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September 4, 2001

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VIA HAND DELIVERY

Blanca S. Bayo, Director
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Betty Easley Conference Center
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Re: Docket Nos.: 000824-EI; 010577-EI and 001148-EI

Dear Ms. Bayo:

On behalf of Reliant Energy Power Generation, Inc., enclosed for filing and distribution are the original and 15 copies of the following:

- Direct Testimony of Robert Mechler.

Please acknowledge receipt of the above on the extra copy of each and return the stamped copies to me. Thank you for your assistance.

Sincerely,

Joseph A. McGlothlin

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Review of Tampa Electric Company and impact of its participation in GridFlorida, a Florida Transmission Company, on TECO's retail ratepayers.	Docket No.: 010577-EI
In re: Review of Florida Power & Light Company's proposed merger with Entergy Corporation, the formation of a Florida transmission company ("Florida transco"), and their effect on FPL's retail rates.	Docket No. 001148-EI
In re: Review of Florida Power Corporation's earnings, including effects of proposed acquisition of Florida Power Corporation by Carolina Power Corporation by Carolina Power & Light	Docket No.: 000824-EI Filed: September 4, 2001

DIRECT TESTIMONY OF ROBERT MECHLER

ON BEHALF OF RELIANT ENERGY POWER GENERATION, INC.

SEPTEMBER 4, 2001

Q. Please state your name and business address.

A. My name is Robert Mechler. My business address is 1111 Louisiana Street, Houston, Texas.

Q. By whom are you employed, and in what capacity?

A. I am the Manager of Transmission Policy for Reliant Energy Power Generation, Inc.

Q. Please describe your educational background and professional experience.

A. I received a B.S. degree in Electrical Engineering from the University of Texas and an M.S. degree in Engineering from the same institution. After completing my education, I was employed by Florida Power Corporation for fifteen years. During the early part of my tenure there, I held positions in which I was involved in the engineering, construction and maintenance of substations and transmission lines. Over time, I held a variety of management positions with FPC. In May of 2000 I assumed my present position with Reliant Energy. I am a registered Professional Engineer in Florida.

Q. What is the purpose of your testimony?

A. I will address four of the issues identified for consideration in this docket. First, I will comment on Issues 2 and 3, which ask what benefits would be derived by peninsular Florida and the customers of the individual utilities from the participation of each in GridFlorida, Inc; and Issue 7, which asks the policy position the Commission should adopt relative to GridFlorida, Inc. Obviously, these subjects are closely related. First, I will address the benefits that bear on the policy position that Reliant Energy believes the Commission should adopt relative to the desirability of the formation of an RTO such as GridFlorida, Inc. I will then comment, on a macro level, on the relationship between the costs and benefits that the Commission should expect to be associated with an RTO such

as GridFlorida, Inc. As I will develop in my testimony, I believe this relationship should give the Commission a high level of comfort with respect to the ability of the RTO to lead to significant net savings for end use customers. Finally, I will comment briefly on Issue 11, which asks whether Floridians would be served better by an RTO limited to peninsular Florida, or by the larger, Southeastern RTO under consideration.

Q. What benefits would peninsular Florida and the customers of the applicant utilities derive from GridFlorida, Inc?

A. At the outset, I wish to state that my remarks will be from the "20,000 foot" level. There are numerous possible variations on the RTO theme, and not all of the blanks have been filled in with respect to the organization, workings, and size of GridFlorida. Nor do I wish to indicate that Reliant Energy agrees with every choice made by the Petitioners. In fact, through its support of comments filed with FERC by EPSA, Reliant Energy has advocated several modifications—such as a change to the manner in which Petitioners proposed to allocate existing transmission rights and a proposal to redispatch on a broader, system basis—that, in Reliant's view, would go farther to remove barriers to entry and enhance market efficiency. However, it is not necessary to agree on all details of a particular RTO to understand that the concept of an RTO presents the potential to realize many benefits. I do not intend in my testimony to critique GridFlorida, Inc. I will discuss GridFlorida, Inc. in terms of the RTO concept delineated by FERC in Order No. 2000. Individual preferences aside, Reliant Energy believes GridFlorida, Inc. incorporates the fundamental attributes of that concept. An RTO such as GridFlorida, Inc. will achieve benefits for the wholesale market and, ultimately, for customers through improvements in the areas of market performance, reliability of the grid and system planning. For these reasons, as I

will develop later, Reliant Energy recommends that the Commission favor the formation and implementation of GridFlorida, Inc. as a matter of policy. The Commission can adopt a general policy that supports the implementation of the RTO at the same time it reserves its ability to advocate specific positions on particular details of the RTO.

Q How can an RTO such as GridFlorida, Inc. improve market performance?

