demand, and to encourage the wise use of energy and affect positive change in energy-use habits.

Customer Eligibility

The GoodCents Energy Survey is available to all residential customers served by Gulf Power Company.

Program Standards

1. GoodCents Energy Survey requested by customer.
2. Gulf Power Company representative meets with customer on-site, reviews energy usage, evaluates home's thermal characteristics, mechanical system efficiency and occupant lifestyle.
3. Company representative reviews recommendations with homeowner and provides customer with the information needed to determine which energy saving measures are best suited to their individual needs and requirements. (See the attached Residential Energy Survey Form, Attachment 1.)

Residential Energy Survey For:

Please Print

Name _____ Telephone _____ Date _____

Address _____ City _____

Gulf Power Representative _____ Telephone _____

Checked below are the conservation measures which we would recommend to you to increase the efficiency of your home. Each measure will save a certain amount of your energy cost; but savings are not in every case simply additive. Different measures that affect the heating system, for example, may overlap in their savings effect on your utility bill.

Energy Features Evaluated

☐ 1. ***Attic Insulation:*** The recommended level is R-38 with an average of 10-20% savings on heat and/or cooling cost. Your present insulation value is _____.

☐ 2. ***Wall Insulation:*** The recommended level is R-19 with an average of 5-15% savings on heating and/or cooling cost. Your present insulation value is _____.

☐ 3. ***Floor Insulation:*** The recommended level is R-19 with an average of 10-15% savings on heating and/or cooling cost. Your present insulation value is _____.

☐ 4. ***Storm Windows:*** An average of 5-10% savings can be expected on heating and/or cooling cost. Your current windows are _____.

☐ 5. ***Caulking and/or Weather-stripping for Windows and/or Doors:*** An average of 1-8% savings on heating and/or cooling cost. Condition of your current caulking is _____.

☐ 6. ***Doors -- Insulated or Storm:*** An average of 2-7% savings on heating and/or cooling cost. You presently have _____doors, of which _____are insulated or storm. _____

☐ 7. ***Duct and Pipe Insulation:*** An average of 4-13% savings in heating and/or cooling cost. Currently your ducts and pipes are _____.

☐ 8. ***Ridge Vent/Power Vent:*** A continuous ridge vent or power vent combined with adequate soffit vents can lower attic temperature by 20° - 30°. This aids in the reduction of cooling costs. _____

☐ 9a. ***Heating Equipment:*** The replacement of resistant heat with the heat pump could result in 50-55% savings in heating cost. Your current heating method is _____.

☐ 9b. ***Cooling Equipment:*** The estimated SEER of your present system is _____. Increasing the efficiency of the system could result in 14 - 40% savings in cooling costs. _____

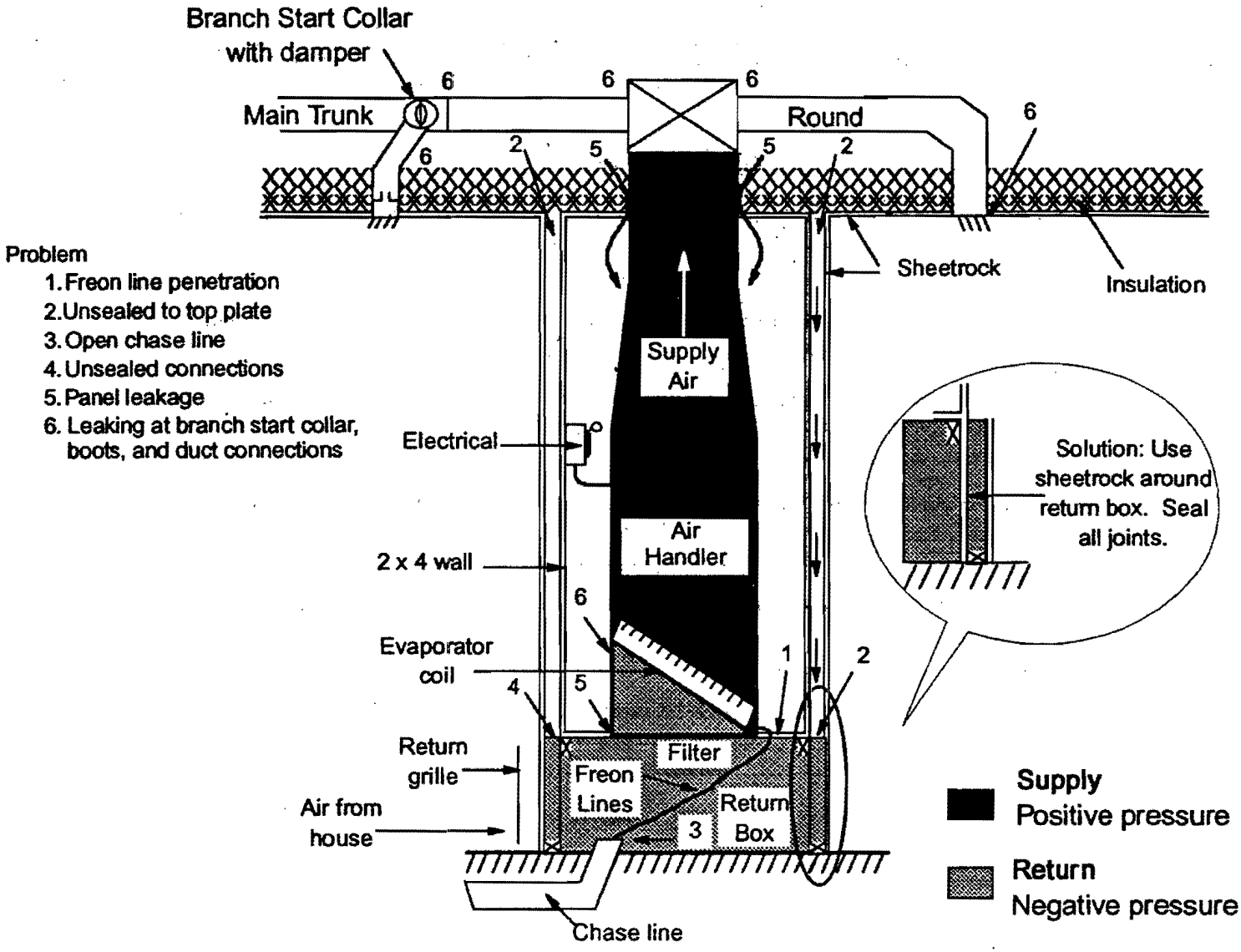
☐ 10. ***Advanced Water Heating Device:*** The installation of either solar water heating, heat pump water heater, or heat recovery system could save you 35-70% on water heating cost. Your_____ water heater is responsible for 17% of your energy consumption. We recommend:_____Timer (limit run time to less than 4 hours) _____Insulation Jacket _____Insulation of water lines.

Notes:_____

_____

Gulf Power

GOOD ¢ENTS HOME MECHANICAL CLOSET CHECKLIST



Typical leakage points in air handler systems.

The areas checked below should be sealed & mastic applied to increase comfort and efficiency:

_____ 1. Support platform hole penetration
_____ 2. Open studwall cavity to attic space
_____ 3. Open refrigerant line slab chase pipe
_____ 4. Opening at attic-ceiling area
_____ 5. Connections to unit and duct plenum
_____ 6. Panel leakage
_____ 7. Ductwork branch start collars, boots, duct connections
_____ 8. Other_____

Gulf Power Company
GoodCents Mail-In Energy Survey
Program Standards

Program Description

The Residential Mail-In Energy Survey Program is a direct-mail energy-auditing program that will assist in the evaluation of the specific energy requirements of a customer's home. An on-line interactive version of the questionnaire was developed to assist customers who have Internet access.

Gulf Power Company will mail an introductory letter and a Residential Mail-In Energy Survey questionnaire to the customer. The letter will explain how the program works and the benefits the customer will receive by participating. Customers will then complete the questionnaire on their own or may request the assistance of a Gulf Power Company representative. The questionnaire will ask customers about their energy consuming equipment or appliances, square footage, and other detailed questions regarding their existing energy practices.

Completed surveys will be returned to Gulf Power Company or its agent to be analyzed and processed to generate a personalized customer analysis. This analysis will identify specific recommendations that the participant can implement to reduce their energy consumption. A complete analysis will be mailed to the customer and a Gulf Power Company representative will provide any follow-up

assistance requested by the customer to aid in implementation of the recommendations made in the analysis.

Program Objectives

The objectives of the GoodCents Mail-In Energy Survey are as follows:

- To involve the homeowner or person responsible for energy related decisions.
- To provide residential customers with energy conservation advice that will encourage the implementation of efficiency measures resulting in energy savings for the customer and energy and demand savings for Gulf Power Company.
- To encourage the wise use of energy and affect positive change in energy-use habits.

Customer Eligibility

The GoodCents Mail-In Energy Survey is available to all residential customers served by Gulf Power Company.

Program Standards

1. Questionnaire mailed to customer. An "on-line" version is available to those with internet access.
2. Customer completes questionnaire and returns to Gulf Power Company.
3. Gulf Power Company processes the customer information, whereby results (Home Energy Profile) are generated and mailed to customer. The Home Energy Profile summarizes energy consumption as well as energy conservation recommendations. Customer is made aware of additional products and services available.

Gulf Power Company
Duct Leakage Repair
Program Standards

Program Description

The Duct Leakage Repair Program is to provide Gulf Power Company's residential customers a means to identify house air duct leakage and recommend appropriate repairs.

Program Objectives

The objective of the program is to reduce customer kWh energy usage and kW demand.

Customer Eligibility

This program is available to all residential customers served by Gulf Power Company. Gulf Power Company will identify potential program participants through the Residential Energy Audit Program as well as through educational activities. The following criteria must be met:

- The residence must have an electric air conditioning system(s) coupled with a central duct system(s). Residences with non-electric heating are eligible where safety is not an issue.
- Duct systems must be easily accessible for leak site identification and repair.
- Duct leakage testing and diagnostics must be performed by Gulf Power Company approved contractors.
- Repairs must be performed by Gulf Power Company approved contractors.

Contractor Eligibility

- Repair contractors and their employees making repairs must attend a specified training course in testing and repair.
- Approved contractors must comply with Gulf Power Company's repair program requirements.
- All repairs must meet state and local codes.
- It is the responsibility of the contractor to obtain repair approval from the owner of the residence prior to performing any repairs.

Program Standards:

- Existing Home Market

1. Energy consultant conducts residential energy survey (audit).
2. Energy consultant notifies customer of supply/return leaks and recommends duct test.
3. Customer requests duct diagnostic testing from approved contractor. Contractor may charge customer up to $50 for duct test.
4. Approved contractor conducts pre test diagnostics and provides results to customer along with repair estimate.
5. Customer schedules repair work with contractor.
6. Contractor makes repairs and bills customer.
7. Gulf Power Company inspects work or the pre test and post test worksheets.
8. Gulf Power Company pays contractor $25 per residence for a single HVAC system plus $30 per residence for each additional HVAC system to share the cost of the testing.
9. Gulf Power Company provides post test on 10% of all jobs to identify and assure leakage reduction.

- New Home Market

1. Builder, HVAC Contractor or Homeowner requests duct leakage test for new home duct system.

2. Requesting customer signs agreement and is billed $25 per duct system for duct test.

3. Gulf Power Company conducts duct test diagnostics (utilizing duct blaster) and provides results to requesting customer.

   Results include:

   a) Drawing of ductwork and leakage points identified.

   b) Amount of leakage in C F M.

4. Duct repairs made (responsibility of requesting customer).

5. Post-test available upon request. (Cost is $25 per duct system).

Gulf Power Company
GoodCents Building Program
Program Standards

Program Description

The commercial/industrial market is comprised of a wide range of diverse businesses with variable size and operational characteristics. The success of the GoodCents Building program lies in its ability to address this diversity by focusing on the mutual characteristics of commercial buildings. The most common critical areas in commercial buildings that affect summer peak kW demand are the thermal efficiency of the building and HVAC equipment efficiency. The GoodCents Building program provides requirements for these areas that, if adhered to, will help reduce peak kW demand and energy consumption.

The promotion of the GoodCents Building program through the years has featured a positive relationship with trade allies, the public and local commercial/industrial customers. The program's design continues to be sufficiently flexible to allow an architect or designer to use initiative and ingenuity to achieve results that are meaningful to both the customer and Gulf Power Company.

The GoodCents Building program is designed to ensure that buildings are constructed with energy efficiency levels above the Florida Model Energy code standards. These standards include both HVAC efficiency and thermal envelope requirements.

To provide an accurate quantitative analysis of the kW and kWh savings due to the GoodCents Building Program, the GoodCents standards for average commercial buildings are compared to the Florida Model Energy Code. The features used to prepare the customer's analysis include: wall and ceiling R-values; glass area; description of glass; and equipment used in determining the kW and kWh differences for the two types of structures. The AXCESS - Energy Analysis Computer Program (AXCESS) is used to calculate the kW and kWh differences. Use of the AXCESS program is further described in the Benefits and Costs section.

The GoodCents Building Program is available to all new or existing commercial and industrial customers who maintain conditioned space within their buildings.

Prescriptive Envelope Option:

The Prescriptive Envelope Option provides architects/designers and building owners a menu of items available for a GoodCents Building certification. Except for one, the features in this option are all structural in nature. The minimum requirements listed are those for insulation levels and window (glass) shading. As described in the Participation Standards section on the following pages, the minimum window requirement consists of two choices. The first choice of 100 percent externally shaded at 3:00 p.m. indicates the need for overhangs. Windows (glass) that would be naturally shaded by the building itself at 3:00 p.m.

would not need external overhangs installed (i.e. N, NE, E, SE). The second choice considers the shading coefficient of the glass itself. The shading coefficient of .65 (35 percent solar reduction) does not allow for internal shading (blinds, curtains, etc.).

