

July 30, 2009

Ms. Ann Cole, Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850 OBJUL 30 PM 4: 05

Re:

Commission Review of Numeric Conservation Goals

Docket Nos. 080408-EG

Dear Ms. Cole:

Enclosed for filing is an original and 15 copies of the rebuttal testimony for PEF witness, John Masiello in the above-referenced docket.

Thank you for your assistance in this matter and please let me know if you have any questions.

Sincerely,

John T. Burnett

John T. Burnett so

JTB/at Attachment Certificate of Service

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#### **CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished via overnight mail and hand delivery this  $30^{\circ}$  day of July, 2009 to all parties of record as indicated below.

JOHN T. BURNETT

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#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Commission review of numeric conservation goals (Progress Energy Florida, Inc.)

Docket No. 080408-EG

Submitted for Filing: July 30, 2009

### REBUTTAL TESTIMONY OF JOHN A. MASIELLO ON BEHALF OF PROGRESS ENERGY FLORIDA

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FPSC-COMMISSION CLERK

# IN RE: COMMISSION REVIEW OF NUMERIC CONSERVATION GOALS (PROGRESS ENERGY FLORIDA, INC.)

#### FPSC DOCKET NO. 080408-EG

# REBUTTAL TESTIMONY OF JOHN A. MASIELLO

1	I.	INTRODUCTION AND QUALIFICATIONS
2	Q.	Please state your name and business address.
3	A.	My name is John A. Masiello. My business address is 3300 Exchange Place, Lake
4		Mary, Florida, 32746.
5		
6	Q.	Have you previously filed Direct Testimony in this proceeding?
7	A.	Yes. I have provided testimony to the Florida Public Service Commission ("FPSC"
8		or the "Commission") on behalf of Progress Energy Florida, Inc. ("PEF" or "Progress
9		Energy").
10		
11	II.	SUMMARY OF REBUTTAL TESTIMONY
12	Q.	Please summarize your rebuttal testimony.
13	A.	The purpose of my rebuttal testimony is to address the Direct Testimony of the
14		following: John D. Wilson, Philip H. Mosenthal, William Steinhurst, Ralph Cavanagh
15		and the Direct Testimony of Richard F. Spellman and Caroline Guidry (GDS).
16		Mr. Spellman's recommendations for the revision of goals proposed by the FEECA
17		utilities are unsubstantiated, unsupportable, and unrealistic. Mr. Spellman's

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FPSC-COMMISSION CLERK

recommendation that PEF's energy efficiency goals be based on an estimate of the maximum achievable cost-effective potential determined through the use of the E-TRC test and the Participant Test as the primary cost-effectiveness tests is extreme and has no consideration of rate impacts or requirements of the FPSC. Mr. Spellman's assertion that the RIM test discourages meaningful and impactful measures by encouraging peak demand vs. energy savings is also without merit and is simply wrong. Additionally, both Mr. Spellman's and the intervener witnesses' proposed goals are not based on any sound or principled analysis and, in some instances, are simply pulled out of thin air. Further, Mr. Spellman's testimony contains inaccurate descriptions of PEF's performance, erroneous conclusions related to the processes and methodologies used throughout the course of goals development, and a misunderstanding of appropriate cost-effectiveness testing.

In contradiction to the GDS and SACE/NRDC testimony, my rebuttal testimony and the rebuttal testimony of witness Dean will demonstrate that the "high" scenario (E-RIM) goal that PEF has proposed in our 2009 DSM Goals filed on June 1, 2009, will balance the needs of all of our stakeholders by:

- o Adhering to the prescribed regulatory requirements
  - Florida Energy Efficiency Conservation Act (FEECA)
  - HB 7135

- Meeting the objectives of the FPSC
- o Considering rate impacts to our customers

Furthermore, my testimony in this matter demonstrates that because of PEF's proven history of successful implementation and management of energy efficiency and demand response programs, we are in the strongest position to propose the appropriate goals and programs to meet the complex challenges facing our customers and environment. PEF shares the same objectives as the FPSC which are to meet the energy efficiency needs of our service-territory today and in the future while preserving the environment, maintaining diligent awareness of impacts to electric rates, and upholding our responsibility to all stakeholders to ensure that PEF continues to be a strong electric provider in the future. PEF is committed to working with the Commission to build on our success of historical DSM accomplishments while forging a path to the future with well analyzed and appropriate goals as proposed in our "high" scenario (E-RIM) goals filing.

My testimony and Mr. Dean's testimony also shows that:

- The goals proposed by PEF in the Goals Docket Filed on June 1, 2009 are appropriate, properly analyzed, meet the objectives established in Florida rules and statutes, and should be approved as proposed.
- The FPSC has long recognized the appropriateness of the RIM and Participant
   Tests as effective measures in determining the best balance of programs/costs
   to all ratepayers.
- PEF's proposed goals analyze impacts to customers' bills and the recommended goals represent a balanced approach to ensure that all customers are considered.
- A two year payback is an appropriate component that has long been recognized by the FPSC, as a means to reduce free ridership and reduce costs.
- Q. What is your position on the issues incorporated with the testimony of Jim Dean filed on behalf of the IOUs in this docket?

