

# I. Meeting Packet



**State of Florida**  
Public Service Commission  
**INTERNAL AFFAIRS AGENDA**  
Tuesday – December 14, 2010  
Following Commission Conference  
Room 140 - Betty Easley Conference Center

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**REVISED**

1. Approve November 30, 2010, Internal Affairs Meeting Minutes. (Attachment 1)
2. Discussion of comments regarding Hedging for Fuel Costs. (Attachment 2)
3. Staff's Review of the 2010 Ten-Year Site Plans. (Deferred from the November 30<sup>th</sup> Internal Affairs.) (Attachment 3) **This item is being deferred until the January 12, 2011 Internal Affairs Meeting.**
4. Draft Comments to the FCC regarding its Nov. 3, 2010 Public Notice regarding a National Deaf-Blind Equipment Distribution Program. (Attachment 4)
5. Cover Letter for Annual Lifeline Report. (Attachment 5)
6. Follow-up discussion of 1st DCA's order.
7. Other matters, if any.

TD/sa

OUTSIDE PERSONS WISHING TO ADDRESS THE COMMISSION ON  
ANY OF THE AGENDAED ITEMS SHOULD CONTACT THE  
OFFICE OF THE EXECUTIVE DIRECTOR AT (850) 413-6068.





**State of Florida**  
**Public Service Commission**  
**INTERNAL AFFAIRS MINUTES**

November 30, 2010

11:10 am – 1:20 pm

Room 140 - Betty Easley Conference Center

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COMMISSIONERS PRESENT: Chairman Graham  
Commissioner Edgar  
Commissioner Skop  
Commissioner Brisé  
Commissioner Balbis

STAFF PARTICIPATING: Devlin, Hill, Helton, Polk, Casey, DeMello, Fogleman,  
Hunter, Pennington, Miller, Cibula, Hinton, Willis, Bellak

OTHERS PARTICIPATING: Jon Moyle - FIPUG  
Ken Hoffman - FPL

1. Approve November 9, 2010 Internal Affairs Meeting Minutes.

The minutes were approved.

Commissioners participating: Graham, Edgar, Skop, Brisé

2. 2010 Annual Lifeline Report regarding the Number of Customers Subscribing to Lifeline Service and the Effectiveness of Procedures to Promote Participation. Critical Information: ACTION IS NEEDED – Approval of the Lifeline draft report is sought. The 2010 Lifeline Final Report is due to the Governor, President of the Senate, and Speaker of the House by December 31, 2010.

The draft report was approved. A reference to the Federal Universal Service Program is to be included in the cover letter to be signed by the Chairman. This letter is to be brought back to the December 14, 2010 Internal Affairs Meeting for review.

Commissioners participating: Graham, Edgar, Skop, Brisé, Balbis



3. Staff's Review of the 2010 Ten-Year Site Plans for Florida's Electric Utilities.

This item was deferred to the December 14, 2010 Internal Affairs Meeting.

4. Follow-up discussion regarding Federal Universal Service Program.

A discussion was held concerning this issue. The Commission's concern regarding the inequities of the funding for the Federal Universal Service Program will be included in the cover letter for the Lifeline report.

Commissioners participating: Graham, Edgar, Skop, Brisé, Balbis

5. Other matters, if any.

- a. Ms. Pennington updated the Commissioners on legislative matters of interest to the Commission.
- b. The Chairman asked staff what procedures can be taken to allow the Commission to proceed with certain FPL dockets. After some discussion, Commissioner Brisé made a motion to move forward with a narrowly-prepared motion, requesting that the 1<sup>st</sup> District Court of Appeal allow the Commission to proceed with Docket Nos. 080677-EI/090130-EI, and that Commissioner Skop be allowed to participate. This motion would not be filed if opposed by FPL or withdrawn should an opposing motion from FPL be filed. Commissioner Brisé's motion was seconded and approved.

Subsequently, staff was directed to prepare a motion, to be filed in the 1<sup>st</sup> District Court of Appeal on December 15, 2010, requesting that the stay be lifted due to a change in the factual issues.

Commissioners participating: Graham, Edgar, Skop, Brisé, Balbis




State of Florida



## Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD  
TALLAHASSEE, FLORIDA 32399-0850

**-M-E-M-O-R-A-N-D-U-M-**

**DATE:** December 2, 2010  
**TO:** Timothy J. Devlin, Executive Director  
**FROM:** Marshall W. Willis, Director, Division of Economic Regulation   
**RE:** Analysis of Responses regarding Fuel Price Hedging

**Critical Information** – Please place on December 14, 2010, Internal Affairs.  
Briefing only, no action required.

At the November 9, 2010 Internal Affairs Meeting the Commission instructed staff to gather information from parties to the fuel docket regarding hedging. The Commission wanted to know if parties believe there are problems with current hedging practices and where improvements could be made. In addition, the Commission asked whether utilities have the ability, within current hedging guidelines, to take advantage of low market prices, and whether there was a process in place whereby utilities can adjust hedging plans when an opportunity to benefit customers presents itself.

On November 12, 2010, staff sent a questionnaire to parties in the fuel docket containing seven general questions, along with an additional four questions directed specifically to the utilities. Staff received responses to the questionnaire on November 19, 2010, from the following utilities: Florida Power and Light Company (FPL), Gulf Power Company (Gulf), Progress Energy Florida (PEF), and Tampa Electric Company (TECO). The Florida Industrial Power Users Group (FIPUG), the Office of Public Counsel (OPC), the Office of the Attorney General (AG), and the Federal Executive Agencies (FEA) also responded. FIPUG provided detailed responses to the questionnaire, and FEA agreed with FIPUG. OPC responded by submitting comments that OPC filed in the 2008 hedging proceeding, and the AG's office agreed with OPC. The comments are attached for your review.

Below is a brief summary of how the parties addressed the topics raised by the Commissioners, and staff's opinion on how best to proceed from here.

### Questionnaire Responses

FIPUG believes the utilities' existing hedging practices have a number of problems. FIPUG stated that specific risks subject to mitigation should be the target of utility hedging practices, rather than targeting volatility. Staff infers that the specific risks FIPUG recommends addressing are those that might lead to increases in fuel factors. In addition, FIPUG believes that the present approach, which relies on submission of a Risk Management Plan for preapproval, with that plan being followed formulaically, does not benefit customers. FIPUG states that the plans require certain volumes of fuel to be hedged and do not allow the utility the flexibility to take advantage of changes in market conditions.

FIPUG questions the lack of quantitative benchmarks in the Risk Management Plans. FIPUG suggests, as an example of a benchmark, that the results of a utility's hedging practices should be measured against the market (i.e., how well the hedges mitigated market risk). FIPUG also expresses concern over a lack of loss limits. A loss limit creates a threshold under which a utility would be required to take action, acting as a restraint on the trading floor's ability to enter into transactions that will result in losses charged to ratepayers. According to FIPUG, the proposed loss limits would require the utility to stop hedging and reverse some outstanding hedging transactions to mitigate losses. The loss limits would force the utility to revise its hedging approach, file a revised plan, or otherwise demonstrate why the continuation of the plan would ultimately serve consumers' interests. FIPUG feels the aforementioned issues should be discussed at a hedging workshop.

OPC filed comments that it originally provided in 2008, in Docket No. 080001-EI. OPC stated that utility hedging activities are of limited value to customers and that the levelized fuel cost recovery mechanism already protects customers from volatile fuel prices. According to OPC, regulatory risk to the utility is lower because, by following its risk management plans and the hedging guidelines, the utility has more certainty regarding approval of its hedging activities. OPC further noted that the utility could derive financial benefits, such as more stable cash flow, from hedging and, if so, that should have the effect of lowering the utility's authorized ROE.

The utilities, however, do not believe there are problems with current hedging practices or that the Commission should alter the current hedging guidelines. The utilities assert that the purpose of hedging is to decrease exposure to volatile fuel prices on a long-term basis. As such, hedging has reduced fuel price volatility, delivered greater price certainty to customers, and reduced the need for fuel cost driven mid-course corrections.

The utilities risk management plans allow for a range of volumes of fuel that can be hedged. Within this range, the utilities generally target a percentage of their expected natural gas burn as the amount to hedge. The utilities can then adjust the amount to be hedged, within the approved range, as forecasted burn volumes are updated. Market prices during any given period will generally be captured within hedging programs due to the layering of hedges over time. Utility fuel programs take advantage of low spot prices, as observed in recent fuel markets, within the unhedged portions of fuel portfolios.

Although there are varying opinions regarding the flexibility of current hedging guidelines, in general the utilities agree that consistent implementation of structured plans better accomplishes the objective of hedging. The utilities have structured, disciplined approaches to their hedging activities, and the utilities believe their respective hedging programs are working as intended.

#### Staff Comments

The Commission has determined that utility hedging programs are designed to mitigate large price spikes, and that hedging is not to be based on speculation (guessing the market). Hedging is not designed to generate profits or gains; rather, over the long run the expectation is that gains and losses will cancel out. The benefit of fuel price hedging is that it reduces the customers' exposure to volatile changes in fuel prices, particularly natural gas prices.

Natural gas is a commodity with spot and futures prices determined in a market with a large number of buyers and sellers. These prices are influenced by supply and demand

conditions, such as industrial demand, storage levels, weather forecasts, etc. Although the spot and futures markets are efficient, in that all publicly available information is reflected in current prices, the prices can fluctuate widely day-to-day. Therefore, natural gas prices cannot be predicted in any accurate, consistent manner. Since the price spikes of 2008, natural gas prices have trended steadily downward due to the slow economic recovery, increased supply from shale gas production, and new development in the natural gas industry.

Staff believes that an emphasis upon market timing can lead to speculation in the market, where utilities attempt to guess the best time to hedge in order to capture the lowest price. Since the natural gas market is affected by multiple variables, employing a market timing strategy to pick the low point for prices is unlikely to successfully provide consistent gains. In other words, utilities will experience losses, even if their intent is to avoid such losses. Staff believes an emphasis on market timing should not be a part of a utility risk management plan or hedging program. The focus of a hedging program should be reducing price volatility through consistent implementation of structured hedging strategies. However, utilities do have the flexibility to increase or decrease the volume of fuel hedged within approved ranges, and low market prices in any given period should be captured by the layered approach to hedging. In addition, if conditions necessitated a departure from a utility's approved hedging plan, that utility could make a formal request for review and approval to the Commission.

#### Conclusion

Staff believes, based upon the questionnaire responses, our analysis of hedging in this year's fuel clause, as well as the extensive analysis that occurred in 2008, that hedging is working as the Commission contemplated in its orders. Hedging was established in response to a period of large spikes in the price of natural gas, in an effort to protect customers from the large increases in rates that result from these spikes. Of course, during times of historically low prices for natural gas, the tendency will be to question the effectiveness of hedging. Staff believes that will always be the case – hedging will be cheered when there are gains and decried when there are losses. Nevertheless, staff believes hedging does provide a benefit to customers, and that current hedging practices are functioning as the Commission intended. At this time, staff does not believe there is a need to revisit or otherwise revise the hedging guidelines that are in place. However, if the Commission would like an opportunity for a more in-depth analysis of current hedging practices or additional information, staff could conduct an educational workshop on hedging in 2011. The Commission could hear a summary of each utility's hedging programs, and other parties could have an opportunity to present their ideas on how guidelines should be changed.

MW/PL:kb

Attachment

Cc: Cheryl Bulecza-Banks  
Lisa Bennett  
Cayce Hinton  
Mary Anne Helton

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November 18, 2010

Lisa C. Bennett, Senior Attorney  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

Re: Staff's Data Request No. 1 dated November 12, 2010 in  
Docket No. 100001-EI

Dear Ms. Bennett,

This letter is in response to your letter dated November 12, 2010. While Gulf believes that the current Commission guidelines regarding electric utility Risk Management Plans and hedging practices continue to be appropriate, we appreciate the opportunity to participate in this review and any future activities regarding this subject the Commission chooses to initiate.

General Questions:

1. Do you believe there are problems with current hedging practices? If so, explain.

ANSWER: No.

2. Pursuant to Order No. PSC-02-1484-FOF-EI in Docket No. 011605-EI, the Commission developed a checklist of guidelines for the utilities to follow in hedging (Exhibit TBF-4 of the order). Are there any items on that checklist that:
  - a. Need to be revised, or refreshed.
  - b. Need to be deleted, or are no longer applicable;
  - c. Need to be added to the list?

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ANSWER:

- a. No.
- b. No.
- c. No.

3. Do you believe certain aspects of current hedging practices should be modified to derive greater benefit for customers? If so, explain what should be modified and why.

ANSWER: No.

4. Does the purpose of hedging include taking advantage of low market prices at any given time, or is hedging better accomplished by planning amounts to be hedged at designated intervals and then strictly adhering to that plan?

ANSWER: No. The purpose of hedging is to mitigate fuel price volatility. Gulf's current hedging plan allows for flexibility as to the timing of entering hedging transactions and the quantity of fuel hedged in order to take into consideration changes in the fuel markets over time. While Gulf's preference is to preserve that level of flexibility in its hedging plan, we recognize that planning amounts to be hedged at designated intervals and strictly adhering to that plan is another viable hedging strategy.

5. Do you believe it would be appropriate for a utility to deviate from an approved plan in order to take advantage of low market price at any given time? Explain.

ANSWER: Gulf believes the current guidelines allow each utility to develop a Risk Management Plan for Fuel Procurement that includes the flexibility to adjust the implementation of its hedging strategy in reaction to the market price of fuel. The decision to include this flexibility in the plan should be based on each utility's unique needs.

6. Does Order No. PSC-08-0667-PAA-EI address a utility's ability to deviate from approved plans in order to take advantage of low market prices at any given time? Explain.

ANSWER: The order states "In addition, the guidelines allow the utilities flexibility for creating and implementing risk management plans." Furthermore, the Commission has retained the discretion to determine the prudence of hedging

results and acknowledges that the guidelines are not binding the Commission's review of a utility's hedging practices.

7. If utilities were required to obtain approval to deviate from hedging plans to take advantage of low market prices, how should that be accomplished procedurally?

ANSWER: Assuming a utility's current hedging plan does not provide the flexibility to take advantage of low market prices, a utility should have the option of requesting approval of a change to its hedging plan from the Commission on an expedited basis.

IOU Only Questions:

1. Do the techniques and principles of hedging include the ability to respond to market prices at any given time to hedge more or less? If so, explain. If not, should it?

ANSWER: Yes. As long as the current percent of projected burn hedged is within the range established in the hedging plan the utility can effectively react to changes in market price forecasts to add to its current hedge position or to not enter into additional hedge positions at any point in time. The utility is clearly prohibited from entering into speculative hedge positions by exceeding the amount of the projected burn.

2. Does your current hedging plan provide the flexibility to respond to current market prices by hedging more or less? Explain.

ANSWER: Yes, while Gulf's hedging plan establishes a range of hedge positions relative to the projected natural gas burn it also affords the flexibility to hedge volumes of gas above or below that range should market conditions warrant such activity.

3. Do current hedging plans prohibit your utility from responding to low market prices or otherwise acting to take advantage of time sensitive opportunities that would benefit customers?

ANSWER: No.



4. Given that the utility's risk management plan specifies ranges for the volume of natural gas to be hedged, what are the factors influencing the percentage within the range to be hedged?

ANSWER: Market price risk (volatility) or operational changes such as plant outages influence the quantity of natural gas to be hedged.

Should you have any questions, please do not hesitate to give me a call at 850-469-3316.

Sincerely,



Russell A. Badders  
For the Firm

cc: Ann Cole, Office of Commission Clerk  
Erik Saylor, Office of General Counsel  
Pete Lester, Division of Economic Regulation



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November 19, 2010

VIA HAND DELIVERY

Ms. Ann Cole  
Commission Clerk  
Florida Public Service Commission  
2540 Shumard Oak Boulevard, Room 110  
Tallahassee, FL 32399-0850


**RE: Docket No. 100001-EI**

Dear Ms. Cole:

Enclosed for filing on behalf of Florida Power & Light Company are the original and five (5) copies of its responses to Staff's Data Request No. 1, dated November 12, 2010.

Please contact me if you or your Staff has any questions regarding this filing.

Sincerely,

  
for John T. Butler

Enclosure

cc: Counsel for Parties of Record (w/encl.)

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Florida Power & Light Company  
Docket No. 100001-EI  
Staff's Data Request No. 1 - General Questions  
Question No. 1  
Page 1 of 1

**Q.**

**Do you believe there are problems with current hedging practices? If so, explain.**

**A.**

No, FPL does not believe there are problems with the current hedging practices. The primary objective of FPL's hedging programs has been, and remains, the reduction of fuel price volatility. To that end, FPL's hedging programs have reduced fuel price volatility, delivered greater price certainty to customers, and reduced the need for fuel cost driven mid-course corrections, while avoiding speculative hedging strategies aimed at "out guessing" the market. At the same time, FPL's fuel programs have been able to take advantage of the current low spot prices observed in recent fuel markets with respect to the unhedged portions of its fuel portfolio, as well as capturing low prices for future fuel deliveries by virtue of the manner in which FPL layers in its hedges over time.

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**Florida Power & Light Company  
Docket No. 100001-EI  
Staff's Data Request No. 1 - General Questions  
Question No. 2  
Page 1 of 1**

**Q.**

**Pursuant to Order No. PSC-02-1484-FOF-EI, in Docket No. 011605-EI, the Commission developed a checklist of guidelines for the utilities to follow in hedging (Exhibit TFB-4 of the order). Are there any items on that checklist that:**

**A: need to be revised, or refreshed.**

**B: need to be deleted, or are no longer applicable;**

**C: need to be added to the list?**

**A.**

The guidelines noted in Order No. PSC-02-1484-FOF-EI, along with the clarifications contained in Order No. PSC-08-0667-PAA-EI, provide adequate regulatory support and direction from the Commission regarding the characteristics and documentation each prudently managed, non-speculative hedging plan should include. FPL has not identified any items that should be added, revised, or removed from Exhibit TFB-4 at this time.