The Additional Requirements section of the Prescriptive Option allows the customer a choice of three of the seven requirements listed. These choices include increased insulation levels above the minimum requirements, improved entryways with the incorporation of vestibules and exterior door improvements, and increased glass performance. One option, the installation of an Energy Management System, is more behavioral rather than structural.

Thermal Performance Option:

A building may meet GoodCents standards through its thermal performance. This option requires a building to use the entire exterior thermal envelope by calculating both solar and transmission heat gains into the performance formula. The resulting BTUH heat gain is then divided by the total envelope square footage (total exterior shell of the conditioned space including walls, windows, roof/ceiling, and floors if off-grade) to obtain a BTUH/Sq. Ft. ratio. Depending upon the conditioned floor square footage of the building, this ratio must meet the requirements of the applicable building size described in the program. By using this calculation, the performance of the entire envelope of the building is evaluated.

HVAC Efficiency Requirements:

Besides increased efficiency requirements, differentiation has been made between single phase and three-phase equipment with a cooling capacity less than 65,000 BTU/h. The lack of market availability for three phase units in the higher efficiencies justifies a lower standard than that of a single-phase unit. The addition of the package thermal air conditioners and heat pumps (PTAC or PTHP) has allowed a more complete list of possible cooling types in the commercial market.

The HVAC requirements are applicable to both the Prescriptive and Thermal Performance Options. Gulf Power Company's continuing efforts to influence the market toward high efficiency equipment and quality construction standards are the foundation of the GoodCents Building program.

Participation Standards

To qualify for the GoodCents Building certification, customers must meet the HVAC requirements and meet or exceed the standards in either the Prescriptive or Performance options.

HVAC Efficiency Requirements (A/C or Heat Pump):

Systems with cooling capacity < 65,000 BTU/h
Unitary split systems
Single Phase Min. 11.0 SEER
Three Phase Min. 10.2 SEER

Unitary package systems Min. 10.0 SEER
Packaged Terminal A/C or Heat Pump (PTAC or PTHP)
<12,000 Min. 9.0 EER
>12,001 Min. 8.7 EER

Systems with cooling capacity > 65,001 and < 135,000 BTU/h
Unitary split systems Min. 9.0 EER
Unitary package systems Min. 9.0 EER

Systems with cooling capacity > 135,001 BTU/h
Unitary split systems Min. 9.0 EER
Unitary package systems Min. 8.5 EER

Prescriptive Envelope Option:
Minimum Insulation Requirements:
R-19 Roof/Ceiling structure
R-11 Exterior Walls

Minimum Window (including glass doors) Requirements:
All glass is 100% externally shaded at 3:00 p.m.
or
All glass has a shading coefficient (without any internal shading) of .65 or lower as rated by the manufacturer

Additional Requirements
In addition to the above requirements, the building must also meet at least three of the seven requirements listed below.

1. Increase roof/ceiling insulation to R-30.
2. Increase exterior wall insulation to R-13.
3. Incorporate a vestibule on all regularly used entrances and exits.
4. Total glass area is less than 12% of gross exterior wall area.
5. All exterior glass (except glass doors) is double pane.
6. Metal insulated or double pane glass exterior doors.
7. Install programmable thermostats or Energy Management Systems on all HVAC systems.

Thermal Performance Option:

The solar and transmission heat gain designed at 93° outside and 78° inside shall not exceed the following levels of heat gain per square foot of the above grade exterior envelope.

Conditioned Floor Square Footage	BTU/h/Sq. Ft. of Exterior Envelope
0 to 5,000	5.5
5,001 to 15,000	5.0
Over 15,000	4.5

The benefits that accrue by the construction of a new GoodCents Building or the retrofit of an existing building are:

- Customer

1. Lower life cycle costs.
2. Lower operating costs.
3. Lower risks.
4. Improved comfort.

- Architects / Engineers

1. Lower design risks.
2. Increased client satisfaction.
3. Innovation and differentiation.

- Gulf Power Company

1. Improved load factor (peak clipping/valley filling).
2. Improved demand-side management.
3. Strategic conservation.
4. Improved productivity and effectiveness.

Gulf Power Company
Commercial Energy Analysis Programs
Program Standards

Commercial Energy Analysis Program: TIER I (Mail-In Audit)

Program Description

The Tier I Commercial Energy Analysis Program is a direct mail energy audit program. Gulf Power Company mails an introductory letter and questionnaire to qualifying businesses. The letter explains how the program works and the benefits the customer will receive by participating. The customer fills out the questionnaire and returns it to Gulf Power Company. The customer is then mailed a completed analysis that includes billing history data and energy evaluation recommendations based on the information from the questionnaire. Recommendations are primarily standardized and encourage the customer to implement measures that, if cost effective, move the customer beyond the efficiency level typically installed in the marketplace.

Participation Standards

The Tier I Commercial Energy Analysis is available to all commercial customers with billing demands of 150 kW or less served by Gulf Power Company. The program is designed to involve the business owner, management or person responsible for energy related decisions for the business.

Benefits and Cost

Benefits for Gulf Power Company's customers are achieved through the customer's participation in the program. The customer analysis is specific to each customer's survey responses and business type. The analysis makes customer specific recommendations for improving profitability by lowering energy cost. After reviewing the customer's energy use, the analysis provides the customer with energy management strategies to enhance their overall business operations. New technologies and other ideas are provided to help individual businesses control energy costs.

The Tier 1 Energy Analysis form follows as Attachments 1 .

TIER 1

Energy Analysis

Date: _____

Business Name: _____

Business Owner Name: _____

Address: _____

❑ Own Building ❑ Lease Building Phone: ( ) _____ Long Distance Company: _____

Electronic Security System: ❑ Yes ❑ No Air conditioner maintenance plan: ❑ Yes ❑ No

❑ Access to personal computer ❑ Access to CD Rom ❑ Access to the internet

What is the Gulf Power Commercial Energy Analysis?

This energy analysis is intended to act as a simple guide that you, as the business owner/operator, can perform by yourself. The energy analysis will familiarize you with basic energy saving concepts and techniques that you can employ in your business.

How do I begin?

Your first step is to simply walk through your business facility and fill in all the information you can on the chart provided. Since your energy analysis is based on specific estimates of wise and efficient energy use, it will act as ready reference for your current energy efficiency levels. Each item on the back of this form corresponds to a page of the included Business Energy Solution Guide, where additional information can be found for energy efficiencies.

What do I do after I have completed the Energy Analysis?

FOLD THIS FORM OVER, STAPLE AND SEND IT IN! Gulf Power will provide you with energy efficient recommendations tailored to your specific business needs and a FREE book, 101 Energy Saving Ideas.

Thank you for participating in the
Gulf Power Commercial Energy Analysis.

We appreciate your business and we want you
to be a very satisfied customer.

GULF POWER
A SOUTHERN COMPANY

To receive a FREE tailored energy analysis, recommendations and 101 Ways To Save Energy book, return your Energy Analysis by folding the form to show the return address, tape closed at top and place in the U.S. mail.

ENERGY ANALYSIS

Air Conditioned Space of Building	Square Feet:	Age of Building:	
Hours of Operation per Day	Hrs.		
Next Planned Renovation	Yr.		
Heating Equipment	❑ Electric	❑ Gas	Age
Cooling Equipment	❑ Electric	❑ Gas	Age
Water Heating Equipment	❑ Electric	❑ Gas	Age
Cooking Equipment	❑ Electric	❑ Gas	Age
The Majority of Your Indoor Lighting is	❑ Fluorescent	❑ Incandescent	
Outdoor Security Lighting	❑ Yes	❑ No	
Surge Protection	❑ Yes	❑ No	❑ Not Sure
Windows	❑ Single Pane	❑ Double Pane	❑ Tinted ❑ Other
Ceiling Insulation in Inches	❑ None	❑ 1-3"	❑ 4-6" ❑ 7" or greater
Wall Insulation in Inches	❑ None	❑ 1-3"	❑ 4" or greater
Floor	❑ Insulated	❑ No Insulation	
Doors	❑ Glass	❑ Wood	❑ Metal
Heating/Air Conditioning Duct Work	❑ Insulated	❑ No Insulation	
Air Conditioner Filter Checked Regularly	❑ Yes	❑ No	
Comments			

Your business type is –

- ❑ College
- ❑ Fast Food
- ❑ Food Store
- ❑ Hospital
- ❑ Lodging
- ❑ Medical Office
- ❑ Nursing Home
- ❑ Office
- ❑ Restaurant
- ❑ Retail
- ❑ School
- ❑ Technical School
- ❑ Warehouse
- ❑ Other _____

For more information and help on your business energy needs, call toll free 1-800-225-5797 or 969-3111 in the Pensacola area.

GULF POWER
A SOUTHERN COMPANY

Attachment 1

Commercial Energy Analysis Program: Tier 2

Program Description

The Tier II Commercial Energy Analysis Program is an interactive program that provides commercial customers assistance in identifying energy conservation opportunities. The Tier 2 analysis is a prime tool for the Gulf Power Company Commercial Energy Consultant to personally introduce customers to conservation measures including low/no cost improvements or new electro-technologies to replace old or inefficient equipment. Further, this program facilitates the load factor improvement process necessary for the company to increase its performance.

The Tier 2 energy analysis process consists of an on-site review by the Commercial Energy Consultant of the commercial customer's facility operation, equipment and energy usage pattern. The consultant identifies all areas of potential reduction in kW demand and kWh consumption. An electronic evaluation is then performed which includes an energy use summary, energy management options, and a facility use and equipment inventory. This evaluation presents opportunities for reducing electrical operating costs that were revealed by the on-site evaluation.

Participation Standards

The Tier 2 Commercial Energy Analysis will be available to all commercial customers served by Gulf Power Company. The program is designed to involve the business owner, management, or person responsible for energy related decisions for the business. Customers are notified of this no cost service every six months as specified in Rule 25-17.003 of the Florida Administrative Code.

Benefits and Cost

Benefits for Gulf Power Company's customers are achieved through the customer's participation in the program. The customer analysis is specific to each customer's business. The analysis makes customer-specific recommendations for improving profitability by lowering energy cost. After reviewing the customer's energy use, the analysis provides the customer with energy management strategies to enhance their overall business operations. New technologies and other ideas are provided to help individual businesses control energy costs.

Gulf Power Company expects a summer and winter peak reduction of 1.6 kW per audit and an annual 5,886 kWh savings. As a modification to the existing commercial/industrial audit program, Gulf Power Company's cost per participant will change. The proposed changes to the Tier 2 Audits are expected to enhance productivity in conducting this type of audit. Gulf Power Company's cost will be monitored and evaluated on an annual basis. Participants' cost is dependent

upon the condition of the existing building and the specific recommendations per the program audit and follow-up by the customer.

The Tier 2 Business Evaluation follows as Attachment 1.

GULF POWER

A SOUTHERN COMPANY

Gulf Power Company

Tier 2 Business Evaluation

Data Collection Forms

Version 2.6-A

Attachment 1

Project Information Evaluation Date:_____ Evaluator Name: _____

Facility name: _____

Facility address 1: _____

Facility address 2: _____

Facility city: _____ **Facility State:** FL **Facility zip:** _____

Facility contact Name:_____ **Telephone Number:** _____

Electric Account Numbers: _____

If Company is different than facility (the report should go to a different address):

Company name: _____

Company address 1: _____

Company address 2: _____

Company city: _____ **Company State:** _____ **Company zip:** _____

Company contact Name:_____ **Telephone Number:** _____

Natural Gas

Year:	Consumption (therms)	Cost $
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		
TOTAL		

Average Cost per therm:

_____

Gas Utility name:

_____

Rate Identifier: _____

Attachment 1

Check the building type:

__Office, small
__Office, medium
__Office, high rise
__Office/Computer center
__Office/Warehouse
__Bank
__Restaurant
__Lounge/Club
__Parking structure
__Retail, small
__Retail, large
__Minimarket/Supermarket
__Large Supermarket
__Warehouse, non-refrig
__Warehouse, refrig
__School
__College/University
__Hospital, acute care
__Hospital, long-term care
__Clinic/medical office
__Religious Building
__Hotel/Motel
__Miscellaneous
__Residential, multifamily
__Manufacturing, automotive
__Manufacturing, chemical
__Manufacturing, elec. equip
__Manufacturing, machinery
__Manufacturing, process
__Manufacturing, misc
__Heating plant
__Cooling plant
__Heating/Cooling plant
__Sports arena, gymnasium
__Theatre

Facility Square Feet: _____
Heated Square Feet: _____
Cooled Square Feet: _____
Construction Year: _____
Major Renovation Year: _____
Number of Employees _____
Average Occupancy Hours: _____

Check the closest location:

__Bonifay
__Chipley
__Graceville
__Lynn Haven
__Panama City
__Panama City Beach
__Argyle
__Baker
__Crestview
__DeFuniak Springs
__Destin
__Eglin AFT
__Ft. Walton Beach
__Holt
__Hulbert Field
__Laurel Hill
__Milligan
__Cantonment
__Century
__Gulf Breeze
__Harold
__Holley
__Milton
__Molino
__Pace
__Pensacola
__Pensacola Beach
__Navarre
__Navarre Beach
__Niceville
__Paxton
__Ponce De Leon
__Santa Rosa Beach
__Shalimar
__Valparaiso
__Mary Esther

Enter the numbers 1, 2 and 3 next to the most common, next most common, and third most common operating schedule for lighting, motors, and 'other' equipment at the facility. You can select more than three if you need to.