1	A.	Mr. Jim Dean has filed testimony on behalf of the four major IOUs. Jim Dean's
2		testimony focuses on five main topics to include:
3		o Interpretation of Florida Statute 366.82 regarding "maximum achievable
4		energy savings"
5		o Goal setting process
6		o Reduction of green house gases through conservation
7		o Interpretation of Florida Statute 366.82 regarding cost effectiveness tests
8		(RIM/TRC)
9		o Two year payback
10		I accept, incorporate and adopt Mr. Dean's testimony as my own.
11	Q.	Are you sponsoring any exhibits with your testimony?
12	A.	No.
13		
14	III.	REBUTTAL TESTIMONY
15		Proposed Goals
16		
17	Q.	Is PEF in agreement with GDS's and SACE/NRDC's proposed goals for PEF?
18	A.	No. Mr. Spellman proposes goals in his testimony that are developed by making
19		unsupportable "adjustments" to PEF's technical and achievable potential, adding in
20		energy efficiency measures that have been appropriately eliminated due to free
21		ridership consideration, selectively increasing market penetrations, and by making
22		other self-serving revisions to arrive at goals for each of the FEECA utilities. Given
23		his caviler approach to making these adjustments in an effort to support his

suggestion that Florida lags behind the rest of the nation in energy efficiency, it appears that Mr. Spellman is unfamiliar with the goals setting process in Florida and the success of DSM programs under the Florida Energy Efficiency Conservation Act (FEECA). By proposing arbitrary "percentage of sales" goals for PEF instead of goals that are supported by principled analysis, the SACE/NRDC witnesses appear to suffer from this same infirmity.

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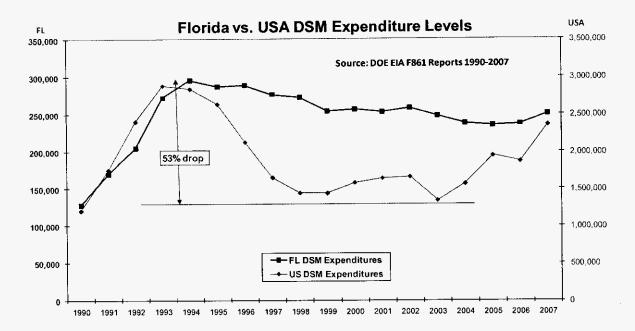
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PEF has a long history of aggressively pursuing energy efficiency and demand Under the guidance of the Public Service response over the past 28 years. Commission, PEF has developed and implemented DSM programs through an integrated resource planning process that has avoided the need for 17 power plants. Since 1993, PEF has conducted approximately 600,000 energy audits and currently offers 16 programs incorporating over 100 measures. We have nationally-recognized programs and advertising campaigns that are used throughout the nation as examples for energy service providers to emulate. We are in homes and businesses everyday to educate and motivate our customers on energy efficiency. We go far beyond what we take credit for in our annual EIA report. We are in the homes of low-income families installing efficiency measures at no cost and at the same time providing substantial education to encourage behavior that provides long term benefits. Additionally, we work with our schools and communities to take advantage of every opportunity to encourage participation in our energy efficiency and demand response programs. PEF has been actively engaged in the education and delivery of both energy efficiency and demand response programs that have resulted in the savings of over 12,000 GWH and 1,575 WMW since 1980. Unlike other states whose commitment to funding and support of DSM programs has changed over time, DSM expenditures in Florida have remained stable. Table 1 below shows the comparison of Florida and U.S. DSM Expenditures.

Table 1: Florida versus USA DSM Spending Levels



I reiterate that PEF has complied with FEECA by submitting realistic, ambitious, and achievable goals that are based on extensive analysis to assess the full technical and achievable potential for energy and peak demand savings for DSM in Florida. PEF's proposed goals are based upon the Company's most recent planning process of the total cost-effective kilowatt and kilowatt-hour (kWh) DSM savings reasonably achievable in PEF's service territory over the ten-year period 2010 to 2019 and were developed using the Commission's approved cost-effective methodology. This validated process, which was agreed upon by all parties, resulted in submission of cost effective goals that should be approved in this docket.

What is your response to the comments made in Spellman's testimony stating, "The ultimate goal of the FEECA statutes is to implement successful energy efficiency programs that can reduce the growth rate of electric consumption."?

Q.

A.

I disagree with Mr. Spellman's assertion. His view of FEECA's "ultimate goal" is a misinterpretation based on "cherry picking" sentences from the Statute while dismissing other language. For example, the FEECA statute states that "Reduction in, and control of, the growth rates of electric consumption and of weather-sensitive peak demand are of particular importance." By conveniently ignoring that FEECA also recognizes the reduction in "weather-sensitive peak demand" as being "of particular importance", Mr. Spellman's statement demonstrates his lack of knowledge of Florida's laws, rules, and unique characteristics, as well as a bias against demand response programs that focus on reducing weather-sensitive peak demand.

