

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FILE COPY

In re: Approval of Demand-Side
Management Plan of FLORIDA POWER
& LIGHT COMPANY)
_____)

Docket No. ~~941170-EG~~

Filed: May 17, 1995

NOTICE OF SERVICE OF FLORIDA POWER & LIGHT COMPANY'S
ANSWERS TO STAFF'S FOURTH SET OF INTERROGATORIES
INTERROGATORIES 53-55

Florida Power & Light Company ("FPL") gives notice of serving its Answers To Staff's Fourth Set Of Interrogatories, Interrogatories 53-55, with a copy thereof to all counsel on the attached Certificate of Service, this 17th day of May, 1995.

Respectfully submitted,

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FPSC-RECORDS/REPORTING

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of Florida Power & Light Company's Answers To Staff's Fourth Set Of Interrogatories, Interrogatories 53-55, was served by Hand Delivery (when indicated with an *) or mailed this 17th day of May, 1995 to the following:

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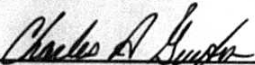
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Charles A. Guyton

ISSUE 1: Should FPL's Commercial Industrial Load Control Program be approved, including approval of the tariffs for cost recovery?

RECOMMENDATION: Yes, this program and the attached tariffs should be approved, including approval for cost recovery. Because of the minimal past interruptions of this rate schedule, staff will more closely monitor the data currently filed by FPL pursuant to Rule 25-6.018, Florida Administrative Code. Staff will use this information to compare the "capacity factor" of this program relative to the avoided unit used in the cost-effectiveness tests.

STAFF ANALYSIS: FPL's proposed DSM plan was approved by the Commission in Docket No. 941170-EG at the May 16, 1995 Agenda Conference with the exception of the Commercial/Industrial Load Control Program. Additional discovery responses have since been filed by the Company enabling staff to conclude the analysis of the C/I Load Control Program.

In Order 22176, issued November 14, 1989, the Commission stated that conservation programs will be judged by the following criteria:

1. Does each component program advance the policy objectives set forth in Rule 25-17.001 and the FEECA statute?
2. Is each component program directly monitorable and yield measurable results?
3. Is each component program cost-effective?

Staff has reviewed FPL's C/I Load Control Program filing, including recently received discovery responses, and believes this program meets the Commission's three-pronged test. The program advances the policy objectives set forth in Rule 25-17.001 and the FEECA statute; is monitorable and yields measurable results when viewed from the perspective of an all electric customer; and passes all three of the Commission's cost-effectiveness tests.

Based on the IRP analysis performed during 1994 for the DSM Plan Document filed in the this Docket, FPL projects the following combined benefit-cost ratios based on two avoided units - a 1997 Combustion Turbine, and a 2001 Combined Cycle unit with in-service costs of \$392 and \$552 per kW respectively.

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BENEFIT/COST RATIOS

RIM	TRC	Participants
1.36	38.85	163.40

Staff requested additional information relating to FPL's current avoided costs after becoming aware of a decline in capital costs for combustion turbines. FPL's present projection of avoided costs for the first avoided unit, a 1997 Combustion Turbine is now \$252 per kW, down from the \$392 per kW used in the 1994 IRP analysis. Staff subsequently requested an updated cost-effectiveness run for the C/I Load Control program based on the updated costs (\$252) for a single avoided unit, the 1997 Combustion Turbine. The following results indicate that this program continues to be cost-effective, however at a lower ratio.

BENEFIT/COST RATIOS

RIM	TRC	Participants
1.12	33.75	165.91

A benefit-cost ratio close to 1.0 leaves less room for error in the many input assumptions incorporated in the cost-effectiveness analysis. This is especially important given the fact that this program has experienced rapid growth both in number of participating customers and program costs over the past five years. Through year-end 1994, FPL had signed up 365 C/I Load Control customers who have the ability to provide approximately 360 MW of demand reductions. The Company was recently authorized to recover approximately \$20.5 million of program costs and rate credits through the Energy Conservation Cost Recovery (ECCR) clause for the twelve-month period ending September 1994.

FPL projects an additional 123 installations for the period 1995 through 2003, contributing an additional 137 MW of demand reductions. This program comprises twenty two and fifty six percent of FPL's respective C/I summer and winter demand reduction goals.

FPL has called upon the C/I Load Control customers to interrupt their load a total of only 5 times over the last five years. Therefore, staff will more closely monitor the data currently filed by FPL pursuant to Rule 25-6.018, Florida Administrative Code. Staff will use this information to compare

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the "capacity factor" of this program relative to the avoided unit used in the cost-effectiveness tests.

Staff is concerned with FPL's projections of the incentive portion of the C/I Load Control costs contained in the cost-effectiveness analysis. The Company did not include the difference between what the C/I Load Control customers pay for fuel and the other cost recovery clauses compared to what they would have paid if they were taking firm service under the otherwise applicable rate schedule. FPL included only the difference between what the C/I Load Control customers pay for base rates under the CILC rate schedule and what they would have paid on the otherwise applicable firm rate schedule.

Staff believes the difference in the fuel charges and the cost recovery clause factors should be included in the cost-effectiveness analysis because the lower charges for fuel and cost recovery factors are part of the "incentive" for taking service on C/I Load Control which are recovered from other firm customers. However, since including the difference in these charges increases the incentives by only 3.2%, the program's benefit-cost ratio continues to be greater than one.

Data relating to the use of certain DSM programs such as the C/I Load Control program to potentially influence end-use equipment and fuel choices of customers in a competitive environment is currently being gathered by staff. This information may be discussed at the Commission workshop currently scheduled for September 5, 1995.

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DATE: JUNE 15, 1995

ISSUE 2: When should the revised rate schedules become effective on a permanent basis?

RECOMMENDATION: Thirty days after Commission vote.

DISCUSSION: Thirty days will give the utility and the Commission staff adequate time to process the rate schedules.

ISSUE 3: Should this docket be closed?

RECOMMENDATION: Yes, with the adoption of staff's recommendation in Issue 1 this tariff should become effective July 18, 1995. If a protest is filed within 21 days from the issuance date of the order, the tariff should remain in effect with any increase in revenue held subject to refund pending resolution of the protest. If no timely protest is filed, this docket should be closed.

STAFF ANALYSIS: If no protests are filed within 21 days of the issuance of the order, staff recommends that this docket should be closed.

ATTACHMENTS

COMMERCIAL/INDUSTRIAL LOAD CONTROL PROGRAM
(OPTIONAL)

RATE SCHEDULE: CILC-1

AVAILABLE:

In all territory served. Available to any commercial or industrial customer to which the load control provisions of this schedule can feasibly be applied, through the execution of a Commercial/Industrial Load Control Program Agreement with the Company.

LIMITATION OF AVAILABILITY:

This schedule may be modified or withdrawn subject to determinations made under Commission Rules 25-17.0021(4), F.A.C., Goals for Electric Utilities and 25-6.0438, F.A.C., Non-Firm Electric Service - Terms and Conditions or any other Commission determination.

APPLICATION:

For electric service provided to any commercial or industrial customer as a part of the Commercial/Industrial Load Control Program Agreement between the Customer and the Company, who agrees to allow the Company to control at least 200 kw of the Customer's load, or agrees to operate backup generation equipment (see Definitions) and designate (if applicable) additional controllable demand to serve at least 200 kw of the Customer's own load during periods when the Company is controlling load. A Customer shall enter into a "Commercial/Industrial Load Control Program Agreement" with the Company for service under this schedule. To establish the initial qualification for service under this schedule, the Customer must have had an On-Peak Demand (as defined below) during the summer rating period (April through October) for at least three of the previous twelve (12) months of at least 200 kw greater than the Firm Demand or Controllable Demand (as applicable) level specified in Section 4 of the Commercial/Industrial Load Control Program Agreement. This controlled load shall not be served on a firm service basis until service has been terminated under this rate schedule.

SERVICE:

Three phase, 60 hertz at any available standard voltage.

A designated portion of the Customer's load served under this schedule is subject to control by the Company. Transformation Rider-TR, where applicable, shall only apply to the Customer's Maximum Demand for delivery voltage below 69 kv. Standby Service is not provided hereunder. Resale of service is not permitted hereunder.

MONTHLY RATE:

Delivery Voltage Level:	<u>Distribution below 69 kv</u>		Transmission
	<u>200-499 kw</u>	<u>500 kw & above</u>	<u>69 kv & above</u>
Maximum Demand Level:			
Customer Charge:	\$ 600.00	\$ 600.00	\$ 3,200.00
Demand Charge:			
per kw of Maximum Demand in excess of 10 kw	\$ 2.43	-	-
per kw of Maximum Demand	-	\$ 2.43	None
<u>per kw of Load Control On-Peak Demand. Where Firm kw is < 10 kw, the Load Control On-Peak Demand shall be adjusted by the difference between 10 kw and Firm kw</u>	\$ 1.16	-	-
per kw of Load Control On-Peak Demand	\$ 1.16	\$ 1.16	\$ 1.15
per kw of Firm On-Peak Demand in excess of 10 kw	\$ 5.85	-	-
per kw of Firm On-Peak Demand	-	\$ 5.85	\$ 6.25
Energy Charge:			
On-Peak Period:			
Non-fuel charge per kwh	1.448¢	1.133¢	0.942¢
Off-Peak Period:			
Non-fuel charge per kwh	1.448¢	1.133¢	0.942¢

Minimum: The Customer Charge plus the Demand Charge.