__Continuous
__5:00A-6:00P, M-F
__5:00A-6:00P, M-Sa
__5:00A-6:00P, M-Su
__5:00A-6:00P, M-F
__5:00A-6:00P, M-Sa
__5:00A-6:00P, M-Su
__6:00A-2:00A, M-F
__6:00A-2:00A, M-Sa
__6:00A-2:00A, M-Su
__6:00A-4:30P, M-F
__6:00A-4:30P, M-Sa
__6:00A-4:30P, M-Su
__6:00A-6:00P, M-F
__6:00A-6:00P, M-Sa
__6:00A-6:00P, M-Su
__6:00A-8:00P, M-F
__6:00A-8:00P, M-Sa
__6:00A-8:00P, M-Su
__7:00A-5:30P, M-F
__7:00A-5:30P, M-Sa
__7:00A-5:30P, M-Su
__7:00A-7:00P, M-F
__7:00A-7:00P, M-Sa
__7:00A-7:00P, M-Su
__7:00A-9:00P, M-F
__7:00A-9:00P, M-Sa
__7:00A-9:00P, M-Su
__8:00A-10:00P, M-F
__8:00A-10:00P, M-Sa
__8:00A-10:00P, M-Su
__8:00A-12:00A, M-F
__8:00A-12:00A, M-Sa
__8:00A-12:00A, M-Su
__8:00A-6:00P, M-F
__8:00A-6:00P, M-Sa
__8:00A-6:00P, M-Su
__9:00A-1:00P, M-F
__9:00A-1:00P, M-Sa
__9:00A-1:00P, M-Su
__9:00A-5:00P, M-F
__9:00A-5:00P, M-Sa
__9:00A-5:00P, M-Su
__9:00A-6:00P, M-F
__9:00A-6:00P, M-Sa
__9:00A-6:00P, M-Su
__9:00A-9:00P, M-F
__9:00A-9:00P, M-Sa
__9:00A-9:00P, M-Su
__10:00A-3:00P, M-F
__10:00A-3:00P, M-Sa
__10:00A-3:00P, M-Su
__10:00A-8:00P, M-F
__10:00A-8:00P, M-Sa
__10:00A-8:00P, M-Su
__10:00A-10:00P, M-F
__10:00A-10:00P, M-Sa
__10:00A-10:00P, M-Su
__Noon-10:00P, M-F
__Noon-10:00P, M-Sa
__Noon-10:00P, M-Su
__Noon-2:00A, M-F
__Noon-2:00A, M-Sa
__Noon-2:00A, M-Su
__Noon-8:00P, M-F
__Noon-8:00P, M-Sa
__Noon-8:00P, M-Su
__Noon-Midnight, M-F
__Noon-Midnight, M-Sa
__Noon-Midnight, M-Su
__2:00P-10:00P, M-F
__2:00P-10:00P, M-Sa
__2:00P-10:00P, M-Su
__4:00P-10:00P, M-F
__4:00P-10:00P, M-Sa
__4:00P-10:00P, M-Su
__6:00P-10:00P, M-F
__6:00P-10:00P, M-Sa
__6:00P-10:00P, M-Su
__6:00P-2:00A, M-F
__6:00P-2:00A, M-Sa
__6:00P-2:00A, M-Su
__6:00P-6:00A, M-F
__6:00P-6:00A, M-Sa
__6:00P-6:00A, M-Su
__7:00P-12:00A, M-F
__7:00P-12:00A, M-Sa
__7:00P-12:00A, M-Su
__7:00P-5:00A, M-F
__7:00P-5:00A, M-Sa
__7:00P-5:00A, M-Su

Weekly:
__W- 1 Hr/Week
__W- 5 Hrs/Week
__W-10 Hrs/Week
__W-15 Hrs/Week
__W-20 Hrs/Week
__W-25 Hrs/Week
__W-30 Hrs/Week
__W-35 Hrs/Week
__W-40 Hrs/Week
__W-45 Hrs/Week
__W-50 Hrs/Week
__W-55 Hrs/Week
__W-60 Hrs/Week
__W-65 Hrs/Week
__W-70 Hrs/Week
__W-75 Hrs/Week
__W-80 Hrs/Week
__W-85 Hrs/Week
__W-90 Hrs/Week
__W-95 Hrs/Week
__W-100 Hrs/Week
__W-105 Hrs/Week
__W-110 Hrs/Week
__W-115 Hrs/Week
__W-120 Hrs/Week
__W-125 Hrs/Week
__W-130 Hrs/Week
__W-135 Hrs/Week
__W-140 Hrs/Week
__W-145 Hrs/Week
__W-150 Hrs/Week
__W-155 Hrs/Week
__W-160 Hrs/Week
__W-165 Hrs/Week

Attachment 1

Business Information: These questions relate to the parent company of a multi-facility company.

Primary Decision Maker Name: _____
Telephone Number: _____
Secondary Decision Maker Name: _____
Telephone Number: _____
Key Influence 1 Name: _____
Telephone Number: _____
Key Influence 2 Name: _____
Telephone Number: _____
Key Influence 3 Name: _____
Telephone Number: _____
How many company locations do you currently have in Alabama, Georgia, Florida, and Mississippi? (confirm if 50 or over): _____
How many locations do you currently have outside of these states? (confirm if 50 or over): _____

Other Questions about the Facility

Do you currently have an energy management system(s)? (circle one) Yes No
If yes, how many?
If no, do you have any separate cooling zones, for example for a central computer system? (circle one) Yes No

What is your heating temperature setpoint:
What is your cooling temperature setpoint:

Are you planning any major equipment changes? (circle one) Yes No
If yes, to what equipment? _____
Number of systems? _____
When: _____
Where: _____
If no, would you make changes if financing were available? (circle one) Yes No

Are you suffering the loss of key equipment because of lightning strikes or other power problems? (circle one) Yes No

Are you satisfied with the level of outdoor lighting? (circle one) Yes No

Do you have a maintenance contractor performing scheduled maintenance on your HVAC or water heating equipment? (circle one) Yes No
If No, are you satisfied with the condition of your HVAC equipment? (circle one) Yes No
With the condition of your water heating equipment? (circle one) Yes No

Equipment/Services Used

Do you have the following equipment at your facility? Circle yes or no. If yes, ask for the approximate number of systems:

Equipment	Present?		No. systems
Electronic Cash Registers	Yes	No	_____
Mainframe Computers	Yes	No	_____
PCs	Yes	No	_____
Internet capability	Yes	No	_____
CD-ROM capability	Yes	No	
Electronic Security Systems	Yes	No	_____

Business Recommendations

If yes, check here to recommend financing _____

If yes, check here to recommend Surge protection _____
System type: _____ Number of systems: _____

If no, check here to recommend outdoor lighting __

Attachment 1

Gulf Power Equipment Confirmation

While you are at the facility, please verify Gulf Power Meter and Transformer Information

Meter ID Number: _____
Voltage: _____
Location: _____

Meter ID Number: _____
Voltage: _____
Location: _____

Meter ID Number: _____
Voltage: _____
Location: _____

Meter ID Number: _____
Voltage: _____
Location: _____

Meter ID Number: _____
Voltage: _____
Location: _____

Transformer ID Number: _____

Project Notes:

Customer Issues and Comments:

Lighting Instructions

Lighting Name. You may find it useful to name the item by location.

Light Source. Choose from:

F2 = Fluorescent 2 foot
F3 = Fluorescent 3 foot
F4 = Fluorescent 4 foot 1 lamp
F42 = Florescent 4 foot 2 lamps
F43 = Fluorescent 4 foot, 3 lamps
F44 = Fluorescent 4 foot, 4+ lamps
F5 = Fluorescent 5 foot
F6 = Fluorescent 6 foot
F8 = Fluorescent 8 foot, 1 lamp
F82 = Fluorescent 8 foot, 2 lamps
F83 = Fluorescent 8 foot, 3+ lamps
FU = U-tube fluorescent
FO = Circline fluorescent
FS = Screw-in comp. fluor.
FH = Hardwired comp. fluor.
ID = Incandescent PAR
IO = Incandescent other
HQ = Halogen, Quartz Halogen
LP = Low pressure sodium
HP = High pressure sodium
HD = Metal halide
MV = Mercury vapor
XT = Exit sign
OT = Other

For fluorescents:

Lamp type: T12 T12HO T10 T8

Ballast type:

STD = standard magnetic
EFM = Energy Efficiency Magnetic
ELE = Electronic
HYB = Hybrid

Refl: Check if the system has a reflector (a shiny liner indicating the system has been delamped)

For others:

Watts: Enter the lamp watts

T12 lamps default to 40 watts. Enter wattage only if different.

 # Fxt. Enter the number of fixtures. A fixture is a fluorescent system (a combination of lamps and ballasts) but is an individual incandescent lamp. If you see several incandescent lamps in the same decorative installation (such as a chandelier or decorative strip lighting) count the number of lamps. If this is too time consuming, describe the system as a special lighting system in the 'other' section.

OS: Refer to the list of operating schedules in the first section, and enter 1, 2, or 3 corresponding to the most common, second most common, or least common facility schedule.

Control? Check if there is a motion sensor (either wall or ceiling) installed. The program assumes a 30% reduction for controls.

OD: Check if the system is used outdoors. Quartz and mercury vapor lamps are replaced with Metal Halide systems indoors and high pressure sodium systems outdoors.

Example for Incandescent:

Show each light bulb as a fixture. In this way, a fixture with 10 60-watt lamps =
Light Source IO, Watts 60, # Fixt. 10. Lamp type, ballast type and reflector are all not applicable.

Replace?: Check here to recommend replacement.

For existing incandescent lamps, check only if a compact fluorescent will fit in the fixture.

For high wattage (200 W and over) incandescent and quartz systems, check only if a high pressure sodium or metal halide replacement is appropriate (i.e. a pendant fixture).

Hint: Describe Neon lighting on the "Other" section of the form, only if it represents a signficant energy use.

HVAC Equipment Instructions

HVAC Equipment name. Enter the name you will use to identify the HVAC equipment.

Category/Type. Choose from the list.
AHCO = Air Handler, Cooling Only
AHHO = Air Handler, Heating Only
AHHC = Air Handler, Heating and Cooling
BWCI = Boiler Hot Water, Cast-Iron
BWEL = Boiler Hot Water, Electric
BWHF = Boiler Hot Water, HRT/Firebox
BWSM = Boiler Hot Water, Scotch Marine
BWWT = Boiler Hot Water, Water Tube
BSCI = Boiler Steam, Cast-Iron
BSEL = Boiler Steam, Electric
BSHF = Boiler Steam, HRT/Firebox
BSSM = Boiler Steam, Scotch Marine
BSWT = Boiler Steam, Water Tube
CH1A = Chiller, 1 stage absorption
CH2A = Chiller, 2 stage absorption
CH2F = Chiller, Direct Fired, absorption
CHCT = Chiller, Centrifugal
CHED = Chiller, Engine Driven
CHRC = Chiller, Reciprocating
CHSL = Chiller, Scroll
CHSW = Chiller, Screw
FCCO = Fan Coil Unit, Cooling Only
FCHO = Fan Coil Unit, Heating Only
FCHC = Fan Coil Unit, Heating and Cooling
FNCN = Furnace, Condensing
FNDC = Furnace, Duct
FNWA = Furnace, Warm Air
MACO = Makeup Air Unit, Cooling Only
MAHO = Makeup Air Unit, Heating Only
MAHC = Makeup Air Unit, Heating and Cooling
MAHP = Makeup Air Unit, Heat Pump
PTCO = Packaged Terminal Unit, Cooling Only
PTHC = Packaged Terminal Unit, Heating and Cooling
PTHP = Packaged Terminal Unit, Heat Pump
RPCO = Rooftop Unit, Cooling Only
RPHO = Rooftop Unit, Heating Only
RPHC = Rooftop Unit, Heating and Cooling
RPHP = Rooftop Unit, Heat Pump
SPCO = Split System, Cooling Only
SPHC = Split System, Heating and Cooling
SPHP = Split System, Heat Pump
UHHO = Unit Heater, Heating Only
UVCO = Unit Ventilator, Cooling Only
UVHO = Unit Ventilator, Heating Only
UVHC = Unit Ventilator, Heating and Cooling
WUCO = Window Unit, Cooling Only
WUHP = Window Unit, Heat Pump

Eff: For chillers and rooftop package systems, enter the system efficiency category:

SE = standard efficiency
VH = very high efficiency

 # Sys. Enter the number of systems of this type and condition.

Year. Enter the year of manufacture, if available. System will provide a default.

Cndn. Describe the system condition:
A = Average
P = Poor
N = As New

Svc. Check if system was serviced in the last year.

Some systems provide both heating and cooling, some just one type of service. Fill in the following information for each service provided.

Fuel: EL = Electric, NG = Natural Gas, LP = Liquid Propane

Heating and Cooling Capacity. The capacity is for <u>each</u> system being described. For example, if you inventory 10 packaged terminal units in the same record, and the 10 systems serve 10,000 square feet, each system serves 1,000 square feet. Usage load is calculated as full load hours * capacity * number of systems. Estimate the capacity by applying the following factors to the square footage served.

Building Type	Cooling (divide by)	Heating (multiply by)
Office, small	260	.043
Office, medium	340	.035
Office, high rise	300	.042
Computer center	85	.000
Bank	240	.050
Restaurant	200	.060
Lounge/Club	175	.068
Retail, small	280	.043
Retail, large	300	.040
Minimarket/Supermarket	250	.048
Large Supermarket	350	.034
School	260	.048
College/University	260	.046
Hospital, acute care	270	.045
Hospital, long-term care	270	.045
Clinic/medical office	230	.052
Religious Building	*330	.036
Motel	425	.028
Sports arena, gymnasium	*300	.040
Theater	*300	.040
Hotel, public areas	220	.055
guest rooms	275	.044

*gathering places use 19 persons/ton

Full Load Hours (FLH): Enter from the following table

Type	Cool	Heat	AH
Office, small	1900	600	2500
Office, medium	2100	500	3000
Office, high rise	2000	400	3500
Services	1900	500	2500
Restaurant	1800	500	3500
Fast Food	3000	800	4000
Retail, small	2000	800	4000
Retail, medium	2200	500	4200
Retail, large	2400	400	4400
Convenience Store	2000	500	3500
Supermarket	2500	500	3500
Hotel/Motel	1600	600	4000
School, 9 month	1000	500	2000
School, 12 month	2000	500	3000
Health	2000	600	3500
Religious Building	600	300	1200
Warehouse	1500	300	2500

Econ. If the system has an economizer enter D=dry bulb, E=enthalpy. The economizer has its major impact on cooling energy usage, although it may be installed in line with both heating and cooling systems. Dry bulb are most common.

