

**Joint Post-Workshop Comments of Florida Power & Light Company, Gulf Power Company, Progress Energy of Florida, and Tampa Electric Company**

**Undocketed**

**Florida Public Service Commission Staff Workshop  
Evaluation of the Cost-Effectiveness of Utility-Sponsored Energy Efficiency  
And Demand-Side Management Programs**

Florida Power & Light Company (FPL), Gulf Power Company (Gulf), Progress Energy of Florida (PEF) and Tampa Electric Company (Tampa Electric), hereinafter the Companies or the Investor-Owned Utilities (IOUs), jointly file these Post-Workshop Comments.

While the workshop was useful, it seems clear from the discussion that the goal-setting process is the appropriate forum for discussing the potential for energy efficiency and the appropriate means for measuring the cost-effectiveness of programs. The goal-setting process is the most appropriate forum because these issues can be discussed after in-depth analysis and in the context of real programs and Florida-specific measures offered by and potentially available from each individual utility. The impact of programs and measures on energy demand and use and on electric rates can be discussed, as well as their interplay with other mechanisms and policies with similar or related purposes (e.g., building code modifications, CO<sub>2</sub> cap and trade programs, utility system emissions, etc.).

It should be remembered that the Companies and the Florida Public Service Commission (FPSC or Commission) have been successful and continue to be successful in encouraging and helping customers to use less energy and to use energy more efficiently. Florida and the Companies have consistently promoted energy efficiency since 1980, and Florida ranks second among all states in the implementation of demand response and energy efficiency programs.

Using the current tests and methodologies, the FPSC has successfully implemented the Florida Energy Efficiency and Conservation Act (FEECA), resulting in the avoidance of over a

dozen 500 MW power plants and savings of about 6,200 gigawatt hours of electricity annually. Florida utilities are leading providers of demand-side management (DSM), including both energy efficiency and load management, and have expended billions of dollars to advance conservation. At the same time Florida has been achieving these significant results, it has avoided DSM exerting any upward pressure on customer rates relative to what supply side alternatives would have cost. Florida's accomplishments are unique and the FPSC should take credit for what it has achieved.

Some workshop participants suggested that there are significant untapped opportunities for further energy efficiency or DSM measures and that use of the rate impact measure (RIM) cost-effectiveness test stymies further measures. There is no reliable Florida-specific data to back up these claims and, furthermore, the FPSC is already taking steps to assess the technical potential for additional energy efficiency measures. The FPSC staff has noticed a workshop that will take place on Wednesday, June 4, 2008. As the Notice states:

The purpose of this meeting is to discuss the status of a technical potential study currently being conducted by the utilities subject to the Florida Energy Efficiency and Conservation Act (FEECA). The technical potential study will provide an inventory of potential demand-side efficiency measures, unconstrained by cost-effectiveness considerations. Such an inventory will provide the basis for establishing new goals during the conservation goal-setting proceeding to be conducted in 2009.

Regarding the cost-effectiveness tests, the relative merits of each test cannot be assessed in a vacuum. Rather, such assessment should be done as part of the goal-setting process in which a thorough evaluation of the merits of each test can be done with reference to specific energy efficiency programs or measures using Florida-specific data. Further, utilities are currently required under Rule 25-17.008, F.A.C., and the FPSC's cost-effectiveness manual for DSM programs to provide evaluations of programs and measures using the RIM and Total Resource Cost (TRC) and Participant Tests, and utilities can propose implementation of "TRC

measures when it is found the savings are large and the rate impacts are small.” FPSC Order No. PSC-94-1313-FOF-EG (Oct. 25, 1994).<sup>1</sup> Utilities are also permitted by the rule and the FPSC’s manual to evaluate programs and present information to the Commission using other cost-effectiveness tests.

Finally, the IOUs routinely conduct energy audits to help customers identify energy efficiency and conservation measures that will save customers money. Cost-effectiveness tests are not used to determine whether such measures should be implemented, but rather whether other utility customers should help pay for the implementation.

With these general comments in mind, the IOUs provide the following responses to the staff’s specific questions.

#### I. QUESTIONS IDENTIFIED IN THE WORKSHOP NOTICE

##### **(1) What is each cost-effectiveness test designed to achieve?**

A. Participant Test - This test quantifies the benefits and costs to participants in a program. The benefits derived from this test are in terms of reductions in a customer’s bill plus any incentives received from the utility or third parties, and any applicable tax credit or Renewable Energy Credit (REC). The Participant Test is useful in determining whether a program is beneficial to participants in the long run, and whether they are likely to participate in the program. This test does not necessarily represent a complete measure of benefits and costs of a program to a customer because customers usually do not base their decisions to participate in a program solely on quantifiable variables.