A. The RTO would improve market performance relative to the status quo in several ways. For instance, the RTO will eliminate "pancaking" of transmission rates, which is a significant impediment to market performance. The RTO will encourage the development of independent power projects by providing one stop shopping for services, independent planning, independent analysis of interconnection requests, and customer-focused response. The new power projects will be far more efficient and far cleaner than the dirty, inefficient units they displace. By encouraging more suppliers to enter the market, the RTO will have the effect of reducing the market power of individual participants. The RTO will create a larger, regional market for wholesale power. It will reduce per unit transaction costs at the same time that it increases transaction revenues. All of these attributes will translate into better service and lower costs for end use customers.

Q. How can an RTO such as GridFlorida, Inc. reduce transaction costs and increase revenues?

A. It can do so in two ways. First, the elimination of pancaked transmission rates reduces the cost of transmitting power across intervening systems, thereby making more transactions economically feasible. The evolution from multiple rates to a single rate is itself a reduction in transaction costs. Second, the lower "toll" will enable more generators to enter and participate in the market. As the number of users of the system increases, unit

costs of transmission service will decrease as revenues increase.

Q. Doesn't peninsular Florida already have a regional market for wholesale power?

A. As a matter of geographical boundaries, this may be true; however, the expensive, Byzantine system of providing and charging for transmission service reduces or eliminates the ability of generators to participate in transactions throughout the geographical "region." As transaction costs come down, more transactions between generators and buyers throughout the region will become economically feasible, thereby converting the *theory* of a regional market into a reality.

Q. How can an RTO such as GridFlorida, Inc. improve the reliability of the grid?

A. To maximize reliability, it is necessary to manage "parallel paths" and "congestion" effectively. The RTO will provide the means to improve performance in both of these areas.

Q. What do you mean by "parallel paths," and how do they affect reliability?

A. Under certain conditions, power flow through one transmission system can cause a "parallel" flow in a neighboring system. This "parallel" flow can affect reliability by overloading system elements such as transmission lines or transformers.

Q. How are parallel paths handled presently?

A. To eliminate overloading of system elements, systems operators will curtail power flow transactions on the system or by redispatching the system. If "redispatch" is employed, of necessity it will be less than economically optimal.

Q. How would GridFlorida, Inc. improve the management of parallel paths?

A. The system operator will still curtail transactions to relieve overloaded elements, but, by being able to "see" all transactions on the system, he will be able to offer the buyer and

seller of the curtailed transaction other alternatives through which to maintain their transaction. This will enable energy trading to continue, while maintaining reliability.

Q. Please explain what you mean by "congestion".

A. Much like "parallel paths," "congestion" on a transmission system is usually associated with the overscheduling of power flows through a capacity- limited system element; which, if left as scheduled, would lead to a system element overload.

Q. How is congestion managed presently?

A. Today, any energy transaction schedule that would cause congestion under normal conditions is rejected. Thus, certain trading opportunities are disallowed.

Q. How would an RTO such as GridFlorida, Inc. improve congestion management?

A. As mentioned earlier, the RTO will provide alternative transactions that will relieve the congestion, while enabling buyer and seller energy transactions to continue with no adverse effect on system reliability.

Q. How is system planning accomplished currently?

A. Currently, system planning is accomplished by each transmission owner, with limited inter-regional coordination.

Q. What benefit would be derived from planning based on a regional approach?

A. Very simply, a transmission network that is designed and built to enable an individual utility to deliver power to customers in its service area, will be configured very differently from one which is intended to carry bulk wholesale power between and among systems. A transmission system based on the former approach will at some point become a limiting factor on the ability of competitive wholesale transactions to lower consumers' costs. With an RTO, the full region would be part of a completely integrated and coordinated

planning process. This would provide not only for a system that is planned more efficiently, but one that also is more flexible to new opportunities for energy transactions. Planning that is conducted from a regional perspective tends to optimize local needs and bulk wholesale transactions better. Regional planning would also enhance the ability to estimate key transmission capacity ratings such as the available transfer capacity, or ATC.

Q. What is ATC, and how does it affect planning?

A. The ATC is the measure of how much energy can be moved between transmission systems. An RTO will have the ability to plan system expansion projects to increase ATC while meeting local transmission needs. As this measure can be more uniformly determined if performed by a single transmission operator such as an RTO, ATC will tend to be a barometer of the trading opportunities between systems.

Q. How do the costs of GridFlorida that the petitioners have identified relate to the benefits that you have described? Does this relationship affect the policy position the Commission should adopt?

A. Certainly consumers will receive net savings only if the benefits I have identified outweigh the costs of achieving them. It is also true that savings cannot be quantified precisely before they occur. However, when formulating its policy position. I believe the Commission should have a high level of comfort regarding the relative magnitudes of RTO costs and the corresponding net savings to consumers that can be achieved.