Additionally, FEECA specifically states that "...it is critical to utilize the most efficient and cost-effective demand-side renewable energy systems and conservation systems in order to protect the health, prosperity, and general welfare of the state and its citizens." Contrary to Mr. Spellman's view, "implementing successful" programs is not equivalent to "utilizing the most efficient and cost-effective" programs. Further, FEECA does not encourage energy efficiency programs over other types of demand-side programs. To suggest that any one of the FEECA goals is superior above the other is demonstrative of a flawed understanding of the statute and of Florida's history with Demand Side Management. As Mr. Spellman admits, Florida utilities have been highly successful in their contribution to FEECA goals as demonstrated by his statement that PEF is first in the nation with other Florida utilities closely behind depending on the year evaluated. Progress Energy and Florida

utilities are national leaders as Mr. Spellman fully admits in his testimony. It is a contradiction to state otherwise. This status has not come easily and is the result of many years of working with the Florida Public Service Commission to implement aggressive DSM programs. PEF's success is a testament to our Public Service Commission and the legislators that wrote and continue to support FEECA. Our efficiency programs target the most energy intensive measures impacting the major loads that provide significant energy savings. These measures range from high efficiency heating and air conditioning systems, to attic insulation, duct repair, wall insulation, window replacement, and a list of over 100 total measures. The full portfolio design has succeeded in placing an emphasis on reducing the growth rates of weather sensitive peak demand, reducing and controlling the growth rates of electricity consumption, reducing the consumption of expensive resources such as petroleum fuels. Indeed, PEF has implemented and continues to implement successful energy efficiency programs to reduce electric consumption in Florida. To allege otherwise is flat wrong. When meaningful analysis is applied to objective data, the results clearly show that Florida and the FPSC have been and continue to be a national leader in DSM and energy efficiency.

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Unlike PEF, neither GDS nor the SACE/NRDC witnesses have submitted any specifics to the Commission as to how their proposals would work in Florida, what programs and measures would be used to achieve their proposals, or what their proposals would mean in costs to Florida customers. Instead, the GDS and SACE/NRDC witnesses pick arbitrary goals that are unsupported by any meaningful analysis (much less an analysis specific to Florida) and ask the Commission to approve them based on the belief that unspecified measures and programs could be

created quickly and would instantly work in Florida at some undetermined cost.

Offering such rank speculation and supposition to the Commission shows a fundamental lack of understanding of how the Commission and the Florida legislature have responsibly and prudently managed demand side management and energy efficiency in Florida over the past two decades.

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#### PEF's Performance

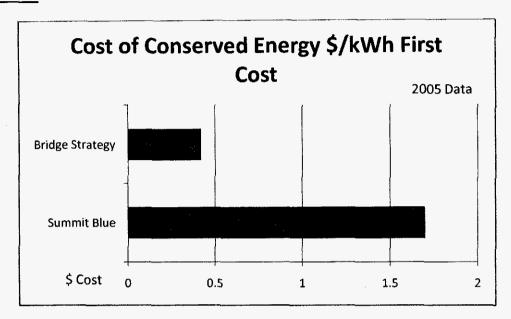
What is your response to Witness Wilson's statement regarding his uncertainty whether FEECA utilities are saving energy at an average cost of no more than one-half of the typical cost of a new power source?

Mr. Wilson's assertion is illustrative of the superficial and inaccurate testimony put forth by the SACE/NRDC witnesses. Mr. Wilson quotes from reports that inaccurately depict the accomplishments of Progress Energy Florida. In the Summit Blue report that Mr. Wilson relies on, PEF's cost for DSM programs is shown as the highest at \$1.70 per kWh. However, the Summit Blue report did not account for the fact that 76% of PEF's DSM expenses are used to support and maintain the existing 1,000 MWs of demand response that PEF has obtained through its aggressive historical efforts.

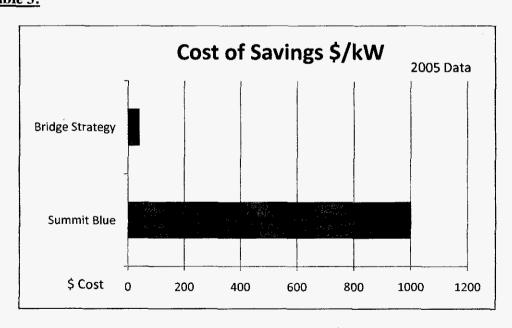
The Bridge Strategy Group has prepared an analysis of information contained in the Summit Blue report that properly allocates the costs for each type of program and determined that the values presented by Summit Blue are significantly overstated. Specifically, Table 2 below shows that the first year cost \$1.70 per kWh for PEF becomes \$0.42 per kWh when costs are properly accounted for. Further, Summit

Blue incorrectly states the residential cost per kWh at \$1.05, instead of the proper cost of \$0.37 when existing DR system costs are excluded.

#### Table 2:



## 6 <u>Table 3:</u>



\*PEF cost of demand \$/kW

Additionally, Table 3 above shows that the \$1000 costs for residential kW that Summit Blue asserts becomes \$41 when the calculation is based on present demand response megawatts and relationship to cost.

Thus, Mr. Wilson has relied on incorrect data to make incorrect assertions about the costs of DSM in Florida. Again, this is yet another example where the lack of knowledge and awareness of the long standing history of successfully implementing DSM programs in PEF's service territory leads to misleading and frankly, a total disregard for accurately presenting information. The Commission should reject Mr. Wilson's inaccurate and uncorroborated statements and subject the balance of the SACE/NRDC testimony to heightened scrutiny as to its accuracy and validity.

A.

#### **Processes and Methodologies**

Q. Do you agree with Witness Spellman's suggestion that the FEECA Utilities estimates for the anticipated cost of GHG emissions are too low?

No I do not agree. PEF's carbon costs were based on EPA carbon projections that, as shown in Table 4 below, are higher than the recent Congressional Budget Office (CBO) figures that Mr. Spellman uses. Thus, any suggestion by Mr. Spellman that PEF has undervalued the potential costs of future carbon legislation is simply wrong.