**Florida Power & Light Company  
Docket No. 100001-EI  
Staff's Data Request No. 1 - General Questions  
Question No. 3  
Page 1 of 1**

**Q.**

**Do you believe certain aspects of current hedging practices should be modified to derive greater benefit for customers? If so, explain what should be modified and why.**

**A.**

No, FPL does not believe that any aspects of current hedging practices should be modified in order to derive greater benefits for customers. The current hedging practices have been beneficial for customers through reduced fuel price volatility that, in turn, has delivered greater price certainty to customers and reduced the need for fuel cost driven mid-course corrections. Additionally, while customers have received these benefits associated with the hedged portion of FPL's fuel portfolio, they have also received the benefit of the more recent lower natural gas prices through the unhedged portion of the fuel portfolio.

As acknowledged by the Commission, the primary purpose of a hedging program is not to reduce an IOU's fuel costs paid by customers over time, but rather to reduce the variability or volatility in those fuel costs over time. The associated lost opportunity for savings in fuel costs to be paid by customers when fuel prices decline has been recognized as a reasonable trade-off for reducing customers' exposure to fuel price increases. FPL believes its current hedging practices properly incorporate both the benefits associated with reducing customer exposure to fuel price increases and the corresponding trade-off described by the Commission as a lost opportunity for savings due to fuel price decreases.

**Florida Power & Light Company  
Docket No. 100001-EI  
Staff's Data Request No. 1 - General Questions  
Question No. 4  
Page 1 of 1**

**Q.**

**Does the purpose of hedging include taking advantage of low market prices at any given time, or is hedging better accomplished by planning amounts to be hedged at designated intervals and then strictly adhering to that plan?**

**A.**

Hedging is best accomplished by developing a properly detailed plan with prescribed parameters, which could include volumetric amounts, timing intervals, and various other appropriate components, and then following that plan. The plan should allow for a reasonable amount of flexibility within the prescribed parameters, but should be specific enough to avoid undisciplined and/or speculative decisions. Following such a plan does not preclude a utility from taking advantage of low market prices at certain times. For example, FPL's plan includes the layering in of hedges over a long period of time which has allowed FPL to execute its most recent hedges during the current trend of lower natural gas prices.

**Florida Power & Light Company  
Docket No. 100001-EI  
Staff's Data Request No. 1 - General Questions  
Question No. 5  
Page 1 of 1**

**Q.**

**Do you believe it would be appropriate for a utility to deviate from an approved hedging plan in order to take advantage of low market prices at any given time? Explain.**

**A.**

As described in Section IV (f) of the Hedging Order Clarification Guidelines approved in Order No. PSC-08-0667-PAA-EI, each utility has been provided the opportunity to bring requests for modifying/deviating from a previously approved risk management plan to the Commission for consideration and approval. However, if a modification was intended to anticipate the most favorable point in time at which to place hedges or was based upon a forecast(s) about whether the utility expects markets to ultimately rise or fall, that would be considered speculative in nature (and may be inconsistent with Section IV (e) of the guidelines), and FPL does not believe that it would be an appropriate component of its hedging program.

**Florida Power & Light Company  
Docket No. 100001-EI  
Staff's Data Request No. 1 - General Questions  
Question No. 6  
Page 1 of 1**

**Q.**

**Does Order No. PSC-08-0667-PAA-EI address a utility's ability to deviate from approved plans in order to take advantage of low market prices at any given time? Explain**

**A.**

As discussed in response to Question 5, Section IV (f) of the Hedging Order Clarification Guidelines approved in Order No. PSC-08-0667-PAA-EI includes provisions that allow for a utility to both request a deviation from one or more of the guiding principles and request a modification or exception to a previously approved risk management plan. Theoretically, a utility could use these provisions to seek Commission approval for a deviation from its approved plan to take advantage of low market prices at any given time. However, as discussed in response to Question 5, neither Order No. PSC-02-1484-FOF-EI nor Order No. PSC-08-0667-PAA-EI supports the use of utility risk management plans to pursue speculative strategies.



**Florida Power & Light Company**  
**Docket No. 100001-EI**  
**Staff's Data Request No. 1 - General Questions**  
**Question No. 7**  
**Page 1 of 1**

**Q.**

**If utilities were required to obtain Commission approval to deviate from hedging plans to take advantage of low market prices, how should that be accomplished procedurally?**

**A.**

A utility has two methods available by which it could seek approval from the Commission for strategies and procedures intended to take advantage of low market prices when they occur. First, a utility could include a strategy and procedures for attempting to take advantage of low market prices as part of its risk management plan that is filed along with its annual Estimated/Actual Filing, which typically occurs in early August. If the Commission approved the strategy and procedures, then the utility could utilize them prospectively in an attempt to take advantage of low market prices. Alternatively, if a utility's then-current risk management plan did not contain a strategy or procedures for attempting to take advantage of currently low market prices, the utility could file a request with the Commission to deviate from the plan under Section IV (f) of the Hedging Order Clarification Guidelines approved in Order No. PSC-08-0667-PAA-EI. This request would then be reviewed and considered for approval. Because of market dynamics, the timing of approval for a deviation request would be extremely important. A very short review period, less than 30 days, would probably be necessary, and it is not clear procedures exist for the Commission to take definitive action in such a short time frame.

Please note that, as explained in prior responses, including strategies intended to anticipate the most favorable point in time during which to place hedges or predict whether markets will ultimately rise or fall would be speculative in nature, and FPL does not believe that such strategies would be an appropriate part of its hedging program.

**Florida Power & Light Company  
Docket No. 100001-EI  
Staff's Data Request No. 1 - Questions for IOUs Only  
Question No. 1  
Page 1 of 1**

**Q.**

**Do the techniques and principles of hedging include the ability to respond to market prices at any given time to hedge more or less? If so, explain. If not, should it?**

**A.**

Commission approved hedging principles properly do not support utilities randomly responding to market prices that currently appear to be "low" or "high". The guiding principle, as prescribed by the Commission, behind utility hedging programs is to reduce fuel price volatility. The programs should not include the ability to respond to market prices by trying to "out-guess" the market with strategies intended to anticipate the most favorable point in time to place hedges or predict whether markets will ultimately rise or fall, in hope of potentially returning savings to customers.

The primary objective of FPL's hedging program has been, and remains, the reduction of fuel price volatility. In general, FPL's objective is to limit the likelihood that its actual fuel costs in the hedged year will vary substantially from FPL's fuel cost projection for that year. Reducing fuel price volatility helps deliver greater price certainty to FPL's customers. As a consequence of volatility reduction, the hedging program will show savings in some years and losses in others, with the expectation that, over time, the cumulative impact of FPL's hedging program will be neutral and not result in significant savings or losses to FPL's customers.

**Florida Power & Light Company  
Docket No. 100001-EI  
Staff's Data Request No. 1 - Questions for IOUs Only  
Question No. 2  
Page 1 of 1**

**Q.**

**Does your current hedging plan provide the flexibility to respond to current market prices by hedging more or less? Explain.**

**A.**

FPL's current hedging plan provides a specified range of flexibility to respond to current market prices by including volumetric bands that allow for lower or higher hedge volumes to be executed in a particular period. However, FPL's current hedging plan does not provide the flexibility to speculate about the most favorable point in time to place hedges or predict whether current market prices will ultimately be "high" or "low," when compared to future prices.

After initial monthly target volumes have been hedged, rebalancing transactions are executed to maintain hedge percentages within approved tolerance bands. As stated in the annual risk management plan, FPL's projected hedge percentages are expected to change, within that specified range, from time to time due to rebalancing. The percentage changes are typically due to changes in market prices, which result in fuel switching opportunities that allow FPL customers to take advantage of lower cost fuel for generation, variations in projected unit outage schedules, or changes in FPL's load forecast.

**Florida Power & Light Company  
Docket No. 100001-EI  
Staff's Data Request No. 1 - Questions for IOUs Only  
Question No. 3  
Page 1 of 1**

**Q.**

**Do current hedging plans prohibit your utility from responding to low market prices or otherwise acting to take advantage of time sensitive opportunities that would benefit customers?**

**A.**

Current hedging plans do not prohibit FPL from responding to low market prices or time sensitive opportunities that could benefit customers. However, Commission orders do not support the inclusion of speculative strategies in utilities' hedging plans. FPL's current plan does not identify market price levels that would be considered as "low" or "high". Instead, FPL's approved plan includes a certain amount of flexibility that allows the utility to take advantage of relatively low prices and time sensitive opportunities which might occur during a specific month, while adhering to the overall strategy approved by the Commission during the annual fuel hearing.

The primary objective of FPL's hedging program has been, and remains, the reduction of price volatility. An attempt to capture "low" or "high" market prices for future fuel deliveries, with the intention of generating savings for customers in comparison to what spot fuel prices ultimately would have been at the time of delivery, would be purely speculative and the outcome would be unpredictable.

**Florida Power & Light Company**  
**Docket No. 100001-EI**  
**Staff's Data Request No. 1 - Questions for IOUs Only**  
**Question No. 4**  
**Page 1 of 1**

**Q.**

**Given that the utility's risk management plan specifies ranges for the volumes of natural gas to be hedged, what are the factors influencing the percentage within that range to be hedged?**

**A.**

FPL's risk management plan is designed with the objective of hedging a portion of its total projected annual natural gas volume requirements. These hedges are currently executed within a hedging window with transactions being executed during every month of the window.

Volume projections are dynamic and influenced by many different factors, including, but not limited to, customer demand, fuel-switching economics, planned outages, and system dispatch optimization. This implies that the program anticipates some variability in projected natural gas volumes over time. Additionally, FPL's projected load and fuel consumption have a strong seasonality component that influences the actual volume of natural gas consumed each month. FPL has been able to reduce the need to unnecessarily rebalance its portfolio by including tolerance bands around its hedge targets. During each month of the hedging window, FPL plans to hedge an amount that falls within a range around its target volume. This range provides FPL the operational flexibility to spread the hedges over the month and potentially avoid placing hedges on days when extraordinary events, such as hurricanes, create short-term aberrations in market prices.



November 19, 2010

OFFICE OF  
ECONOMIC REGULATION

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FLORIDA PUBLIC SERVICE  
COMMISSION

**VIA HAND DELIVERY**

Ms. Ann Cole, Commission Clerk  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

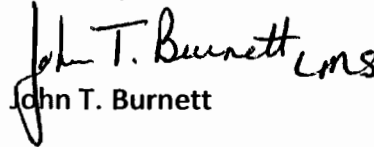
Re: Fuel and purchased power cost recovery clause with generating performance incentive factor; Docket No. 100001-EI

Dear Ms. Cole:

Please find enclosed for filing on behalf of Progress Energy Florida, Inc. ("PEF") the original and five (5) copies of PEF's responses to Staff's Hedging Data Request in the above referenced docket.

Thank you for your assistance in this matter. Please call me at (727) 820-5184 should you have any questions.

Sincerely,

  
John T. Burnett

JTB/lms

cc: Parties of Record

DOCUMENT NUMBER DATE

09539 NOV 19 0

FPSC-COMMISSION CLERK

**PROGRESS ENERGY FLORIDA, INC.'S RESPONSES TO STAFF'S HEDGING DATA REQUEST  
DOCKET NO. 100001-EI**

GENERAL QUESTIONS

**Q1. Do you believe there are problems with current hedging practices? If so, explain.**

Response: PEF does not believe there are problems with current hedging practices.

**Q2. Pursuant to Order No. PSC-02-1484-FOF-EI, in Docket No. 011605-EI, the Commission developed a checklist of guidelines for the utilities to follow in hedging (Exhibit TFB-4 of the order). Are there any items on that checklist that:**

**A: need to be revised, or refreshed.**

**B: need to be deleted, or are no longer applicable;**

**C: need to be added to the list?**

Response: PEF does not believe the checklist of hedging guidelines developed by the Commission for IOU's to follow should be revised, refreshed or deleted. The checklist provides an outline for the utilities to follow in its Risk Management Plan that is submitted to the Commission and Stakeholders, and provides a useful guide for the Commission to review the company's hedging activities. The Risk Management Plan identifies how PEF is engaging in competitive fuel procurement practices and activities and shows that PEF has the capabilities to perform active asset optimization and portfolio management activities to execute PEF's hedging program.

**Q3. Do you believe certain aspects of current hedging practices should be modified to derive greater benefit for customers? If so, explain what should be modified and why.**

Response: PEF does not believe its hedging program should be modified at this time. Current practices result in a consistent approach to executing a structured plan and do not involve attempting to speculate or out guess the market.

**Q4. Does the purpose of hedging include taking advantage of low market prices at any given time, or is hedging better accomplished by planning amounts to be hedged at designated intervals and then strictly adhering to that plan?**

Response: The purpose of PEF's hedging program is to reduce overall price volatility and provide greater price certainty over time for customers. PEF's structured plan does not involve speculating on prices or trying to out guess the market, and PEF's plan involves executing transactions over time within the parameters of its plan. PEF's structured plan design establishes target hedge percentages for natural gas, fuel oil and coal rail and river barge transportation and also states that PEF can make adjustments if

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FPSC-COMMISSION OFFICE

needed to remain within targeted hedge percentage ranges. PEF established hedge percentage ranges provide a minimum volume of forecasted burns and exposures to be hedged over time with an emphasis on natural gas as it represents the largest fuel cost component. These ranges were established with some degree of flexibility and recognition that forecasted fuel burns can change over time due to deviations in forecasted burns caused by dynamic factors including, but not limited to, fuel price relationships, load variability and forecasted plant operations. As such, PEF has established targeted hedging percentages with established hedging ranges. PEF believes its plan, with the forward rolling 36 month period for natural gas, allows for some flexibility to hedge within its ranges. However, the current approved plan does not allow PEF the flexibility to hedge for periods beyond a forward rolling 36 month time period.

Per its Plan, PEF continues to layer transactions in the current lower market price environment as it works towards its targeted hedging percentages. For illustration of some recent hedging activities, PEF has executed the following hedging transactions:

- On November 3, 2010, PEF executed a hedge transaction for the period of April through October 2011 at \$[REDACTED] per MMBtu.
- On November 12, 2010, PEF executed a hedge transaction for the months of January through March 2011 at \$[REDACTED] per MMBtu.
- On November 15, 2010, PEF executed a hedging transaction for December 2010 at [REDACTED] per MMBtu.

These transactions were not executed because PEF believed or perceived natural gas prices are low; they were executed as part of PEF's on-going execution of its hedging plan.

**Q5. Do you believe it would be appropriate for a utility to deviate from an approved hedging plan in order to take advantage of low market prices at any given time? Explain.**

**Response:** PEF believes that the answer to this question is dependent on particular facts and circumstances. As a general matter, and under typical conditions, it is not likely that PEF would seek to deviate from an approved plan. However, if certain facts and circumstances led PEF to believe that a deviation would be appropriate, PEF would make a formal request for review and approval to the Commission.

**Q6. Does Order No. PSC-08-0667-PAA-EI address a utility's ability to deviate from approved plans in order to take advantage of low market prices at any given time? Explain.**

**Response:** In PEF's interpretation, Order number PSC-08-0667-PPA-EI on Exhibit 1 Section IV, requires the utilities to file exceptions or modifications to the approved Plan would need to be filed and approved by the Commission. As noted in general response



4 above, PEF does believe that its structured hedging plan with annual hedging percentage target ranges for each of the respective periods does provide it some degree of flexibility. In fact, one of the drivers of PEF's hedging percentage ranges in its Risk Management Guidelines for the various periods is to provide some degree of flexibility for dynamic factors that impact costs and forecasted burns.

**Q7. If utilities were required to obtain Commission approval to deviate from hedging plans to take advantage of low market prices, how should that be accomplished procedurally?**

Response: PEF believes that this question would need to be fully vetted and analyzed with all relevant stakeholders. In addition, low market prices are relative at any point in time and PEF's current activities are participating in the current lower price environment. However, if PEF desired to deviate from its Plan, it needs to be recognized that time would be of the essence in these situations. PEF believes that the process would need to include: 1) a standard of the type of transactions the Commission would consider if the utilities desired to deviate from its hedging plans; 2) a communication format procedure established so utilities could submit potential transactions to the Commission and quickly vet questions and data requests; and 3) timely approval or non-approval from the Commission.

#### QUESTIONS FOR IOU's

**Q1. Do the techniques and principles of hedging include the ability to respond to market prices at any given time to hedge more or less? If so, explain. If not, should it?**

Response: A consistent hedging approach should be applied to meet the objective and benefit of hedging over time which is to reduce price risk and provide greater price certainty. A hedging plan should provide flexibility to respond to dynamic factors. As PEF's plan illustrates, the company believes this is accomplished by using minimum or targeted hedge percentages along with hedging ranges to provide some degree of flexibility.

**Q2. Does your current hedging plan provide the flexibility to respond to current market prices by hedging more or less? Explain.**

Response: As noted in general Questions 4 and 6 above, PEF believes its current structured hedge plan provides some degree of flexibility as it has percentage targets and outlined percentage ranges for the various time periods in its guidelines.