<u>Fuel Charge</u>	See Sheet No. 8.830
<u>Tax Clause</u>	See Sheet No. 8.840
<u>Conservation Charge</u>	See Sheet No. 8.860
<u>Capacity Payment Charge</u>	See Sheet No. 8.870
<u>Environmental Cost Recovery Clause</u>	See Sheet No. 8.875
<u>Oil Backout Charge</u>	See Sheet No. 8.880
<u>Franchise Fee</u>	See Sheet No. 8.890

LOAD CONTROL:

Control Condition:

The Customer's controllable load served under this rate schedule is subject to control when such control alleviates any emergency conditions or capacity shortages, either power supply or transmission, or whenever system load, actual or projected, would otherwise require the peaking operation of the Company's generators. Peaking operation entails taking base loaded units, cycling units or combustion turbines above the continuous rated output, which may overstress the generators. ~~These conditions will typically result in less than fifteen (15) control periods per year, will typically allow advance notice of four (4) hours or more prior to a control period and will typically result in control periods of four (4) hours' duration. The operating limits under the tariff are described below:~~

Frequency: The Control Conditions frequency of control will typically result in less than fifteen (15) control periods per year and will not exceed twenty-five (25) control periods per year. Typically, the Company will not initiate a control period within six (6) hours of a previous control period.

Notice: The Company will provide one (1) hour's advance notice or more to a Customer prior to controlling the Customer's controllable load. Typically, the Company will provide advance notice of four (4) hours or more prior to a control period.

Duration: The duration of a single period of load control will typically be four (4) hours and will not exceed six (6) hours.

In the event of an emergency, such as a Generating Capacity Emergency (see Definitions) or a major disturbance, greater frequency, less notice, or longer duration than listed above may occur. If such an emergency develops, the Customer will be given 15 minutes' notice. Less than 15 minutes' notice may only be given in the event that failure to do so would result in loss of power to firm service customers or the purchase of emergency power to serve firm service customers. The Customer agrees that the Company will not be liable for any damages or injuries that may occur as a result of providing no notice or less than one (1) hour's notice.

Customer Responsibility:

Upon the successful installation of the load control equipment and/or any necessary backup generation equipment, a test of this equipment will be conducted between the hours of 7 a.m. and 6 p.m., Monday through Friday, excluding holidays, as specified in the Commercial/Industrial Load Control Program Agreement.

The Customer shall be responsible for providing and maintaining the appropriate equipment required to allow the Company to electrically control the Customer's load, as specified in the Commercial/Industrial Load Control Program Agreement.

The Company will control the controllable portion of the Customer's service for a one-hour period (during designated on-peak periods), once per year at a mutually agreeable time and date for Company testing purposes on the first Wednesday in November or, if not possible, at a mutually agreeable time and date, if the Customer's load has not been successfully controlled during a load control event in the previous twelve (12) months. Testing purposes include the testing of the load control equipment to ensure that the load is able to be controlled within the agreed specifications. ~~If the Customer's load has been successfully controlled during the previous 12 months, this test obligation will have been met.~~

RATING PERIODS:

On-Peak:

November 1 through March 31: Mondays through Fridays during the hours from 6 a.m. to 10 a.m. and 6 p.m. to 10 p.m. excluding Thanksgiving Day, Christmas Day, and New Year's Day.

April 1 through October 31: Mondays through Fridays during the hours from 12 noon to 9 p.m. excluding Memorial Day, Independence Day, and Labor Day.

Off-Peak:

All other hours.

LOAD CONTROL PERIOD:

All hours established by the Company during a monthly billing period in which:

1. the Customer's load is controlled (which includes the operation of the Customer's generation equipment), or
2. the Customer is billed pursuant to the Continuity of Service Provision.

DEMAND:

Demand is the kw to the nearest whole kw, as determined from the Company's metering equipment, for a 30-minute period as adjusted for power factor.

ON-PEAK DEMAND:

On-Peak Demand is the kw to the nearest whole kw, as determined from the Company's metering equipment, for a 30-minute period of Customer's greatest use for the designated on-peak periods during the month as adjusted for power factor.

MAXIMUM DEMAND:

Maximum Demand shall be the greater of the current month's demand whenever it occurs or the highest demand for the prior twenty-three (23) months. A Customer's Maximum Demand may be re-established to allow for the following adjustments:

1. Demand reduction resulting from the installation of FPL Demand Side Management Measures or FPL Research Project efficiency measures; or
2. Demand reductions resulting from the installation of other permanent and quantifiable efficiency measures, upon verification by FPL; or
3. Permanent changes to customer facilities that result in a permanent loss of electric load, including any fuel substitution resulting in permanently reduced electricity consumption, upon verification by FPL.

The re-established Maximum Demand shall be the higher of the actual demand registered in the next billing period following the Customer's written request or the prior Maximum Demand minus the calculated demand reduction. Requests to re-establish the Maximum Demand may be processed up to twice per calendar year when more than one efficiency measure is installed, where the same efficiency measure is installed in phases.

CALCULATION OF FIRM DEMAND AND LOAD CONTROL ON-PEAK DEMAND

There will be two methods of calculating the Firm Demand and Load Control On-Peak Demand for the Customer, depending on the type of demand designated in the Commercial/Industrial Load Control Program Agreement.

THIS SECTION IS APPLICABLE TO CUSTOMERS DESIGNATING A FIRM DEMAND LEVEL:

FIRM ON-PEAK DEMAND:

The Customer's monthly Firm On-Peak Demand shall be the lesser of the "Firm Demand" level specified in the Customer's Commercial/Industrial Load Control Program Agreement with the Company, or the Customer's highest on-peak demand during the month. The level of "Firm Demand" specified in the Customer's Commercial/Industrial Load Control Program Agreement shall not be exceeded during the periods when the Company is controlling the Customer's load.

LOAD CONTROL ON-PEAK DEMAND:

Load Control On-Peak Demand shall be the Customer's highest demand for the designated on-peak periods during the month less the Customer's "Firm Demand".

PROVISIONS FOR ENERGY USE DURING CONTROL PERIODS FOR CUSTOMERS DESIGNATING A FIRM DEMAND LEVEL:

EXCEPTIONS TO CHARGES FOR EXCEEDING FIRM DEMAND:

Customers notified of a load control event should meet their Firm Demand during periods when the Company is controlling load. However, energy will be made available during control periods if the Customer's failure to meet its Firm Demand is a result of one of the following conditions:

If the Customer exceeds the "Firm Demand" during a period when the Company is controlling load due to:

1. Force Majeure events (see Definitions) which can be demonstrated to the satisfaction of the Company to have been beyond the Customer's control, or
2. maintenance of generation equipment necessary for the implementation of load control which is performed at a pre-arranged time and date mutually agreeable to by the Company and the Customer (See Special Provisions), or
3. adding firm load that was not previously non-firm load to their the Customer's facility, or
4. an event affecting local, state or national security and space launch operations within five (5) days prior to an impending launch, or
5. an event whose nature requires that space launch activities be placed in the critical mode (requiring a closed-loop configuration of FPL's transmission system) as designated and documented by the NASA Test Director at Kennedy Space Center and/or the USAF Range Safety Officer at Cape Canaveral Air Force Station.

then (The Customer's energy use (in excess of the "Firm Demand") for the conditions listed above will not be required to pay the Charges for Exceeding Firm Demand during the period of such exceptions, but will be billed pursuant to the Continuity of Service Provision. For periods during which power under the Continuity of Service Provision is no longer available, the Customer will be billed, in addition to the normal charges provided hereunder, the greater of the Company's As-Available Energy cost, or the most expensive energy (calculated on a cents per kilowatt-hour basis) that FPL is purchasing or selling during that period, less the applicable class fuel charge. As-Available Energy cost is the cost calculated for Schedule COG-I in accordance with FPSC Rule 25-17.0825, F.A.C.

If the Company determines that the Customer has utilized one or more of the exceptions above in an excessive manner, the Company will terminate service under this rate schedule as described in TERM OF SERVICE.

CHARGES FOR EXCEEDING FIRM DEMAND:

If the Customer exceeds the "Firm Demand" during a period when the Company is controlling load for any reason other than those specified ~~above~~ in Exceptions to Charges for Exceeding Firm Demand, then the Customer will be:

1. billed the difference between the Firm On-Peak Demand Charge and the Load Control On-Peak Demand Charge for the excess kw for the prior sixty (60) months or the number of months the Customer has been billed under ~~the~~ this rate schedule, whichever is less, and
2. billed a penalty charge of \$1.00 per kw of excess kw for each month of rebilling.

Excess kw for rebilling and penalty charges is determined by taking the difference between the maximum demand during the Load Control Period and the Customer's "Firm Demand". For rebilling under paragraph 1 above, where Firm kw is <10 kw, the maximum demand during the Load Control Period shall be adjusted by the difference between 10 kw and Firm kw. The Customer will not be rebilled or penalized twice for the same excess kw in the calculation described above.

THIS SECTION IS APPLICABLE TO CUSTOMERS DESIGNATING A CONTROLLABLE DEMAND LEVEL:

FIRM ON-PEAK DEMAND:

The Customer's monthly Firm On-Peak Demand shall be the On-Peak Demand during the month less the "Controllable Demand" level specified in the Customer's Commercial/Industrial Load Control Program Agreement with the Company.