#### Table 4:

#### Carbon Cost per Ton

Year	EPA	СВО
2014	22	17
2015	24	18
2016	26	19
2017	28	21
2018	30	22
2019	32	24
2020	34	26

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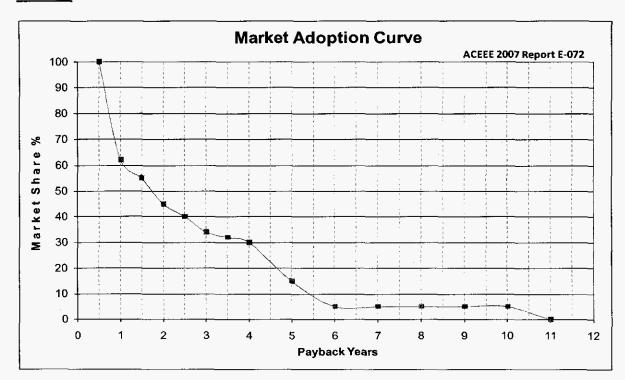
#### 4 Q. What is your response to criticisms regarding the two year payback limit?

Since 1991, a payback of two years or less has been recognized by the Commission as an appropriate threshold to reduce free ridership and maximize cost-effectiveness in DSM program design. The goal of DSM rebates has been to help offset high capital cost measures and reduce paybacks which help to motivate customer action. Indeed, Mr. Spellman himself recognizes in his testimony that the "two year payback "makes sense for the large commercial/industrial market".

In addressing the two-year minimum payback requirement, Mr. Spellman references a portion of the FEECA statute that states "in developing the goals, the commission shall evaluate the full technical potential of all available demand-side and supply-side conservation and efficiency measures ...". However, he incorrectly jumps to the conclusion that "The removal of cost effective measures for the residential and small commercial customer classes is not consistent with the requirement in the FEECA statute for the Commission to evaluate the full technical

potential of all available energy efficiency measures." He doesn't take into consideration that the evaluation of technical potential and economic potential was performed prior to the application of the two-year payback screening criterion, so it had no effect toward limiting the technical potential and is, therefore, not inconsistent with FEECA. This, of course, renders Mr. Spellman's criticisms moot. As to the remainder of the criticisms voiced against a two-year payback limitation, there are many published curves that estimate customer adoption in response to payback levels. These curves are typical of the following graph in table 5 below.

#### Table 5:



\*Source: ACEEE – <u>Potential for Energy Efficiency and Renewable Energy to Meet Florida's Growing Energy Demand, June 2007</u>

# 1 2

#### Table 6:

Payback Level	Two year Payback Adoption	1.5 Yr Payback Adoption	1 Yr Payback Adoption
Free riders	45%	55%	62%

From a two year payback, as shown in Table 6 above, rebates to achieve a 1.5 year payback would result in 55% free riders and increase costs significantly. Providing an incentive to buy down a 2-year payback to 1 year creates 62% free riders and is estimated to almost double costs due to increased incentives. We believe that education is a more cost-effective solution than offering incentives for implementation of measures less than two years and our residential and commercial audits make these recommendations.

On page 6, lines 17-20 of Mr. Spellman's testimony, he indicates the utilities eliminated measures based on the two year minimum payback requirement "without considering the actual market barriers and low market saturations of many of these energy efficiency measures." However, he fails to provide any support for this conclusion and does not appear to be familiar with PEF's residential and commercial audit programs or other education and awareness efforts promoted by the company that directly address several of the market barriers which he cites on pages 28-29 of his testimony.<sup>1</sup>

In summary, the GDS and SACE/NRDC witnesses spend much of their testimony criticizing the two-year payback limitation, but when actual facts and

<sup>&</sup>lt;sup>1</sup> For further information, please refer to page 19, lines 6-13 of the Direct Testimony of John Masiello.

- actual analysis are applied; their unsupported criticisms are revealed to be without

  merit.
- Q. What is your response to Witness Spellman/Guidry's statement made in testimony regarding market penetration estimates used by utilities as being conservative?
- A. Again GDS is wrong. PEF strives to achieve maximum market penetration in all segments. An example of our success is presented in Table 7, demonstrating increasing penetration rates in our residential new construction program, Home Advantage.

#### Table 7:

	2005	2006	2007	2008
System Residential Meter Sets	42,161	46,160	25,845	16,557
Home Advantage Entry or				
Better	17,677	16,068	12,684	8,378
Home Advantage Market				
Penetration	42%	35%	49%	51%

We are currently reaching more than 50% of the new homes built in our service territory with energy efficiency measures. This achievement is notable in an economic downturn and with significant reductions in housing starts. Despite external influences, PEF's focus has remained on increasing the efficiency of every home built in our service territory. PEF's program offerings include incentives, education and sales training on duct seal, high efficiency equipment, increased insulation, and advanced windows among others. As another example, studies from the Florida Solar Energy Center (FSEC) indicate that a significant potential exists to save energy by reducing duct leakage. In response, PEF has designed, implemented, and aggressively marketed measures such as duct seal, thereby improving the

majority of new homes in our service territory. FSEC has recommended and the Florida Building Commission has enacted, with support from Progress Energy, codes to help move the remainder of the market. This objective data clearly shows that PEF's market penetration is by no means conservative, proving once again that the allegations made by GDS are inaccurate and misguided. Said simply, GDS and SACE/NRDC are quick to <u>say</u> that PEF and the other FEECA utilities are not doing a good job, but they fail miserably in proving or supporting any of their assertions.