**Q3. Do current hedging plans prohibit your utility from responding to low market prices or otherwise acting to take advantage of time sensitive opportunities that would benefit customers?**

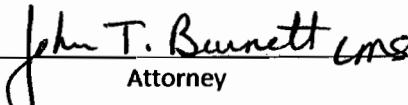
**Response:** No. For example, with respect to natural gas, PEF's current structured plan allows PEF to execute hedge transactions for a forward rolling 36 month time period. This provides benefits to the customer as PEF is reducing price volatility over time. Market prices can change and prices may go up or down further. The execution approach of layering in hedges over time in a non-speculative manner takes the guess work out of hedging and accomplishes the stated objective and purpose of hedging. In addition, as noted in general responses in 4 and 6, PEF is executing hedges for a forward rolling 36 month time period for natural gas and is executing hedging transactions in the current lower market price environment. Although not speculating on prices, all else being equal, lower prices may offer a utility the opportunity to hedge at higher percentage levels within its hedging range plan to provide greater cost certainty in uncertain markets.

**Q4. Given that the utility's risk management plan specifies ranges for the volumes of natural gas to be hedged, what are the factors influencing the percentage within that range to be hedged?**

**Response:** The target hedge percentage ranges of the forecasted annual natural gas burns are outlined in the PEF's Risk Management Plan and Guidelines. The primary drivers that influence the percentage to be hedged over time are: 1) the fuel mix makeup and 2) the phased execution of the layering in hedging transactions over time. Natural gas is PEF's largest fuel component and makes up a majority of the hedging activity. The hedging targets and ranges provide the basis for consistently executing PEF's strategy of layering in hedging transactions over time to reduce price risk and provide greater certainty for PEF's customers. PEF currently has a forward rolling 36 month hedging strategy for natural gas and has established annual targeted ranges that provide for higher hedging target ranges for annual periods that are closer to the delivery period and lower hedging target ranges for delivery periods that are further out in time. This approach will allow PEF to effectively execute a dollar cost averaging affect over time and allow it to participate in the current price environment.

**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished via electronic mail to the following this 19<sup>th</sup> day of November, 2010.

  
\_\_\_\_\_  
Attorney

<p>Lisa Bennett, Esq. Office of General Counsel Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 <a href="mailto:lbennett@psc.state.fl.us">lbennett@psc.state.fl.us</a></p> <p>James D. Beasley, Esq. Ausley &amp; McMullen Law Firm P.O. Box 391 Tallahassee, FL 32302 <a href="mailto:jbeasley@ausley.com">jbeasley@ausley.com</a></p> <p>John T. Butler, Esq. Florida Power &amp; Light Co. 700 Universe Boulevard Juno Beach, FL 33408 <a href="mailto:John.butler@fpl.com">John.butler@fpl.com</a></p> <p>Ken Hoffman Florida Power &amp; Light 215 S. Monroe Street, Ste. 810 Tallahassee, FL 32301-1859 <a href="mailto:Ken.hoffman@fpl.com">Ken.hoffman@fpl.com</a></p> <p>Jeffrey A. Stone, Esq. Russell A. Badders, Esq. Steven R. Griffin Begg &amp; Lane Law Firm P.O. Box 12950 Pensacola, FL 32591 <a href="mailto:jas@beggslane.com">jas@beggslane.com</a> <a href="mailto:rab@beggslane.com">rab@beggslane.com</a> <a href="mailto:srg@beggslane.com">srg@beggslane.com</a></p> <p>Ms. Paula K. Brown Tampa Electric Company P.O. Box 111 Tampa, FL 33601 <a href="mailto:regdept@tecoenergy.com">regdept@tecoenergy.com</a></p> <p>Ms. Susan D. Ritenour Gulf Power Company One Energy Place Pensacola, FL 32520-0780 <a href="mailto:sdriteno@southernco.com">sdriteno@southernco.com</a></p>	<p>Florida Industrial Power Users Group c/o John McWhirter, Jr. McWhirter Law Firm P.O. Box 3350 Tampa, FL 33601 <a href="mailto:jmcwhirter@mac-law.com">jmcwhirter@mac-law.com</a></p> <p>Beth Keating Gunster, Yoakley &amp; Stewart, P.A. 215 S. Monroe St., Ste 618 Tallahassee, FL 32301 <a href="mailto:bkeating@gunster.com">bkeating@gunster.com</a></p> <p>J.R.Kelly/Charles Rehwinkel/Charlie Beck Office of Public Counsel c/o The Florida Legislature 111 West Madison Street, #812 Tallahassee, FL 32399 <a href="mailto:Kelly.jr@leg.state.fl.us">Kelly.jr@leg.state.fl.us</a> <a href="mailto:Rehwinkel.charles@leg.state.fl.us">Rehwinkel.charles@leg.state.fl.us</a> <a href="mailto:Beck.charles@leg.state.fl.us">Beck.charles@leg.state.fl.us</a></p> <p>George Bachman Florida Public Utilities Company P.O. Box 3395 West Palm Beach, FL 33402-3395 <a href="mailto:gbachman@fpuc.com">gbachman@fpuc.com</a></p> <p>James W. Brew, Esq. c/o Brickfield Law Firm 1025 Thomas Jefferson St., NW 8<sup>th</sup> Floor, West Tower Washington, DC 20007 <a href="mailto:jbrew@bbrslaw.com">jbrew@bbrslaw.com</a></p> <p>Keefe Law Firm Vicki Gordon Kaufman/Jon C. Moyle, Jr. 118 North Gadsden Street Tallahassee, FL 32301 <a href="mailto:vkaufman@kagmlaw.com">vkaufman@kagmlaw.com</a></p> <p>Ms. Cecilia Bradley Office of the Attorney General The Capitol - PL01 Tallahassee, FL 32399-1050 <a href="mailto:Cecilia.bradley@myfloridalegal.com">Cecilia.bradley@myfloridalegal.com</a></p>
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**Florida Retail Federation**  
**Robert Scheffel Wright/John T. LaVia,**  
**c/o Young Law Firm**  
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# AUSLEY & McMULLEN

ATTORNEYS AND COUNSELORS AT LAW

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November 19, 2010

HAND DELIVERED

Ms. Ann Cole, Director  
Division of Commission Clerk  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

Re: Fuel and Purchased Power Cost Recovery Clause with Generating  
Performance Incentive Factor; FPSC Docket No. 100001-EI

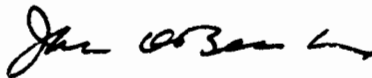
Dear Ms. Cole:

Enclosed for filing in the above docket are the original and five copies of Tampa Electric Company's answers to the Florida Public Service Commission Staff's Data Request No. 1, propounded and served by U. S. Mail on November 12, 2010.

Please acknowledge receipt and filing of the above by stamping the duplicate copy of this letter and returning same to this writer.

Thank you for your assistance in connection with this matter.

Sincerely,



James D. Beasley

JDB/pp  
Enclosure

cc: Lisa Bennett (w/enc.)  
Erik Sayler (w/enc.)  
Pete Lester (w/enc.)  
All Parties of Record (w/enc.)

**General Questions:**

1. Do you believe there are problems with current hedging practices? If so, explain.
  - A. No. The objective of Tampa Electric's current hedging activity, in accordance with its approved risk management plan, is to mitigate major swings in commodity pricing. Tampa Electric believes that its current hedging strategies adequately reduce the overall price volatility for its customers.

- 2.** Pursuant to Order No. PSC-02-1484-FOF-EI, in Docket No. 011605-EI, the Commission developed a checklist of guidelines for the utilities to follow in hedging (Exhibit TFB-4 of the order). Are there any items on that checklist that:

A: need to be revised, or refreshed.

B: need to be deleted, or are no longer applicable;

C: need to be added to the list?

- A.** No. Tampa Electric believes that the checklist is sufficient.

- 3.** Do you believe certain aspects of current hedging practices should be modified to derive greater benefit for customers? If so, explain what should be modified and why.
  - A.** Tampa Electric believes its current hedging strategy derives benefit for its customers while adhering to a disciplined non-speculative risk management plan. Therefore, the company believes customers benefit most on a long-term basis from the decreased exposure to the volatile prices of fuel through the current plan guidelines approved by the Commission in Order No. PSC-02-1284-FOF-EI, in Docket No. 011605-EI.



- 4.** Does the purpose of hedging include taking advantage of low market prices at any given time, or is hedging better accomplished by planning amounts to be hedged at designated intervals and then strictly adhering to that plan?
  - A.** The objective of Tampa Electric's hedging strategy is to reduce uncertainty surrounding future commodity price movements, not to lock in what may be considered "low" prices at a given time. By implementing a hedging strategy, which allows hedging amounts within an authorized range up to 24 months into the future, Tampa Electric maintains an overall stratified hedged position that mitigates price volatility. As such, the company's overall stratified hedged position includes hedges at current "low" prices. Additionally, "low" is a relative term that varies with the market; therefore, if prices were to fall further, future hedges by the company will capture that pricing as well, thereby avoiding others second-guessing the company's decision if it were to deviate from its plan to take "advantage of low market prices".

- 5.** Do you believe it would be appropriate for a utility to deviate from an approved hedging plan in order to take advantage of low market prices at any given time? Explain.
- A.** No. Tampa Electric does not believe it would be prudent to deviate from the approved hedge plan unless there were clear, specific provisions within the approved plan or Commission Order.

- 6.** Does Order No. PSC-08-0667-PAA-EI address a utility's ability to deviate from approved plans in order to take advantage of low market prices at any given time? Explain
  - A.** No. Tampa Electric believes that the guidelines set forth in Order No. PSC-02-1484-FOF-EI, in Docket No. 011605-EI, along with the clarification provided in Order No. PSC-08-0667-PAA-EI, allow the utilities to develop and implement appropriate risk management programs for fuel procurement. However, they do not provide the utility the ability to deviate from the Commission approved risk management plan unless the modifications are filed and approved by the Commission.

- 7.** If utilities were required to obtain Commission approval to deviate from hedging plans in order to take advantage of low market prices, how should that be accomplished procedurally?
- A.** Tampa Electric believes its hedging strategy is appropriate to meet its objective of mitigating fuel price volatility. In the event utilities were required to obtain Commission approval to deviate from hedging plans in order to take advantage of lower market prices, the utility should file a petition with a revised hedging plan, requesting Commission approval of its the proposed changes.

**Questions for IOUs Only:**

1. Do the techniques and principles of hedging include the ability to respond to market prices at any given time to hedge more or less? If so, explain. If not, should it?
  - A. No. A well designed risk management plan requires systematic hedging that is not driven by price speculation. Including flexibility to respond to market prices could lead to speculative trading that would result in increased risks to Tampa Electric's customers.

- 2.** Does your current hedging plan provide the flexibility to respond to current market prices by hedging more or less? Explain.
- A.** Yes. Tampa Electric designates ranges for hedging at given intervals and has the flexibility to hedge anywhere within this range.

- 3.** Do current hedging plans prohibit your utility from responding to low market prices or otherwise acting to take advantage of time sensitive opportunities that would benefit customers?
  - A.** As previously stated, the objective of Tampa Electric's current hedge plan is to mitigate major swings in commodity pricing and reduce the overall volatility by participating in the market; therefore, the company's plan does not prohibit the company from responding to all prices in the market. However, it does require the company to operate within its disciplined non-speculative plan to achieve the company's hedging objectives.

- 4.** Given that the utility's risk management plan specifies ranges for the volumes of natural gas to be hedged, what are the factors influencing the percentage within that range to be hedged?
  - A.** The factors influencing the percentage of natural gas to be hedged within the range include forecasted unit operations, weather projections and volumetric variability.





**BILL McCOLLUM**  
**ATTORNEY GENERAL**  
**STATE OF FLORIDA**

**OFFICE OF THE ATTORNEY GENERAL**

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**Senior Assistant Attorney General**  
**PL-01 The Capitol**  
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**Telephone (850) 414-3300,**  
**Fax (850) 488-4872,**  
**Cecilia.bradley@myfloridalegal.com**

November 19, 2010

Ms. Ann Cole  
Commission Clerk  
Office of Commission Clerk  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850

This letter is in response to the November 12, 2010, letter of Ms. Lisa Bennett, Senior Attorney, concerning the hedging practices of utilities regulated by the Florida Public Service Commission.

The Office of the Attorney General concurs with the comments filed by the Office of Public Counsel.

Sincerely,

/s/ Cecilia Bradley  
Cecilia Bradley  
Senior Assistant Attorney General

cc: Parties of Record

DOCUMENT NUMBER - DATE

09545 NOV 19 0

FPSC-COMMISSION CLERK

**MIKE HARIDOPOLOS**  
*President of the Senate*



J.R. Kelly  
Public Counsel

**STATE OF FLORIDA**  
**OFFICE OF PUBLIC COUNSEL**

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**DEAN CANNON**  
*Speaker of the  
House of Representatives*



November 19, 2010

Ms. Ann Cole  
Commission Clerk  
Office of Commission Clerk  
2540 Shumard Oak Boulevard  
Tallahassee, Florida, 32399-0850

Re: Docket No. 100001-EI - Fuel and purchased power cost recovery clause with generating performance incentive factor.

Dear Ms. Cole:

I am writing this letter in response to the November 12, 2010 letter of Ms. Lisa Bennett, Senior Attorney concerning the hedging practices of utilities regulated by the Florida Public Service Commission.

We do not believe that the utilities have shown that their hedging programs are providing benefits to customers that are justified by the costs of hedging borne by customers. The attached comments filed in docket 080001-EI on September 3, 2008, more fully explain our position.

Sincerely,

A handwritten signature in cursive script that reads "Charlie Beck".

Charlie Beck  
Deputy Public Counsel

CB:bsr

DOCUMENT NUMBER-DATE

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FP00-COMMISSION CLERK

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

In Re: Fuel and Purchased Power )  
Cost Recovery Clause with )  
Generating Performance Incentive )  
Factor )

Docket No. 080001-EI

FILED: September 3, 2008

**OPC'S COMMENTS ON PROPOSED HEDGING GUIDELINES**

The Office of Public Counsel submits its observations and comments on the proposed hedging guidelines submitted by Florida Power & Light Company in Docket No. 080001-EI on August 5, 2008. For the following reasons, OPC opposes the request of FPL and the other major investor-owned electric utilities for approval of the proposed guidelines. With respect to reducing fuel price volatility felt by retail customers, which is the single purpose of hedging identified by the utilities, the hedging activities are of very limited value to customers, while the costs of those activities have never been quantified satisfactorily. However, by FPL's own admission, the hedging costs could be substantial. While the hedging programs do not add materially to the insulation against fuel price volatility already in place in the form of the levelized fuel cost recovery charge, it appears to OPC that the hedging transactions provide financial benefits to the utilities themselves. That being the case, if the utilities continue to hedge their fuel prices, the Commission should not relinquish its full ability to gauge the prudence of the utilities' transactions. The proposal contained in FPL's petition and the attached guidelines goes far beyond "clarifying" the Commission's 2002 order. It would sacrifice the Commission's ability to conduct full, after-the-fact prudence reviews in order to accede to the utilities' desire to reduce their regulatory risk through an "up front" sign-off. Even if the Commission were to entertain the request, such an explicit lowering of regulatory risk should be accompanied by a commensurate lowering of the authorized return on equity, but that is not part of the proposal.

**The data indicate that the utilities' hedging programs do not add materially to the customers' insulation against fuel cost volatility already in place in the form of the levelized fuel cost recovery factor.**

During all meetings held to discuss the value of the utilities' fuel hedging programs, utilities have emphasized that the limited purpose of their fuel hedging programs—the sole benefit that they identify as the justification for their hedging programs, and the costs thereof—is to reduce the impact of the volatility of fuel prices on the retail customer. OPC believes a first step in the Commission's appraisal of the "clarifying" new hedging guidelines is to take stock of information available six years after the Commission issued its original hedging order. It should consider, based on historical information, whether the hedging activities are needed to accomplish that purpose. Said differently, the appropriate starting point is to consider whether data gained from experience indicate that there is a problem (volatility in fuel costs felt by the customer) for hedging to solve. This is the same question that FPL raised initially in its "VMM" petition of January 31, 2008. In that pleading, FPL asserted that the levelized fuel adjustment charge has the effect of insulating the retail customer from

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FLORIDA PUBLIC SERVICE COMMISSION

changes in the price of fuel. In a meeting held to discuss the "VMM" proposal, FPL compared its customers' bills *with* hedging to the customers' bills as they would have been if there had been *no* hedging. The comparison showed that the existing levelized fuel cost recovery mechanism already protects customers from volatility of fuel prices as measured by the customers' monthly bills, and little additional "tempering" of volatility seen and felt by customers through their bills is accomplished by the hedging activities. Additional information that Gulf Power provided to OPC, in response to an informal request for information, reinforces the conclusion to which FPL's data leads.

At one point during a more recent meeting to discuss hedging, someone suggested that there are only two relevant "data points"—December, when one approved factor expires, and January, when the replacement factor takes its place—to consider when evaluating the contribution of hedging to the objective of moderating the fuel price volatility felt by customers. That is not true. Customers receive bills monthly. Therefore, customers are exposed to volatility of fuel costs monthly. Each monthly bill is, therefore, a "data point" that must be observed in ascertaining the extent to which the volatility of the fuel markets reaches and affects customers. In Florida, the volatility that would otherwise register on customers' bills each month is reduced by the application of a levelized annual charge on each of the monthly bills, *regardless of differences in prices paid by the utility from month to month*. While it is certainly true that bills rise or fall in conjunction with the establishment of a new levelized factor in January, it is incorrect to state that December and January are the only relevant data points. Accurately viewed, the situation is that, because of the levelizing that is done independent of hedging, 12 of 13 relevant data points reflect minimal volatility in fuel costs. Further, as FPL demonstrated in the VMM petition, there are means other than hedging—such as spreading a large underrecovery over a period longer than the following 12 months—with which the Commission and utilities may manage any issue of rate shock at the outset of the calendar year. In short, retail customers are called upon to bear the costs of hedging programs, but derive little value from hedging in the form of an additional layer of protection against volatility.