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<sup>1</sup> Reference has been made to the implementation of programs and measures by municipalities that do not pass a RIM test. Those examples have little applicability to investor-owned utilities that must prove the cost-effectiveness of programs or measures. It appears that analyses done did not involve a comparison with reference to an actual planned generating unit that the utility would actually have selected absent the DSM program.

B. Rate Impact Measure - This test measures the change in all customers' electric rates from the energy efficiency program versus the avoided generating unit. If the benefit to cost ratio is greater than 1.0, the program's impact on electric rates is better with the DSM program and results in lower overall rates or rates that are lower than they would be with the avoided generating unit. This is the only test that compares the program or measure to a power plant on a level playing field with all program costs included, which is the approach used when utilities evaluate competing supply side options. This test is similar to the Pareto efficiency test in economics: a policy or project that makes everyone better off without making anyone worse off.

C. Total Resource Cost - This test accounts for the benefits of DSM in the same way that the RIM Test does. However, contrary to the RIM Test's approach for addressing all of the costs of DSM, the TRC Test does *not* account for all costs related to DSM (specifically, program incentives and unrecovered revenue requirements are not included as costs). Instead, it includes only a subset of the utility's costs of a DSM program and includes the full costs of participating customers. Because the TRC Test does not account for all costs related to DSM, all customers may not be better off due to potential cross-subsidization.

D. Utility Test - This test, also known as the Program Administrator Test, measures the net costs of a program as a resource option based on some of the costs incurred by the utility (including incentive costs, but excluding unrecovered revenue requirements) and excluding any net costs incurred by the participant. The test compares a utility's avoided costs (a reduction in total costs or revenue requirements) to certain costs of a program. By not including recovery of revenue requirements, however, the rate impacts are not captured.

E. Societal Test - This test is similar to the TRC Test, but the test is expanded to include externalities. In the past, various externalities have been proposed for inclusion and, generally, these externalities have been subjective and difficult or impossible to quantify.

The Participant, RIM and TRC Tests are the tests currently required by Commission rule.

**(2) Are the tests capturing all the benefits and costs of energy efficiency and DSM?**

The tests and methodologies currently used by the FPSC allow for all the benefits and costs appropriate to determining whether a measure should be part of a utility's energy efficiency program (for which all utility customers will pay) to be captured. Furthermore, the existing methodologies can be adapted to changing circumstances to allow analyses of additional factors that may be appropriate for consideration in the goal-setting process. The FPSC's approved cost-effectiveness methodologies allow a utility to include "other" costs and benefits in both its RIM and TRC reporting.

**(3) How do the tests used affect the level of conservation goals?**

This question suggests that the test should be selected based on which test results in higher goals. That should not be the objective. Rather, the objective should be what are reasonable and prudent costs to be incurred to promote cost-effective energy efficiency and conservation. The FPSC should retain the flexibility to evaluate measures under a variety of cost-effectiveness tests to ensure money spent yields the best results and in a manner that is fair to all customers.

Moreover, tests alone do not drive the level of goals. DSM goals are driven by several factors including, among other things, the utility's projected future resource needs and the technical and market potential of DSM options in its service area, as well as the cost-effectiveness of DSM options.

Measures that benefit both the customers that implement them (participating customers) as well as those that don't (non-participating customers) should be favored. This is what the RIM Test evaluates. RIM eliminates subsidization of participating customers by non-participating customers. A program that passes other tests but fails RIM will, by definition, result in increased rates and subsidization of some customers by others.

**(4) Should the tests be modified to address other concerns?**

Identification and explanation of what “other concerns” may exist must occur before determining if these concerns should be addressed in the evaluation of energy efficiency measures, and if the existing tests can address them.

**(5) Should non-economic benefits and costs be included, and if so, how?**

As in question Number (4), it is not clear what may be included in “non-economic benefits and costs.” However, the evaluation of “non-economic benefits or costs” will certainly be subjective, controversial and difficult or impossible to quantify, and have the potential to result in increased costs to utility customers. Any inclusion of non-economic impacts should only be done pursuant to specific legislative direction.

II. QUESTIONS ASKED BY STAFF AT THE WORKSHOP

**(6) What is the goal of utility-sponsored conservation?**

There are likely numerous goals of utility-sponsored conservation. The quantification of these goals should be determined after a technical potential study is conducted and as part of the goal-setting process, taking into account the requirements of the Florida Statutes and relevant FPSC rules.

**(7) Are utility estimates of projected and historical demand and energy savings accurate?**

Yes, the IOUs believe that such estimates are quite accurate. The FPSC has required utilities to employ sound evaluation techniques to determine historical DSM measure savings, and projections are based on that historical data. If staff has any specific concerns with any such data, the utilities would be happy to address them.

**(8) How are capacity deferral benefits affected by the ability of customers to leave programs?**

While energy efficiency is generally not affected in this manner, capacity deferral benefits can be affected by the ability of customers to leave programs. If a significant number of customers participating in a program leave – for whatever reason – that causes concern for the utility. Utilities need to consider this possibility when determining how much to rely on DSM measures in deferring generation and in maintaining reliable electric service.