Q.

A.

# What is your response to GDS's adjustments "to allow for higher market penetrations due to implementation of more aggressive marketing and education strategies."?

GDS's adjustments in this regard are out of touch with reality and demonstrate a fundamental lack of sophistication and understanding of the Florida market. Our aggressive goals are achieved by our energy advisors through programs that provide education and promote many measures during our in-home audits. PEF has a long history of developing and implementing innovative and meaningful DSM programs to all segments of our service territory. PEF efficiency advisors are committed to sharing their knowledge and expertise in delivering programs that provide a great benefit to all sectors including low income customers.

One specific program for low income customers that PEF uses is the Neighborhood Energy Saver Program that was designed to deliver energy efficiency measures at no cost to the customers. The Progress Energy Florida Neighborhood Energy Saver (NES) Program assists low-income families with energy costs through energy-efficiency improvements to their homes. The program offers the installation

of a comprehensive package of energy-efficiency improvements at no cost to the customer as well as educating families on how to use energy efficiently and wisely. The combination of these components results in sustainable savings for low-income families. Items such as air conditioning filters are installed, and a one-year supply of filters is left with the customer to ensure sustainability of the energy saving measures. This nationally acclaimed, award-winning program has been recognized by various organizations such as SEE, ACEEE and Chartwell. Most recently, this program received the 2009 AESP Award for Outstanding Achievement in Program Implementation. Although the costs of the installation and all materials are provided at no charge to the customer, and the services mentioned above are delivered at the customer's convenience on the customer's schedule, the average rate of adoption in this program has been under 70%. This demonstrates that contrary to the intervener's global assertions that greater market penetration may be or could likely be achieved in Florida, actual data from actual utilities doing business in Florida with actual Florida customers presents a different story.

Another compelling point is that although the interveners and GDS are once again quick to criticize PEF's education and marketing efforts, they do not appear to even know what PEF does in this regard, nor do they offer any specifics on how PEF could do its job better. Focusing on actual facts instead of supposition, it is important to note that PEF uses a three-pronged approach to educate and inform customers about energy efficiency programs. This approach includes mass media, interactive media, and grassroots community marketing as part of the Save the Watts campaign. This three-pronged approach educates PEF customers about the various ways that they can become more energy efficient, regardless of payback period. The

savethewatts.com website is another major tool in our marketing communications elements. Customers can find "100 Energy Saving Tips" on the website, consisting of no-cost and low-cost ideas (lighting, heating and cooling, home electronics and appliances, pool pumps, windows, etc.) that customers can implement right away to save energy, as well as home improvements that customers can invest in for increased energy savings.

As part of our grassroots community efforts, PEF has also developed energy-efficiency educational materials that are provided to customers at local community events and at the time of their energy audit. PEF's external media relations team also produces monthly articles about various energy efficiency topics which are available for local Homeowners' Associations to reprint in their community newsletters.

As I stated earlier, Mr. Spellman and the interveners simply assert that more aggressive measures are needed but do nothing to address current efforts and programs, nor do they offer any specific recommendations as to how these unspecified "aggressive measures" would be implemented or how they would work. Stated simply, they assume there is a problem without showing there actually is one and then make adjustments that they pulled out of thin air without any analytical support to show how or if those adjustments could be achieved in real life. The Commission should reject such assertions out of hand.

Q.

Does PEF only focus on peak demand reduction with their energy efficiency programs and not on energy savings as the GDS and SACE/NRDC witnesses suggest?

Not at all. PEF currently has 105 measures for customers that save energy during both on and off peak hours. These measures have some of the most substantial and aggressive energy savings a home or business may install. Lighting retrofits for example, are a part of PEF's commercial measure offerings, but only one of a large portfolio of measures. Other measures that provide significant energy savings are PEF's residential duct repair, insulation upgrade, HVAC replacement, cool roof, and motor replacement measures. Furthermore, peak demand reduction and energy efficiency are not mutually exclusive of one another as the GDS and SACE/NRDC witnesses apparently believe. Taking peak demand impacts into consideration when designing measures helps in screening those measures which are most beneficial to all customers, helps reduce the growth of weather-sensitive peak demand, and reduces rate impacts. As of June 2009, PEF customers who have implemented efficiency measures have saved over \$1 billion dollars in energy costs. Based on the PEF's "high" scenario (E-RIM) filed as our goal, PEF's second \$1 billion in energy costs savings for customers is predicted to occur by the 3<sup>rd</sup> quarter of 2018. Customers who have voluntarily participated in our demand response programs have also received an additional \$1 billion. When compared to the 167 other IOU's listed in the 2007 EIA report, PEF is in the top quartile of annual energy efficiency as a percent of retail sales. Thus, the GDS and SACE/NRDC witnesses have once again made baseless and incorrect assertions that are easily dismissed when proper analysis is applied to them.

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A.

What is your response to the statement made by GDS and the SACE/NRDC witnesses that technical potential studies excluded many important energy efficiency measures?

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Q.