LOAD CONTROL ON-PEAK DEMAND:

Load Control On-Peak Demand shall be the "Controllable Demand" level specified in the Customer's Commercial/Industrial Load Control Program Agreement with the Company.

PROVISIONS FOR ENERGY USE DURING CONTROL PERIODS FOR CUSTOMERS DESIGNATING A CONTROLLABLE DEMAND LEVEL:

Customers notified of a load control event should achieve the Controllable Demand Level during periods when the Company is controlling load, except under the following conditions:

1. Force Majeure events (see Definitions) which can be demonstrated to the satisfaction of the Company, or
2. maintenance of generation equipment necessary for the implementation of load control which is performed at a pre-arranged time and date mutually agreeable to the Company and the Customer (See Special Provisions), or
3. adding firm load that was not previously non-firm load to the Customer's facility, or
4. an event affecting local, state or national security, or
5. an event whose nature requires that space launch activities be placed in the critical mode (requiring a closed-loop configuration of FPL's transmission system) as designated and documented by the NASA Test Director at Kennedy Space Center and/or the USAF Range Safety Officer at Cape Canaveral Air Force Station.

The Customer's energy use (in excess of the "Firm Demand") for the conditions listed above, will be billed pursuant to the Continuity of Service Provision. For periods during which power under the Continuity of Service Provision is no longer available, the Customer will be billed, in addition to the normal charges provided hereunder, the greater of the Company's As-Available Energy cost, or the most expensive energy (calculated on a cents per kilowatt hour basis) that EPL is purchasing or selling during that period, less the applicable class fuel charge. As-Available Energy cost is the cost calculated for Schedule COG-1 in accordance with FPSC Rule 25-17.0825, F.A.C.

If the Company determines that the Customer has utilized one or more of the exceptions above in an excessive manner, the Company will terminate service under this rate schedule as described in TERM OF SERVICE.

CHARGES FOR EXCEEDING FIRM DEMAND:

If the Customer does not achieve the Controllable Demand level during a period when the Company is controlling load for any reason other than those specified above, then the Customer will be:

1. billed the difference between the Firm On-Peak Demand Charge and the Load Control On-Peak Demand Charge for the rebilling kw for the prior sixty (60) months or the number of months the Customer has been billed under this rate schedule, whichever is less, and
2. billed a penalty charge of \$1.00 per kw of excess kw for each month of rebilling.

The kw for rebilling and penalty charges is determined by taking the difference between the Controllable Demand and the maximum demand actually reduced during the Load Control Period. For rebilling under paragraph 1 above, where Firm kw is ≤ 10 kw, the maximum demand during the Load Control Period shall be adjusted by the difference between 10 kw and Firm kw. The Customer will not be rebilled or penalized twice for the same excess kw in the calculation described above.

As long as the Customer's load reduction from the operation of the control circuit results in a demand during the control period that is at or below the calculated Firm Demand for that billing period, the Customer will not be required to pay the penalty and rebilling charges.

TERM OF SERVICE:

During the first year of service under this schedule, the Customer will determine whether or not this program is appropriate for the Customer and may request to exit the program subject to the Provisions for Early Termination. It is intended that the Company will continue to provide and the Customer will continue to take service under this rate schedule for the life of the generating unit which has been avoided by the rate. There is, however, a five-year termination notice provision which will allow either the Customer or the Company to terminate service under this schedule should there be circumstances under which the termination of the Customer's participation or the Company's offering of the program is desired.

Service under this rate schedule shall continue, subject to Limitation of Availability, until terminated by either the Company or the Customer upon written notice given at least five (5) years prior to termination. Should a Customer terminate service or be removed by the Company and later desire to resume service under this rate schedule, the Customer must provide five (5) years' written notice prior to resuming service under this schedule.

The Company may terminate service under this rate schedule at any time for the Customer's failure to comply with the terms and conditions of this rate schedule or the Commercial/Industrial Load Control Program Agreement. Prior to any such termination, the Company shall notify the Customer at least ninety (90) days in advance and describe the Customer's failure to comply. The Company may then terminate service under this rate schedule at the end of the 90-day notice period unless the Customer takes measures necessary to eliminate, to the Company's satisfaction, the compliance deficiencies described by the Company. Notwithstanding the foregoing, if, at any time during the 90-day period, the Customer either refuses or fails to initiate and pursue corrective action, the Company shall be entitled to suspend forthwith the monthly billing under this rate schedule and bill the Customer under the otherwise applicable firm service rate schedule.

PROVISIONS FOR EARLY TERMINATION:

Transfers, with less than five (5) years' written notice, to any firm retail rate schedule for which the Customer would qualify, may be permitted if it can be shown that such transfer is in the best interests of the Customer, the Company and the Company's other customers.

If the Customer no longer wishes to receive electric service in any form from the Company, or decides to cogenerate to serve all of the previously controlled Load Control On-Peak Demand and to take interruptible standby service from the Company, the Customer may terminate the Commercial/Industrial Load Control Program Agreement by giving at least thirty (30) days' advance written notice to the Company.

Except as noted below:

If service under this schedule is terminated ~~by the Customer~~ for any reason, the Customer will not be rebilled as specified in paragraphs 1 and 2 above Charges for Early Termination if:

- a. it has been demonstrated to the satisfaction of the Company that the impact of such transfer of service on the economic cost-effectiveness of the Company's CILC program is in the best interests of the Customer, the Company and the Company's other customers, or
- b. the Customer is required to transfer to another retail rate schedule as a result of Commission Rule 25-6.0438, F.A.C., or
- c. the termination of service under this rate schedule is the result of either the Customer's ceasing operations at its facility (without continuing or establishing similar operations elsewhere in the Company's service area), or a decision by the Customer to cogenerate to serve all of the previously controlled Load Control On-Peak Demand and to take interruptible standby service from the Company, or
- d. any other Customer(s) with demand reduction equivalent to, or greater than, that of the existing Customer(s) agree(s) to take service under this schedule and the MW demand reduction commitment to the Company's Generation Expansion Plan has been met and the new replacement Customer(s) has (have) the equipment installed and is (are) available to perform load control; or
- e. FPL determines that the Customer's MW reduction is no longer needed in accordance with the FPL Numeric Commercial/Industrial Conservation Goals.

In the event the Customer pays the ~~penalty~~ Charges for Early Termination because no replacement Customer(s) is (are) available as specified in paragraph d. above, but the replacement Customer(s) does(do) become available within 12 months from the date of termination of service under this schedule or FPL later determines that there is no need for the MW reduction in accordance with the FPL Numeric Commercial/Industrial Conservation Goals, then the Customer will be refunded all or part of the rebilling and penalty in proportion to the amount of MW obtained to replace the lost capacity less the additional cost incurred by the Company to serve those MW during any load control periods which may occur before the replacement Customer(s) became available.

Charges for Early Termination:

In the event that:

- a) service is terminated by the Company for any reason(s) specified in this section, or
- b) there is a termination of the Customer's existing service and, within twelve (12) months of such termination of service, the Company receives a request to re-establish service of similar character under a firm service or a curtailable service rate schedule, or under this schedule with a shift from non-firm load to firm service,
 - i) at a different location in the Company's service area, or
 - ii) under a different name or different ownership, or
 - iii) under other circumstances whose effect would be to increase firm demand on the Company's system without the requisite five (5) years' advance written notice, or
- c) the Customer transfers the controllable portion of the Customer's load to "Firm Demand" or to a firm or a curtailable service rate schedule without providing at least five (5) years' advance written notice, or

then the Customer will be:

1. rebilled under the otherwise applicable firm or curtailable service rate schedule for the shorter of (a) the most recent prior sixty (60) months during which the Customer was billed for service under this rate schedule, or (b) the number of months the Customer has been billed under this rate schedule, and
2. billed a penalty charge of \$1.00 per ~~kWh~~ times the number of months rebilled in No. 1 above times the highest Load Control On-Peak Demand occurring during the current month or the prior twenty-three (23) months.

SPECIAL PROVISIONS:

1. Control of the Customer's load shall be accomplished through the Company's load management systems by use of control circuits connected directly to the Customer's switching equipment or the Customer's load may be controlled by use of an energy management system where the firm demand or controllable demand level can be established or modified only by means of joint access by the Customer and the Company.
2. The Customer shall grant the Company reasonable access for installing, maintaining, inspecting, testing and/or removing Company-owned load control equipment.

3. It shall be the responsibility of the Customer to determine that all electrical equipment to be controlled is in good repair and working condition. The Company will not be responsible for the repair, maintenance or replacement of the Customer's electrical equipment.
4. The Company is not required to install load control equipment if the installation cannot be economically justified.
5. Billing under this schedule will commence after the installation, inspection and successful testing of the load control equipment.
6. Maintenance of generation equipment necessary for the implementation of load control will not be scheduled during periods where the Company projects that it would not be able to withstand the loss of its largest unit and continue to serve firm service customers.

CONTINUITY OF SERVICE PROVISION

In order to minimize the frequency and duration of interruptions or requests that the Customer operate its backup generation equipment, requested under this rate schedule, the Company will attempt to obtain reasonably available additional capacity and/or energy during periods for which interruptions or operation of the Customer's backup generation equipment may be requested. The Company's obligation in this regard is no different than its obligation in general to purchase power to serve its Customers during a capacity shortage; in other words, the Company is not obligated to account for, or otherwise reflect in its generation planning and construction, the possibility of providing capacity and/or energy under this Continuity of Service Provision. Any non-firm customers so electing to receive capacity and/or energy which enable(s) the Company to continue service to the Customer's non-firm loads during these periods will be subject to the additional charges set forth below.