Note:

Enter motors for air handlers, HVAC package, rooftop, unitary, and exhaust systems on motors form.

Project Information Evaluation Date:_____ Evaluator Name: _____

Facility name: _____

Facility address 1: _____

Facility address 2: _____

Facility city: _____ **Facility State:** FL **Facility zip:** _____

Facility contact Name:_____ **Telephone Number:** _____

Electric Account Numbers: _____

If Company is different than facility (the report should go to a different address):

Company name: _____

Company address 1: _____

Company address 2: _____

Company city: _____ **Company State:** _____ **Company zip:** _____

Company contact Name:_____ **Telephone Number:** _____

Natural Gas

Year:	Consumption (therms)	Cost $
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		
TOTAL		

Average Cost per therm:

_____

Gas Utility name:

_____

Rate identifier: _____

Check the building type:

__Office, small
__Office, medium
__Office, high rise
__Office/Computer center
__Office/Warehouse
__Bank
__Restaurant
__Lounge/Club
__Parking structure
__Retail, small
__Retail, large
__Minimarket/Supermarket
__Large Supermarket
__Warehouse, non-refrig
__Warehouse, refrig
__School
__College/University
__Hospital, acute care
__Hospital, long-term care
__Clinic/medical office
__Religious Building
__Hotel/Motel
__Miscellaneous
__Residential, multifamily
__Manufacturing, automotive
__Manufacturing, chemical
__Manufacturing, elec. equip
__Manufacturing, machinery
__Manufacturing, process
__Manufacturing, misc
__Heating plant
__Cooling plant
__Heating/Cooling plant
__Sports arena, gymnasium
__Theatre

Facility Square Feet: _____
Heated Square Feet: _____
Cooled Square Feet: _____
Construction Year: _____
Major Renovation Year: _____
Number of Employees _____
Average Occupancy Hours: _____

Check the closest location:

__Bonifey
__Chipley
__Graceville
__Lynn Haven
__Panama City
__Panama City Beach
__Argyle
__Baker
__Crestview
__DeFuniak Springs
__Destin
__Eglin AFT
__Ft. Walton Beach
__Holt
__Hulbert Field
__Laurel Hill
__Milligan
__Cantonment
__Century
__Gulf Breeze
__Herold
__Holley
__Milton
__Molino
__Pace
__Pensacola
__Pensacola Beach
__Navarre
__Navarre Beach
__Niceville
__Paxton
__Ponce De Leon
__Santa Rosa Beach
__Shalimar
__Valparaiso
__Mary Esther

Enter the numbers 1, 2 and 3 next to the most common, next most common, and third most common operating schedule for lighting, motors, and 'other' equipment at the facility. You can select more than three if you need to.

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__6:00A-2:00A, M-F
__6:00A-2:00A, M-Sa
__6:00A-2:00A, M-Su
__6:00A-4:30P, M-F
__6:00A-4:30P, M-Sa
__6:00A-4:30P, M-Su
__6:00A-6:00P, M-F
__6:00A-6:00P, M-Sa
__6:00A-6:00P, M-Su
__6:00A-8:00P, M-F
__6:00A-8:00P, M-Sa
__6:00A-8:00P, M-Su
__7:00A-5:30P, M-F
__7:00A-5:30P, M-Sa
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__7:00A-7:00P, M-Su
__7:00A-9:00P, M-F
__7:00A-9:00P, M-Sa
__7:00A-9:00P, M-Su
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__8:00A-10:00P, M-Sa
__8:00A-10:00P, M-Su
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__8:00A-12:00A, M-Sa
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__8:00A-6:00P, M-Su
__9:00A-1:00P, M-F
__9:00A-1:00P, M-Sa
__9:00A-1:00P, M-Su
__9:00A-5:00P, M-F
__9:00A-5:00P, M-Sa
__9:00A-5:00P, M-Su
__9:00A-6:00P, M-F
__9:00A-6:00P, M-Sa
__9:00A-6:00P, M-Su
__9:00A-9:00P, M-F
__9:00A-9:00P, M-Sa
__9:00A-9:00P, M-Su
__10:00A-3:00P, M-F
__10:00A-3:00P, M-Sa
__10:00A-3:00P, M-Su
__10:00A-8:00P, M-F
__10:00A-8:00P, M-Sa
__10:00A-8:00P, M-Su
__10:00A-10:00P, M-F
__10:00A-10:00P, M-Sa
__10:00A-10:00P, M-Su
__Noon-10:00P, M-F
__Noon-10:00P, M-Sa
__Noon-10:00P, M-Su
__Noon-2:00A, M-F
__Noon-2:00A, M-Sa
__Noon-2:00A, M-Su
__Noon-6:00P, M-F
__Noon-6:00P, M-Sa
__Noon-6:00P, M-Su
__Noon-Midnight, M-F
__Noon-Midnight, M-Sa
__Noon-Midnight, M-Su
__2:00P-10:00P, M-F
__2:00P-10:00P, M-Sa
__2:00P-10:00P, M-Su
__4:00P-10:00P, M-F
__4:00P-10:00P, M-Sa
__4:00P-10:00P, M-Su
__8:00P-10:00P, M-F
__6:00P-10:00P, M-Sa
__6:00P-10:00P, M-Su
__6:00P-2:00A, M-F
__6:00P-2:00A, M-Sa
__6:00P-2:00A, M-Su
__6:00P-8:00A, M-F
__6:00P-8:00A, M-Sa
__6:00P-8:00A, M-Su
__7:00P-12:00A, M-F
__7:00P-12:00A, M-Sa
__7:00P-12:00A, M-Su
__7:00P-5:00A, M-F
__7:00P-5:00A, M-Sa
__7:00P-5:00A, M-Su

Weekly:
__W- 1 Hr/Week
__W- 5 Hrs/Week
__W-10 Hrs/Week
__W-15 Hrs/Week
__W-20 Hrs/Week
__W-25 Hrs/Week
__W-30 Hrs/Week
__W-35 Hrs/Week
__W-40 Hrs/Week
__W-45 Hrs/Week
__W-50 Hrs/Week
__W-55 Hrs/Week
__W-60 Hrs/Week
__W-65 Hrs/Week
__W-70 Hrs/Week
__W-75 Hrs/Week
__W-80 Hrs/Week
__W-85 Hrs/Week
__W-90 Hrs/Week
__W-95 Hrs/Week
__W-100 Hrs/Week
__W-105 Hrs/Week
__W-110 Hrs/Week
__W-115 Hrs/Week
__W-120 Hrs/Week
__W-125 Hrs/Week
__W-130 Hrs/Week
__W-135 Hrs/Week
__W-140 Hrs/Week
__W-145 Hrs/Week
__W-150 Hrs/Week
__W-155 Hrs/Week
__W-160 Hrs/Week
__W-165 Hrs/Week

Business Information: These questions relate to the parent company of a multi-facility company.

Primary Decision Maker Name: _____
Telephone Number: _____
Secondary Decision Maker Name: _____
Telephone Number: _____
Key Influence 1 Name: _____
Telephone Number: _____
Key Influence 2 Name: _____
Telephone Number: _____
Key Influence 3 Name: _____
Telephone Number: _____
How many company locations do you currently have in Alabama, Georgia, Florida, and Mississippi? (confirm if 50 or over): _____
How many locations do you currently have outside of these states? (confirm if 50 or over): _____

Other Questions about the Facility

Do you currently have an energy management system(s)? (circle one) Yes No
If yes, how many?
If no, do you have any separate cooling zones, for example for a central computer system? (circle one) Yes No

What is your heating temperature setpoint:
What is your cooling temperature setpoint:

Are you planning any major equipment changes? (circle one) Yes No
If yes, to what equipment? _____
Number of systems? _____
When: _____
Where: _____
If no, would you make changes if financing were available? (circle one) Yes No

Are you suffering the loss of key equipment because of lightning strikes or other power problems? (circle one) Yes No

Are you satisfied with the level of outdoor lighting? (circle one) Yes No

Do you have a maintenance contractor performing scheduled maintenance on your HVAC or water heating equipment? (circle one) Yes No
If No, are you satisfied with the condition of your HVAC equipment? (circle one) Yes No
With the condition of your water heating equipment? (circle one) Yes No

Equipment/Services Used

Do you have the following equipment at your facility? Circle yes or no. If yes, ask for the approximate number of systems:

Equipment	Present?		No. systems
Electronic Cash Registers	Yes	No	_____
Mainframe Computers	Yes	No	_____
PCs	Yes	No	_____
Internet capability	Yes	No	_____
CD-ROM capability	Yes	No	
Electronic Security Systems	Yes	No	_____

Business Recommendations

If yes, check here to recommend financing _____

If yes, check here to recommend Surge protection _____
System type: _____ Number of systems: _____

If no, check here to recommend outdoor lighting __

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Gulf Power Equipment Confirmation

While you are at the facility, please verify Gulf Power Meter and Transformer Information

Meter ID Number: _____
Voltage: _____
Location: _____

Meter ID Number: _____
Voltage: _____
Location: _____

Meter ID Number: _____
Voltage: _____
Location: _____

Meter ID Number: _____
Voltage: _____
Location: _____

Meter ID Number: _____
Voltage: _____
Location: _____

Transformer ID Number: _____

Project Notes:

Customer Issues and Comments:

Lighting Instructions

Lighting Name. You may find it useful to name the item by location.

Light Source. Choose from:
F2 = Fluorescent 2 foot
F3 = Fluorescent 3 foot
F4 = Fluorescent 4 foot 1 lamp
F42 = Florescent 4 foot 2 lamps
F43 = Fluorescent 4 foot, 3 lamps
F44 = Fluorescent 4 foot, 4+ lamps
F5 = Fluorescent 5 foot
F6 = Fluorescent 6 foot
F8 = Fluorescent 8 foot, 1 lamp
F82 = Fluorescent 8 foot, 2 lamps
F83 = Fluorescent 8 foot, 3+ lamps
FU = U-tube fluorescent
FO = Circline fluorescent
FS = Screw-in comp. fluor.
FH = Hardwired comp. fluor.
ID = Incandescent PAR
IO = Incandescent other
HQ = Halogen, Quartz Halogen
LP = Low pressure sodium
HP = High pressure sodium
HD = Metal halide
MV = Mercury vapor
XT = Exit algn
OT = Other

For fluorescents:

Lamp type: T12 T12HO T10 T8

Ballast type:

STD = standard magnetic
EFM = Energy Efficiency Magnetic
ELE = Electronic
HYB = Hybrid

Refl: Check if the system has a reflector (a shiny liner indicating the system has been delamped)

For others:

Watts: Enter the lamp watts

T12 lamps default to 40 watts. Enter wattage only if different.

 # Fxt. Enter the number of fixtures. A fixture is a fluorescent system (a combination of lamps and ballasts) but is an individual incandescent lamp. If you see several incandescent lamps in the same decorative installation (such as a chandelier or decorative strip lighting) count the number of lamps. If this is too time consuming, describe the system as a special lighting system in the 'other' section.

OS: Refer to the list of operating schedules in the first section, and enter 1, 2, or 3 corresponding to the most common, second most common, or least common facility schedule.

Control? Check if there is a motion sensor (either wall or ceiling) installed. The program assumes e 30% reduction for controls.

OD: Check if the system is used outdoors. Quartz and mercury vapor lamps are replaced with Metal Halide systems indoors and high pressure sodium systems outdoors.

Example for Incandescent:

Show each light bulb as a fixture. In this way, a fixture with 10 60-watt lamps =
Light Source IO, Watts 60, # Fixt. 10. Lamp type, ballast type and reflector are all not applicable.

Replace?: Check here to recommend replacement.

For existing incandescent lamps, check only if a compact fluorescent will fit in the fixture.

For high wattage (200 W and over) incandescent and quartz systems, check only if a high pressure sodium or metal halide replacement is appropriate (i.e. a pendant fixture).

Hint: Describe Neon lighting on the "Other" section of the form, only if it represents a signficant energy use.

Lighting Inventory

Group	Location Name	Light Source	Lamp Type	Ballast type	Refl	Watts	# Fxt.	OS	Control	OD	Replace?
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											

HVAC Equipment Instructions

HVAC Equipment name. Enter the name you will use to identify the HVAC equipment.

Category/Type. Choose from the list.
AHCO = Air Handler, Cooling Only
AHHO = Air Handler, Heating Only
AHHC = Air Handler, Heating and Cooling
BWCI = Boiler Hot Water, Cast-Iron
BWEL = Boiler Hot Water, Electric
BWHF = Boiler Hot Water, HRT/Firebox
BWSM = Boiler Hot Water, Scotch Marine
BWWT = Boiler Hot Water, Water Tube
BSCI = Boiler Steam, Cast-Iron
BSEL = Boiler Steam, Electric
BSHF = Boiler Steam, HRT/Firebox
BSSM = Boiler Steam, Scotch Marine
BSWT = Boiler Steam, Water Tube
CH1A = Chiller, 1 stage absorption
CH2A = Chiller, 2 stage absorption
CH2F = Chiller, Direct Fired, absorption
CHCT = Chiller, Centrifugal
CHED = Chiller, Engine Driven
CHRC = Chiller, Reciprocating
CHSL = Chiller, Scroll
CHSW = Chiller, Screw
FCCO = Fan Coil Unit, Cooling Only
FCHO = Fan Coil Unit, Heating Only
FCHC = Fan Coil Unit, Heating and Cooling
FNCN = Furnace, Condensing
FNDC = Furnace, Duct
FNWA = Furnace, Warm Air
MACO = Makeup Air Unit, Cooling Only
MAHO = Makeup Air Unit, Heating Only
MAHC = Makeup Air Unit, Heating and Cooling
MAHP = Makeup Air Unit, Heat Pump
PTCO = Packaged Terminal Unit, Cooling Only
PTHC = Packaged Terminal Unit, Heating and Cooling
PTHP = Packaged Terminal Unit, Heat Pump
RPCO = Rooftop Unit, Cooling Only
RPHO = Rooftop Unit, Heating Only
RPHC = Rooftop Unit, Heating and Cooling
RPHP = Rooftop Unit, Heat Pump
SPCO = Split System, Cooling Only
SPHC = Split System, Heating and Cooling
SPHP = Split System, Heat Pump
UHHO = Unit Heater, Heating Only
UVCO = Unit Ventilator, Cooling Only
UVHO = Unit Ventilator, Heating Only
UVHC = Unit Ventilator, Heating and Cooling
WUCO = Window Unit, Cooling Only
WUHP = Window Unit, Heat Pump

Eff: For chillers and rooftop package systems, enter the system efficiency category:

SE = standard efficiency
VH = very high efficiency

 # Sys. Enter the number of systems of this type and condition.

Year. Enter the year of manufacture, if available. System will provide a default.