Q. Please explain.

A. The estimates of the costs of GridFlorida, Inc. contained in the testimony of the Petitioners' witnesses are not small numbers. However, they must be examined in the context of the overall costs incurred to serve the customer. For instance, according to the

testimony of William Ashworth, the impact of GridFlorida, Inc. will be to increase TECO's transmission costs by 23%, but the overall impact will be to increase the total retail bill by only 1%. Witness Korel Dubin of FPL provides information that indicates the impact of the RTO on FPL's typical residential bill would be less than 1%. More importantly, for purposes of the Commission's policy formulation, the costs of generation for which an end use customer pays are *orders of magnitude* greater than the costs of transmission incurred to transmit the generated energy. Accordingly, even a very small percentage decrease in the cost of generation made possible by a more efficient and more competitive market easily can exceed the increase in the transmission portion of the overall costs of electricity needed to form and operate the RTO. In the larger scheme of things, I believe the Commissioners should adopt the perspective that the costs of the RTO are an investment that can, through a kind of "leverage," result in a return significantly greater than the associated costs.

Q. Can you illustrate your point?

A. Yes. Based upon data included in the ITA proposal that was submitted to the Commission in September 1999, a typical breakdown of a customer's bill would approximate the following:

Generation	5.3¢/KWH
Distribution	1.2¢/KWH
Transmission	0.3¢/KWH
Total	6.8¢/KWH

From this information, one can calculate that an increase of 23% in transmission costs attributable to the RTO (to use TEC0's number) will be more than offset by a decrease of only 1.3% in generation costs. Based on the same relationship, if increased competition and better market performance attributable to the RTO were to reduce generation costs by

only 5% -- which, to my mind, is still a conservative assumption---then reductions in costs of generation would exceed the costs of the RTO by a factor of approximately 4 to 1. If higher reductions in generation costs are achieved, the savings would increase accordingly. I will note that, while the information derived from the September 1999 submission are generic in nature, the disparity between transmission costs and generation costs is so great (the cost of generation is almost *18 times* that of transmission) that an increase in the transmission component or a decrease in the generation component would have to be significant to affect these comparisons in a material way.

Q. Are there any considerations, other than the basic theory of supply and demand, that the Commission should take into account when evaluating the prospects for achieving these savings?

A. Yes. My assumption that the RTO will lead to lower costs of generation is based on far more than the theory of supply and demand. Just as the obstacles to an efficient, region-wide wholesale market in peninsular Florida are real and known, the factors that present the opportunity for decreases in the costs of generation are real and known. The known fact is that Florida has a large fleet of aging power plants that operate very inefficiently. In fact, over 25% of Florida's existing installed capacity is more than 30 years old; over 50% of existing installed capacity is more than 20 years old. Floridians are being served by expensive sources of power that could be displaced economically based on existing technology. New plants are cheaper to build and are significantly more efficient to operate. They are also far superior to the existing units in terms of their impact on the environment.

This situation makes Florida an attractive market for developers of wholesale generation

projects. In my testimony I have identified specific impediments to their ability to enter the market and compete efficiently region-wide, all of which would be ameliorated by the RTO. Further, experience in jurisdictions like Texas demonstrates that the formation of an independent transmission organization leads to the participation by more entrants and an increase in supply. For these reasons, the Commission should view the situation as one in which the opportunity for savings is very real, and very much worth pursuing.

Q. Do you have additional comments relative to the policy that the Commission should adopt relative to GridFlorida, Inc?

A. Yes. The extent of savings that are delivered to customers as a result of the RTO will be a function of the depth and liquidity of the wholesale market. However, I encourage the Commission not to regard the implementation of the RTO as a measure for which a fully developed, competitive wholesale market is a condition precedent. Rather, the RTO is a step that, by creating a more efficient market, will enhance the level of wholesale competition that is presently possible. Reliant Energy recommends that the Commission support, simultaneously, the implementation of the RTO and the additional measures needed to develop a more robustly competitive wholesale market.

Q. Please address the issue of whether customers in peninsular Florida would be better served by an RTO that is limited to peninsular Florida or by a larger Southeastern RTO.

A. Without intending to trivialize what is of course a very significant issue, I believe the question of timing, more than any other consideration, should weigh most in the formulation of the Commission's position on this issue. To realize the significant benefits that I have described for ratepayers as soon as possible, it is important that the process of

implementing the more efficient, market-based regime of an RTO not be delayed. It appears that an RTO that is specific to peninsular Florida would be quicker to implement than the large Southeastern RTO under consideration. As a practical matter, the physical constraints on the ability to transfer power into and out of Florida would limit any greater benefits available through a larger RTO until those constraints have been alleviated. There are reasons why a larger regional RTO may make sense in time, and why matters may evolve in that direction over time even if GridFlorida, Inc. is first established as a Florida-specific organization. Even if that is a prospect, GridFlorida, Inc. should proceed without delay. The successful performance of an RTO that is developed with Florida's characteristics and needs in mind could be influential in designing and implementing a separate, larger RTO of which peninsular Florida could possibly become a part. In short, regardless of the Commission's view regarding the relative merits of a smaller or a larger RTO, or of its view concerning the likelihood that a larger RTO will be mandated at some point, I encourage the Commission to support the expeditious development and implementation of GridFlorida, Inc.

Q. Does this conclude your testimony?

A. Yes.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing the Direct Testimony of Robert Mechler has been furnished by (*) hand delivery, (**)electronically and U.S. Mail on this 4th day of September, 2001:

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