In the event a Customer elects not to have its non-firm load interrupted pursuant to this Schedule, the Customer shall pay, in addition to the normal charges provided hereunder, a charge reflecting the additional costs incurred by the Company in continuing to provide service, less the applicable class fuel charge for the period during which the load would otherwise have been controlled (see Sheet No. 8.830). This incremental charge shall apply to the non-firm customer for all consumption above the Customer's Firm Demand during the time in which the non-firm load would otherwise have been controlled. If, for any reason during such period, this capacity and/or energy is (are) no longer available or cannot be accommodated by the Company's system, the terms of this Special Provision will cease to apply and interruptions will be required for the remainder of such period unless energy use is for one of the conditions outlined under "Provisions for Energy Use During Control Periods".

Any customer served under this rate schedule may elect to minimize the interruptions through the procedure described above. The initial election must be made in the Commercial/Industrial Load Control Program Agreement. Any adjustment or change to the election must be provided to the Company with at least 24 hours' written notice (not including holidays and weekends) and must be by mutual agreement, in writing, between the Customer and the Company. In such case, the written notice will replace any prior election with regard to this Continuity of Service Provision.

RULES AND REGULATIONS:

Service under this schedule is subject to orders of governmental bodies having jurisdiction and to the currently effective "General Rules and Regulations for Electric Service" on file with the Florida Public Service Commission. In case of conflict between any provision(s) of this schedule and said "General Rules and Regulations for Electric Service", the provision(s) of this schedule shall apply.

DEFINITIONS:

Generating Capacity Emergency:

A Generating Capacity Emergency exists when any one of the electric utilities in the state of Florida has inadequate generating capability, including purchased power, to supply its firm load obligations.

Force Majeure:

Force Majeure for the purposes of this schedule means causes not within the reasonable control of the Customer affected and not caused by the negligence or lack of due diligence of the Customer. Such events or circumstances may include acts of God, strikes, lockouts or other labor disputes or difficulties, wars, blockades, insurrections, riots, environmental constraints lawfully imposed by Federal, State, or local governmental bodies, explosions, fires, floods, lightning, wind, accidents to equipment or machinery, or similar occurrences.

Backup Generation Equipment

Backup generation equipment shall be Customer-provided generation equipment and switch gear. This generation equipment will be utilized for emergency purposes, including periods when the Company is controlling load.

COMMERCIAL/INDUSTRIAL LOAD CONTROL PROGRAM AGREEMENT

This Agreement is made this _____ day of _____, 19____, by and between _____ (hereinafter called the "Customer"), located at _____ in _____, Florida, and FLORIDA POWER & LIGHT COMPANY, a corporation organized under the laws of the State of Florida (hereinafter called the "Company").

WITNESSETH

For and in consideration of the mutual covenants and agreements expressed herein, the Company and the Customer agree as follows:

1. The Company agrees to furnish and the Customer agrees to take electric service subject to the terms and conditions of the Company's Commercial/Industrial Load Control Program Schedule CILC-1 (~~hereinafter called~~ "Schedule CILC-1") as currently approved or as may be modified from time to time by the Florida Public Service Commission (~~hereinafter called~~ the "Commission"). The Customer understands and agrees that, whenever reference is made in this Agreement to Schedule CILC-1, both parties intend to refer to Schedule CILC-1 as it may be modified from time to time. A copy of the Company's presently approved Schedule CILC-1 is attached hereto as Exhibit A and is hereby made an integral part of this Agreement.
2. Service under Schedule CILC-1 shall continue, subject to Limitation of Availability, until terminated by either the Company or the Customer upon written notice given at least five (5) years prior to termination. Should the Customer terminate service or be removed by the Company and later desire to resume service under Schedule CILC-1, the Customer must provide five (5) years' written notice prior to resuming service under Schedule CILC-1. To establish the initial qualification for service under Schedule CILC-1, the Customer must have had a maximum demand during the previous twelve months of 200 kw greater than the "Firm Demand" level specified in paragraph 7 below.
3. Service under Schedule CILC-1 will be subject to determinations made under Commission Rules 25-17.0021(4), F.A.C. Goals for Electric Utilities and 25-6.0438, F.A.C., Non-Firm Service -Terms and Conditions, or any other Commission determination(s). ~~The Company and the Customer agree that Schedule CILC-1 may be modified or withdrawn subject to determinations made under Commission Rule 25-6.0438, F.A.C., Non-Firm Electric Service -Terms and Conditions, or any other Commission determination.~~
- 4.7. The Customer agrees to a "Firm Demand" either (i) to not exceed a usage level of _____ kw ("Firm Demand") during the periods when the Company is controlling the Customer's service, or (ii) to provide a load reduction of _____ kw ("Controllable Demand") during periods when the Company is controlling the Customer's service. If the Customer chooses to operate backup generation equipment in parallel with FPL, the Customer shall enter into an interconnection agreement with the Company prior to operating such equipment in parallel with the Company's electrical system. This "Firm Demand" level (as applicable) shall not be exceeded during periods when the Company is controlling load, nor shall the "Controllable Demand" level (as applicable) be reduced during periods when the Company is controlling load, nor shall the Customer operate its equipment to meet the "Controllable Demand" level. Upon mutual agreement of the Company and the Customer, the Customer's "Firm Demand" or "Controllable Demand" may be subsequently raised or lowered, as long as the change in the "Firm Demand" or "Controllable Demand" level is not a result of a transfer of load from the controllable portion of the Customer's load. The Customer shall notify the Company, in writing, at least ninety (90) days prior to either upon adding firm load, or reducing or removing any of the Customer's backup generation equipment.

- 2.6- In order to minimize the frequency and duration of interruptions under the CILC Program, the Company will attempt to obtain reasonably available additional capacity and/or energy under the Continuity of Service Provision in Schedule CILC-1. ~~The Company's obligation in this regard is no different than its obligation in general to purchase power to serve its Customers during a capacity shortage; in other words, the Company is not obligated to account for or otherwise reflect in its generation and transmission planning and construction the possibility of providing capacity and/or energy under the Continuity of Service Provision. Customers receiving service under Schedule CILC-1 may elect to continue taking service under the Continuity of Service Provision and it will be provided only if such capacity and/or energy can be obtained by the Company and can be transmitted and distributed to non-firm Customers without any impairment of the Company's system or service to other firm Customers. The Customer elects/does not elect to continue taking service under the Continuity of Service Provision. Service will be provided only if capacity and/or energy can be obtained by the Company and can be transmitted and distributed to non-firm Customers without any impairment of the Company's system or service to firm Customers.~~ The Customer may countermand the election specified above by providing written notice to the Company pursuant to the guidelines set forth in Schedule CILC-1. The Company's obligations under this Section 9 paragraph 7 are subject to the terms and conditions specifically set forth in Schedule CILC-1.
- ~~10- If the Customer no longer wishes to receive any type of electric service from the Company, the Customer may terminate this Agreement by giving thirty (30) days' advance written notice to the Company.~~
- ~~11.41~~ 11.42 The Company may terminate this Agreement at any time if the Customer's load control equipment fails to permit the Company to effect control of the Customer's load, and/or if the Customer's equipment fails to meet the Controllable Demand level fails to comply with the terms and conditions of Schedule CILC-1 or this Agreement. Prior to any such termination, the Company shall notify the Customer at least ninety (90) days in advance and describe the Customer's failure or malfunction of the Customer's load control equipment and/or backup generation equipment to comply. The Company may then terminate this Agreement at the end of the 90-day notice period unless the Customer takes measures necessary to remedy eliminate, to the Company's satisfaction, the compliance deficiencies in the load control equipment and/or the backup generation equipment described by the Company. Notwithstanding the foregoing, if at any time during the 90-day period, the Customer either refuses or fails to initiate and pursue corrective action, the Company shall be entitled to suspend forthwith the monthly billing under the Schedule CILC-1, to bill the Customer under the otherwise applicable firm service rate schedule and to apply the rebilling and penalty provisions enumerated under "Charges for Early Termination" FIRM OF SERVICE in Schedule CILC-1.
- ~~12.42~~ 12.43 The Customer agrees that the Company will not be liable for any damages or injuries that may occur as a result of control of electric service pursuant to the terms of Schedule CILC-1 by remote control or otherwise, and/or installation, operation or maintenance of the Customer's generation equipment to meet the Controllable Demand level.
- ~~13.43~~ 13.44 This Agreement supersedes all previous agreements and representations, either written or oral, heretofore made between the Company and the Customer with respect to matters herein contained. Any modification(s) of this Agreement must be approved, in writing, by the Company and approved by the Commission.
- ~~13.44~~ 13.45 This Agreement may not be assigned by the Customer without the prior written consent of the Company. The Customer shall, at a minimum, provide to the Company a copy of the articles of incorporation or partnership agreement of the proposed assignee, and a copy of such assignee's most recent annual report at the time an assignment is requested.

14.15: This Agreement is subject to the Company's "General Rules and Regulations for Electric Service" and the Rules of the Commission.

IN WITNESS WHEREOF, the Customer and the Company have caused this Agreement to be duly executed as of the day and year first above written.