Again, they are wrong. The potential studies did not exclude important measures in the goal setting process. Instead, focus was maintained on measures that have the greatest potential impact and the possibility for realistic adoption. Comparing Florida to New Hampshire and coming to the conclusion that phantom load switches, second refrigerator and freezer turn-in, LED lighting, programmable thermostats and tree shading could represent nearly 20% of energy efficiency potential ignores the significant difference in end use loads, demographics, and climate, all which play a large role in the applicability of these measures. Importantly, some measures are materially affected by climate. Specifically, tree shading may be an excellent measure in New Hampshire's hurricane free environment where a predominance of trees with heavy deciduous foliage exists and are readily available in sizes that would produce significant impact in a short period. In Florida, however, palms and evergreens do not have the same load averting profile. Trees also cross over into the realm of behavior and acceptance. Behavior and acceptance also play a significant role in power strip and programmable thermostat use, thus limiting potential or worse, in the case of an improperly deployed programmable thermostat in Florida, actually could add to peak demand and overall energy use as reported in FSEC-PF-362-01, Factors Influencing Space Heat and Heat Pump Efficiency from a Large-Scale Residential Monitoring Study.

Additionally, PEF has worked with local media and other channels, including our energy advisors, to inform customers about phantom loads, and PEF addresses

second unit use and replacement through energy audits and training. These are just further examples of how GDS and SACE/NRDC incorrectly compare PEF's service territory to service territories that are over a thousand miles away and assume, without any analysis, that what works in New England will automatically work in Florida.

In addition to making "apples-to-oranges" comparisons, GDS and SACE/NRDC have also provided the Commission incorrect and incomplete information. For example, the inclusion of LEDs is premature and infeasible for the following reasons:

- 1) High quality, bright, uniform screw based LEDs are not yet available.
- 2) Given the adoption stage of CFLs, their inclusion in the study captured all of the potential LED participants.
- 3) The cost of changing from a CFL to an LED is significantly greater than from an incandescent to a CFL, but the kWh and kW savings are significantly less.
- 4) Even Mr. Wilson, on behalf of SACE/NRDC, testified that "since LED luminary lamps are primarily an opportunity for lifetime cost savings, and not additional energy savings, I do not recommend any adjustment to the technical potential study results for this measure".
- 5) Building envelope measures contribute to a greater part of potential savings, although their costs are considerably higher in Florida, as heating and cooling loads represent the largest end uses, not lighting and appliances. Again, even a simple analysis of GDS's and SACE/NRDC's assertions in this regard show that their conclusions are rife with misstatements and misinformation.

- Q. What is your reaction to Witness Wilson's statements regarding his lack of support of the Technical Potential Study outcome and design?
- His statements lead me to believe that he has not communicated well with his clients. 3 Α. NRDC/SACE were actively involved at the technical potential phase, and no one, 4 including SACE, NRDC, Mr. Wilson, or any other witnesses objected to the process, 5 procedure or results. Thus, it is surprising to hear SACE and NRDC state that the 6 Technical Potential Study's outcome and/or design is flawed because they were 7 involved in its development and accepted it during the technical potential phase. The 8 9 goals collaborative for the technical development process was done with full disclosure and inclusion. The Commission should reject Mr. Wilson's statement on 10 the basis of his client's active involvement and acceptance of the process during the 11 12 study development.

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A.

- How would you respond to the statement made in Witness Spellman/Guidry's testimony re: "Energy efficiency programs can help reduce the demand for electricity at a levelized cost per lifetime kWh saved that is much less expensive than building and operating a new nuclear power plant or power plant fueled with clean coal."
  - Much like the balance of their testimony, the simple fact that GDS says something does not make it true. For assertions such as these to be taken seriously, they need to be objectively analyzed and factually supported. These witnesses offer no facts or analysis to support the conclusion that energy efficiency programs can help reduce the demand for electricity at a levelized cost per lifetime kWh saved that is much less expensive than building and operating a new nuclear power plant or power plant

fueled with clean coal, nor do they offer any facts or analysis as to how such statements may or may not be consistent with system planning and reserve margin needs within a given service territory. Unlike these witnesses who offer no support or analysis at all for their novel and unsubstantiated opinions, PEF and the other FEECA utilities have actually performed an analysis that considers system planning and cost effectiveness and have submitted that information to the Commission in their direct testimony. This is the only credible and supported evidence that the Commission can rely on to make decisions in this docket, and GDS's assertions of "it's true because I say so" cannot be accepted.

Q.

A.

What is your response to Witness Spellman/Guidry's methodology used to calculate their proposed ratio of summer peak kW savings to the annual kWh savings for each market sector?

GDS uses an overly simplistic and incorrect approach to estimate summer and winter peak demand savings by assuming peak demand savings reasonably achievable through utility DSM programs can be extrapolated based solely on kWh energy savings. Their approach ignores standard resource planning practices in that it allows peak demand savings to grow well beyond a utility's capacity needs, since it doesn't consider the utility's resource plan. The GDS ratio approach also doesn't consider the mix of demand response versus energy efficiency programs in the goals, nor the proper mix of demand-side versus supply-side resources in the projection of planning reserves. Thus, their recommended peak demand savings goals leads to an overreliance on demand response as it becomes a proportionally larger share of planning reserves in the future.

#### **Appropriate Cost Effectiveness Test**

2	Q.	Please discuss the impacts to PEF's customers as a result of the GDS and
3		SACE/NRDC witnesses proposing TRC as the primary cost effectiveness test.

A.