**The costs of hedging programs have not been quantified, but, according to FPL, "could be quite substantial."** At the same time the value of hedging in accomplishing the only purpose ascribed to it by the utilities is demonstrably very small, we know that the utilities incur costs associated with hedging activities. OPC believes a comparison of benefits and costs should be a fundamental component of any consideration of a utility-proposed and utility-serving revamping of the regulation of hedging programs. OPC has seen no precise quantification of the total costs that customers bear as a result of utilities' hedging programs. However, in its original petition FPL said the indirect costs associated with hedging (i.e., costs other than direct transactional costs) "could be quite substantial." (FPL's "VMM" petition, at page 6.) The unquantified, but likely "quite substantial," costs of hedging transactions should be taken into account when considering a request to diminish the Commission's ability to gauge the prudence of the utilities' activities.

**The utilities benefit from their hedging programs.** While the utilities like to characterize hedging as a means of reducing volatility of fuel costs from the customers' perspective, to OPC's knowledge the utilities have never described or even acknowledged the benefits that *they* receive from hedging. The hedging of fuel costs can lead to more stable cash flow and more predictable earnings, both of which are valued highly by corporate management and investors, separate and apart from any claimed

benefit to customers. Rather than leading to a higher perceived risk, as asserted (but not supported) by FPL in its pending petition, the hedging activities provide distinct financial advantages to the utilities. At the same time, the proposed guidelines would shift more financial risk away from the utilities and onto their customers. The advantages and benefits of hedging that inure to utility management and investors should be taken into account when considering a request to diminish the Commission's ability to protect customers' interests.

**The proposed guidelines would reduce the utilities' regulatory risk, at the cost of the Commission's ability to conduct the oversight role necessary to protect customers' interests fully, without achieving a concomitant reduction in the utilities' authorized rate of return.**

Each time the Commission accommodates the utilities' desire for expedited, up-front approval of the utilities' transactions and conduct, the ability of the Commission to conduct a comprehensive prudence review with the requisite time and attention is diminished, to the detriment of its ability to protect customers' interests fully. If the Commission were to approve the proposed guidelines, the effect would be to lower the utilities' regulatory risk. Inasmuch as the utilities are compensated for the level of risk they bear through an approved rate of return, any approval by the Commission should be reflected in a rate of return on equity that is commensurately lower. But the utilities have not proposed to lower the rate of return (or lower rates that would be needed to generate the lower return) in their proposal. The Commission should not implement one side of the equation without implementing the other.

## SUMMARY

In conjunction with its consideration of FPL's pending petition to approve hedging guidelines, the Commission should use the six years of experience gained since it issued its 2002 hedging order to evaluate whether the utilities' hedging programs are providing benefits to customers that are justified by the costs of hedging that customers bear. It should recognize the benefits and advantages of hedging that inure to the utilities and their investors rather than customers. It should maintain its full ability to protect customers' interests with a procedure that provides the full time and attention that the subject matter requires. It should ensure that any steps taken to reduce the utilities' risk profile is accompanied with a corresponding reduction in the authorized return on equity that customers are required to support through the rates they pay. Based on OPC's view of these considerations, OPC opposes the proposed guidelines.

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Public Counsel

---

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Attorney for the Citizens  
of the State of Florida

**DOCKET NO. 080001-EI**  
**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a copy of the foregoing **OPC'S COMMENTS ON PROPOSED HEDGING GUIDELINES** has been furnished by U.S. Mail and electronic mail to the following parties on this 3rd day of September, 2008.

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Joseph A. McGlothlin





DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS AIR FORCE LEGAL OPERATIONS AGENCY (HQ AFLOA)

19 November 2010

Ms Ann Cole, Director  
Commission Clerk and Administrative Services  
Florida Public Service Commission  
2540 Shumard Oak Blvd  
Tallahassee, FL 32399-0850

Re: Docket No 10001EI- Fuel and purchased power cost recovery clause with generation performance incentive factors

Dear Ms Cole,

This letter is submitted in reponse to Staff's Data Request No. 1, dated 12 Nov 10. I have read the comments submitted by FIPUG in response to the data request. Federal Excecutive Agencies agrees with and adopts the positions stated therein.

Please call me at 850-283-6348 if you have any questions.

KAREN S. WHITE, GS-14, DAF  
Staff Attorney  
Air Force Utility Law Field Support Center

Attorney for Federal Executive Agencies

Cc: Parties of Record

DOCUMENT NUMBER DATE

09536 NOV 19 2010

FPSC-COMMISSION CLERK

**KA** Keefe, Anchors  
**GM** Gordon & Moyle  
November 19, 2010

VIA E-MAIL

Ms. Ann Cole, Director  
Commission Clerk and Administrative Services  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850

Re: Docket No. 100001-EI – Fuel and purchased power cost  
recovery clause with generating performance incentive factor

Dear Ms. Cole:

In response to Staff's request of November 12<sup>th</sup>, please see FIPUG's responses to Staff's Data Request No. 1, which are attached.

Please contact me with any questions.

s/Vicki Gordon Kaufman

Vicki Gordon Kaufman  
Jon C. Moyle, Jr.

Attorneys for the Florida Industrial  
Power Users Group

Enclosure

cc: Parties of Record (w/encls.)

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DOCUMENT NUMBER-DATE

09529 NOV 19 2010

FPSC-COMMISSION CLERK

**FIPUG REPOSES TO STAFF DATA REQUEST NO. 1**

**Docket No. 100001-EI**

1. Do you believe there are problems with current hedging practices? If so, explain.

**FIPUG Response:**

Yes. There are a number of problems with the existing hedging practices.

- The current process results in a formulaic approach which focuses on hedging a specific percentage of requirements by a date certain. A more effective hedging strategy is one that is interactive with the market and sensitive to market direction. Otherwise, the benefits from the hedging plan will be limited to those periods in which there is an upward move in the market and the plan will fail to allow the utility to take advantage of a market decline.
- The present approach fails to establish specific objectives for the hedging plan. Currently, the hedging policy and hedging plans are designed to hedge against price "volatility." Volatility is simply the up and down price movement of the price of a commodity over a given period of time. Rather than targeting "volatility," hedging practices should target a specific risk or risks subject to mitigation. In determining the objective, consideration needs be given to whether it is upward or downward price movement that is most harmful to customers.
- The current approach results in utilities placing hedges for a portion of their required supply up to a certain percentage level three years before the year being hedged; an additional percentage of supply will be hedged during the second year before the purchase; and a third tier of hedges will be concluded in the year preceding the year of purchase. In a market in which prices continue to rise over an extended period – 3 years or more – this may prove to be an effective strategy. However, in other market conditions, such as occurred over the last several years, where the market has moved steadily downward, this strategy is ineffective and costly to ratepayers. This highlights the need for flexibility with the ability to adjust the plan as conditions change.
- Given the vagaries of the market, the present approach, which relies upon the submission of a plan for preapproval, with that plan being followed formulaically, does not benefit consumers.

2. Pursuant to Order No. PSC-02-1484-FOF-EI, in Docket No. 011605-EI, the Commission developed a checklist of guidelines for the utilities to follow in hedging (Exhibit TFB-4 of the order). Are there any items on that checklist that:

- A: need to be revised, or refreshed.
- B: need to be deleted, or are no longer applicable;
- C: need to be added to the list?

FIPUG Response:

There are several aspects of Exhibit TFB-4 that should be considered for revision.

- Item 1: FIPUG has observed no quantitative benchmarks in the Risk Management Plans. That is, the plans lack any quantitative measures by which the Commission can judge whether the plans have been successful. To establish such measures, as explained in Response to Request No. 1, the risk to be mitigated needs to be more clearly identified. The effectiveness of a hedge is not based on the percent of a product hedged, but rather the results of the hedges – that is, gains and losses on the hedges. Examples of quantitative benchmarks could include: i) limit plan losses to less than a certain dollar amount if the market trend reverses; and/or, ii) reduce the price paid for the commodity by a certain percent in times of rising prices. That is, the results can and should be measured against the market; *i.e.*, how well have the hedges mitigated market price risk?
- Item 2: Unless established on an exceptionally broad basis, the use of a minimum level of purchases to be hedged by a date certain, such as 1 year in advance of the purchases, constitutes a constraint on the ability of the utility to adjust to longer term market changes.
- Item 3: One of the risks that is not quantified or identified is the potential for losses that will occur when the market direction changes. What is lacking is designated loss limits. Loss limits act as a restraint on the trading floor's ability to enter into transactions that will result in losses charged to ratepayers. As currently structured, the utilities have total freedom to play with an unlimited amount of house money, *i.e.*, ratepayer money. A level of market-to-market losses that are likely to be incurred and passed on to ratepayers needs to be established.

It is important to establish loss limits, as can be seen by looking at the losses incurred in 2009 and 2010 to date, as well as potential losses in 2011. In 2009, losses incurred as a result of PEF's hedging activities were approximately \$583 million. This results in a \$16.32 per MWH increase in the cost of PEF generation. (Hearing transcript at 83). The estimated losses from hedging in 2010 are \$219 million, which increases the costs of generation by \$6.02 per MWH. And as of September 30, 2010, the hedging losses from 2011 were approximately \$200 million or \$5.68 per MWH. (*Id.* at 88-89). Loss limits would require the utility to stop hedging and work out some portion of the hedges to mitigate losses, force the utility to revise its hedging approach, or require the filing of a

revision to its plan or a demonstration as to why the continuation of the plan would ultimately serve consumers' interest. An overall loss limit level should be discussed in detail at a workshop.

3. Do you believe certain aspects of current hedging practices should be modified to derive greater benefit for customers? If so, explain what should be modified and why.

FIPUG Response:

See Response to Request No. 1.

4. Does the purpose of hedging include taking advantage of low market prices at any given time, or is hedging better accomplished by planning amounts to be hedged at designated intervals and then strictly adhering to that plan?

FIPUG Response:

As explained in Response to Staff Request No. 1, hedging should target a particular risk against which protection is sought. The over-arching objective of utility fuel procurement programs should be to provide reliable service at least cost. As such, in FIPUG's view, a hedging strategy should target the mitigation of price spikes or price increases caused by sustained price increases. A hedging plan to accomplish that goal needs to be flexible and attuned to overall market direction. This does not mean that the plan should focus on day-to-day price fluctuations but rather price movement over a more sustained period.

5. Do you believe it would be appropriate for a utility to deviate from an approved hedging plan in order to take advantage of low market prices at any given time? Explain.

FIPUG Response:

See Responses to Nos. 1 and 4 above.

6. Does Order No. PSC-08-0667-PAA-EI address a utility's ability to deviate from approved plans in order to take advantage of low market prices at any given time? Explain.

FIPUG Response:

It does not appear to permit this.

7. If utilities were required to obtain Commission approval to deviate from hedging plans to take advantage of low market prices, how should that be accomplished procedurally?

FIPUG Response:

Such procedures should be discussed at a workshop held for that purpose.



State of Florida



## Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD  
TALLAHASSEE, FLORIDA 32399-0850

**-M-E-M-O-R-A-N-D-U-M-**

**DATE:** November 1, 2010  
**TO:** Timothy J. Devlin, Executive Director  
**FROM:** Traci Matthews, Government Analyst I, Division of Regulatory Analysis  
**RE:** Review of the 2010 *Ten-Year Site Plans* for Florida's Electric Utilities

DB  
RLT  
mmj

**Critical Information:** Please place on November 9, 2010 Internal Affairs. Report is due December 31, 2010. Commission approval of report is sought.

Attached is a draft of the review of the Electric Utility 2010 *Ten-Year Site Plans*. Commission approval of this report will satisfy two statutory requirements:

1. Section 186.801, Florida Statutes, requires the Commission to review each utility's *Ten-Year Site Plan* for suitability, and forward the review to the Florida Department of Environmental Protection (DEP) within nine months of receipt of the Plans. Our review is due to DEP by December 31, 2010.
2. Section 377.703(2)e, Florida Statutes, requires the Commission to review electricity and natural gas forecasts for the Florida Energy and Climate Commission (FECC). Our review is due to the FECC by December 31, 2010.

Please place this item on the November 9, 2010 Internal Affairs conference agenda.

TM

Attachment

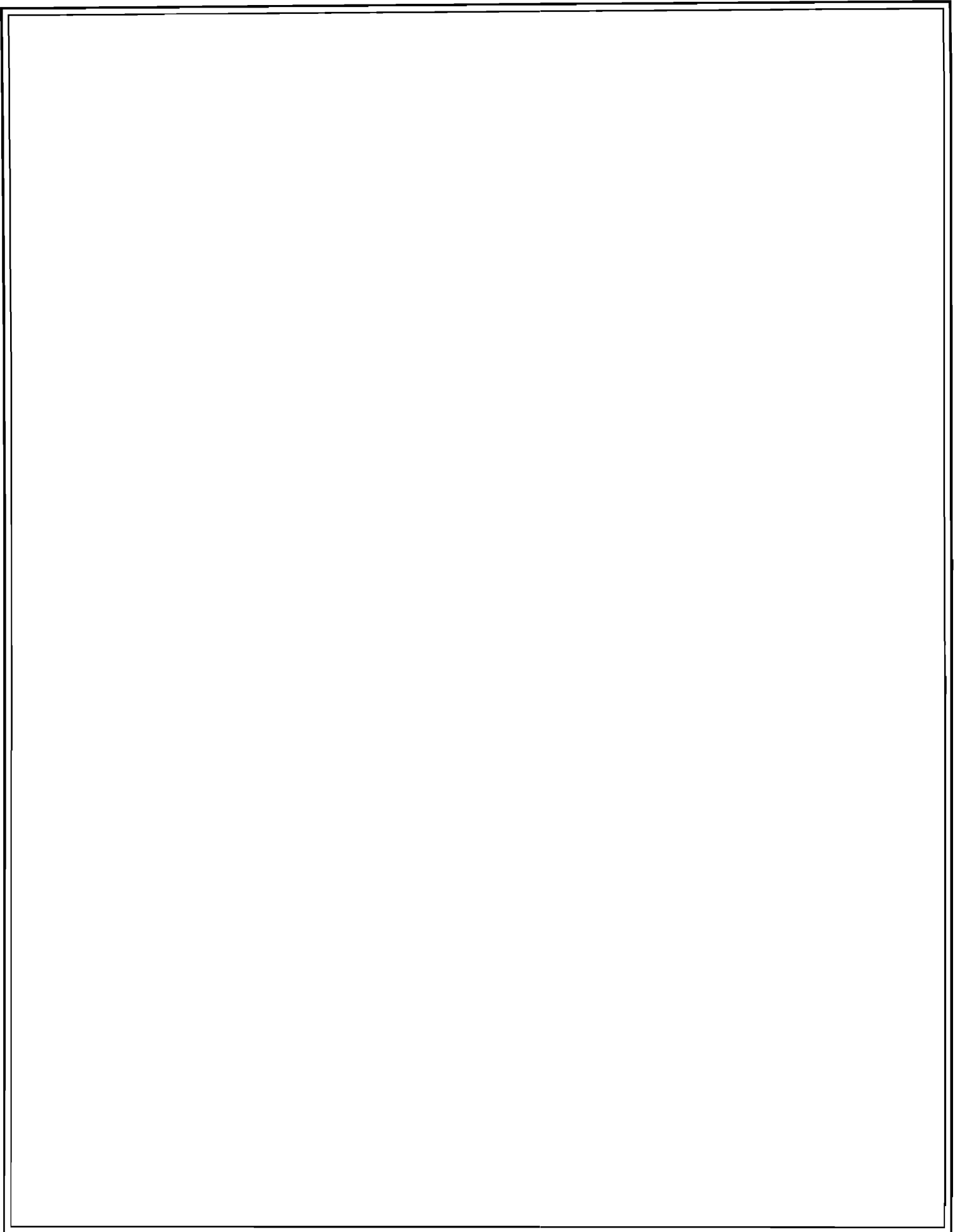
cc: Division of Regulatory Analysis (Salak, Trapp, Ballinger)  
 Division of Economic Regulation (Willis, Hinton, Stallcup)  
 Office of the General Council (Brubaker, Murphy)



**Review of the  
2010 Ten-Year Site Plans  
for Florida's Electric Utilities**

*Florida Public Service Commission  
Tallahassee, Florida  
October 2010*





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# **LIST OF UTILITIES FILING A TEN-YEAR SITE PLAN**

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## **Investor-Owned Utilities**

FPL	Florida Power & Light Company
Gulf	Gulf Power Company
PEF	Progress Energy Florida, Inc.
TECO	Tampa Electric Company

## **Municipal Utilities**

FMPA	Florida Municipal Power Agency
GRU	Gainesville Regional Utilities
JEA	JEA (formerly Jacksonville Electric Authority)
LAK	City of Lakeland
OUC	Orlando Utilities Commission
TAL	City of Tallahassee

## **Rural Electric Cooperatives**

SEC	Seminole Electric Cooperative
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## LIST OF ACRONYMS

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AB	Agricultural Byproducts
Bcf	Billion Cubic Feet
CC	Combined Cycle generating unit
CT	Combustion Turbine generating unit
DEP	Florida Department of Environmental Protection
DOE	United States Department of Energy
DSM	Demand-Side Management
ECCR	Energy Conservation Cost Recovery Clause
EIA	Energy Information Administration
ERO	Electric Reliability Organization
FEECA	Florida Energy Efficiency and Conservation Act
FERC	Federal Energy Regulatory Commission
FGT	Florida Gas Transmission
FRCC	Florida Reliability Coordinating Council
GWh	Gigawatt-Hour
IGCC	Integrated Coal Gasification Combined Cycle generating unit
kWh	Kilowatt-hour
LFG	Landfill Gas
LNG	Liquefied Natural Gas
MMBtu	Million British Thermal Units
MSW	Municipal Solid Waste
MW	Megawatt
MWh	Megawatt-hour
NEL	Net Energy for Load
NERC	North American Electric Reliability Corporation
NUG	Non-Utility Generator
OBG	Biomass Gases
OBS	Biomass Solids
PPSA	Power Plant Siting Act
PURPA	Public Utility Regulatory Policies Act
REC	Renewable Energy Certificate
RPS	Renewable Portfolio Standard
RTO	Regional Transmission Organization
TLSA	Transmission Line Siting Act
TYSP	Ten-Year Site Plan
WAT	Water
WDS	Wood/Wood Waste Solids



# 1. EXECUTIVE SUMMARY

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Pursuant to Section 186.801(1), Florida Statutes (F.S.), each generating electric utility must submit to the Florida Public Service Commission (Commission) a Ten-Year Site Plan which estimates the utility's power generating needs and the general locations of its proposed power plant sites over a ten-year planning horizon. The Commission is required to perform a preliminary study of each plan and classify each one as either "suitable" or "unsuitable." All findings of the Commission are made available to the Florida Department of Environmental Protection (DEP) for its consideration at any subsequent electrical power plant site certification proceedings. A copy of this report is also posted on the Commission's Web site and is available to the public.