Witnesses:

Witnesses:

CUSTOMER (public) FLORIDA POWER & LIGHT COMPANY

Governmental Entity: _____

Signed: _____

Name: _____

Title: _____

CUSTOMER (private)

Company: _____

Signed: _____

Name: _____

Title: _____

FLORIDA POWER & LIGHT COMPANY

Signed: _____

Name: _____

Title: _____

Attest:

By: _____
Clerk/Deputy Clerk

June 28, 1995

Director
Division of Records and Reporting
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Petition on Proposed Agency Action

This letter is in regards to the Approval of Demand-Side Management Plan of Florida Power & Light Company, Docket No. 941170-EG. 9/20/95

My name is Donnie Nolley. I am the owner of Free Energy Survey, a residential energy auditing company in FPL's northern district. I live at 1372 Salina St. SE, Palm Bay, FL 32909. I would like to address FPL's proposal to discontinue the residential solar water heating program. I have been in the energy auditing business for the last twenty years and have found solar water heating to be of interest to homeowners.

We are all concerned with finding renewable sources of energy that do not deplete our natural resources. Solar energy is an excellent resource that is being used simply and effectively, now Florida Power & Light has an ulterior motive in discontinuing this program; they are threatened by future prospects of solar usage, and their loss of revenue.

FPL has not promoted solar water heating as a viable alternative to electric energy. Their auditors have discouraged and misled homeowners in the beneficial use of solar water heating. I meet with 50-60 households a month to discuss their energy uses and the programs offered by FPL; 85% of these families are interested in solar energy. There is a large market for solar energy, but of the homeowners who contact FPL, 95% of them cancel their orders for solar water heating.

Solar energy is an important resource that is available now and has been proven effective in hot water heating. Solar energy is at the heart of economic and technological growth in the field of renewable technologies; discontinuance of the residential solar water heating program, now, would be a step backwards. With Florida Power & Light's support and promotion of solar energy, contractors can provide homeowners with a cost-effective, renewable energy resource.

I ask that you reverse the decision to discontinue solar water heating. Solar energy works, it is the future of Florida.

Sincerely,

Donnie E. Nolley
Donnie Nolley

encl.

06134-95
6/30/95



Background

In 1993 the Florida Legislature passed the *Florida Building Energy-Efficiency Rating Act*. This act establishes a voluntary statewide energy-efficiency rating system for residential buildings. The intent of the act is to provide home buyers with a marketplace yardstick that measures the benefits of energy-efficiency improvements.

Florida's efforts closely parallel national activities. For example, the U.S. Department of Energy is developing national standards for Home Energy Rating Systems, and the U.S. Department of Housing and Urban Development administers an Energy Efficient Mortgage (EEM) guarantee program that allows buyers of energy-efficient homes to qualify for mortgages at higher debt-to-income ratios than they would for conventional mortgages. A home's energy-efficiency rating may qualify it for an EEM.

Rating System

Florida's Building Energy-Efficiency Rating System and Guide provide a fair, balanced way to compare energy efficiency among various residences of the same size and number of bedrooms. It gives overall estimates for the following:

- The home's annual energy cost in dollars (\$)
- Annual energy use in millions of British thermal units (MBtu)
- A rating for the residence in relation to the most and least efficient residences

In addition, the rating system provides nine separate energy end-use estimates that are combined to arrive at the overall rating. These energy end-uses for residences are:

- Air conditioning
- Space heating
- Water heating
- Lighting
- Refrigeration equipment
- Cooking
- Clothes drying
- Pool water pumping
- Miscellaneous equipment

Ratings are computed based on three sources:

- Class 1 - data from site audit and field performance tests
- Class 2 - data from site audit
- Class 3 - data from plans (new buildings only).

Rating Basics

Much like an automobile mile-per-gallon sticker or an appliance energy guide, the Florida Building Energy Rating Guide is only an estimate. It represents the most likely energy consumption and cost under standard home occupancy and operating conditions.

For example, the rating system assumes that each bedroom in the home is used by one occupant. It also assumes that the thermostat is set at 78°F for cooling and 72°F for heating. For a five-bedroom home with only two occupants, actual energy use is likely to be lower than the rating. Similarly, if the thermostat is set differently from the assumed 78°F and 72°F, actual home energy use will also differ.

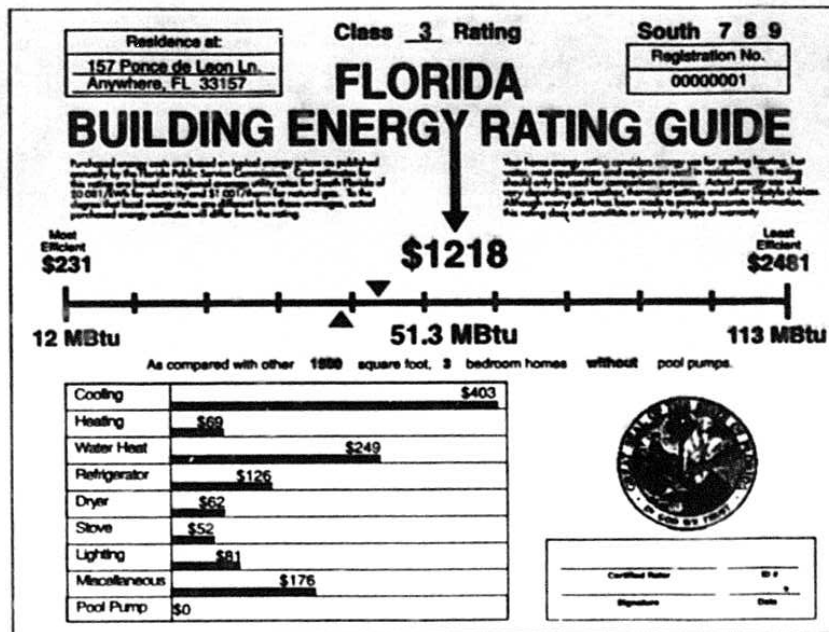
Estimates of energy cost are based on average regional cost by fuel type. Utility prices vary, so actual energy cost may differ from the estimate. The Rating Guide specifies the utility prices used to compute the estimate.

Interpreting the Rating

The Rating Guide provides a scale that allows you to compare a specific building with the most efficient and least efficient building energy technologies available today. The "most efficient" end of the scale represents both the lowest energy use (in MBtu) and the lowest cost. The lowest energy use represents the most energy-efficient technologies currently available. The lowest cost represents the choice of fuel that will provide that energy at the least price.

Although the lowest rating is always technically achievable, it usually is not the most cost-effective. Generally speaking, the closer the rating is to the left end of the scale ("most efficient"), the more difficult and expensive it will be to achieve more efficiency. On the other hand, ratings toward the right end of the scale ("least efficient") can be easily and cost-effectively improved.

The breakdown of separate energy uses in this guide shows how costs are distributed. This information will be helpful when you face a choice of where to invest money in energy-efficiency improvements.



WATT-SAVER™



FPL

TL 199

FPL's ENERGY CONSERVATION INCENTIVE CERTIFICATE

ACCOUNT NO

--	--	--	--	--	--

CUSTOMER NAME _____

ADDRESS _____

CITY _____ ZIP _____ PHONE _____

NON - NEGOTIABLE

Valid only if signed prior to work being initiated
FPL RESERVES THE RIGHT TO NULLIFY
AFTER 90 DAYS OF ISSUANCE

AMOUNT _____ dollars and /100 \$

For partial payment to participating contractor upon installation of measure indicated below. This Certificate is valid only for work performed by a participating licensed contractor.

FPL REPRESENTATIVE	ID #	DATE
--------------------	------	------

INCENTIVE SCHEDULE

FAMILY SIZE	WATER HEATING		AMOUNT	CEILING INSULATION		
	SOLAR	HEAT REFLY		MARGINAL ADDR 11 CHART 1	INADEQUATE ADDR 19 CHART 2	NE NE ADDR 19 CHART 3
\$	\$	\$	SO FT	SO FT	SO FT	
PREVIOUS W. H. AGE	PREVIOUS W. H. AGE	AMOUNT	WINDOW TREATMENT			
		\$	E W SE SW	S	NE NW	
		\$	SO FT	SO FT	SO FT	

PA-EE	CONTRACTOR #		
MAIL ADDRESS	CITY	ST	ZIP
SIGNATURE TITLE	INSTALLED DATE		

I acknowledge that the measure indicated was installed at the address listed above.

CUSTOMER SIGNATURE _____

FPL accepts no responsibility for the quality of the workmanship or installation of any conservation measures it recommends nor for any consequential or incidental damages resulting from defects therein, and does not guarantee such measures, even if free from defects and properly installed.

FPL USE ONLY

SYS INST	✓	Vendor Work Order	B/E	ER	Account No. or			Loc. Code	E AC	Date	ID #	Insp Type
					COMP	SEC	UC					
WT		W 8650	E 90	A 000	03	0	L 085	X 782		00		
INSUL		W 8660	E 90	A 000	03	0	L 085	X 781		00		
SOLAR		W 8840	E 90	A 000	03	0	L 085	X 786		00		
HRU		W 8840	E 90	A 000	03	0	L 085	X 788		00		
										00		

VENDOR NUMBER V _____ Delivery Location Code _____ Authorized _____ Date _____



FPL

Walk-Thru Energy Survey

SURVEY NUMBER					
DIST	CYDY	ROUTE	FOLIO	T	C

Date _____

Name _____

Address _____

City _____ Phone No _____

Based on the Walk-Thru Energy Survey of your home, FPL recommends the following conservation measures and practices to help you save energy and money:

To reduce cooling and heating costs:

- Install highest efficiency unit available when replacing present air conditioner (air conditioner, 11.0 EER/SEER or higher, recommended for South Region; heat pump, 11.0 or higher, recommended for North Region).
- Replace electric resistance heat with high-efficiency heat pump (11.0 EER or higher).
Or natural gas heating.
- Seal leaks in cooling and heating ducts
- Install clock thermostat IF you leave the air conditioner running when the house is vacant for extended periods or if you are a seasonal resident
- Install or increase attic insulation to at least R-19. (Estimated present level R _____)
____ Add R-19
____ Add R-11
- Install window treatment on:
____ East/West/SE/SW ____ South ____NE/NW
- Caulk and seal windows and doors.
- Weatherstrip windows and doors.
- Install plastic inserts for jalousie windows.