Cndn. Describe the system condition:
A = Average
P = Poor
N = As New

Svc. Check if system was serviced in the last year.

Some systems provide both heating and cooling, some just one type of service. Fill in the following information for each service provided.

Fuel: EL = Electric, NG = Natural Gas, LP = Liquid Propane

Heating and Cooling Capacity. The capacity is for <u>each</u> system being described. For example, if you inventory 10 packaged terminal units in the same record, and the 10 systems serve 10,000 square feet, each system serves 1,000 square feet. Usage load is calculated as full load hours * capacity * number of systems. Estimate the capacity by applying the following factors to the square footage served.

Building Type	Cooling (divide by)	Heating (multiply by)
Office, small	280	.043
Office, medium	340	.035
Office, high rise	300	.042
Computer center	85	.000
Bank	240	.050
Restaurant	200	.060
Lounge/Club	175	.068
Retail, small	280	.043
Retail, large	300	.040
Minimarket/Supermarket	250	.048
Large Supermarket	350	.034
School	260	.046
College/University	260	.046
Hospital, acute care	270	.045
Hospital, long-term care	270	.045
Clinic/medical office	230	.052
Religious Building	*330	.035
Motel	425	.028
Sports arena, gymnasium	*300	.040
Theater	*300	.040
Hotel, public areas	220	.055
guest rooms	275	.044

*gathering places use 18 persons/ton

Full Load Hours (FLH): Enter from the following table

Type	Cool	Heat	AH
Office, small	1900	600	2500
Office, medium	2100	500	3000
Office, high rise	2000	400	3500
Services	1900	500	2500
Restaurant	1800	500	3500
Fast Food	3000	600	4000
Retail, small	2000	600	4000
Retail, medium	2200	500	4200
Retail, large	2400	400	4400
Convenience Store	2000	500	3500
Supermarket	2500	500	3500
Hotel/Motel	1600	600	4000
School, 9 month	1000	500	2000
School, 12 month	2000	600	3000
Health	2000	600	3500
Religious Building	600	300	1200
Warehouse	1500	300	2500

Econ. If the system has an economizer enter D=dry bulb, E=enthalpy. The economizer has its major impact on cooling energy usage, although it may be installed in line with both heating and cooling systems. Dry bulb are most common.

Note:

Enter motors for air handlers, HVAC package, rooftop, unitary, and exhaust systems on motors form.

Inventory of HVAC Equipment

							Heat	Cool	Heat	Cool	Heat	Cool	
HVAC Equipment Name	**Cat./Type**	**Eff.**	**# Sys**	**Year**	**Cndn.**	**Svc.**	**Fuel**	**Fuel**	**Cap.**	**Cap.**	**FLH**	**FLH**	**Econ.**

MBtuh Tons

Burner						Chiller			
Year	B. Cndn.	Heat	Over	Stack	Size	Reset	Cond.	Wet.	Dmd.

	Measure	When to recommend
	Replace with high efficiency equivalent	If system >5 years old.
	Add wet bulb economizer	If a rooftop unit - install when equipment is replaced.
	Add condenser water reset controller	If none is present
	Tune up burner	If no annual maintenance program and has not been serviced in the last year
	Tune up cooling system	If no annual maintenance program and has not been serviced in the last year

							Heat	Cool	Heat	Cool	Heat	Cool	
HVAC Equipment Name	**Cat./Type**	**Eff.**	**# Sys**	**Year**	**Cndn.**	**Svc.**	**Fuel**	**Fuel**	**Cap.**	**Cap.**	**FLH**	**FLH**	**Econ.**

MBtuh Tons

Burner						Chiller			
Year	B. Cndn.	Heat	Over	Stack	Size	Reset	Cond.	Wet.	Dmd.

	Measure	When to recommend
	Replace with high efficiency equivalent	If system >5 years old.
	Add wet bulb economizer	If a rooftop unit - install when equipment is replaced.
	Add condenser water reset controller	If none is present
	Tune up burner	If no annual maintenance program and has not been serviced in the last year
	Tune up cooling system	If no annual maintenance program and has not been serviced in the last year

							Heat	Cool	Heat	Cool	Heat	Cool	
HVAC Equipment Name	**Cat./Type**	**Eff.**	**# Sys**	**Year**	**Cndn.**	**Svc.**	**Fuel**	**Fuel**	**Cap.**	**Cap.**	**FLH**	**FLH**	**Econ.**

MBtuh Tons

Burner						Chiller			
Year	B. Cndn.	Heat	Over	Stack	Size	Reset	Cond.	Wet.	Dmd.

	Measure	When to recommend
	Replace with high efficiency equivalent	If system >5 years old.
	Add wet bulb economizer	If a rooftop unit - install when equipment is replaced.
	Add condenser water reset controller	If none is present
	Tune up burner	If no annual maintenance program and has not been serviced in the last year
	Tune up cooling system	If no annual maintenance program and has not been serviced in the last year

The second row of the block is used to describe components that may or may not be part of the system.

Burner Details. Enter if the equipment has a burner:

Year. Enter the year of manufacture. InSite defaults to 10 years old, or the facility construction year if more recent

B. Cndn. Describe the burner condition:
A = Average
P = Poor
N = As New

Heat. Check if the combustion air is from heated space.

Over. Check if the burner is oversized.

Stack. Check if a stack damper is installed.

Size. Enter the stack size if known.

Chiller Details. Enter if the equipment is a chiller.

Reset. Check if the system has a chilled water reset control.

Cond. Check if the system has a condenser water reset control.

Wet. Check if the system has a wetside economizer.

Dmd. Check if the system has a demand controller.

Inventory of HVAC Equipment

							Heat	Cool	Heat	Cool	Heat	Cool	
HVAC Equipment Name	Cat./Type	Eff.	# Sys	Year	Cndn.	Svc.	Fuel	Fuel	Cap.	Cap.	FLH	FLH	Econ.
									MBtuh	Tons			

Burner						Chiller			
Year	B. Cndn.	Heat	Over	Stack	Size	Reset	Cond.	Wet.	Dmd.

	Measure	When to recommend
	Replace with high efficiency equivalent	If system >5 years old.
	Add wet bulb economizer	If a rooftop unit - install when equipment is replaced.
	Add condenser water reset controller	If none is present
	Tune up burner	If no annual maintenance program and has not been serviced in the last year
	Tune up cooling system	If no annual maintenance program and has not been serviced in the last year

							Heat	Cool	Heat	Cool	Heat	Cool	
HVAC Equipment Name	Cat./Type	Eff.	# Sys	Year	Cndn.	Svc.	Fuel	Fuel	Cap.	Cap.	FLH	FLH	Econ.
									MBtuh	Tons			

Burner						Chiller			
Year	B. Cndn.	Heat	Over	Stack	Size	Reset	Cond.	Wet.	Dmd.

	Measure	When to recommend
	Replace with high efficiency equivalent	If system >5 years old.
	Add wet bulb economizer	If a rooftop unit - install when equipment is replaced.
	Add condenser water reset controller	If none is present
	Tune up burner	If no annual maintenance program and has not been serviced in the last year
	Tune up cooling system	If no annual maintenance program and has not been serviced in the last year

							Heat	Cool	Heat	Cool	Heat	Cool	
HVAC Equipment Name	Cat./Type	Eff.	# Sys	Year	Cndn.	Svc.	Fuel	Fuel	Cap.	Cap.	FLH	FLH	Econ.
									MBtuh	Tons			

Burner						Chiller			
Year	B. Cndn.	Heat	Over	Stack	Size	Reset	Cond.	Wet.	Dmd.

	Measure	When to recommend
	Replace with high efficiency equivalent	If system >5 years old.
	Add wet bulb economizer	If a rooftop unit - install when equipment is replaced.
	Add condenser water reset controller	If none is present
	Tune up burner	If no annual maintenance program and has not been serviced in the last year
	Tune up cooling system	If no annual maintenance program and has not been serviced in the last year

Motors Instructions

Motor Name. The name you will use to identify the motor system.

Power. Enter the motor horsepower.

1	5	20	50	125	300	1000
1 1/2	7 1/2	25	60	150	400	1500
2	10	30	75	200	500	2000
3	15	40	100	250	750	2500

Speed. Enter the speed of the motor.

900 1200 1800 3600

Enclosure Type. Enter the enclosure type.

TEFC ODP TEXP

Eff: Efficiency: ST=Standard, HI=High

#. Enter the number of motors of the same type and with the same operating characteristics.

Task. Enter the task code.

FN = Fan
PM = Pump
CM = Compressor
MX = Mixer
CV = Conveyor
EV = Elevator
FL = Forklift
MT = Machine Tool

Operating Schedule. Refer to the list of operating schedules in the first section, and Enter 1, 2, or 3 corresponding to the most common, second most common, or least common facility schedule. You may pick a different schedule if none of these three match the operating profile.

FOR VENTILATION FANS AND PUMPS ONLY

Controls. Describe any existing controls.

V = vane D = Damper ASD = Adjustable Speed Drive

Task Profile. If the motor has a control, describe the motor's underlying task profile.

CS = Continuous Summer
CW = Continuous Winter
HC = Heating and Cooling
SC = Summer Cooling
WH = Winter Heating
YR = Year Round Continuous
YC = Year Round Cooling

HI Eff: If the existing motor is a standard efficiency motor, check here to recommend replacing with a high efficiency motor on burnout.

TIPS!

Estimating HVAC Supply motor Horsepower
Count the number of air handlers and/or number of rooftop units. Assume that each motor is 1800 rpm, ODP, Standard efficiency.

Estimate the horsepower of each system as the conditioned square footage/1000 divided by the number of systems. (assumes 1 CFM/conditioned square foot, and 1000 CFM/hp).

Estimating Exhaust motor Horsepower
Count the number of exhaust fans. Assume that each motor is 1800 rpm, ODP, Standard efficiency.

Estimate the horsepower of each system as 10% of the square footage/2000 divided by the number of fans. (assumes 1 CFM/conditioned square foot, and 2000 CFM/hp).

Estimating HVAC Supply Motor Operating Schedule
For air handling motors in buildings not built or operating to code, use total heating and cooling FLH from page 14. If operating to code, use AH FLH listed on page 14. Then, divide FLH by 52 weeks and select corresponding weekly operating schedule.

DHW System Instructions

The first section of the block describes the equipment information.

System Name. The name that will identify the DHW System.

Type. Enter a type code from the list.

BSA = Boiler Sidearm
BSS = Boiler Sidearm w/ summer self-contained
DBS = Dedicated Boiler w/ storage
SCT = Self-contained
HPS = Heat pump w/ storage
POU = Point of use
THC = Tankless HW Converter.

Fuel. Enter the fuel. E = electricity, G = Nat. Gas. P = Liquid Propone

Input. Enter the system rated input (nameplate value)

Tank Size: Enter the storage tank size.

# of Systems. Enter the number of systems of the same type and with the same operating characteristics.

The second row describes the system operating condition, and the peripheral equipment on the system.

Year. Enter the year of manufacture. Default provided.

Condition. Enter the system condition:
A = Average, N = As New, P = Poor.

R. Enter the R value of the system, combining built in insulation and tank wrap if any. **System default provided.**

Pilot. Check if the system has a pilot light.

Btuh. Enter the energy used by the pilot light.

Sol. Check if the system has a solar component.

Operating Schedule. Enter a type code from the list. Idle means there are no loads on the system, it's just compensating for heat loss from the tank and pipes.

C = Continuous
8 = 8 hours a day, otherwise idle.
NS = Off in summer
S = Summer only
NW = Off on weekends
IW = Idle on weekends

Temp. The current setpoint.

Feed. The feed temperature. If not known leave blank (default provided)

Pump. Check if the system has a circulation pump.

Power. If the system has a pump, enter the energy used in Watts.

Op Hrs. If the system has a pump, enter the number of hours per day the pump runs (default = 24)

Trap. Check if the system has a heat trap.

Ins. Check if the exposed piping is already insulated.

Loads. The second section of the block describes the system load. You may describe loads in three different ways, in any combination.

Loads by type. Describe up to three standard loads.

Type. Enter a load type from the list and Units

OB = Office Building	Units = Number of staff
RS = Restaurant, full service	Units = Meals per day
RF = Restaurant, fast food	Units = Meals per day
DO = Dormitory	Units = Number of students
ES = Elementary School	Units = Number of students
HS = High School	Units = Number of Students
MU = Motel	Units = Number of motel units
NH = Nursing Home	Units = Number of beds

For Office Building only:
LFF. Check if low flow faucets are present.
LFS. Check if low flow showers are present.

Residential. Enter the following information if residential units are present in the facility.

Dish. Check if the residential unit(s) has a dishwasher.
Laun. Check if the residential unit(s) has a laundry.
LFF. Check if low flow faucets are present.
LFS. Check if low flow showers are present.
 # Units. Enter the number of residential units.
 # Pers. Enter the average number of people in each unit.