The Commission has reviewed the Ten-Year Site Plans filed by the eleven reporting utilities in Florida and finds that the projections of load growth appear reasonable.<sup>1</sup> For the second year in a row, utilities are reporting slow or negative growth in customers. In addition, the utilities have forecasted a continuation of diminished growth in peak demand and energy consumption. Over the ten-year planning period, current average annual summer peak demand forecasts are more than 1,500 MW less, and average annual net energy for load projections are nearly 23,000 GWh less than last year's forecasts.

In response to continued declines in load forecasts, the reporting utilities have deferred or cancelled several generation facilities. Only a single proposed unit, TECO's conversion of the Polk combustion turbine to a 970 MW combined cycle unit with an in-service date in 2019, would still require certification by the Commission. A need determination petition would be expected for this unit by 2015.

The 2010 Ten-Year Site Plans include the net addition of approximately 5,600 MW of natural gas-fired generation, the majority of which is either already certified as needed by the Commission or under construction. The 2009 Ten-Year Site Plans included roughly 11,000 MW of additional generation. This decline can be attributed in part to the continued decline of load forecasts in the 2010 Ten-Year Site Plans. Total generation additions and uprates are offset by unit retirements, deratings, and changes in the contractual status of purchases. As in past years, the majority of new capacity planned is expected to come from natural gas-fired units. Nuclear generation represents the next largest fuel source addition, although all of the planned additional nuclear units have now been delayed beyond the current ten-year horizon.

The Commission finds the 2010 Ten-Year Site Plans filed by the eleven reporting utilities to be suitable for planning purposes. While the plans are suitable for planning purposes, they are subject to modification due to factors such as changes to fuel cost, energy use projections, evolving technology, and shifting energy policy. Therefore, the Commission will continue to closely monitor the future rate of load growth in Florida and its effect on the need for additional generation and transmission facilities in the state.

---

<sup>1</sup> Investor-owned utilities (IOUs) filing 2010 Ten-Year Site Plans include Florida Power & Light Company (FPL), Tampa Electric Company (TECO), Gulf Power Company (Gulf), and Progress Energy Florida, Inc. (PEF). Municipal utilities filing 2010 Ten-Year Site Plans include Florida Municipal Power Agency (FMPA), Orlando Utilities Commission (OUC), City of Lakeland (LAK), City of Tallahassee (TAL), JEA (formerly Jacksonville Electric Authority), and Gainesville Regional Utilities (GRU). Seminole Electric Cooperative (SEC) also filed a 2010 Ten-Year Site Plan.

## **Reliable and Affordable Power**

Pursuant to Section 366.03, F.S., each public utility has a statutory obligation to serve every customer within its service territory. Florida's utilities must continue to explore all available measures to ensure the most efficient means of producing and delivering reliable and affordable power to their customers. Multiple components are required to create an effective energy policy for Florida: conservation and demand-side management, renewable generation, modernization of existing utility generation resources, and new generation facilities.

Current forecasts are significantly affected by state and national economic conditions, which have resulted in dramatic reductions in energy consumption. Several utilities have reported net customer losses, and the state as a whole has reported a decline in population. Historically, however, utilities have seen an increase in energy sales following a recession. It is unclear at this time whether the decline in energy usage is a short-term phenomenon based on current economic conditions in Florida and the nation as a whole or is a portent of a longer downturn in population growth and energy use in the state.

## **Conservation and Demand-Side Management**

The first step in any resource planning process is to focus on the efficient use of electricity by consumers. Government mandates, such as building codes and appliance efficiency standards, provide the starting point for energy efficiency. Customer choice is the next step in reducing the state's dependence upon expensive fuels and lowering greenhouse gas emissions. Consequently, educating consumers to make smart energy choices is particularly important. Florida's utilities can efficiently serve their customers by offering demand-side management (DSM) and conservation programs designed to use fewer resources at lower cost.

In 2009, the Commission established aggressive new conservation goals for utilities to meet through their DSM and energy efficiency programs. The new conservation goals for some utilities are incorporated into the 2010 Ten-Year Site Plans. Both FPL and PEF have already included values for DSM equal to or greater than the total goals set forth by the Commission, but neither TECO nor Gulf incorporated the new goals into their DSM values for the 2010 Ten-Year Site Plans. The implementation of these goals remains in transition, as the DSM Plans have not yet been approved by the Commission. Florida's utilities have projected totals of more than 8,700 MW of summer demand peak load reduction, almost 8,200 MW of winter peak demand reduction, and nearly 15,400 GWh of annual energy savings over the planning period. When compared to the projections in the 2009 Ten-Year Site Plans, these figures correspond to 37 percent more summer peak demand savings, 26 percent more winter peak demand savings, and 85 percent more annual energy savings by 2019.

## **Renewable Generation**

Renewable generation is another key component of providing clean, reliable, and affordable power to Florida's electric utility customers. Approximately 1,220 MW of generation are currently operating in Florida. Roughly 467 MW are sold to Florida's utilities as firm capacity, and the remaining capacity is either sold on a non-firm basis or is used internally by the owners of the renewable generation facility.

Historically, relatively high capital and operating costs, as well as limited physical applications, have hampered the development of renewable energy in the state. The 2010 Ten-Year Site Plans indicate that new renewable projects totaling approximately 734 MW are planned through the year 2019, slightly more than half of which will come from biomass. In addition to biomass, there are several notable solar projects within the state, including 110 MW of generation authorized for cost recovery by Section 366.92(4), F.S., and multiple as-available energy contracts with solar energy providers. While these new projects are a significant increase from the existing level of renewable generation, the current firm generation capacity is approximately 58,420 MW for Florida, so the contribution toward fuel diversification from renewable energy remains relatively small.

The Commission has taken steps to promote renewable generation on the customer's side of the meter, as directed by the Legislature in Section 366.91(5), F.S. As part of the utility DSM Plans, the Commission has directed the investor-owned utilities to expend approximately \$24 million on rebates and incentives for solar technology, including photovoltaics and thermal water heating. In addition, these solar energy systems will be provided free of charge to a limited number of public facilities and low-income residences. In April 2008, the Commission amended Rule 25-6.065, Florida Administrative Code (F.A.C.), relating to interconnection and net metering of small customer-owned renewable generation. The changes promote the development of small customer-owned renewable generation by streamlining the interconnection process and allowing monthly credits to accumulate and carry over for 12 months for excess on-site renewable generation on the retail customer's bill. In 2009, a large increase in the participation of net metering occurred, almost tripling the total number of customers taking advantage of the ability to offset their generation through renewable technologies. Currently, Florida's utilities report almost 1,600 residential interconnections with a total capacity of approximately 13 MW, an increase in capacity of more than 75 percent.

Pursuant to current state and federal law, payments for capacity and energy purchased by utilities to generation facilities using renewable energy sources are capped at the utility's avoided cost for capacity and energy. In spite of the downturn in load growth resulting in reduced need for new generation, renewable generation has increased. Compared to figures in the 2009 Ten-Year Site Plan Review, existing renewable generation facilities have grown by approximately 4.2 percent (49 MW). However, Progress Energy Florida recently announced the termination of two large renewable purchased power contracts, which had represented almost twenty percent of the state's planned new renewable generation. A 40 MW biomass project and a 60 MW refuse-to-energy project were both cancelled due to a lack of funding. As a result, when compared to the 2009 Ten-Year Site Plan Review, the amount of new renewable generation planned for the ten-year horizon has decreased by approximately 1.75 percent (13.1 MW).

## **Modernization of Existing Utility Generation**

Since the current projections indicate that the state's total energy demand will surpass projected DSM and energy efficiency programs offered by Florida's utilities and planned renewable generation, the remaining generation needs must be met by traditional utility generation.

When considering the addition of supply-side generation, Florida's electric utilities must consider how best to serve their customers cleanly, reliably, and affordably. The modernization of existing units plays a key role in addressing all of these issues. The term "modernization" refers to the upgrading of older, less efficient units in order to utilize more fuel efficient technologies. Such

projects may require the temporary removal of existing units, thus impacting reliability until the completion of the modernization. Given that several utilities are projecting high reserve margins, conditions are currently favorable for modernizations. Modernization of units allows for an increased output of power and improved fuel efficiency with the same or lower emission rates. The Commission has recently approved several projects involving modernization with a combined capacity of approximately 2,400 MW.

Only a portion of Florida's fossil fuel units have potential for modernization. Limiting factors for feasible modernization can include the physical plant layout and available space, availability of water supplies, natural gas transportation capacity, and the age of existing units. In addition to modernizing some of its units, FPL has announced plans to place several of its fossil-steam units in Inactive Reserve, approximately 1,940 MW of generation, which will improve the overall system efficiency. Before considering new generation, all of Florida's utilities should address the feasibility of modernization. The Commission encourages utilities to continue to explore potential modernization projects and report the feasibility of each conversion in next year's Ten Year-Site Plans.

## **Strategic Concerns**

Fuel diversity is a critical strategic concern. Maintaining a balanced mix of fuel sources enhances the reliability of supply and allows utilities to mitigate the effects of volatile price fluctuations. In previous Ten-Year Site Plans, Florida's utilities responded to fuel diversity concerns through the inclusion of multiple coal-fired power plants. Due to a combination of fuel cost uncertainties, high capital costs, and uncertainties regarding potential environmental costs related to possible carbon emission regulations, no new coal-fired generating capacity is currently planned in Florida. All previously planned units have been cancelled.

Because nuclear generation provides base-load capacity that produces no greenhouse gas emissions, nuclear energy has become an important component of an energy efficient Florida. In 2007 and 2008, the Commission approved the need for approximately 5,000 MW of additional nuclear capacity based primarily on projected fuel cost savings. All existing nuclear units are scheduled to receive capacity uprates totaling 565 MW, and the 4,400 MW of proposed new power plants will mark the first construction of new nuclear generation in Florida in almost 30 years. The 2010 Ten-Year Site Plan for PEF contains the first of two units, Levy Unit 1, coming online in 2019. However, since the publishing of its Ten-Year Site Plan, PEF projects that the Levy Units will enter service in 2021 and 2022. Neither of FPL's new nuclear units, Turkey Point Units 6 and 7, are in the current planning period, with in-service dates scheduled for 2022 and 2023, respectively. Even with the identified new nuclear units, Florida's dependence on natural gas is projected to increase from 48.5 percent in 2009 to 51.4 percent by 2019.

## **New Generation Facilities**

Generation planning requires considerable lead time, but changes in fuel cost, energy use projections, evolving technology, and changing energy policy can cause plans to be modified. The primary fuel types remaining in Florida as a viable option for new generation are natural gas or nuclear power plants, but at this time no new nuclear generating units are expected to enter service for

over a decade. Even though the modernization of existing units can increase the overall efficiency of natural gas-fired generation in the state, the current forecasts continue to indicate the need for additional natural gas-fired generation. The long permitting and construction periods involved with nuclear generating plants, coupled with the cancellation of all planned coal-fired generation, have led to natural gas becoming the default fuel of choice in Florida. Natural gas already provides approximately half of Florida's energy generation and is projected to provide the majority of new generation beyond the next ten years. Such growth in natural gas generation may impact the volatility of electricity prices to Florida's ratepayers.

As the state continues to construct new natural gas-fired generation, natural gas storage and supply become increasingly significant issues in ensuring the reliability of the state's electrical system. Multiple supply options and sufficient storage are critical factors in maintaining the integrity of Florida's electric system during supply disruptions due to severe storms and hurricanes. Florida's utilities have begun increasing the amount of natural gas storage that is available to the state. Utilities should continue to evaluate diversity within the fuel type, such as liquefied natural gas (LNG) and gas storage, as options to traditional sources and delivery methods for natural gas.





## 2. INTRODUCTION

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The Ten-Year Site Plans give state, regional, and local agencies advance notice of proposed power plants and transmission facilities. The Commission receives comments from these agencies regarding various issues of concern. These comments are summarized in Chapter 8, and the agencies' comments as filed are included in Appendix A. Because a utility's Ten-Year Site Plan is a planning document containing tentative data, it may not contain sufficient information to allow regional planning councils, water management districts, and other reviewing agencies to evaluate site-specific issues within their jurisdictions. Each utility must provide detailed data, based on in-depth environmental assessments, during certification proceedings under the Power Plant Siting Act (PPSA), Sections 403.501-403.518, F.S., or the Transmission Line Siting Act (TLSA), Sections 403.52-406.5365, F.S.

### Statutory Authority

Section 186.801, F.S., requires that all major generating electric utilities in Florida submit a Ten-Year Site Plan to the Florida Public Service Commission for annual review. To fulfill the requirements of Section 186.801, F.S., the Commission has adopted Rules 25-22.070 through 25-22.072, F.A.C. Each utility's Ten-Year Site Plan contains projections of the utility's electric power needs, fuel requirements, and the general locations of proposed power plant sites and major transmission facilities. Utilities with existing generating capacities below 250 megawatts (MW) are exempt from this requirement unless the utility plans to build a new unit larger than 75 MW within the ten-year planning period.

In accordance with Section 186.801, F.S., the Commission performs a preliminary study of each Ten-Year Site Plan and is required to determine whether each one is **suitable** or **unsuitable**. The results of the Commission's study are contained in this report, *Review of the 2010 Ten-Year Site Plans*, which is forwarded to the Florida Department of Environmental Protection (DEP) for use in subsequent power plant siting proceedings.

Section 377.703(2)(e), F.S., requires the Commission to analyze and provide natural gas and electricity forecasts to the Florida Energy and Climate Commission. The *Review of the 2010 Ten-Year Site Plans* is forwarded to the Energy and Climate Commission to fulfill this statutory requirement.

### Information Sources

In April 2010, eleven utilities filed their Ten-Year Site Plans, and on August 5, 2010, the Commission held a public workshop to facilitate discussion of the plans. In addition to the individual utility filings, the Commission relies on cost and performance data obtained through supplemental data requests made to the reporting utilities, as well as on other sources. The Florida Reliability Coordinating Council (FRCC) annually publishes several documents that assess the adequacy and

reliability of Peninsular Florida's<sup>2</sup> generating units and transmission system. The Commission used the following FRCC documents to supplement this review:

- The *2010 Regional Load and Resource Plan* contains aggregate data on demand and energy, capacity and reserves, and proposed new generating unit and transmission line additions for Peninsular Florida as well as statewide. The FRCC submitted this study in July 2010.
- The *2010 Reliability Assessment* is an aggregate study of generating unit availability, forced outage rates, load forecast methodologies, and gas pipeline availability. The FRCC submitted this study in August 2010.
- The *Long Range Transmission Reliability Study* is an assessment of the adequacy of Peninsular Florida's bulk power and transmission system. The study includes both a short-term (2010-2014) detailed analysis and a long-term (2015-2019) evaluation of developing trends that would require transmission additions or other corrective action. The FRCC submitted an executive summary of this study in August 2010.

## Suitability

The Commission has reviewed the Ten-Year Site Plans filed by the eleven reporting utilities and finds that the projections of load growth appear reasonable and that the reporting utilities have identified additional generation facilities required in order to maintain an adequate supply of electricity at a reasonable cost. Therefore, the Commission finds the 2010 Ten-Year Site Plans filed by the reporting utilities to be **suitable** for planning purposes.<sup>3</sup>

Since the Ten-Year Site Plan is not a binding plan of action for electric utilities, the Commission's classification of a Ten-Year Site Plan as suitable or unsuitable does not constitute a finding or determination in docketed matters before the Commission. The Commission may address any concerns raised by a utility's Ten-Year Site Plan at a public hearing.

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<sup>2</sup> Peninsular Florida refers to the FRCC region which includes all utilities with the exception of Gulf Power Company.

<sup>3</sup> Investor-owned utilities (IOUs) filing 2010 Ten-Year Site Plans include Florida Power & Light Company (FPL), Tampa Electric Company (TECO), Gulf Power Company (Gulf), and Progress Energy Florida, Inc. (PEF). Municipal utilities filing 2010 Ten-Year Site Plans include Florida Municipal Power Agency (FMPA), Orlando Utilities Commission (OUC), City of Lakeland (LAK), City of Tallahassee (TAL), JEA (formerly Jacksonville Electric Authority), and Gainesville Regional Utilities (GRU). Seminole Electric Cooperative (SEC) also filed a 2010 Ten-Year Site Plan.