To reduce water heating costs:

- Install one of the following systems:
 - Solar Water Heating System (uses the sun's energy to heat water)
 - Heat Recovery Water Heating System (uses the heat from the central air conditioner to heat water).
 - Heat Pump Water Heating System (draws heat from the air to heat water).
 - Natural Gas Water Heating System.
- Install low flow shower heads and faucet flow restrictors.
- Install water heater insulation.
 - Entire wrap Top cover and pipes only

Other energy-saving practices and measures:

- Repair leaky faucets
- Lower temperature setting of water heater (Turn off power before making this adjustment)
 - 140° F. if you use a dishwasher
 - 120° F. for normal use
- Turn off water heater when leaving for 2 days or longer.
- Use outside and/or inside shading for windows and walls (shrubby, drapes, blinds, etc)
- Set thermostat to 68° F. during the heating season (winter months).
- Set thermostat to 55° F. at night or when leaving for 4 or more hours during the heating season. (Not advisable for heat pumps.)
- Install ceiling fans (effective only when room occupied).
- Clean or replace air-conditioning filter(s) monthly during heavy usage periods.
- Set thermostat no lower than 78° F. during the cooling season
- Turn air conditioner off when leaving for longer than 4 hours or set thermostat to 82° F. during the cooling season
- Have air conditioning system serviced annually
- Use fireproof material to plug any holes or gaps around fireplace damper.
- Add batt insulation to attic scuttle hole panel
- Use clothesline where deed restrictions permit
- Operate pool pump during the following hours
Summer: 9 am - 3 pm and 9 pm - 11 pm
Winter: 9 am - 3 pm
- Clean refrigerator condenser coil at least twice a year. Check door seal for leaks.
- Install timers or photocells to be sure outside lights do not operate during daylight hours
- Install duct insulation.
- Install wall insulation.
- Replace pool heating system with solar swimming pool heating (where present heating is non-renewable resource).

The results of this residential energy survey indicate your home has a _____ Star Rating. The higher number of stars denotes a more efficient home with a Five Star rated home being the most efficient. Implementing the measures checked above can increase the energy efficiency of your home and may improve its rating under the Five-Star Watt-Wise Rating Program.

Customer Signature _____

Prepared by _____



Background

In 1993 the Florida Legislature passed the **Florida Building Energy-Efficiency Rating Act**. This act establishes a voluntary statewide energy-efficiency rating system for residential buildings. The intent of the act is to provide home buyers with a marketplace yardstick that measures the benefits of energy-efficiency improvements.

Florida's efforts closely parallel national activities. For example, the U.S. Department of Energy is developing national standards for Home Energy Rating Systems, and the U.S. Department of Housing and Urban Development administers an Energy Efficient Mortgage (EEM) guarantee program that allows buyers of energy-efficient homes to qualify for mortgages at higher debt-to-income ratios than they would for conventional mortgages. A home's energy-efficiency rating may qualify it for an EEM.

Rating System

Florida's Building Energy-Efficiency Rating System and Guide provide a fair, balanced way to compare energy efficiency among various residences of the same size and number of bedrooms. It gives overall estimates for the following:

- The home's annual energy cost in dollars (\$)
- Annual energy use in millions of British thermal units (MBtu)
- A rating for the residence in relation to the most and least efficient residences.

In addition, the rating system provides nine separate energy end-use estimates that are combined to arrive at the overall rating. These energy end-uses for residences are:

- Air conditioning
- Space heating
- Water heating
- Lighting
- Refrigeration equipment
- Cooking
- Clothes drying
- Pool water pumping
- Miscellaneous equipment

Ratings are computed based on three sources:

- Class 1 - data from site audit and field performance tests
- Class 2 - data from site audit
- Class 3 - data from plans (new buildings only).

Rating Basics

Much like an automobile mile-per-gallon sticker or an appliance energy guide, the Florida Building Energy Rating Guide is only an estimate. It represents the most likely energy consumption and cost under standard home occupancy and operating conditions.

For example, the rating system assumes that each bedroom in the home is used by one occupant. It also assumes that the thermostat is set at 78°F for cooling and 72°F for heating. For a five-bedroom home with only two occupants, actual energy use is likely to be lower than the rating. Similarly, if the thermostat is set differently from the assumed 78°F and 72°F, actual home energy use will also differ.

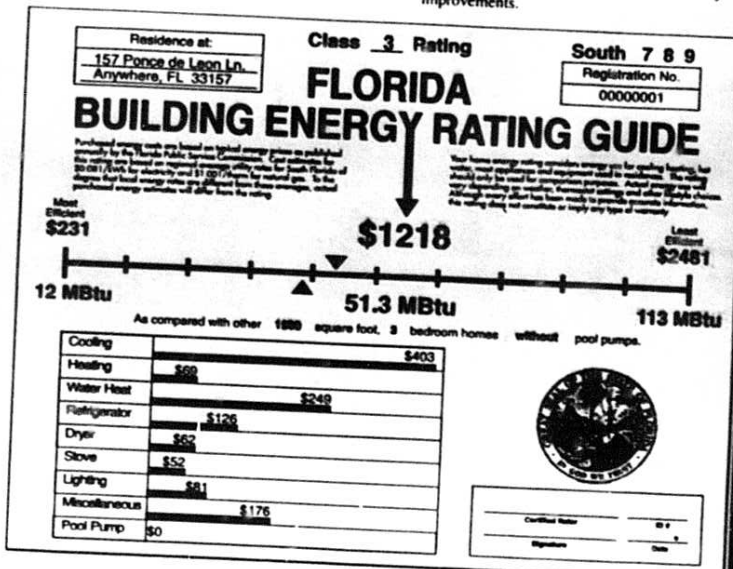
Estimates of energy cost are based on average regional cost by fuel type. Utility prices vary, so actual energy cost may differ from the estimate. The Rating Guide specifies the utility prices used to compute the estimate.

Interpreting the Rating

The Rating Guide provides a scale that allows you to compare a specific building with the most efficient and least efficient building energy technologies available today. The "most efficient" end of the scale represents both the lowest energy use (in MBtu) and the lowest cost. The lowest energy use represents the most energy-efficient technologies currently available. The lowest cost represents the choice of fuel that will provide that energy at the least price.

Although the lowest rating is always technically achievable, it usually is not the most cost-effective. Generally speaking, the closer the rating is to the left end of the scale ("most efficient"), more difficult and expensive it will be to achieve more efficiency. On the other hand, ratings toward the right end of the scale ("least efficient") can be easily and cost-effectively improved.

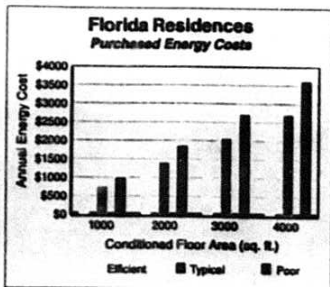
The breakdown of separate energy uses in the guide shows how costs are distributed. This information will be helpful when you face a choice of where to invest money in energy-efficiency improvements.



Typical Residential Energy Use

Annual energy consumption in a residential building can be estimated from the amount of floor area that is heated and cooled. The following chart shows the average annual energy cost for Florida residences by conditioned floor area.

Generally, the design and construction of the building itself and the efficiency of energy service devices will control the most significant portion of a building's energy use. But even in the same



building, energy use will vary with occupant lifestyle. Occupants control much of a building's energy use by virtue of their comfort preferences and personal traits: thermostat settings, the use of natural ventilation, energy awareness (as in turning off lights and ceiling fans in unoccupied rooms) and other lifestyle choices.

Ways To Improve Energy Efficiency

Air conditioning is the single largest energy use in the average Florida home. More than 30% of annual energy costs may go toward air conditioning. The most effective ways to reduce air-conditioning cost are by keeping heat out of the building and by improving air conditioner efficiency. Keeping the heat out means protecting

windows from direct sunlight, using light-colored surfaces, installing good wall and ceiling insulation, and controlling air flow between indoors and outdoors (infiltration). The efficiency of the air conditioner has a strong impact. When selecting a new unit, it should be properly sized and have a Seasonal Energy Efficiency Ratio (SEER) of 12.0 or greater. The higher the SEER, the less energy will be used for cooling. Air conditioning duct systems should be free of leaks; otherwise large quantities of energy can be wasted. Consider installing programmable thermostats that can be adjusted automatically when the house is unoccupied.

Space heating typically accounts for about 5-10% of average annual energy cost. Reduce its cost through better wall and ceiling insulation and control of indoor-outdoor air flows. Increasing the Heating Season Performance Factor (HSPF) of electric heating systems or the Annual Fuel Utilization Efficiency (AFUE) of gas heating systems can substantially reduce heating energy use. New systems should have HSPF of 7.0 or greater or AFUE of 0.85 or greater. Again, air distribution duct systems should be leak-free and programmable thermostats should be considered.