**(9) Should the avoided unit match the duty cycle of the energy efficiency and DSM measure?**

No. Whether conservation programs are cost-effective should be evaluated in light of the next planned generation unit(s), and not based on a type of unit that is not planned by the utility.

**(10) Are lost revenues always a cost to a utility, given its earnings and growth? In other words, should a utility's earnings and growth be factored into the impact of lost revenues in the cost-effectiveness evaluation?**

It is not appropriate to try to factor in the impact of lost revenues based on a utility's earnings and growth in the cost-effectiveness evaluation of a particular program. The cost-effectiveness of a program is separate from, and should not take into account, other unrelated factors such as a utility's earnings and growth.

**(11) Do energy efficiency and DSM measures result in reduced emissions?**

Maybe. The answer would depend upon the specific measure and the utility's planned generating unit. A general statement that energy efficiency and DSM measures do or do not result in reduced emissions is simply not possible.

**(12) Should a utility use a banded approach to cost-effectiveness?**

Given that Florida's utilities have been successful in the past without using a banded-approach, it is clearly not necessary for a utility to use a banded approach to cost-effectiveness in order to have successful programs. Under the current rules, the utilities have the flexibility to use a banded approach to propose programs that do not pass RIM, if they need to do so.

**(13) What measures are we missing using RIM? Why?**

The measures that have not been implemented are those that were not found to be cost-effective to non-participating customers. As evidenced by the utilities' past success, a multitude of programs do pass RIM. The utilities offer dozens of programs and well over 100 opportunities for rebates. If staff desires to understand specifically which potential measures fail RIM, but pass TRC, then, as part of the conservation goal-setting, staff can do that by comparing a TRC portfolio and RIM portfolio.

**(14) Should some programs be funded by participants only?**

Yes. Where only customers who choose to implement an energy efficiency measure will see a benefit (i.e., save money through implementation of the measure), and other customers will not benefit, the fairest approach is for only the participating customer to pay for the measure. Otherwise, the non-participating customers are subsidizing the participating customers. This is what use of the RIM Test avoids. However, the utilities do have the flexibility to propose measures that do not pass RIM, when the rate impacts will be small and the savings are large. FPSC Order No. PSC-94-1313-FOF-EG (Oct. 25, 1994).

**III. OTHER ISSUES RAISED AT WORKSHOP**

A number of statements were made at the workshop regarding a variety of resource planning issues, including how the RIM Test works, the lifecycle costs of resources, and rate



impacts. The nature and breadth of these comments further point out that a full and open discussion of these resource planning issues is needed before an informed decision can be made regarding the energy efficiency and DSM goals that are appropriate for each utility. The IOUs encourage this discussion be held as part of the goals docket.

At the workshop, staff asked for information on the impact of a new methodology on rates or on the general body of ratepayers. Such data cannot be provided at present. This type of information needs to be the fruit of a thorough analysis, such as the one being performed for the next goals proceeding. It is worth noting that the last time the FPSC examined the issue of cost-effectiveness tests, based on a state supported consultant's study, individual utility quantifications of TRC and RIM portfolios, more than 60 expert witnesses and over a month of hearings, the Commission concluded that RIM was the right test, as follows:

We will set overall conservation goals for each utility based on measures that pass both the participant and RIM tests. The record in this docket reflects that the difference in the demand and energy saving between the RIM and TRC portfolios are negligible. We find that goals based upon measures that pass TRC but not RIM would result in increased rates and would cause customers who do not participate in a utility DSM measure to subsidize customers who do participate. Since the record reflects that the benefits of adopting a TRC goal are minimal, we do not believe that increasing rates, even slightly, is justified.

FPSC Order No. PSC-94-1313-FOF-EG (Oct. 25, 1994). That specific finding was appealed to the Supreme Court of Florida. The Supreme Court held as follows:

Finally, we reject as without merit LEAF's third argument: that the Commission erred in finding there was a negligible energy and demand savings difference between demand-side management portfolios based on the different cost-effectiveness tests. . . . Since we find the record supports the Commission's order, we affirm the decision. . . . Based on our review of the record, we find ample support for the Commission's determination to set conservation goals using RIM resources.

*Legal Env'tl Assistance Found. v. Clark*, 668 So. 2d 982, 987-88 (Fla. 1996).

#### IV. CONCLUSION

The IOUs appreciate the opportunity to provide these comments and look forward to working with the FPSC to continue to encourage energy efficiency and DSM. While useful, the workshop clearly showed that energy efficiency and DSM goals, and programs to meet those goals, should not be developed in isolation. Rather the development of such goals and programs should be done in the context of the Commission's goal-setting process where thorough analyses and discussion will yield the best results.

Respectfully submitted,

s/Susan F. Clark

Susan F. Clark

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