### **3. DEMAND AND ENERGY FORECASTS**

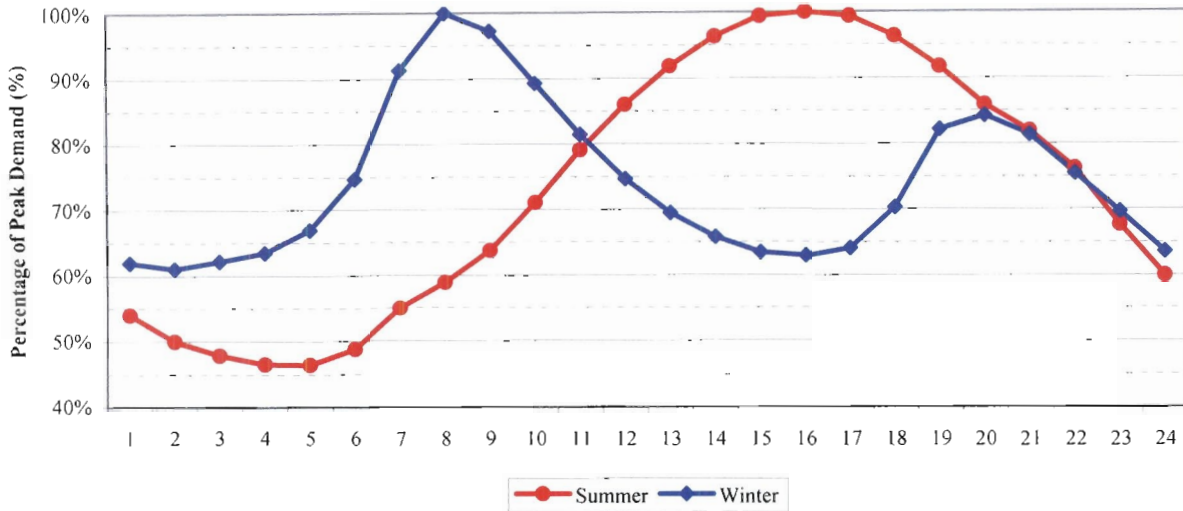
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Historical data forms the foundation for utility load and energy forecasts. These sets of historical data contain energy usage patterns, trends in population growth, economic variables, and weather data for each utility's service territory. Econometric forecast models are then used to quantify the historical impact of population growth, economic conditions, and weather on energy usage patterns. Finally, sets of forecast assumptions on future population growth, economic conditions, and weather are assembled and together with the forecast models, yield the final demand and energy forecasts. Each utility's peak demand and energy forecasts serve as the starting point for determining new capacity additions needed to reliably and efficiently serve the anticipated load.

Peak demand is the measure of the amount of electric power in MW required at any particular instant in time. The change in demand follows a pattern that depends on the season and the maximum value of demand is the quantity that determines the timing and size of planned capacity additions. Energy is the accumulation of demand over time, and the unit of measure for energy is the MWh, which is the total number of MW consumed over a particular period. The appropriate type of new generating capacity required is determined by energy requirements of the system. A load that remains relatively constant would require a base load unit, whereas a load with a great deal of variation would require a peaking or intermediate unit. Many factors exist which, when taken together, can allow a utility to determine both the type of generator and the fuel that best suit the circumstances.

Figure 1 below illustrates the typical daily load curve for summer and winter days in Florida. In the summer, customer demand begins to climb in the morning and peaks in the early evening, a pattern which corresponds to increasing air conditioning loads. In contrast, the winter load curve has two peaks, the largest in mid-morning followed by a smaller peak in the late evening. Both peaks correspond to heating loads.

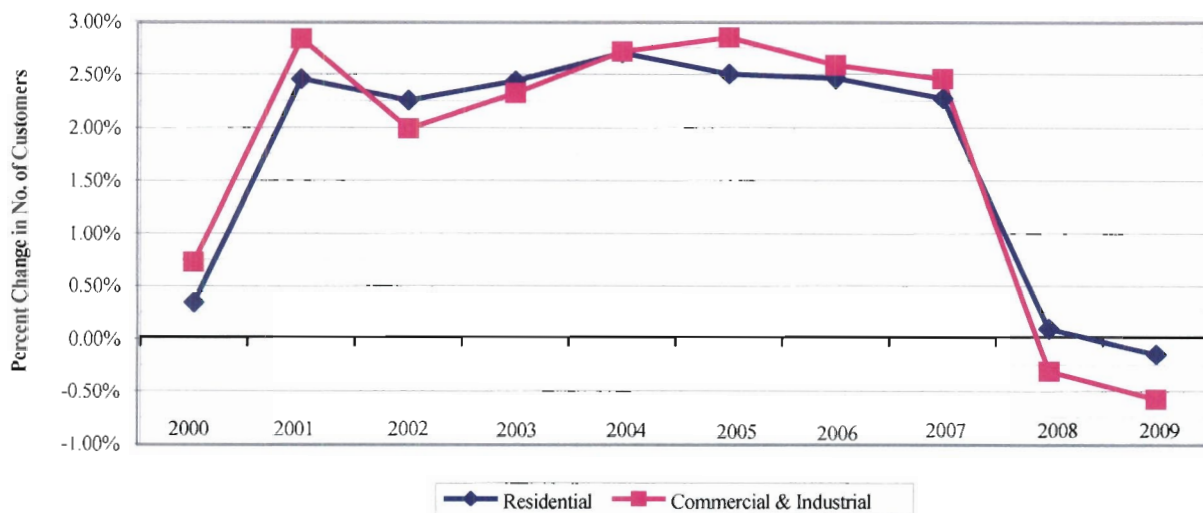
**Figure 1. Typical Daily Load Curve**



Change in the customer base is a critical factor in the process of forecasting load growth for electric utilities. Customer growth in Florida has been on the decline for the past few years. Having fewer new customer accounts leads to smaller increases in both demand and energy consumption.

Figure 2 below shows the annual customer growth rate for the period 2000 through 2009. While 2008 saw a significant reduction in growth, 2009 featured negative growth for all categories. The last positive changes in the residential and the commercial customer base were seen in 2004 and 2005, respectively.

**Figure 2. State of Florida: Annual Growth Rate (%) of Customers (2000 through 2009)**



Florida's electrical demand and energy requirements are heavily dependent on the energy consumption behaviors of residential customers. As shown in Table 1 below, residential customers make up close to 90 percent of Florida's electric customers and purchase more than 50 percent of the state's electric energy.

**Table 1. State of Florida: Characteristics of Florida's Electric Customers (2009 Actual)**

Customer Class	Number of Customers	% of Customers	Energy Sales (GWh)	% of Sales
Residential	8,338,964	88.7	113,341	52.7
Commercial	1,032,948	11.0	80,939	37.6
Industrial	27,627	0.3	20,811	9.7
<b>Total</b>	<b>9,399,539</b>	<b>100.0</b>	<b>215,091</b>	<b>100.0</b>

The deterioration of economic conditions and lower customer growth have brought about a significant reduction in demand and energy forecasts. Reduced load and energy requirements result in the deferral of additional generating capacity as well as reductions in the burning of fossil fuels.

### **Role of Demand Side Management (DSM)**

In recent years, Florida has gradually increased the standards for appliance efficiency and building codes in order to maximize energy savings. However, in large part, the responsibility for reducing the state's dependence on fossil fuels and improving the environment must fall on consumers. Encouraging responsible energy choices is extremely important in controlling load and energy usage. Once consumers are cognizant of behaviors that result in increased efficiency and reduced energy use, they are much more likely to participate in utility-sponsored DSM and energy conservation programs.

In addition to the effects of stricter building codes and increased appliance efficiency standards, since 1980 utilities have offered DSM programs to customers based on the requirements of the Florida Energy Efficiency and Conservation Act (FEECA).<sup>4</sup> FEECA emphasizes reducing the growth rates of weather-sensitive peak demand, reducing and controlling the growth rates of electricity consumption, reducing the consumption of scarce resources such as petroleum fuels, and encouraging use of renewable fuels. To accomplish these objectives, FEECA requires the Commission to establish conservation and DSM goals and requires all IOUs and any municipal or cooperative utility with annual energy sales of at least 2,000 GWh as of July 1, 1993, to implement DSM programs to meet the established goals. Demand and energy goals for the seven FEECA utilities (FPL, FPUC,<sup>5</sup> Gulf, JEA, OUC, PEF, and TECO) represent the minimum threshold that utilities must meet before building any major power plants.

<sup>4</sup> Sections 366.80-366.85 and 403.519, F.S.

<sup>5</sup> Florida Public Utilities Corporation (FPUC) is a non-generating, investor-owned utility subject to FEECA's requirements. FPUC does not file a Ten-Year Site Plan with the Commission.



The seven Florida utilities which are subject to FEECA currently offer more than 100 DSM and conservation programs to residential, commercial, and industrial customers. Energy audit programs provide a first step for utilities and customers to assess conservation opportunities for Florida's electric customers and serve as the foundation for all other DSM and conservation programs. All FEECA utilities are required to offer energy audits to residential customers, pursuant to Section 366.82(11), F.S., and most utilities also provide energy audits for commercial/industrial customers.

Load and energy savings from conservation or non-dispatchable DSM programs, such as ceiling insulation installation, enable utilities and customers to realize sustained energy savings over time. Savings from dispatchable DSM, such as load management and interruptible load programs, also play a significant role in any utility energy conservation plan. Load management and interruptible service are measures that allow reductions in system peak demand when needed. Load management programs offer monetary incentives for the participant to allow the utility to control the availability of certain electric appliances. Interruptible load programs allow a utility to interrupt specific services to a commercial or industrial customer.

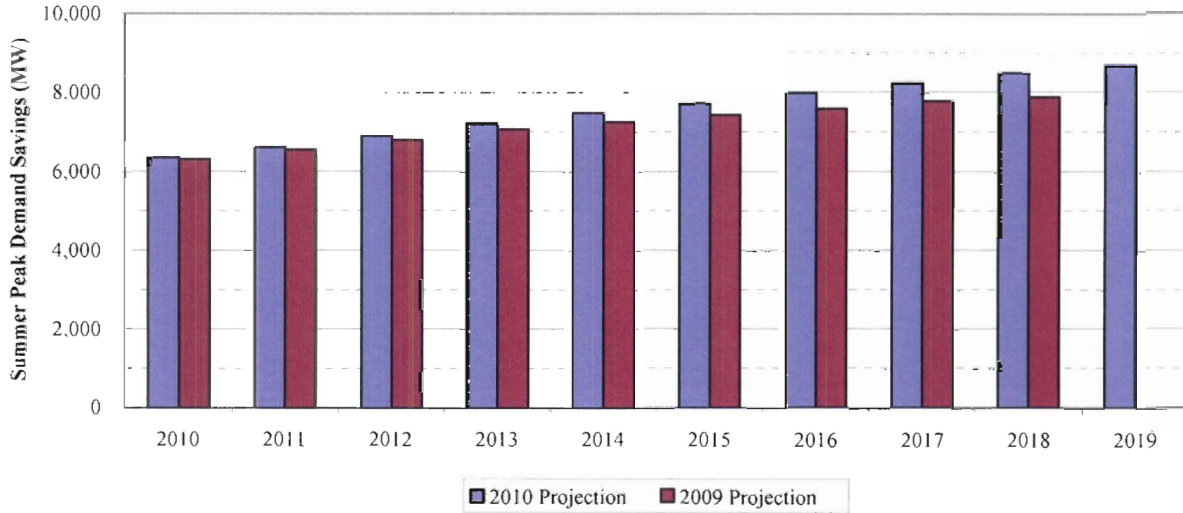
### **Recent DSM Developments**

In 2008, the Legislature amended Section 366.82, F.S., which directs the Commission's process for establishing DSM and energy conservation goals. More specifically, the Commission must now consider an expanded scope of potential conservation and efficiency measures and the impact of demand-side renewable energy systems. Additional considerations include the need for incentives and the effect of greenhouse gas compliance costs.

New DSM goals were set on December 30, 2009, for the fourth time under FEECA. Both FPL and PEF have already included values for DSM equal to or greater than the total goals set forth by the Commission, but neither TECO nor Gulf incorporated the new goals into their DSM values for the 2010 Ten-Year Site Plans. The implementation of these goals remains in transition, as the DSM Plans have not yet been approved by the Commission. While Gulf has no planned generation units in the 2010 to 2019 period, TECO is planning construction of several units to meet peak demand and a unit that will be subject to the Power Plant Siting Act. The additional DSM represented by the new goals may have some effect upon the timing and size of units to be constructed. Staff expects that the 2011 Ten-Year Site Plans for all utilities should reflect the Commission's orders relating to conservation, including the new DSM goals.

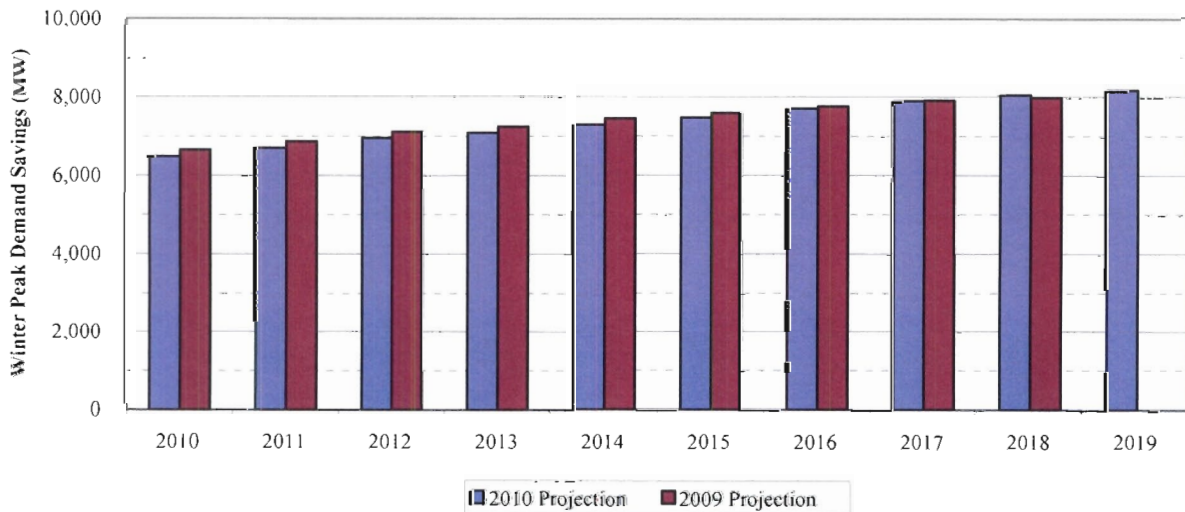
DSM is a critical component in the reduction of load requirements for both residential and commercial customers. DSM programs are projected to reduce summer peak demand by just over 6,300 MW in 2010, increasing to nearly 8,700 MW by 2019. Projections indicate a summer peak demand reduction of approximately 13 percent from DSM for each year between 2010 and 2019. Figure 3 below illustrates the projected total amounts of summer peak demand savings from utility-sponsored DSM programs over the ten-year planning horizon. The change from the 2009 projection to the 2010 projection is approximately 828 MW, primarily from the inclusion of the new PSC goals in several of the utilities' load forecasts.

**Figure 3. State of Florida: DSM Summer Peak Demand (MW) Savings**



In contrast to summer peak demand savings, forecasted savings in winter peak demand due to DSM are reduced from last year at the beginning of the evaluation period. Conservation programs are estimated to result in a cumulative savings of 6,500 MW in 2010, increasing to 8,200 MW by the end of the period. These figures represent a reduction of approximately 170 MW at the beginning of the period, and a total net gain of only 190 MW over the ten-year period. This trend is illustrated in Figure 4 below.

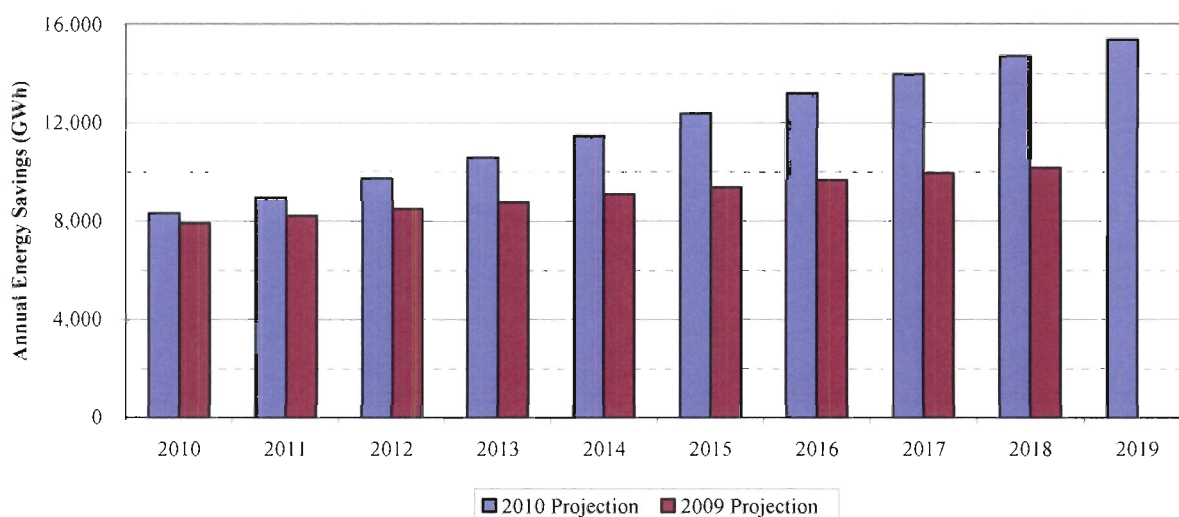
**Figure 4. State of Florida: DSM Winter Peak Demand (MW) Savings**





Mandated building codes and appliance efficiency measures, voluntary conservation efforts, and customer participation in utility DSM programs are all contributors to declines in peak demand and annual energy consumption. Utility-sponsored DSM is projected to reduce annual energy consumption by 8,300 GWh in 2010, increasing to approximately 15,400 GWh in 2019. These high levels of energy savings allow utilities to avoid burning fossil fuels. Figure 5 below illustrates the projected total amounts of annual energy savings from utility-sponsored DSM programs over the ten-year planning horizon. The projected energy savings for 2010 represents an increase from the 2009 projection of 5,200 GWh, primarily from the inclusion of the new PSC-directed goals in some utility load forecasts.