Economists have developed different cost effectiveness tests in order to evaluate the benefits and costs from a variety of perspectives, including program participants (the Participant Test), program non-participants (the RIM Test), and all customers as a whole (the TRC Test). Using the TRC test to determine the cost effectiveness of a DSM portfolio affects customers negatively in several ways. First, TRC will result in higher electricity rates for the DSM portfolio resource plan than for a supply-side only resource plan without any DSM. Second, TRC allows a cross-subsidization between participants and non-participants such that program participants receive an economic benefit from the DSM portfolio while program non-participants actually suffer an economic loss. TRC allows utilities to pay higher incentives to participating customers than RIM, which, of course, drives up rates.

In contrast, PEF's proposal to use the RIM and Participant tests helps to ensure that the DSM portfolio plan will: (1) result in lower electric rates than the supply-side only plan, (2) represent a win-win scenario for all customers by providing an economic benefit to both participants and non-participants, and (3) will only allow cost-effective incentives. PEF's research and long-standing experience confirm that customers at the lower income levels have the least participation in DSM programs. Once again, GDS, SACE, and NRDC are advocating the TRC test to advance their own personal agendas without regard to the impact that this could have on those customers least able to afford it.

All customer segments support energy efficiency programs, therefore all customer segments should receive benefits from the programs they support. If this balance doesn't occur, then cross subsidy occurs. The issue of cross subsidy raises the concern that the customer who can least afford to take advantage of the energy efficiency measures offered will help pay for programs and measures that others will use.

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A study of customer incomes and participation rates for various measures consistently shows that middle and higher income customers participate in energy efficiency measures at higher percentages than lower income customer segments. The three highest indexes based on customer income in our duct repair program, for example, are the \$125,000-\$149,999; \$150,000 and over; and \$100,000-\$124,999 The three lowest indexes based on customer income segments respectively. participation is the \$15,000-\$19,999; \$20,000-\$29,999; and under \$15,000 respectively. Additionally, these customers are not guaranteed any benefit unless measures are RIM based, which avoids having an undue impact on the costs passed on to them. While the RIM benefit cost model ensures benefits to all customer segments whether they participate or not, the TRC does not. Therefore, TRC will allow cross subsidies to occur without reward to the rate impacts on low income customers. Said simply, with TRC, the customer least capable of participating in the measures ends up paying the higher ECCR cost without getting benefits of rate savings.

In reviewing the testimony provided by SACE, NRDC and GDS it becomes obvious that their collective objective is to increase energy efficiency to a level of approximately 1 percent of total retail sales. It appears that they started with this end

result in mind and then attempted to piece together some sort of argument to support it. Thus, GDS's and SACE/NRDC's lack of consideration of the cost implications related to their proposals and their championing of the TRC test is not surprising. PEF has prepared a directional indication of customer impacts to provide incentives as high as 50% or higher of the incremental measure cost to achieve 60% penetration under the E-TRC test as suggested by Mr. Spellman in his recent deposition.

Below, Table 8 provides an estimate of the DSM cost impacts for the GDS proposed goals for PEF. As one can see, the cost impact is quite dramatic. Since GDS's proposed goals are up by a factor of 6.5 times, the estimated DSM cost would be higher by a factor of 5.6 times, and base revenues deficiencies are up by a factor of 5.1 times:

#### Table 8:

Plans	GWH	Estimated Cost (\$000,000)	Estimated Base  Revenues  Deficiencies*
			(\$000,000)
E-RIM-H	614	\$1,240	\$181
GDS Scenario	4,020	\$6,955	\$932
E-RIM to GDS Difference	3,406	\$5,715	\$752

Collectively, the costs for Mr. Spellman's proposed goals under the E-TRC test are estimated to be in the range of \$5.7 billion for program costs plus incentives over the

10 years of the plan. That cost component alone would add over \$570 million in costs annually and significantly increase our current ECCR annual cost of approximately \$80 million.

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- Q. What is your response to the comments made in Spellman/Guidry's testimony stating, "Unlike the E-TRC Test, the RIM Test fails to consider the impact on participants' electric bills."
- Florida has used the RIM test and the Participant test as criteria for our DSM 8 A. 9 programs and measures because no one test captures the total economic condition, and this is why the economists developed five different perspectives. To say that the 10 RIM test fails to consider the impact on participants' electric bills is simply wrong. 11 Using RIM and Participant tests help ensure that a DSM portfolio will hold rates at or 12 13 below supply side costs had no DSM activity occurred. The participant's bill savings, in the Participant test, are a part of deciding what is cost effective. Every measure we 14 have in our current DSM programs and the proposed ITRON "high" (E-RIM) case 15 16 has passed the cost effectiveness test for the Participant and RIM. GDS's assertions 17 in this regard are again simply incorrect and the Commission should flat out reject 18 such an erroneous statement.

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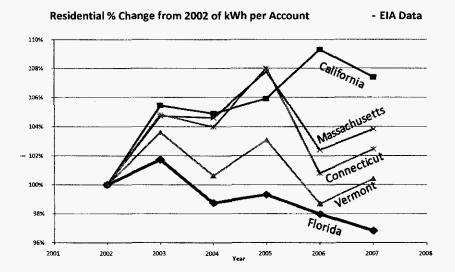
- Q. How do you respond to the allegations that Florida utilities are falling short of national leadership status?
- 22 A. This is probably the most offensive and unsupported assertion that the GDS and SACE/NRDC witnesses make as it is patently false and it impugns the FEECA utilities, the Commission, and the Florida Legislature. I have spent a career that

spans 30 years actively engaged in energy conservation, designing and implementing DSM programs that have been recognized nationally for their significance. During my tenure at Progress Energy Florida, we have been fortunate to receive numerous awards and recognition for our exemplary efforts and innovation in the area of energy efficiency. We have demonstrated performance that is sustainable and achieved meaningful savings for our Florida customers. It is inappropriate to say that Florida is not a leader in energy efficiency and these allegations ignore the commendable and long-standing efforts that the FPSC and the Florida utilities have taken under FEECA by creating a legacy of programs that are recognized throughout the nation.