Water heating is often the second-largest energy use in a home. The cost can be most effectively reduced by increasing the water heater Efficiency Factor (EF). New electric water heaters should have an EF of at least 0.9, and new gas water heaters should have an EF of at least 0.57. Solar water heaters should be considered since they can have an EF greater than 10. Installation of low-flow showerheads can save upwards of 10% on hot water use. Additional tank and piping insulation should be considered.

Refrigerator energy use can be surprisingly large. Older model refrigerators and freezers are at best only marginally efficient. In selecting new refrigerators or freezers, use the appliance energy

guide to select the most efficient unit available. Turning off a second refrigerator or freezer usually saves over \$100 per year.

Clothes drying energy use can be most effectively reduced by drying full loads.

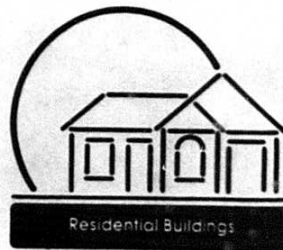
Cooking energy use averages about 4% of the energy cost of an average Florida home. Microwave ovens are about 30% more efficient than conventional ovens. Pressure cooking, stir frying and steaming are the more efficient means of stove-top food preparation.

Lighting averages about 8% of total home energy use. Fluorescent lighting provides equal light at about three times the efficiency of incandescent lighting. Of course, lights not in use should be turned off.

Pool pumping can be a large user of energy and can be responsible for up to 20% of a home's energy use. Efficient pool pumping system designed with larger piping and appropriately sized pumps can save considerable energy over standard installations. Daily pump run times can often be reduced to four hours a day and, in winter, as little as two hours a day. Any heating of pool water should consider solar systems.

Miscellaneous equipment energy use is a general category whose content depends heavily on lifestyle choices. Examples include: clothes washers, dishwashers, TV, stereo, computer, ceiling fans, bath and kitchen appliances, power tools, vacuum cleaners and other equipment. Waterbeds are notorious energy users and the old second-hand freezer in the garage should be avoided. Use the cold water setting for clothes washing; and wash full, not partial, loads of dishes, and turn off what you are not using.

Florida Building Energy-Efficiency Rating System



The State of Florida
Department of Community Affairs
Codes and Standards Office
2740 Centerview Drive
Tallahassee, FL 32399-2100
(904) 487-1824

Linda Loomis Shelley, Secretary



FPL

On behalf of Florida Power and Light Company, this

Certificate of Achievement

is hereby presented to

Donnie E. Nolley

for successfully completing the course(s)

CE Course Sponsor Number: 04P0189

Course Name: R.C.S. Auditor Workshop

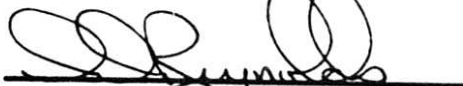
Number: 04P0189-

Credit Hours: 14

Course Name:

Number: 04P0189-

Credit Hours:



Instructor

Course Name:

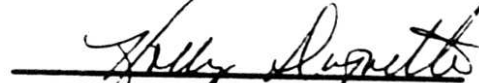
Number: 04P0189-

Credit Hours:

Course Name:

Number: 04P0189-

Credit Hours:



Senior Program Manager

Class 2 Bears Raters

the Commission has already determined that load control offerings are appropriate energy conservation programs, that Peoples is simply attempting to relitigate the issue whether gas technologies should be offered through electric utility DSM programs, and that any attempt to relitigate cost-effectiveness is barred.

Regarding FPL's assertions regarding load control programs, Peoples simply raises the same and similar concerns as those raised by the Commission Staff regarding FPL's (and FPC's and TECO's) commercial and industrial load control offerings: that they "may be more correctly classified as load building or load retention programs." FPSC Docket Nos. 941170-EG et al., FPSC Staff Recommendation, FPSC Document No. 04390 (May 4, 1995). These concerns led the Commission to schedule an undocketed workshop regarding these issues on September 5, 1995. Order No. PSC-95-0691-FOF-EG at 13. Unfortunately, as Peoples noted in its Petition on Proposed Agency Action, this undocketed workshop is not adequate to protect Peoples' interests in these issues.

As to the second point, FPL incorrectly asserts that Peoples is simply trying to relitigate whether Gas DSM measures should be offered by electric utilities. Peoples is properly and appropriately attempting to litigate issues relating to the terms and conditions under which electric DSM measures may be offered and whether such measures may be used -- as part of an electric utility's energy conservation programs, with cost recovery pursuant to FEECA -- to promote electric load growth where other, more efficient alternatives are available to serve the same end uses and

where such alternatives are not comparably supported by the offering utility. Peoples does not argue that FPL cannot implement its programs; Peoples simply argues that FPL cannot implement its programs as part of its energy conservation offerings pursuant to FEECA where doing so would discriminate against and impede more efficient alternatives, unless FPL also provides comparable incentives for such alternatives. (FPL's own evaluations of gas technologies in the conservation goals dockets showed that 9 of the 11 measures evaluated would be cost-effective to FPL's general body of ratepayers. In Re: Adoption of Numeric Conservation Goals for Florida Power & Light Company, Florida Power Corporation, Gulf Power Company, and Tampa Electric Company, FPSC Order No. PSC-94-1313-FOF-EG at page 29. While FPL's concern regarding promotion of programs that may not be cost-effective to all potential participants is legitimate (which concern, incidentally, probably also applies to some participants in electric DSM programs), such measure must be cost-effective to some significant number of customers. As the Commission noted in its order on conservation goals,

The nearly total failure of the gas technologies to pass the electric utilities' calculation of the participant test is difficult to accept. We do not believe that approximately 600,000 existing Florida gas customers have made a mistake in their economic decision, nor that the manufacturers of gas technologies would commit resources to develop and market new gas technologies if they are

all destined to be market failures.

FPSC Order No. PSC-94-1313-FOF-EG at page 29.

Finally, the cost-effectiveness of measures is obviously on the table in this proceeding; FPL has itself proposed a program (see FPL's Motion at 31, note 12) that was not cost-effective per FPL's filings in the goals dockets but which has now been re-designed to be cost-effective. Additionally, the Commission has, in a later order herein (Order No. PSC-95-0865-FOF-EG) reviewed revised calculations of the cost-effectiveness of FPL's proposed commercial and industrial load control program offerings.

IV. THE COMMISSION'S RULES DO NOT REQUIRE A PETITION ON PROPOSED AGENCY ACTION TO "STATE A CAUSE OF ACTION" AGAINST OTHER PARTIES TO A PROCEEDING.

FPL criticizes Peoples' Petition on Proposed Agency Action for allegedly failing to state a cause of action in discrimination involving any of FPL's programs. This criticism is misplaced. In the first instance, Peoples has effectively protested the Commission's proposed action herein; this is not a complaint proceeding. Secondly, Peoples has identified, as specifically as possible under the circumstances, those provisions of the PAA Order that it is protesting and also those provisions that propose to approve enumerated specific utility programs. Most of the reason that Peoples' Petition on Proposed Agency Action is not any more specific is that the Commission's PAA Order proposes to approve, or to permit administrative approval, of DSM program provisions -- the "program participation standards" -- that no one outside the

Water Heater

MODEL-EFR90-42, FRE90-42, TEF42

ELECTRIC

FIRST HOUR RATING: 50

PREFIX-CR, Z, K, M

SUFFIX-S, D, STR, DTR, L, U, 9

ENERGYGUIDE

Estimates on the scale are based on a national average

ELECTRIC

Only models with first hour ratings of

RATE OF 8.04¢ PER KILOWATT HOUR

18 - 55 GALLONS are used in this scale

\$456

Model with lowest energy cost

\$123

Model with highest energy cost

\$562

▼ THIS MODEL ▼

Your cost will vary depending on your local energy rate and how you use the product. This energy cost is based on U.S. Government standard tests.

How much will this model cost you to run yearly?

YEARLY COST

Cost per	4¢	\$227
KILOWATT	6¢	\$340
HOUR	8¢	\$454
	10¢	\$567
	12¢	\$681
	14¢	\$794

Ask your salesperson or local utility for the energy rate in your area
COST PER KILOWATT HOUR

Important Removal of this label before consumer purchase is a violation of federal law. (42 U.S.C. 6302)

5011200



FPL

Walk-Thru Energy Survey

SURVEY NUMBER					
DIST	CYDY	ROUTE	FOLIO	T	C

Date _____

Name _____

Address _____

City _____ Phone No. _____

5-Star Rating

Based on the Walk-Thru Energy Survey of your home, FPL recommends the following conservation measures and practices to help you save energy and money:

To reduce cooling and heating costs:

- 21 26 Install highest efficiency unit available when replacing present air - conditioner (air conditioner, 11.0 EER/SEER or higher, recommended for South Region; heat pump, 11.0 or higher, recommended for North Region).
- 29 10 Replace electric resistance heat with high - efficiency heat pump (11.0 EER or higher).
Or natural gas heating.
- 5 5 Seal leaks in cooling and heating ducts.
- 1 1 Install clock thermostat IF you leave the air conditioner running when the house is vacant for extended periods or if you are a seasonal resident.
- 22 22 Install or increase attic insulation to at least R-19. (Estimated present level: R ____).
____ Add R-19
____ Add R-11
- 6 7 Install window treatment on:
____ East/West/SE/SW ____ South ____NE/NW.
- 2 2 Caulk and seal windows and doors.
- 2 2 Weatherstrip windows and doors.
- 1 1 Install plastic inserts for jalousie windows.