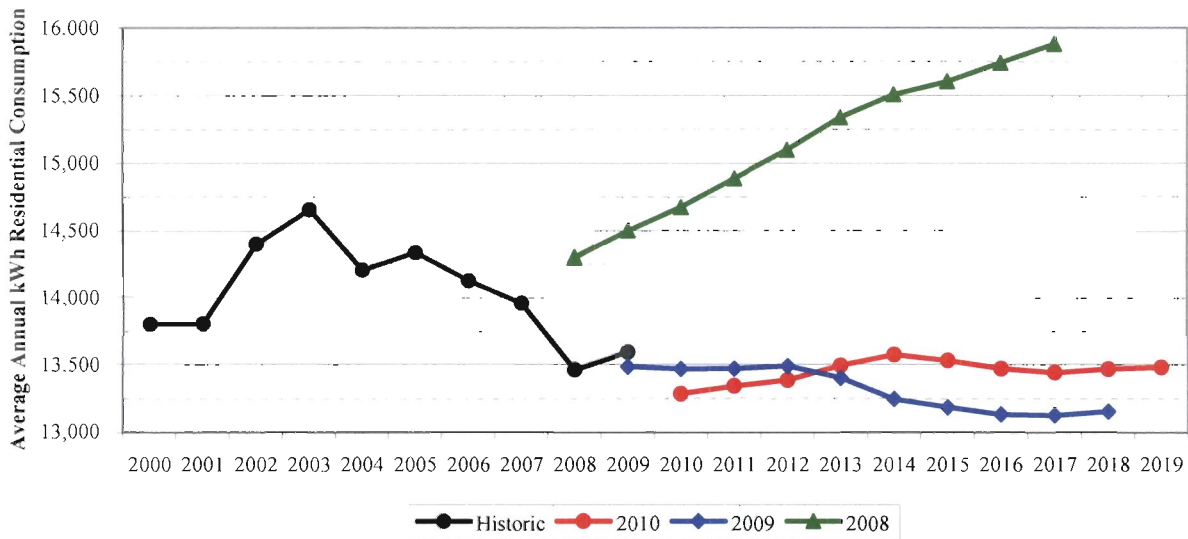
**Figure 5. State of Florida: DSM Net Energy for Load (GWh) Savings**



### Per Capita Energy Consumption

Per customer energy consumption, which is ultimately used to determine the utilities' net energy for load, is forecasted to increase slightly and then level off during the period 2010 through 2019. Illustrated in Figure 6 below, the current projection for per-capita residential consumption is a slow increase through 2014 that stabilizes around 13,500 kWh/year through the end of the decade. This trend is slightly different than the 2009 forecast, which featured stagnant consumption followed by a steady decrease before a similar plateau in the latter years of the forecast horizon. These changes appear to indicate a more optimistic forecast, with a slowly improving economy.

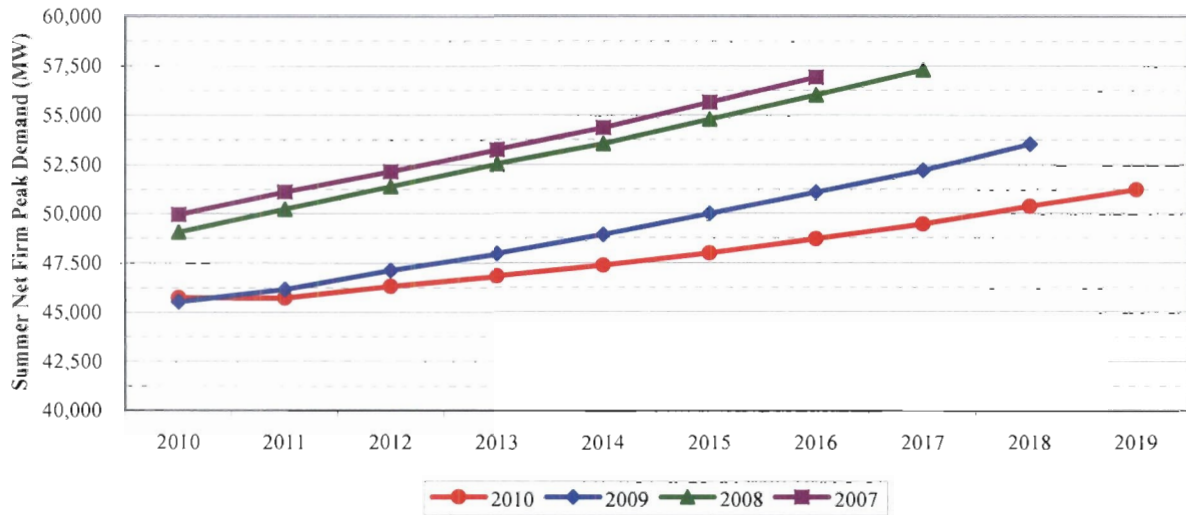
**Figure 6. State of Florida: Forecast Energy Consumption per Residential Customer (kWh/yr)**



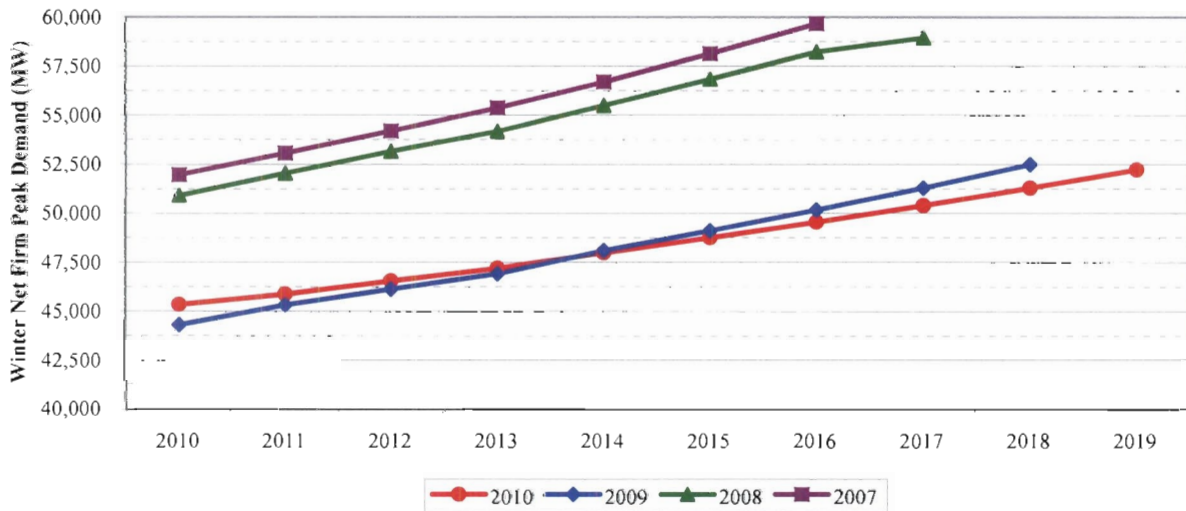
## Energy and Demand Forecasts

Historically, Florida’s actual electric demand has been highest in the summer. Consequently, the timing of future capacity additions, if necessary, will likely be governed by the projected summer peak demand. The utilities decreased their summer peak demand forecast greatly in 2009, and current forecasts reflect a continued reduction. Over the ten-year planning period, current annual summer peak demand forecasts are, on average, more than 1,500 MW less than the last year’s forecasts. Figure 7 and Figure 8 illustrate the magnitude of the utilities’ most recent reductions in peak demand forecasts when compared to prior forecasts.

**Figure 7. State of Florida: Historical Summer Peak Demand (MW) Forecasts by Forecast Year**



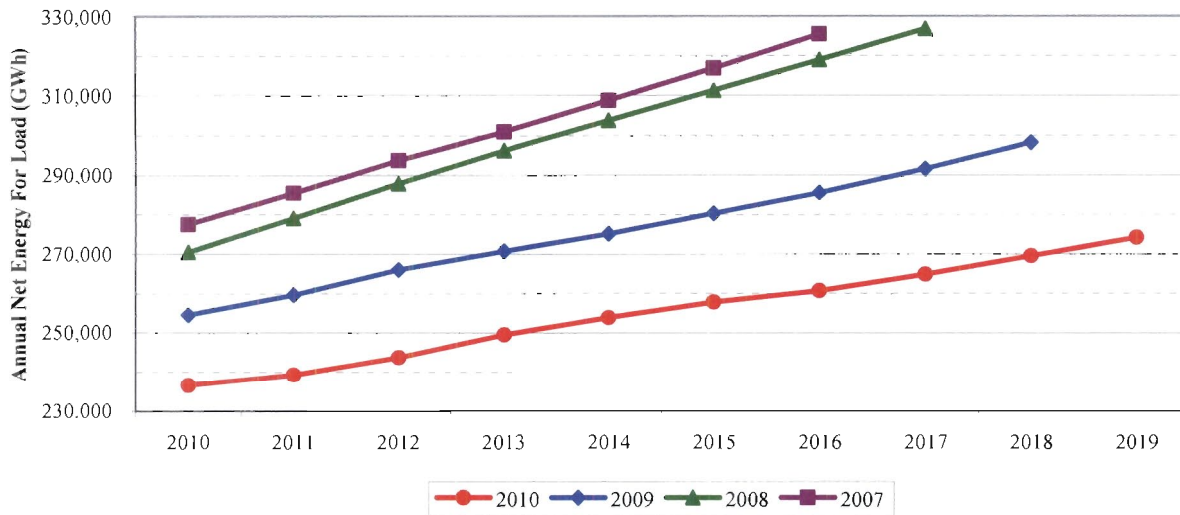
**Figure 8. State of Florida: Historical Winter Peak Demand (MW) Forecasts by Forecast Year**



Net energy for load, which is an accumulation of demand over time, represents the amount of energy (measured in GWh) necessary to meet a customer’s need. While peak demand forecasts determine the size and timing of necessary generating capacity additions, net energy for load determines the type of generation that should be added. The utilities’ current peak demand forecasts are significantly below previous years’ forecasts, and a similar trend can be seen in the utilities’

energy forecasts as current annual net energy for load projections are on average nearly 23,000 GWh less than last year's projections. Figure 9 below illustrates the reduced energy forecasts when compared with prior years.

**Figure 9. State of Florida: Annual Net Energy for Load (GWh) Forecasts**



## Outlook

Current forecasts are significantly affected by state and national economic conditions. These conditions have resulted in dramatic reductions in energy consumption. Several utilities have reported net customer losses, and the state as a whole has reported a decline in population. Historically, however, utilities have seen an increase in energy sales following a recession. It is unclear at this time whether this decline is a short-term phenomenon based on current economic conditions in Florida and the nation as a whole, or is a portent of a longer downturn in population growth and energy usage in the state.

Another key element to future energy consumption is increasing conservation efforts. In Order Number PSC-09-0855-FOF-EG issued December 30, 2009, the Commission established aggressive conservation goals for the FEECA utilities, whose ratepayers make up a majority of customers in the state. The success of Florida's utilities in achieving sufficient customer participation in order to meet these increased conservation goals will have a significant impact upon future levels of demand and net energy for load.



## 4. RENEWABLE ENERGY GENERATION

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### Federal Legislation

In 1978, the U.S. Congress enacted the Public Utility Regulatory Policies Act (PURPA), signed into law by President Carter on November 9, 1978. PURPA contained six titles and endorsed three broad national purposes: (1) conservation of electric energy, (2) increased efficiency in the use of facilities and resources by electric utilities, and (3) equitable rates for electricity consumers. Section 210 of Title II, entitled “Cogeneration and Small Power Production,” requires electric utilities to interconnect and sell electric energy to qualifying cogeneration and small power production facilities, referred to as Qualifying Facilities, or QFs, and to purchase electric energy from these facilities at the utility’s full avoided cost. The Federal Energy Regulatory Commission (FERC) was charged with adopting rules to implement PURPA. In addition, states were delegated authority to implement the FERC rules for electric utilities over which they had rate making authority.<sup>6</sup> In March 1980, the FERC issued its rules establishing the criteria for determining the qualifying status of a facility and setting out regulations for electric utility interconnection with, sales to, and purchases from QFs.<sup>7</sup>

### State Legislation

In response to PURPA in 1981, the Florida Legislature authorized the Commission to establish guidelines for the purchase and sale of capacity and energy from cogenerators and small power producers, which includes renewable generators. In 1989, the statutes were broadened with the enactment of Section 366.051, F.S., which declares that:

Electricity produced by cogeneration and small power production is of benefit to the public when included as part of the total energy supply of the entire electric grid of the state or consumed by a cogenerator or small power producer. The electric utility in whose service area a cogenerator or small power producer is located shall purchase, in accordance with applicable law, all electricity offered for sale by such cogenerator or small power producer; or the cogenerator or small power producer may sell such electricity to any other electric utility in the state. The Commission shall establish guidelines relating to the purchase of power or energy by public utilities from cogenerators or small power producers and may set rates at which a public utility must purchase power or energy from a cogenerator or small power producer. In fixing rates for power purchased by public utilities from cogenerators or small power producers, the Commission shall authorize a rate equal to the purchasing utility’s full avoided costs. A utility’s “full avoided costs” are the incremental costs to the utility of the electric energy or capacity, or both, which, but for the purchase from cogenerators or

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<sup>6</sup> In Florida, the Florida Public Service Commission has ratemaking jurisdiction over five investor-owned electric utilities: Florida Power & Light Company (FPL), Progress Energy Florida (PEF), Gulf Power Company (Gulf), Tampa Electric Company (TECO), and Florida Public Utilities Company (FPUC).

<sup>7</sup> QFs must meet all of the requirements of 18 C.F.R. §§ 292.203 and 292.204 for size and fuel use and be certified pursuant to 18 C.F.R. § 292.207.

small power producers, such utility would generate itself or purchase from another source.

In 2005 the Legislature enacted Section 366.91, F.S., which requires investor-owned utilities to continuously offer purchase contracts to producers of renewable energy. In 2006 the Legislature enacted Section 366.92, F.S., requiring the Commission to develop a draft rule, subject to ratification by the Legislature, establishing a Renewable Portfolio Standard (RPS) for Florida's investor-owned electric utilities. Subsection (3)(a)1, F.S., states:

Notwithstanding s. 366.91(3)<sup>8</sup> and (4), upon the ratification of the rules developed pursuant to this subsection, the Commission may approve projects and power sales agreements with renewable power producers and the sale of renewable energy credits needed to comply with the renewable portfolio standard. In the event of a conflict, this subparagraph shall supersede s. 366.91 (3) and (4).

This section of the statutes is the first instance where the Legislature has given expressed authority for the Commission to approve cost recovery for renewable energy resources that are above the utility's avoided costs. The Commission submitted its draft rules implementing these provisions on October 2, 2008. To date, the Legislature has not ratified the draft rules.

## **Commission Rules**

Renewable facilities are permitted to enter into two types of contractual agreements for selling power: standard offer and negotiated contracts. Under these contracts, the energy can be sold as either "firm" or "as-available," depending on the characteristics of the output of the facility. When the output is continuous, except for occasional shutdowns for maintenance and repair, the utility also makes payments for the dependable capacity. These contract and payment options are outlined in Rule 25-17.0825 and Rule 25-17.0832, F.A.C.

### Standard Offer Contracts

Standard offer contracts are pre-approved contracts for the purchase of firm capacity and energy from any renewable generating facility or small qualifying facility. Rule 25-17.230, F.A.C., requires each investor-owned electric utility to establish a standard offer contract for each fossil-fueled generating unit type identified in the utility's Ten-Year Site Plan. The renewable energy generator is allowed to select from a number of payment options that best fits its financing requirements as long as the total cumulative present value of such payments do not exceed full avoided cost and adequate security for front-end loaded payments is provided. For example, the Commission rules allow for levelized payments over the life of the contract which may include both capacity and energy costs.

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<sup>8</sup> Section 366.91(3), F.S., adopts the avoided cost standard as defined in Section 366.051.



### Negotiated Contracts

Renewable generating facilities are encouraged to negotiate purchase power contracts with investor-owned electric utilities pursuant to Rule 25-17.230, F.A.C. Payments to a qualified renewable generator pursuant to a negotiated contract may be recovered from ratepayers by the purchasing utility as long as the cumulative present value of the payments do not exceed the utility's full avoided cost and adequate security for front-end loaded payments is provided.

Firm capacity payments: Firm capacity is capacity (MW) produced and sold by a renewable energy generator pursuant to a standard offer contract or a negotiated contract subject to contractual commitments as to the quantity, time, and reliability of delivery. Firm capacity is purchased at rates specified in a standard offer contract which is equal to the utility's avoided capacity cost or at a negotiated rate which may not exceed the utility's avoided capacity cost. Full avoided cost is calculated by determining the cumulative present value of a year-by-year value of deferring each avoided unit over the term of the contract.

Firm energy payments: Firm energy is energy (kWh) produced and sold by a renewable energy generator pursuant to a negotiated contract or a standard offer contract subject to contractual commitments as to the quantity, time, and reliability of delivery. Generally, the rate of payment for firm energy, in cents per kWh, is the lesser of the fuel cost associated with the avoided unit or the utility's system decremental fuel cost.

As-available energy payments: As-available energy is energy (kWh) produced and sold by a renewable energy generator on an hour-by-hour basis for which contractual commitments as to the quantity, time, or reliability of delivery are not required. As-available energy is purchased at a rate in cents per kilowatt hour (kWh) equal to the utility's hourly decremental system fuel cost, which reflects the highest fuel cost of generation dispatched each hour. No capacity payments are made for as-available energy because no reliability benefits are received.