Additionally, Mr. Spellman cited "the leading utilities in California and New England" as performing better than Florida. However, the metrics he uses to support this assertion are energy efficiency claims as a percentage of energy sold. The only responsible and accurate way to make this comparison is to look at actual performance rather than claims. When one focuses on real, objective data, it is apparent that the FEECA utilities, under direction of the FPSC, are leading the country in actual reduction of residential energy usage on a per customer basis at lower cost when compared to the states that Mr. Spellman cites as reflected in Table 9 below:

#### Table 9:

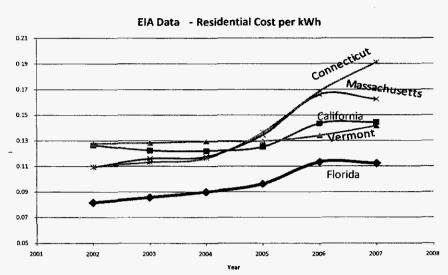
## Per Customer Electric Energy Growth/Reduction



Using the same EIA dataset presented in GDS exhibits, PEF evaluated sales divided by number of customers. This analysis, reflected in Table 10 below, clearly shows that the FEECA utilities are leaders of the group in actual reduction of residential energy usage on a per customer basis at a lower cost than the utilities that Mr. Spellman cites.

#### Table 10:

## Cost for Electric Energy



Additionally, the National Action Plan for Energy Efficiency (NAPEE) report, on which GDS and SACE/NRDC rely heavily, shows a variance in the time horizons for DSM plans in many of the states that those witnesses use as comparators to PEF as reflected in Table 11 below. Components of savings claims vary by utility and although EIA provides guidelines for reporting "implementations", only by comparing each component side by side, within the same appropriate time frame, can there be confidence in the meaningfulness of the data.

#### <u>Table 11:</u>

DSM Program Cycle per NAPEE						
NY	VT	MN	CA	WA	FL	
1 year	3 year	2 year	2/3 years	3 years	10 years	

\*Florida's plan is long term and provides sustainable results

Additionally, Mr. Spellman's comparisons of PEF to what he calls "the top twenty list" of high performing utilities, based on annual KWh savings are misleading and do not provide a fair comparison. Virtually all these "top twenty" utilities are considerably smaller in retail sales in comparison to PEF. Totaling the annual retail sales for the bottom 15 of the 20 utilities would not equal PEF's retail sales alone. Of the total list, less than half are investor owned utilities.

Also, the reference to Reedy Creek being in the top twenty, again used in the comparison of annual KWh savings, does not address the fact that Reedy Creek Improvement District is a public corporation of the state of Florida. The District is approximately 90% owned by the Walt Disney Company. Reedy Creek Energy Services (a part of Disney) operates the power system and the extensive EMS system that runs throughout the Disney properties. Basically, the energy supplier and customer are one in the same. Meaningful examples should be based on "apples to apples" comparisons. Once again, the fact that Mr. Spellman says something does not make it true. When actual facts and an objective analysis are applied to his assertions, a different perspective emerges. The Commission should again reject GDS's self-serving allegations.

Α.

#### IV. SUMMARY

#### 20 Q. Can you summarize the key take aways from your rebuttal testimony?

Yes. The Commission, for all the reasons stated in my testimony, should approve the cumulative goals as filed by PEF on June 1, 2009. PEF's proposed high (E-RIM) goals are appropriate, properly analyzed, and meet the objectives established in FEECA.

- Goals set for each utility should be based on measures that pass both the participant test and the Rate Impact Measure (RIM) tests. The RIM test captures the costs and benefits of measures to non-participating customers while the participant test captures the costs and benefits of participating customers. Thus, the interests of both participants and non-participants are considered and DSM-related rate increases are minimized.
- PEF's goals represent the best way to adequately reflect the costs and benefits to provide equitable treatment for all ratepayers while minimizing overall rate impacts.

#### IV. CONCLUSION

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Through the FPSC's leadership, PEF has been successfully and aggressively conducting energy efficiency and demand response programs (DSM) for 28 years. As a direct result of this effort, PEF has delivered significant savings and benefits to its customers. PEF is a national leader in DSM. Our leadership is testimony to the efforts made by the FPSC, Florida legislators, and the customers of PEF.

PEF intends to continue its success in DSM programs and has proposed goals that are aggressive and meet the requirements of FEECA. To that end, we have increased our energy goal from our 2004 ten-year goals filing by over 300%. PEF has implemented enhancements to its RIM test that created a high scenario "E-RIM". Additionally, PEF has also lowered its pass/fail ratio to 1.01 down from 1.20 allowing many more measures to pass "E-RIM". These two additions alone have dramatically increased our potential and will result in significant savings to our customers.

In summary, PEF has proposed initiatives in our filing that are innovative and would allow even greater opportunities for all segments of our population including low income residential and business customers. Our proposal will benefit both customers that can install measures and those that can least afford to participate. PEF's proposed goals are fair and equitable and should be approved.

#### 7 Q. Does this conclude your testimony?

8 A. Yes.