Other. Enter the following information if any other hot water uses are present.

Temp. Enter the use temperature
Gal. Enter the number of gallons

DHW System Instructions

The first section of the block describes the equipment information.

System Name. The name that will identify the DHW System.

Type. Enter a type code from the list.

BSA = Boiler Sidearm
BSS = Boiler Sidearm w/ summer self-contained
DBS = Dedicated Boiler w/ storage
SCT = Self-contained
HPS = Heat pump w/ storage
POU = Point of use
THC = Tankless HW Converter.

Fuel. Enter the fuel. E = electricity, G = Nat. Gas. P = Liquid Propone

Input. Enter the system rated input (nameplate value)

Tank Size: Enter the storage tank size.

# of Systems. Enter the number of systems of the same type and with the same operating characteristics.

The second row describes the system operating condition, and the peripheral equipment on the system.

Year. Enter the year of manufacture. Default provided.

Condition. Enter the system condition:
A = Average, N = As New, P = Poor.

R. Enter the R value of the system, combining built in insulation and tank wrap if any. **System default provided.**

Pilot. Check if the system has a pilot light.

Btuh. Enter the energy used by the pilot light.

Sol. Check if the system has a solar component.

Operating Schedule. Enter a type code from the list. Idle means there are no loads on the system, it's just compensating for heat loss from the tank and pipes.

C = Continuous
8 = 8 hours a day, otherwise idle.
NS = Off in summer
S = Summer only
NW = Off on weekends
IW = Idle on weekends

Temp. The current setpoint.

Feed. The feed temperature. If not known leave blank (default provided)

Pump. Check if the system has a circulation pump.

Power. If the system has a pump, enter the energy used in Watts.

Op Hrs. If the system has a pump, enter the number of hours per day the pump runs (default = 24)

Trap. Check if the system has a heat trap.

Ins. Check if the exposed piping is already insulated.

Loads. The second section of the block describes the system load. You may describe loads in three different ways, in any combination.

Loads by type. Describe up to three standard loads.

Type. Enter a load type from the list and Units

OB = Office Building	Units = Number of staff
RS = Restaurant, full service	Units = Meals per day
RF = Restaurant, fast food	Units = Meals per day
DO = Dormitory	Units = Number of students
ES = Elementary School	Units = Number of students
HS = High School	Units = Number of Students
MU = Motel	Units = Number of motel units
NH = Nursing Home	Units = Number of beds

For Office Building only:
LFF. Check if low flow faucets are present.
LFS. Check if low flow showers are present.

Residential. Enter the following information if residential units are present in the facility.

Dish. Check if the residential unit(s) has a dishwasher.
Laun. Check if the residential unit(s) has a laundry.
LFF. Check if low flow faucets are present.
LFS. Check if low flow showers are present.
 # Units. Enter the number of residential units.
 # Pers. Enter the average number of people in each unit.

Other. Enter the following information if any other hot water uses are present.

Temp. Enter the use temperature
Gal. Enter the number of gallons

DHW System Inventory

Equipment Information														R value
System Name								Type	Fuel	Input	Tank Size	#	Year	Condition	
Pilot	Btuh	Sol.	OS	Temp	Feed	Pump	Op Hrs.	Power	Trap	Ins.					

System Loads															
Loads by type															
Type			Units	LFF	LFS	Type			Units	LFF	LFS	Type		Units	LFF	LFS

Residential loads						Other loads	
# Units	# Pers.	Dish	Laun	LFF	LFS	Temp.	Gal.

	Measure	When to recommend	Enter the Parameter	Number
	Install faucet aerators	If no obvious aeration AND either office or residential loads.	Number of aerators	
	Replace with high efficiency equivalent	If system is over 3 years old		
	Reduce water heater temperature setpoint	If above 140 for restaurant load types. If above 130 for other standard load types.	New temperature setpoint	
	Turn off water heater	If no hot water needed at all (RARE!)		
	Turn off water heater during idle periods	If Operating Schedule is "Idle on Weekends"		
	Override the circulation pump operating hours	If a circulation pump is used, and runs continuously.	New operating hours/day (<24)	
	Insulate the distribution piping	If there is a circulation pump AND the first 10 feet of piping is not insulated and are in open space	Feet of Insulation	10
	Provide additional tank insulation	If electric system and no tank wrap currently installed	R-value of added insulation	default
	Install Heat Pump water heater	If system uses more than 800 gallons per day		

Equipment Information														R value
System Name								Type	Fuel	Input	Tank Size	#	Year	Condition	
Pilot	Btuh	Sol.	OS	Temp	Feed	Pump	Op Hrs.	Power	Trap	Ins.					

System Loads															
Loads by type															
Type			Units	LFF	LFS	Type			Units	LFF	LFS	Type		Units	LFF	LFS

Residential loads						Other loads	
# Units	# Pers.	Dish	Laun	LFF	LFS	Temp.	Gal.

	Measure	When to recommend	Enter the Parameter	Number
	Install faucet aerators	If no obvious aeration AND either office or residential loads.	Number of aerators	
	Replace with high efficiency equivalent	If system is over 3 years old		
	Reduce water heater temperature setpoint	If above 140 for restaurant load types. If above 130 for other standard load types.	New temperature setpoint	
	Turn off water heater	If no hot water needed at all (RARE!)		
	Turn off water heater during idle periods	If Operating Schedule is "Idle on Weekends"		
	Override the circulation pump operating hours	If a circulation pump is used, and runs continuously.	New operating hours/day (<24)	
	Insulate the distribution piping	If there is a circulation pump AND the first 10 feet of piping is not insulated and are in open space	Feet of Insulation	10
	Provide additional tank insulation	If electric system and no tank wrap currently installed	R-value of added insulation	default
	Install Heat Pump water heater	If system uses more than 800 gallons per day		

Refrigerated Spaces Instructions

System Name. Enter the name that will identify the refrigeration item.

Type. Enter a type from the list.
CO = Coffin open
CC = Coffin covered
CD = Closed display
MO = Multi-deck open
MC = Multi-deck closed
WD = Walk-in display
WS = Walk-in storage
RS = Residential

Contents. Enter contents from the list. Approved temperature ranges for the product are displayed in parentheses. The recommended temperatures are based on ASHRAE standards
BV = Beverages (35 to 55)
DP = Dairy Products (35 to 38)
DL = Deli (25 to 36)
FL = Flowers (31 to 55)
FZ = Frozen food (-99 to 25)
IZ = Ice (-99 to 30)
IC = Ice cream/Juice (-99 to -12)
MU = Meat, unwrapped (32 to 37)
MW = Meat, wrapped (28 to 30)
PR = Produce (35 to 40)
OT = Other (-99 to 55)

Temp. Enter the case temperature if shown on a thermometer.

Self. Check if the system is self contained.

No., Dimension: Enter the number and dimension of the spaces you are describing (e.g. 4 8-ft cases).

Cndn. Condition. Enter the system condition:
W = Well-maintained
A = Average - no regular maintenance
P = Poor - broken gasket, possible broken latch, closed coil, etc.

Anti-Cnd. Describe the anti-condensate heater. Operation.
OF = Always off
ON = Always on
HU = Humidity
TC = Time clock
UN = Unknown

Def. Meth. Describe the defrost method.
AA = Ambient air
EL = Electric
HG = Hot gas
OC = Off cycle
UN = Unknown

Def. Ctl. . Describe the defrost control method.
DM = Demand
TA = Time start, auto stop
TT = Time start, time stop
UN = Unknown

Barrier. For open spaces, describe additional barriers.
NO = None
VC = Vinyl curtains
NC = Night covers

Temp. Enter the ambient temperature surrounding the space, if other than 70F.

Humid. Enter the relative humidity surrounding the space, if other than 50%.

NOTE: Do not use this form for process refrigeration such as ice rinks, ice machines, or ice manufacturing plants. Use "Other" for this equipment.

* Typical Refrigeration diversity = 50% of connected kW.

Refrigerated Spaces Inventory

System Name	Type	Contents	Temp	Self	No.	Dimension	Cndn	Anti-Cnd	Def. Meth	Def. Ctl.	Barrier	Temp	Humid
Measure		When to recommend											
Clean and refurbish equipment		If no maintenance contract and equipment looks shabby											
Clean condenser coils		If no maintenance contract and coils have garm on them											
Replace worn door gaskets		If there is a door gasket, there is no maintenance contract and gasket is cracked or worn. Check 'poor condition' above.											
Install film or blanket night covers on display cases		If open cases and no night covers being uses											
Install strip curtains on walk-in doors		If door left open during operating hours with no barrier - change language so reflects air curtain and the quick open/close as well.											
Adjust case temperature to highest acceptable value		If set temperature is higher than minimum in allowable range.									Temperature (F)		
Replace display case evaporator fans with high efficiency equivalents		If older than 5 years (and when fan burns out)											
Replace walk-in evaporator fans with high efficiency equivalents		If older than 5 years (and when fan burns out)											

System Name	Type	Contents	Temp	Self	No.	Dimension	Cndn	Anti-Cnd	Def. Meth	Def. Ctl.	Barrier	Temp	Humid
Measure		When to recommend											
Clean and refurbish equipment		If no maintenance contract and equipment looks shabby											
Clean condenser coils		If no maintenance contract and coils have garm on them											
Replace worn door gaskets		If there is a door gasket, there is no maintenance contract and gasket is cracked or worn. Check 'poor condition' above.											
Install film or blanket night covers on display cases		If open cases and no night covers being uses											
Install strip curtains on walk-in doors		If door left open during operating hours with no barrier - change language so reflects air curtain and the quick open/close as well.											
Adjust case temperature to highest acceptable value		If set temperature is higher than minimum in allowable range.									Temperature (F)		
Replace display case evaporator fans with high efficiency equivalents		If older than 5 years (and when fan burns out)											
Replace walk-in evaporator fans with high efficiency equivalents		If older than five years (and when fan burns out)											

System Name	Type	Contents	Temp	Self	No.	Dimension	Cndn	Anti-Cnd	Def. Meth	Def. Ctl.	Barrier	Temp	Humid
Measure		When to recommend											
Clean and refurbish equipment		If no maintenance contract and equipment looks shabby											
Clean condenser coils		If no maintenance contract and coils have garm on them											
Replace worn door gaskets		If there is a door gasket, there is no maintenance contract and gasket is cracked or worn. Check 'poor condition' above.											
Install film or blanket night covers on display cases		If open cases and no night covers being uses											
Install strip curtains on walk-in doors		If door left open during operating hours with no barrier - change language so reflects air curtain and the quick open/close as well.											
Adjust case temperature to highest acceptable value		If set temperature is higher than minimum in allowable range.									Temperature (F)		
Replace display case evaporator fans with high efficiency equivalents		If older than 5 years (and when fan burns out)											
Replace walk-in evaporator fans with high efficiency equivalents		If older than 5 years (and when fan burns out)											

"Other" Instructions

System Name. Enter the name that will identify the item.

EU. Enter the end use to which the energy used by the system will be assigned
U = Unspecified
L = Lighting
H = Heating
C = Cooling
M = Motors
R = Refrigeration

Cat./Type. Enter the equipment category and type.

Category	Type
C = Cooking	HD = Hood
	RG = Range
	IR = Induction Range
	FT = Fry top
	BR = Broiler
	CF = Counter deep fryer
	FF = Floor model deep fryer
	IF = Induction fryer
	GR = Griddle
	PO = Pizza oven
	CO = Convection oven
	HO = High frequency oven
	ST = Steamer
	CU = Coffee urn
	HT = Hot food table
	HP = Hot plate
O = Office/Computer	DC = Desk top copier
	FC = Floor model copier
	WP = Word processor
	PC = Personal computer/terminal
	MF = Mainframe computer
	MC = Mini computer
	OE = Office equipment
L = Laundry	WS = Washer
	DR = Dryer
	IR = Iron
	PR = Press (steam)
P = Process	PE = Process equipment
	CK = Cooking
	HT = Heating
	IN = Induction heating
	IM = Immersion heating
	DR = Drying
	KL = Kiln
	WS = Waste treatment
	WW = Wastewater treatment
	FH = Fume hood
	CN = Conveyor
	AC = Air Compressor
	FN = Fan
	PM = Pump
M = Miscellaneous	ME = Medical equipment
	EL = Elevator
	SA = Sauna
	PH = Pool heater
	WD = Welder
(other)	(enter your own description)

No. Enter the number of systems.

Condition. Enter the system condition.
W = Well-maintained
A = Average
P = Poor.

OS. Refer to the list of operating schedules in the first section, and Enter 1, 2, or 3 corresponding to the most common, second most common, or least common facility schedule

Fuel. Enter the fuel: EL = Electricity, NG = Natural Gas

Rating. Enter the number of units of power at which the equipment is rated (i.e. the connected kW). For example, if the system uses 10 kW when it is on, enter 10 here and kW in Rtg. Units.*

Units/Addt'l Rtg. Units. Enter Rating Units as follows:

Units	Addt'l Rtg. Units
kW	
hp	
FLA	Volts
LRA	Volts
RLA	Volts
MBtuh output	
MBtuh input	
User-specified	(text)

Efficiency. Enter the system efficiency if known. Does not apply if Rtg. Units are 'User-specified' or 'MBTuh input'.

*Apply diversity factor to connected kW rating:

	Cooking	Refrigeration	Misc.
Retail, office, convenience store	0.35	0.50	0.25
Grocery	0.30	0.50	0.50
Hotels, motels, restaurants, services, health facilities	0.35	0.50	0.50
Fast Food	0.40	0.50	0.50
Schools, Churches	0.35	0.50	0.30
Offices w/ warehouses	0.35	0.50	0.40

"Other" Inventory

System Name	EU	Cat.	Type	No.	Cndt.	OS	Fuel	Rating	Units	Addt'l Rtg. Units	Efficiency

OTHER 24

Technical Assistance Audit (TAA) Program

Program Description

The Technical Assistance Audit Program is an interactive program that provides commercial customers assistance in identifying advanced energy conservation opportunities. It is customized to meet the individual needs of large customers as required; therefore, it is an evolving program.