To reduce water heating costs:

- 30 30 Install one of the following systems:
 - Solar Water Heating System (uses the sun's energy to heat water).
 - Heat Recovery Water Heating System (uses the heat from the central air conditioner to heat water).
 - Heat Pump Water Heating System (draws heat from the air to heat water).
 - Natural Gas Water Heating System.
- 1 1 Install low flow shower heads and faucet flow restrictors.
- 3 3 Install water heater insulation.
 - Entire wrap Top cover and pipes only.

Total Pts. _____ Rating _____

Other energy-saving practices and measures:

- Repair leaky faucets.
- Lower temperature setting of water heater. (Turn off power before making this adjustment.)
 - 140° F. if you use a dishwasher.
 - 120° F. for normal use.
- Turn off water heater when leaving for 2 days or longer.
- Use outside and/or inside shading for windows and walls (shrubby, drapes, blinds, etc.)
- Set thermostat to 68° F. during the heating season (winter months).
- Set thermostat to 55° F. at night or when leaving for 4 or more hours during the heating season. (Not advisable for heat pumps.)
- Install ceiling fans (effective only when room occupied).
- Clean or replace air-conditioning filter(s) monthly during heavy usage periods.
- Set thermostat no lower than 78° F. during the cooling season.
- Turn air conditioner off when leaving for longer than 4 hours or set thermostat to 82° F. during the cooling season.
- Have air conditioning system serviced annually.
- Use fireproof material to plug any holes or gaps around fireplace damper.
- Add batt insulation to attic scuttle hole panel.
- Use clothesline where deed restrictions permit.
- Operate pool pump during the following hours:
Summer: 9 am - 3 pm and 9 pm - 11 pm
Winter: 9 am - 3 pm
- Clean refrigerator condenser coil at least twice a year. Check door seal for leaks.
- Install timers or photocells to be sure outside lights do not operate during daylight hours.
- Install duct insulation.
- Install wall insulation.
- Replace pool heating system with solar swimming pool heating (where present heating is non-renewable resource).

The results of this residential energy survey indicate your home has a _____ Star Rating. The higher number of stars denotes a more efficient home with a Five-Star rated home being the most efficient. Implementing the measures checked above can increase the energy efficiency of your home and may improve its rating under the Five-Star Watt-Wise Rating Program.

Customer Signature _____

Prepared by _____



FPL

Walk-Thru Energy Survey

SURVEY NUMBER				
DIST	CYDY	ROUTE	FOLIO	T C

Date _____

Name _____

Address _____

City _____ Phone No. _____

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- Replace electric resistance heat with high-efficiency heat pump (11.0 EER or higher).
Or natural gas heating.
- Seal leaks in cooling and heating ducts.
- Install clock thermostat IF you leave the air conditioner running when the house is vacant for extended periods or if you are a seasonal resident.
- Install or increase attic insulation to at least R-19. (Estimated present level: R ____).
____ Add R-19
____ Add R-11
- Install window treatment on:
____ East/West/SE/SW ____ South ____NE/NW.
- Caulk and seal windows and doors.
- Weatherstrip windows and doors.
- Install plastic inserts for jalousie windows.

To reduce water heating costs:

- Install one of the following systems:
 - Solar Water Heating System (uses the sun's energy to heat water).
 - Heat Recovery Water Heating System (uses the heat from the central air conditioner to heat water).
 - Heat Pump Water Heating System (draws heat from the air to heat water).
 - Natural Gas Water Heating System.
- Install low flow shower heads and faucet flow restrictors.
- Install water heater insulation.
 - Entire wrap. Top cover and pipes only.

Other energy-saving practices and measures:

- Repair leaky faucets.
- Lower temperature setting of water heater: (Turn off power before making this adjustment.)
 - 140° F. if you use a dishwasher.
 - 120° F. for normal use.
- Turn off water heater when leaving for 2 days or longer.
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- Have air conditioning system serviced annually.
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- Install duct insulation.
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The results of this residential energy survey indicate your home has a _____ Star Rating. The higher number of stars denotes a more efficient home with a Five-Star rated home being the most efficient. Implementing the measures checked above can increase the energy efficiency of your home and may improve its rating under the Five-Star Watt-Wise Rating Program.

Customer Signature _____

Prepared by _____

WATT-SAVER™



FPL

FPL's ENERGY CONSERVATION INCENTIVE CERTIFICATE

TL 359

ACCOUNT NO

--	--	--	--	--	--	--	--	--	--

CUSTOMER NAME _____

ADDRESS _____

CITY _____ ZIP _____ PHONE _____

NON - NEGOTIABLE

Valid only if signed prior to work being initiated
FPL RESERVES THE RIGHT TO NULLIFY
AFTER 90 DAYS OF ISSUANCE.

AMOUNT _____ dollars and /100 \$ _____

For partial payment to participating contractor upon installation of measure indicated below. This Certificate is valid only for work performed by a participating licensed contractor.

FPL REPRESENTATIVE	ID #	DATE
--------------------	------	------

INCENTIVE SCHEDULE

FAMILY SIZE	WATER HEATING		AMOUNT	CEILING INSULATION		
	SOLAR	HEAT REC'Y		MARGINAL ADD R 11 CHART 1	INADEQUATE ADD R 19 CHART 2	NONE ADD R 19 CHART 3
	\$	\$	\$	SQ FT	SQ FT	SQ FT
	PREVIOUS W/H AGE	PREVIOUS W/H GALS		WINDOW TREATMENT		
			\$	E W SE SW	S	NE NW
				SQ FT	SQ FT	SQ FT

PAYEE	CONTRACTOR #		
MAIL ADDRESS	CITY	ST	ZIP
SIGNATURE TITLE	INSTALLED DATE		

I acknowledge that the measure indicated was installed at the address listed above.

CUSTOMER SIGNATURE _____

FPL accepts no responsibility for the quality of the workmanship or installation of any conservation measures it recommends nor for any consequential or incidental damages resulting from defects therein, and does not guarantee such measures, even if free from defects and properly installed.

FPL USE ONLY

SYS INST	Vehicle Work Order	Blk	ER	Account No or			Loc'n Code	EAC	AMOUNT	Watt Saver #	Insp Type	Contractor Name
				COMP	SEC	UC						
WT	W 8650	E	90	A	000	03	0	L 085 X 782	00			
INSUL	W 8660	E	90	A	000	03	0	L 085 X 781	00			
SOLAR	W 8840	E	90	A	000	03	0	L 085 X 786	00			
HRU	W 8840	E	90	A	000	03	0	L 085 X 788	00			
									00			

VENDOR NUMBER

V

--	--	--	--	--	--	--	--	--	--

Delivery Location Code

--	--	--	--	--

Authorized _____

Date _____
Form 848 (Non - Stocked) Rev. 4/91

WATT-SAVER™



FPL

FPL's ENERGY CONSERVATION INCENTIVE CERTIFICATE

TL 359

ACCOUNT NO.

--	--	--	--	--	--	--	--	--	--

CUSTOMER NAME _____

ADDRESS _____

CITY _____ ZIP _____ PHONE _____

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	SOLAR	HEAT REC'Y		MARGINAL ADD R 11 CHART 1	INADEQUATE ADD R 19 CHART 2	NONE ADD R 19 CHART 3
	\$	\$	\$	SO FT	SO FT	SO FT
	PREVIOUS W HEAT	PREVIOUS W HEAT		WINDOW TREATMENT		
			\$	E W SE SW	S	NE NW
				SO FT	SO FT	SO FT

PAYEE	CONTRACTOR #		
MAIL ADDRESS	CITY	ST	ZIP
SIGNATURE TITLE	INSTALLED DATE		

I acknowledge that the measure indicated was installed at the address listed above

CUSTOMER SIGNATURE _____

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FPL USE ONLY

SYS INST	Vehicle Work Order	Bk	ER	Account No or			Loc n Code	EAC	AMOUNT	Watt Saver #	Division Contractor #	Contractor Name
				COMP	SEC	UC						
WT	W 8650	E	90	A	000	03	0	L 085 X 782	00			
INSUL	W 8660	E	90	A	000	03	0	L 085 X 781	00			
SOLAR	W 8840	E	90	A	000	03	0	L 085 X 786	00			
HRU	W 8840	E	90	A	000	03	0	L 085 X 788	00			
									00			

VENDOR NUMBER

V

--	--	--	--	--	--	--	--	--	--

Delivery Location Code

--	--	--	--	--

Authorized _____

Date _____



FPL

On behalf of Florida Power and Light Company, this

Certificate of Achievement

is hereby presented to

Donnie E. Nolley

for successfully completing the course(s)

CE Course Sponsor Number: 04P0189

Course Name: R.C.S. Auditor Workshop

Number: 04P0189


Credit Hours: 14

Class 2 Bears Raters

Course Name:

Number: 04P0189

Credit Hours:



Instructor

Course Name:

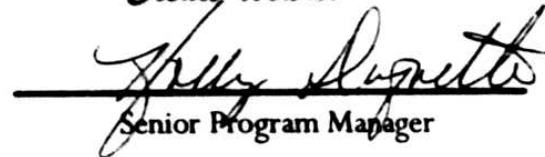
Number: 04P0189

Credit Hours:

Course Name:

Number: 04P0189

Credit Hours:



Senior Program Manager