The Technical Assistance Audit process consists of an on-site review by the Commercial Market Specialist of the customer's facility operation, equipment and energy usage pattern. The specialist identifies all areas of potential reduction in kW demand and kWh consumption as well as identifying end-use technology opportunities. A technical evaluation is then performed which often includes performing an AXCESS simulation in order to ascertain an economic payback or life cycle cost analysis for various improvements to the facility. When necessary, Gulf Power Company will subcontract the evaluation process to an independent engineering firm and/or contracting consultant.

Participation Standards

The Technical Assistance Audit Program is available to all commercial and industrial customers with a minimum annual peak demand of 20 kW.

Benefits and Cost

The Technical Assistance Audit provides specific recommendations on energy conservation opportunities for the customer. The cost to the customer will be

based on the recommendations regarding equipment, operational options, or other suggestions. The age of the existing stock of appliances and building structure envelope are key determinates in the cost of implementation to the customer. Because the program provides specific and unique options to the customer, gross or average cost estimates are not computed.

The benefits to Gulf Power Company are energy conservation as well as improved customer satisfaction. In recent research of commercial/industrial customers, consistent response for areas of improvement from this class of customer include this type of individualized attention and service in helping them improve their cost of operation and efficiency.

Gulf Power Company
Energy Services Program
Program Standards

Program Description

The Energy Services program is designed to establish the capability and process to offer advanced energy services and energy efficient end-use equipment to customers. It is customized to meet the individual needs of large customers as required; therefore, it is an ever-evolving program. These energy services include comprehensive audits, design, construction and financing of energy conservation projects. Specifically, the types of projects covered under this program would be demand reduction or efficiency improvements and/or retrofits, such as lighting (fluorescent and incandescent), motor replacements, HVAC retrofit (including geothermal applications), and new electrotechnologies. The program will be administered in four phases: (1) the energy audit; (2) the proposal; (3) design/construction; and (4) financing. The energy audit will be conducted under the existing Florida Public Service Commission approved audit program. Gulf Power Company currently has full cost recovery of expenses associated with evaluating energy efficiency opportunities in commercial and industrial facilities. Once the customer accepts audit recommendations, Gulf Power Company will develop a scope and price proposal for the project.

The Technical Assistance Audit identifies customer opportunities for efficiency, demand reduction, and/or end-use technology opportunities. In cases where the economic payback is less than two years, the customer has the proper economic

incentive to make the proposed changes outlined in the Technical Assistance Audits. Gulf Power Company will provide follow-up monitoring to identify customer conservation efforts from the audit.

When conservation projects identified in the Technical Assistance Audit are promising and cost effective but exceed an acceptable customer payback period (greater than two years), Gulf Power Company will offer a cost-effective incentive and/or rebate to the customer. The incentive or rebate would be on a project specific basis and used to reduce the payback period for the customer. Any proposed incentive or rebate to implement kW and/or kWh reduction project will be driven by a minimum Rate Impact Measure (RIM) analysis which results in a 1.0 RIM value or greater after the incentive/rebate inclusion. The RIM analysis will be done on a case by case basis.

Participation Standards

This program will initially be limited to commercial and industrial customers with a minimum annual peak demand of 20 kW served by Gulf Power Company. Any of these customers may receive a Technical Assistance Audit along with simple payback or life cycle cost analysis.

For those participants with kW and/or kWh reduction potential, who fail to meet a minimum simple payback of two years, the conservation reduction incentive/rebate may be made available. Applicability would be based upon a

RIM analysis equal to or exceeding 1.0 after the incentive/rebate has been applied.

Benefits and Costs

The Technical Assistance Audit provides specific recommendations on energy conservation opportunities for the customer. The cost to customer will be based on the recommendations regarding equipment, operational options, or other suggestions. The age of the existing stock of appliances and building structure envelope are key determinates in the cost of implementation to the customer. Because the program provides specific and unique options to the customer, gross or average cost estimates are not computed.

The benefits to Gulf Power Company are energy conservation as well as improved customer satisfaction. In recent research of commercial/industrial customers, consistent response for areas of improvement from this class of customer include this type of individualized attention and service in helping them improve their cost of operation and efficiency.

Monitoring and Evaluation

Monitoring and evaluation of the Energy Services Program will be administered on a case by case basis. Energy efficiency levels resulting in lower operating costs, improved customer perception, and kW and kWh reductions will be monitored in determining the effectiveness of this program. Gulf Power Company

will also monitor this program through its existing Gulf Account Reporting System (GARS) which enables the tracking of participating customers.

Cost Effectiveness

The Technical Assistance Audits are provided at no cost to commercial and industrial customers. As an audit program, the Technical Assistance Audit portion of the program does need to meet a cost-effectiveness test. Conservation recommendations implemented as a result of the Technical Assistance Audit which have a simple payback period of two years or less will not be recovered by Gulf Power Company through the Energy Conservation Cost Recovery clause.

Projects potentially qualifying for a conservation incentive or rebate would be required to pass a cost –effectiveness test with a Rate Impact Measure value of 1.0 or greater including the incentive or rebate. The cost-effectiveness analyses will be performed on a case by case basis.

Gulf Power Company
Solar for Schools
Program Standards

Program Description

The principle objective of the Solar for Schools program is to implement cost-effective solar education and demonstration projects at local educational facilities by means of voluntary contributions. The program also seeks to increase renewable energy and energy awareness among students, parents, and contributors.

Solar for Schools is a program that uses voluntary contributions to fund materials for energy education, permanent demonstration displays, rewards for science contests, solar technologies and teacher education. Voluntary contributions are solicited from customers interested in renewable energy and/ or helping to improve the quality of schools in the Gulf Power Company service area. Funds are collected through a "check-off" mechanism on the utility bill or through a direct contribution and accumulated in an interest bearing account.

When contributions reach and adequate level, they are directed to an educational facility for implementation of various solar educational programs including but not limited to permanent demonstration displays, rewards for science contests, solar technologies, teacher education and solar equipment. Contributions will not be used for administrative costs, program research or for program promotion costs.

The administrative costs, program research or program promotion costs will be recovered through the Energy Conservation Cost Recovery Clause.

Program Implementation Procedures

Upon receipt of an appropriately filled out candidacy form, Gulf Power Company will review each educational facility's request. Gulf Power Company will notify each selected school, museum, and non-profit educational facility and invite them to assist in the development of a project plan. Gulf Power Company at its discretion will monitor projects and/or hire contractors to help develop, maintain and evaluate each solar project. The results of each project will be reported during the Energy Conservation Cost Recovery regular reporting schedule.

Disbursement of Funds:

The following requirements apply to the disbursement of contributed funds used to implement the Solar for Schools program:

No funds collected through the Solar For Schools pricing mechanism may be used to pay utility overhead costs incurred in the administration of the Solar for Schools DSM program.

On a program-wide basis, 100 % of the program funds will be applied to implement energy education measures. The energy education measures will include equipment, materials, demonstration displays and rewards for contests.

The value of contributions (not including Gulf Power Company's contribution) applied at each participating school will not exceed $ 100,000.

Gulf Power Company Contribution Procedures

Gulf Power Company will provide contributions to support the Solar for Schools program on a program wide basis and on a per school basis. The money for this contribution will be obtained through Energy Conservation Cost Recovery clause. Program wide support includes coverage of the administrative cost of funds collection through the billing mechanism and the administrative and marketing cost attributable to the program.

Attachment 1:

Solar for Schools
Candidacy Application

Name of School _____

Street Address _____
State, Zip Code _____
Phone Number _____
Principal _____
Assistant Principal _____
Designated Solar for Schools Contact _____
Solar for Schools Contact Phone Number _____
Project Name _____

A.) Customer Obligations

By applying for Candidacy in the Solar for Schools Program, the applicant school agrees to abide by the following conditions:

1.) The candidate school must allow Gulf Power employees access to the premises for the purpose of further development of a Solar for Schools project plan.

2.) The candidate school must allow Gulf Power employees access to the premises for the purpose of performing assessments of solar programs.

If selected to receive Solar for Schools funding, the candidate school agrees to abide by the following conditions:

1.) Participate in the development of a project plan in conjunction with Gulf Power in the following manner:

a.) Preview Gulf Power's proposed project plan during its development.

B.) Gulf Power Obligations

Gulf Power Company agrees to evaluate the candidate for possible funding under the Solar for Schools program. If selected for funding, Gulf Power will notify the candidate school and invite the candidate to assist in the development

of a solar program. Selection notification will include an estimate of the amount of funds available to the candidate school.

C.) Indemnification

The Customer hereby expressly agrees to defend, indemnify and hold harmless Gulf Power from any and all claims, liabilities, obligations, damages, demands, losses, causes of action, cost or expenses of whatsoever kind of nature, including attorney's fees in all pre-litigation and litigation issues, including trial and appellate levels and in bankruptcy or insolvency proceedings, for injury or death of any person and for damage to or destruction of any property resulting, in whole or in part, from any errors, omissions or any negligent, willful, wanton, reckless, or intentional act(s) of the Customer in connection with the performance of the terms and conditions of this **Candidacy Application**, to the extent caused in whole or in part by said acts, errors, omissions of the Customer or a contractor/subcontractor retained by the Customer and/or anyone directly or indirectly employed by them, or either of them, or anyone for whose acts they may be liable; for, by reason of or in consequence if any error, omission, or any willful, wanton, reckless, negligent or intentional act of, by or through the Customer; and/or for any violation of any federal, state, or local laws, ordinances or regulations by, through or as a result of the Customer or any employee, agent, contractor/subcontractor or anyone else directly or indirectly employed by or through them, or either of them, or anyone for whose acts they may be liable. The Customer shall not be obligated to indemnify Gulf Power for such claims, liabilities, obligations, damages or causes of action which arise as a result of the sole negligence of Gulf Power or its employees.

D.) Governing Laws

This **Candidacy Application** shall be construed under and governed by the laws of the Sate of Florida.

Gulf Power Corporate accepts the application of Candidacy for the Solar for Schools Program of

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The Candidacy Applicant listed above agrees to honor the terms listed in this Application.

Gulf Power Company	**Customer**
By: _____	By: _____
Name: _____	Name: _____
Date: _____	Date: _____

Attachment 2:

Gulf Power's Solar for Schools Program

Participation Agreement

Gulf Power Company, a Maine Corporation, hereinafter Gulf Power, whose mailing address is One Energy Place, Pensacola, Florida, 32520-0231, and hereinafter Customer_____, whose business address is

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agrees to implement a Solar for Schools project as follows:

Project Name:

Project Description:

A.) Customer Obligations

1.) The customer agrees to install the project named above, as described in the appended project description. Any deviations from the above stated project desired by the Customer shall be submitted in writing and approved by Gulf Power before the deviation is incorporated into the project. Any deviation from the above stated project not approved by Gulf Power may result in this **Agreement** being declared null and void by Gulf Power within Gulf Power's sole discretion.

2.) The customer agrees to monitor the demand and energy impact of selected measures as described in the appended Impact Verification Plan, which is subject to the following criteria:

   a.) Energy impact data will be collected by the participating school for selected measures over a one-year period.

   b.) Students will participate in the analysis and/or reporting of measured data for selected measures.

   c.) Energy impact data and its corresponding analysis of kW and kWh effects will be made available to Gulf Power in written form accompanied by computer disk.

Any deviations from the above stated Verification Plan desired by the Customer shall be submitted in writing and approved by Gulf Power before the deviation is incorporated into the Verification Plan. Any deviation from the above stated

Verification Plan not approved by Gulf Power may result in this **Agreement** being declared null and void by Gulf Power within Gulf Power's sole discretion.

3.) The Customer agrees to select to select and hire contractors to implement the measures embodied in the above named project.

4.) The Customer agrees to the long term support of the Energy Education component of the Solar Schools program in accordance to the attached Energy Education Plan, which is subject to the following criteria:

a.) Ready access to students of energy education resources made available through this program

b.) Secure housing and storage of energy education resources made available

c.) Support for at least five years of student-based measuring, monitoring and reporting activities for selected solar measures

Any deviations from the above stated Energy Education Plan desired by the Customer shall be submitted in writing and approved by Gulf Power before the deviation is incorporated into the Energy Education Plan. Any deviation from the above stated Education Plan not approved by Gulf Power may result in this Agreement being declared null and void by Gulf Power within Gulf Power's sole discretion.

5.) The Customer agrees to select only those contractors who provide at least a five-year performance guarantee and a five-year equipment warrantee as a component of their bids. The performance guarantee may include a maintenance contract by the contractor or subcontractor.

6.) The Customer agrees to allow Gulf Power access to their facility during the installation and maintenance of the project and throughout the minimum fifteen-year life of the project to install, maintain, and read metering instrumentation.

7.) The Customer agrees to properly maintain and operate installed measures.

8.) The Customer agrees to properly remove and dispose of any equipment which is replaced in connection, directly or indirectly, with this project at the Customer's sole expense and at the customer's sole discretion. Any and all removal/disposal of any such equipment shall

be the Customer's sole responsibility/liability. It is expressly understood and agreed that Gulf Power shall have no responsibility/liability for any said removal/disposal, including, but not limited to incidental and consequential damages caused by/arising from any such removal/disposal.

B.) Gulf Power Obligations.

1. Gulf Power will provide to the customer an Impact Verification Plan which contains those measures selected for energy kW and KWh impact verification and a proposed methodology which takes into account available instrumentation and student expertise.

2. Gulf Power will disburse to the Customer the monies required to carry out the project as described in the appended Disbursement Plan, provided the project meets all the terms, conditions, and provisions of the **Agreement** and the Solar for Schools Program Standards.

3. Gulf Power will initiate an Energy Education Program for the Customer in accordance with the attached Energy Education Plan.

4. Gulf Power will provide a contribution to the project as described in the appended Disbursement Plan and in accordance with the Gulf Power contribution Procedures in the Solar for Schools Program Standards.

C.) Term

1. The time frame of this agreement shall begin on _____, 20__, and project implementation shall commence within six (6) months of this date.

2. The offer of a Gulf Power contribution is valid as long as the Florida Public Service commission continues to approve Gulf Power's Solar for Schools Program and as long as the project is completed within one year from the execution of this **Agreement**.

D.) Indemnification

The Customer hereby expressly agrees to defend, indemnify and hold harmless Gulf Power from any and all claims, liabilities, obligations, damages, demands, losses, causes of action, cost or expenses of whatsoever kind or nature, including attorney's fees in all pre-litigation and litigation issues, including trial and appellate levels and in bankruptcy or insolvency proceedings, for injury to or death of any person and for damage to or destruction of any property resulting, in whole or in part, from any errors, omissions or any negligent, willful, wanton,

reckless or intentional act(s) of the Customer in connection with the performance of the terms and conditions of this **Agreement**, to the extent in whole or in part by said acts, errors or omissions of the Customer or a contractor/subcontractor retained by the Customer and/or anyone directly or indirectly employed by them, or either of them, or anyone for whose acts they may be liable; for, by reason of or in consequence of any error omission, or any willful, wanton, reckless, negligent or intentional act of, by or through the Customer; and/or for any violation of any federal, state, or local laws, ordinances or regulations by, through or as a result of the customer of any employee, agent, contractor/subcontractor or anyone else directly or indirectly employed by or through them, or either of them, or anyone for whose acts they may be liable. The Customer shall not be obligated to indemnify Gulf Power for such claims, liabilities, obligations, damages or causes of action which arise as a result of the sole negligence of Gulf Power or its employees.

E.) Amendment

This **Agreement** represents the complete understanding between Gulf Power and the Customer, and cannot be amended or modified without a written instrument executed by both parties to this **Agreement**.

F.) Governing Laws

This **Agreement** shall be construed under and governed by the laws of the State of Florida.

In witness whereof, Gulf Power Corporation and _____ have executed this Agreement on _____, 20____.

GULF POWER COMPANY	**CUSTOMER**
By:_____	**By:**_____
Name:_____	**Name:**_____

Gulf Power Company
Green Pricing Initiatives
Program Standards

Program Description

Gulf Power Company will continue to investigate customer interest and the economic viability of Green Pricing Initiatives. The objective will be to determine customer/market acceptance, technology development and alternatives, and economic viability of additional offerings. In addition, this research will help increase the knowledge of Gulf Power Company as it relates to renewable energy.

Program Implementation Procedures

Once a renewable energy source has been identified as a potential product offering, Gulf Power Company will evaluate it for market acceptance, technology development and economic viability. Once the evaluation is complete and the project is determined cost effective, Gulf Power Company will design and offer an initiative within the Green Pricing Portfolio. The cost effectiveness of each project will be evaluated on a case by case basis.

Gulf Power Company will provide written notification to the Florida Public Service Commission of all projects that are equal to or greater than $5,000. Administrative costs, research, equipment, and management of the portfolio will be recovered through the Energy Conservation Cost Recovery (ECCR) clause.

The results of each project will be reported during the ECCR regular reporting schedule.

Gulf Power Company
In Concert With The Environment
Program Standards

Program Description

"In Concert With The Environment" is an environment and energy awareness program that is available to school system science classes in Gulf Power Company's service area. The program shows students how everyday energy use impacts the environment and how using energy wisely increases environmental quality. "In Concert" is brought to students who are already making decisions which impact our country's energy supply and the environment. Wise energy use today can best be achieved by linking environmental benefits to wise energy-use activities and by educating both present and future consumers on how to live "in concert with the environment".

The "In Concert" program was designed for teachers and their students from the ground up. "In Concert" comes complete with suggestions for implementation and evaluation, with quality materials designed to accentuate distinctive teaching styles. The program is flexible enough to be used as a stand-alone learning unit, or it can be integrated into existing lessons.

Program Objectives

The objectives of "In Concert" are as follows:

- To provide residential customers with energy conservation advice that will encourage the implementation of efficiency measures resulting in energy savings for the customer and energy and demand savings for Gulf Power Company.

- To encourage the wise use of energy and natural resources and affect change in energy-use habits.
- To illustrate the connection which exists between the daily use of energy and the quality of our environment.
- To develop a sensitivity to energy related environmental concerns.
- To create an understanding of what energy is and how it is transformed for our use.
- To help students understand how personal and family energy use impacts the environment, and encourage them to make positive changes in personal and family energy habits and, thus, positively impact the environment.

Customer Eligibility

"In Concert" is available to all eighth or ninth grade science classes in schools served by Gulf Power Company. The administration from each school district will determine in which grade the program is to be implemented. Students in other grade levels may participate if requested by the teacher. These classes would include honor classes, environmental classes, etc.

Program Standards

"In Concert" program materials include the following:

- An introductory presentation to launch student participation.
- A teacher's guide which includes lesson plans, activities, charts and graphs, and a resource guide.
- A take-home energy survey which the student completes with their families. The survey asks questions about their homes and lifestyles.

- A student handbook which demonstrates to the student the link between energy consumption and the environment is provided to each student. The student will complete the handbook, answer questions and complete activities presented in the handbook and the teacher's guide.

- The energy survey is processed by Gulf Power Company and provides a home energy profile which details energy costs for the home as well as energy conservation recommendations.

Gulf Power Company
The GoodCents Environmental Home Program
Program Standards

Program Description

The GoodCents Environmental Home Program promotes energy-efficient and environmentally sensitive home construction techniques. The GoodCents Environmental Home Program Building Survey and Software program evaluates over 500 components in six categories:

1. Energy Efficiency
2. Building Design
3. Construction Practices
4. Building Materials
5. Water Efficiency
6. Ecological Planning

The GoodCents Environmental Home consists of energy and environmental components. The energy components evaluate the building envelope and mechanical systems of the home with respect to energy efficiency. The environmental components of the program include measures which evaluate thermal energy loss, alternative energy sources, embodied energy and design strategies that affect energy usage in the home.

Program Objectives

The objective of the GoodCents Environmental Home Program is to provide Gulf Power Company's residential customers with guidance concerning energy and environmental efficiency in new construction. The effect of the program will result in reductions in energy usage and peak demand as well as environmental impact.

Customer Eligibility

The GoodCents Environmental Home Program is available to individuals or entities constructing new residential buildings served by Gulf Power Company.

Program Standards

The Gulf Power Company residential energy consultant will work with prospective participants by assisting with the completion of a GoodCents Environmental Home Program Building Survey. The survey will be input into the GoodCents Environmental Home Software Program which will determine program compliance.

The home must meet both GoodCents New Home standards and minimum environmental efficiency standards.

The heat pump/air conditioning system must have a minimum SEER of 13.0 with the minimum heating requirements being a 3.5 COP for a heat pump and a .90 AFUE for a fossil fuel furnace.

Gulf Power Company will give preliminary certification to homes meeting the GoodCents Environmental Home Program standards before construction or during early construction process and will inspect the home upon completion to ensure program compliance. Homes meeting program guidelines upon completion will be awarded GoodCents Environmental Home Certification. Each homeowner will be presented with a certificate of compliance and a user's manual to help guide lifestyle and usage patterns that are more environmentally and energy efficient. Gulf Power Company will provide the HVAC contractor with a certificate to complete and present to the homeowner certifying that the HVAC unit is properly sized and charged and that the duct work has been designed and installed to deliver proper air flow.

Gulf Power Company
GoodCents Energy Survey – Tailored Low-Income Pilot Program Standards

Program Description

The low-income program residential audit is identical to the GoodCents Energy Survey described in the residential program section of the Gulf Power Company 2000 Demand Side Management Plan. It is an on-site service performed by a partnering Weatherization Assistance Program (WAPs). Participants will receive energy conservation advice that encourages the implementation of efficiency measures resulting in energy savings for the customer. There is no charge to the customer for this service.

Program Objectives

The objectives of the low-income pilot program are to reach a broader customer base and increase participation among low-income residents and homebuyers in the GoodCents Energy Survey Program.

Customer Eligibility

The GoodCents Energy Survey: Low-Income Pilot Program' is available to all residential customers served by Gulf Power Company.

Program Standards

- Gulf Power Company will identify and partner with two interested WAP agencies within Gulf Power Company's service territory.

- Gulf Power Company will provide energy survey (audit) training to qualified WAP's so they may become qualified to conduct Gulf Power Company's walk-through and mail-in energy surveys for low-income residential customers in accordance with Gulf Power Company's Residential Energy Survey program standards.

- WAP agencies will be responsible for completing and returning a GoodCents Mail-In Energy Survey to Gulf Power Company for each on-site energy survey performed.

- Gulf Power Company will require participating WAP agencies to submit invoice for reimbursement on a monthly basis. Invoice will identify participating customers by name, address and telephone number.

- Gulf Power Company will process each questionnaire using a computerized energy analysis program and mail a customized report or Home Energy Profile to participating customer.

- Gulf Power Company will train WAP agencies in order to review recommendations of the Home Energy Profile with requesting customers.

- Gulf Power Company will audit WAP agencies' records annually for compliance.

- Gulf Power Company will contract to reimburse WAP agencies at an amount not more than 90 percent of Gulf Power Company's avoided cost of conducting the energy survey.

Gulf Power Company
Energy Education – Low Income
Program Standards

Program Description

Gulf Power Company presently has energy education programs that provide basic energy education, as well as inform the customers of other specific services, such as free energy surveys, that Gulf Power Company currently offers. These energy education programs are tailored for low income residential customers and are designed to identify low-cost and or no-cost energy conservation measures to better assist this audience in managing their energy purchases.

Program Objectives

The objective of the Energy Education – Low Income Program is similar in nature to the objectives of Gulf Power Company's GoodCents Energy Survey Program. These objectives are:

- to involve the homeowner or person responsible for energy related decisions, and
- to encourage the wise use of energy and affect positive change in energy-use habits.

Customer Eligibility

The energy education programs are available to all residential customers served by Gulf Power Company.

Program Standards

Gulf Power Company will continue to identify low-income housing and low-income residential customers and provide this service free of charge to all attendees.

Gulf Power Company representatives will meet on-site with low-income housing customers periodically to perform basic energy education seminars.

These seminars will include no-cost and or low-cost information specific to the audience, and are designed to educate customers on the efficient and cost-effective use of energy.

Customers will be provided with energy-education materials, such as Gulf Power Company's Energy Solutions Booklet, which outlines many cost-effective measures specific to residential customers.

Gulf Power Company
Affordable Housing Builders and Providers
Program Standards

Program Description

Gulf Power Company has developed new home construction seminars for area builders and customers. Attendance is free. Gulf Power Company will educate builders regarding the benefits of constructing homes to meet GoodCents building standards.

Program Objectives

The objectives of the new home construction seminars is to provide the local building industry, including affordable housing builders, with guidance concerning energy efficiency in new construction. The effect of the program will result in reductions in energy usage and peak demand.

Customer Eligibility

The new construction educational workshops are available to builders and individuals constructing new residential buildings within Gulf Power Company's service territory.

Program Standards

The seminars will be offered at least four times each year. Gulf Power Company will identify affordable housing builders within the service area and encourage them to attend these educational workshops.

Gulf Power Company will inform affordable-housing providers within its service area of other new-home construction seminars and workshops it is aware of, such as: Build Green & Profit workshops, and other sponsored events.

Gulf Power Company will work with sponsors of new-construction seminars and workshops to reduce or eliminate attendance fees for affordable housing providers.

Gulf Power Company
Conservation Demonstration and Development
Program Standards

Program Description

This program is a package of conservation programs was approved by the FPSC in Order No. 23561 for Gulf Power Company to explore the development of a program to pursue research, development, and demonstration projects designed to promote energy efficiency and conservation. This program serves as an umbrella program for the identification, development, demonstration and evaluation of new or emerging end-use technologies.

Project Selection Criteria:

1. Potential for cost – effective energy and demand reduction
2. Technology maturity, availability, and applicability
3. Customer acceptability
4. Time and funding requirements

Projects investigated under this program cover a wide array of activities and are subject to specific screening criteria shown above prior to study implementation. Project activities may include, but are not limited to, short term, low cost literature searches, customer surveys, selective customer metering, engineering and financial analyses of promising/emerging technologies or field testing with actual customers to verify operation and energy performance.

Field testing projects under this program would be limited to demonstration of commercially available promising/emerging end – use technologies that meet the guidelines described in the program description. It should be noted that, since technologies invested under this program are test projects, and the level of benefits that might be anticipated are unknown, Gulf Power Company will be limited in its ability to pre-quantify the demand or energy reductions that might result from these projects.

If any extensive field tests or pilot projects that require funding above $25,000 or beyond the scope to the CDD program are warranted, Gulf Power Company will petition the Florida Public Service Commission for approval to conduct the project as any other energy conservation cost recovery program.

Project forms are following as Attachments 1, 2, and 3.

Gulf Power Company
Conservation Demonstration and Development Program
Project Description Summary

Project Name:_____

Brief description of project:_____

Initial assessment of energy and demand reduction potential:_____

_____

Project Objectives:_____

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Gulf Power Company
Conservation Demonstration and Development Program
Project Status Report

Project Name:_____

Date of Project:_____

Date project began:_____

Percent Complete:_____

Project activites:_____

Technology assessment:_____

Customer acceptability assessment:_____

Results:_____

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Gulf Power Company
Conservation Demonstration and Development Program
Project Cost Summary

Project name:_____

Date:_____

Date project began:_____

Total cost:_____

Cost Breakdown:

MATERIALS & EXPENSES	
Materials/Supplies	$_____
Equipment	$_____
Transportation	$_____
Other	$_____
LABOR	$_____
Total	$_____