## **Renewable Resource Outlook**

In 2003, the Commission, in consultation with the Florida Department of Environmental Protection (FDEP), completed the 2003 Renewable Energy Assessment Report to identify renewable energy viability in Florida. According to the report, the most feasible sources of renewable energy in Florida are from biomass materials, such as agricultural waste products or wood residues, and industrial waste heat. The 2003 report also stressed that technical feasibility does not ensure economic cost-effectiveness when determining energy resource production.

In developing draft RPS rules pursuant to Section 366.92, F.S., the Commission, in conjunction with the Department of Energy and the Lawrence Berkeley National Laboratory, retained Navigant Consulting, Inc. to prepare a detailed assessment of Florida's renewable potential. The 2008 Navigant Consulting Renewable Energy Potential Assessment (the 2008 Navigant Consulting Report) reported on the existing renewable conditions, the projected potential for renewable development through 2020, compared cost-effective differences, and considered the potential levels of economic impact future renewables may have. The 2008 Navigant Consulting Report substantiated the Commission's 2003 assessment by observing that the majority of Florida's existing renewables consist of solid biomass plants and municipal solid waste facilities. Although the 2008 Navigant



Consulting Report considered solar technologies to have the largest technical potential of any renewable resource in Florida, only a portion of this potential can actually be achieved.

The 2008 Navigant Consulting Report described the comparison of the technical or physical potential versus the achievable potential. For example, although the technical potential for solar power in Florida may be relatively high according to Navigant Consulting, cost-effectiveness and siting issues significantly reduce the achievable potential to commercially develop solar energy technology. The driving forces to the expansion and sustainability of the renewable market depend on the overall value of renewable energy, a basis that is determined by the financial environment as well as government regulation and support. As noted in the 2008 Navigant Consulting Report, in order for the renewable market to have meaningful growth in Florida, the following key conditions must be met:

1. High fossil fuel costs
2. Access to low cost capital and debt rates
3. Continual government rebate programs and tax incentives
4. Established pricing of CO<sub>2</sub> emissions
5. Formation of a Renewable Energy Certificate (REC) market

Current economic and policy conditions generally coincide with Navigant Consulting's unfavorable scenario for future renewable development. Specifically, the unfavorable scenario for carbon assumes an initial price of \$0/ton, scaling to \$10/ton by 2020. Presently, no federal or state policy exists for establishing carbon pricing. The unfavorable scenario for the cost of debt was estimated to be approximately 8.5 percent, the cost of equity approximately 14 percent, and ready access to debt making up 50 percent of renewable project financing. Currently, credit markets are extremely tight and it is uncertain when conditions will improve. Navigant Consulting assumes natural gas costs to be \$5-\$6/MMBtu in the unfavorable scenario. Currently, natural gas is trading at \$3.95/MMBtu, and most forecasts project natural gas prices to increase over the long term.

In the unfavorable scenario, Navigant Consulting estimated that Florida's solar rebate program would expire in 2010, with a \$5 million annual funding level. The Florida Energy and Climate Commission was authorized to provide \$25.4 million in rebates for solar energy equipment between 2006 and 2009. Currently the authorized budget has been depleted and many program participants are still owed rebates amounting to \$54 million. Additionally, as mentioned previously, the Draft RPS Rule submitted by the Commission has not been ratified, so currently no REC market exists.

## Existing Renewable Resources

Currently, renewable energy facilities provide almost 1,220 MW of firm and non-firm capacity. Consistent with the 2008 Navigant Report, the majority of existing renewable facilities consist of biomass and municipal solid waste facilities. Table 2 below summarizes Florida's existing renewable resources.

**Table 2. State of Florida: Existing Renewable Resources**

Fuel Type	Capacity (MW)
Solar	34.5
Wind	0.0
Biomass	408.0
Municipal Solid Waste	398.1
Waste Heat	288.9
Landfill Gas	35.9
Hydro	54.5
<b>Total</b>	<b>1,219.9</b>

## Firm Renewable Contracts

A portion of Florida's renewable energy generation comes from renewable generators which sell to electric utilities under firm contracts. Capacity purchased under a firm contract from these renewable energy sources can defer the need for utilities to construct power plants. Florida's utilities currently purchase more than 466 MW of firm renewable generation, the majority from municipal solid waste facilities. Table 3 below lists firm contracts with the Ten-Year Site Plan utilities.

**Table 3. State of Florida: Contracts for Firm Renewable Energy**

Purchasing Utility	Facility Name	Fuel Type	Contracted Firm Capacity (MW)	Commercial In-Service Date
<b>Investor-Owned Utilities</b>				
FPL	Broward-North	MSW	56.0	1992
FPL	Broward-South	MSW	54.0	1991
FPL	Palm Beach County	MSW	50.0	2005
PEF	Dade County Resource Recovery	MSW	43.0	1991
PEF	Lake County Resource Recovery	MSW	12.8	1990
PEF	Pasco County Resource Recovery	MSW	23.0	1991
PEF	Pinellas County Resource Recovery	MSW	54.8	1983
PEF	Ridge Generating Station	WDS	39.6	1994
TECO	City Of Tampa Refuse-To-Energy	MSW	19.0	1985
TECO	Hillsborough County Refuse-To-Energy	MSW	23.0	1987
<b>Subtotal of IOUs</b>			<b>375.2</b>	
<b>Municipal Utilities</b>				
GRU	G2 Energy	LFG	3.0	2008
JEA	Trailridge	LFG	9.6	2008
<b>Subtotal of Municipals</b>			<b>12.6</b>	
<b>Cooperative Utilities</b>				
SEC	Brevard Energy	LFG	9.0	2008
SEC	Seminole Landfill	LFG	6.2	2007
SEC	Timberline Energy	LFG	1.6	2008
SEC	Lee County Resource Recovery	MSW	50.0	1999
SEC	Telogia Power, LLC	WDS	12.0	2004
<b>Subtotal of Cooperatives</b>			<b>78.8</b>	
<b>Total</b>			<b>466.6</b>	

### Non-Firm Renewable Energy Generators

Renewable energy facilities also produce almost 670 MW of non-firm capacity for sale to utilities on an as-available basis. Energy purchased on an as-available basis is considered non-firm capacity, so Florida's utilities do not count on this generation for reliability purposes. The energy produced by these facilities, however, can give a utility the ability to avoid burning fossil fuels from existing generators. Table 4 on the next page details the various non-firm energy purchases.

**Table 4. State of Florida: Non-Firm Renewable Energy Generators**

Purchasing Utility	Facility Name	Fuel Type	Non-Firm Capacity (MW)	Commercial In-Service Date
<b>Investor-Owned Utilities</b>				
FPL	US Sugar-Bryant	OBS	20.0	1980
FPL	Georgia Pacific	WDS	52.0	1983
FPL	New Hope / Okeelanta	AB	140.0	1985
FPL	Tomoka Farms	LFG	3.8	1998
Gulf	Stone Container	WDS	34.7	1960
Gulf	International Paper Company	WDS	42.8	1983
Gulf	Montenay Bay LLC	MSW	12.5	1987
PEF	Proctor & Gamble (Buckeye)	WDS	38.0	1954
PEF	Potash Of Saskatchewan	WH	42.0	1986
TECO	South Pierce	WH	23.0	1969
TECO	New Wales	WH	65.0	1984
TECO	CF Industries	WH	34.9	1988
TECO	City Of Tampa Sewage	OBG	1.6	1989
TECO	Greenbay	WH	0.0	1990
TECO	Ridgewood	WH	77.0	1992
TECO	Millpoint	WH	47.0	1995
	<b>Subtotal of IOUs</b>		<b>634.3</b>	
<b>Municipal Utilities</b>				
FMPA	US Sugar Corporation	OBS	26.5	1984
GRU	Solar FIT Program	SUN	8.0	2009
OUC	Orange County Convention	SUN	1.0	2009
	<b>Subtotal of Municipals</b>		<b>35.5</b>	
	<b>Total</b>		<b>669.8</b>	

### Existing Utility-Owned Renewable Resources

The utilities also own some renewable facilities, which represent a range of technologies. Table 5 below lists some of the larger utility-owned resources, which consist mostly of non-firm or intermittent resources. Because the energy is non-firm, these facilities serve more to reduce fuel consumption than to eliminate system capacity. Several utilities also own smaller systems, including over 500 kW of distributed solar PV systems. A more indirect renewable system is the landfill gas purification system, which cleans the renewable gas such that it can be used in existing natural gas-fired turbines, thereby displacing fossil fuels.

**Table 5. State of Florida: Existing Utility Owned Renewable Generation**

Purchasing Utility	Facility Name	Fuel Type	Capacity (MW)	Commercial In-Service Date
<b>Investor-Owned Utilities</b>				
FPL	DeSoto	SUN	25.0	2009
Various	Distributed Solar Installations (Aggregate)	SUN	0.1	Varies
<b>Subtotal of IOUs</b>			<b>25.1</b>	
<b>Municipal Utilities</b>				
JEA	North Landfill	LFG	1.5	1997
JEA	Girvin Landfill	LFG	1.2	1999
JEA	Buckman	OBG	0.8	2003
TAL	Corn Hydro	WAT	11.0	1985
Various	Distributed Solar Installations (Aggregate)	SUN	0.4	Varies
<b>Subtotal of Municipals</b>			<b>14.9</b>	
<b>Other Utilities</b>				
UCEM	Jim Woodruff	WAT	43.5	1957
<b>Subtotal of Others</b>			<b>43.5</b>	
<b>Total</b>			<b>83.5</b>	

### Self-Service Renewable Generation

In addition to those facilities which provide renewable energy to the grid through contracts or as-available energy tariffs, several self-service renewable facilities also produce energy. Facilities such as these do not deliver energy to the grid, but rather meet or reduce their own energy requirements through the use of renewable energy. These facilities cannot be counted on for reliability purposes, similar to non-firm renewables, but they do still play a role in reducing Florida's dependence upon fossil fuel-fired generation.

### Net Metering

Net metering is an arrangement between a utility and a customer with renewable generation capability whereby the customer's energy usage is offset by the amount of energy generated. If the customer's energy usage is less than that produced by the renewable generator, then the utility will credit the customer's account for that energy. Conversely, the customer will be billed for any energy consumed that exceeds the energy generated. Typically, two meters are used to keep account of the amount of energy consumed and the amount of energy generated.

In April 2008, the Commission amended Rule 25-6.065, F.A.C., on interconnection and net metering for customer-owned renewable generation. The rule requires the IOUs to offer a standard interconnection agreement with an expedited interconnection process and net metering for all types of renewable generation up to 2 MW in capacity. Customers first benefit from such renewable systems by reducing their energy purchases from the utility. Net metering provides an additional benefit by allowing customers with excess renewable energy production to reduce future energy purchases from the utility.



The Commission's rule requires all electric utilities to annually report data associated with their interconnection and net metering programs. Data submitted in April 2009 show that the number of customers owning renewable generation systems in Florida is growing. Electric IOUs report that 1,044 customers owned solar photovoltaic systems in 2009, up from 383 in 2008. For all electric utilities, about 13,236 kilowatts (13.2 MW) of solar photovoltaic capacity from 1,590 systems have been installed statewide. Florida's utilities reported the following information on customer-owned renewable generation for 2009, listed on Table 6 below.

**Table 6. State of Florida: Customer-Owned Renewable Generation**

Utility Type	Connections	Non-Firm Capacity (MW)
Investor-Owned	1,044	7.903
Municipal	303	3.378
Rural Electric Cooperatives	243	1.955
<b>Total</b>	<b>1,590</b>	<b>13.236</b>

## Proposed Renewable Generation

Florida's utilities plan to construct or purchase an additional 734 MW of renewable generation over the ten-year planning period. The majority of the additions are currently proposed to come from biomass, with significant amounts from solar and municipal solid waste as well. Table 7 below summarizes the planned renewable resources through the planning horizon.

**Table 7. State of Florida: Planned Renewable Resource Net Additions**

Fuel Type	Capacity (MW)
Solar	296.2
Wind	13.8
Biomass	372.0
Municipal Solid Waste	20.0
Waste Heat	0.0
Landfill Gas	32.3
Hydro	0.0
<b>Total</b>	<b>734.3</b>

On the following pages, Table 8, Table 9, and Table 10 provide detailed lists of the renewable resources planned for construction over the ten-year period in Florida. Table 8 below shows that of the renewable firm capacity in Florida planned over the ten-year horizon, the majority is MSW that will be purchased by IOUs.

**Table 8. State of Florida: List of Planned Renewable Firm Capacity**

Purchasing Utility	Facility Name	Fuel Type	Contracted Firm Capacity (MW)	Commercial In-Service Date
<b>Investor-Owned Utilities</b>				
FPL	Palm Beach County Resource Recovery Uprate	MSW	5.0	2012
PEF	BG&E #2	WDS	75.0	2011
PEF	Hathaway Units 1-3	OBS	48.0	2013
PEF	BG&E #1	WDS	45.0	2013
PEF	FB Energy	AB	60.0	2014
<b>Subtotal of IOUs</b>			<b>233.0</b>	
<b>Municipal Utilities</b>				
GRU	G2 Energy	LFG	0.8	2010
GRU	Gainesville Renewable Energy Center	WDS	100.0	2013
JEA	Trailridge	LFG	6.0	2011
<b>Subtotal of Municipals</b>			<b>106.8</b>	
<b>Cooperative Utilities</b>				
SEC	Hillsborough Waste to Energy Uprate	MSW	15.0	2010
SEC	Bee Ridge	LFG	3.2	2010
SEC	Timber Energy	WDS	13.0	2010
SEC	Hendry County	AB	25.0	2012
<b>Sub-Total of Cooperatives</b>			<b>56.2</b>	
<b>Total</b>			<b>396.0</b>	

Similar to planned firm capacity purchases, Table 9 below shows that most of the non-firm capacity planned in Florida will be purchased by IOUs. However, unlike firm capacity, it will be almost exclusively solar powered.

**Table 9. State of Florida: List of Planned Renewable Non-Firm Capacity**

Purchasing Utility	Facility Name	Fuel Type	Non-Firm Capacity (MW)	Commercial In-Service Date
<b>Investor-Owned Utilities</b>				
FPL	WM Renewable Energy	LFG	8.0	2010
PEF	Eliho	OBS	6.0	2010
PEF	Blue Chip Energy	SUN	10.0	2010
PEF	National Solar #1-6	SUN	127.0	Varies
<b>Subtotal of IOUs</b>			<b>151.0</b>	
<b>Municipal Utilities</b>				
GRU	Solar FIT Program	SUN	20.0	Varies
JEA	Jacksonville Solar	SUN	15.0	2010
LAK	SunEdison PV Projects	SUN	24.0	Varies
OUC	Solar Farm	SUN	9.4	2011
OUC	Solar Aggregation Project	SUN	0.8	2011
OUC	Harmony	SUN	5.0	2013
<b>Subtotal of Municipals</b>			<b>74.2</b>	
<b>Total</b>			<b>225.2</b>	

Table 10 below shows that ninety percent of the utility-owned renewable projects planned in Florida in the next ten years will be owned by IOUs. The remaining ten percent is planned by municipal utilities.

**Table 10. List of Planned Utility-Owned Renewable Additions**

Purchasing Utility	Facility Name	Fuel Type	Capacity (MW)	Commercial In-Service Date
<b>Investor-Owned Utilities</b>				
FPL	Space Coast Next Generation Solar Energy Center	SUN	10.0	2010
FPL	Martin Next Generation Solar Energy Center	SUN	75.0	2010
FPL	St Lucie Wind	WND	13.8	TBD
Gulf	Perdido	LFG	3.0	2010
<b>Subtotal of IOUs</b>			<b>101.8</b>	
<b>Municipal Utilities</b>				
OUC	STC LFG	LFG	2.0	2011
OUC	Holopaw LFG	LFG	9.3	2013
<b>Subtotal of Municipals</b>			<b>11.3</b>	
<b>Total</b>			<b>113.1</b>	



Pursuant to current state and federal law, payments for capacity and energy purchased by utilities to generation facilities using renewable energy sources are capped at the utility's avoided cost for capacity and energy. In spite of the downturn in load growth resulting in reduced need for new generation, renewable generation has increased. Compared to figures in the 2009 Ten-Year Site Plan Review, existing renewable generation facilities have grown by approximately 4.2 percent (49 MW). However, in September 2010, Progress Energy Florida announced the termination of two large renewable purchased power contracts, which had represented almost twenty percent of the state's planned new renewable generation. A 40 MW biomass project and a 60 MW refuse-to-energy project were both cancelled due to a lack of funding. As a result, when compared to the 2009 Ten-Year Site Plan Review, the amount of new renewable generation planned for the ten-year horizon has decreased by approximately 1.75 percent (13.1 MW).

## **Updated Navigant Consulting Report**

The Commission contracted with Navigant Consulting in early 2010 to update their 2008 analysis with current conditions. In June 2010, Navigant Consulting released new comparisons of cost estimates for different renewable generating facilities. Navigant Consulting also provided additional detail pertaining to Florida's renewable resource which they identified as having the most technical potential for growth, solar photovoltaic facilities. Findings from the report are summarized below.

In the 2010 Navigant Consulting Report Update, the most meaningful findings include changes in prices of renewable technologies. PV module prices have fallen and commodity costs for PV units have decreased during the recession, but both are returning to near their pre-recession levels. Wind power prices have also decreased due to the recession, while utility turbine prices have risen as worldwide demand catches up with supply. According to the 2010 Navigant Consulting Report Update, no large performance breakthroughs occurred for any technology. Because Navigant Consulting found solar resource to hold the most potential in Florida, the remainder of the 2010 Navigant Consulting Report Update focuses on solar power.

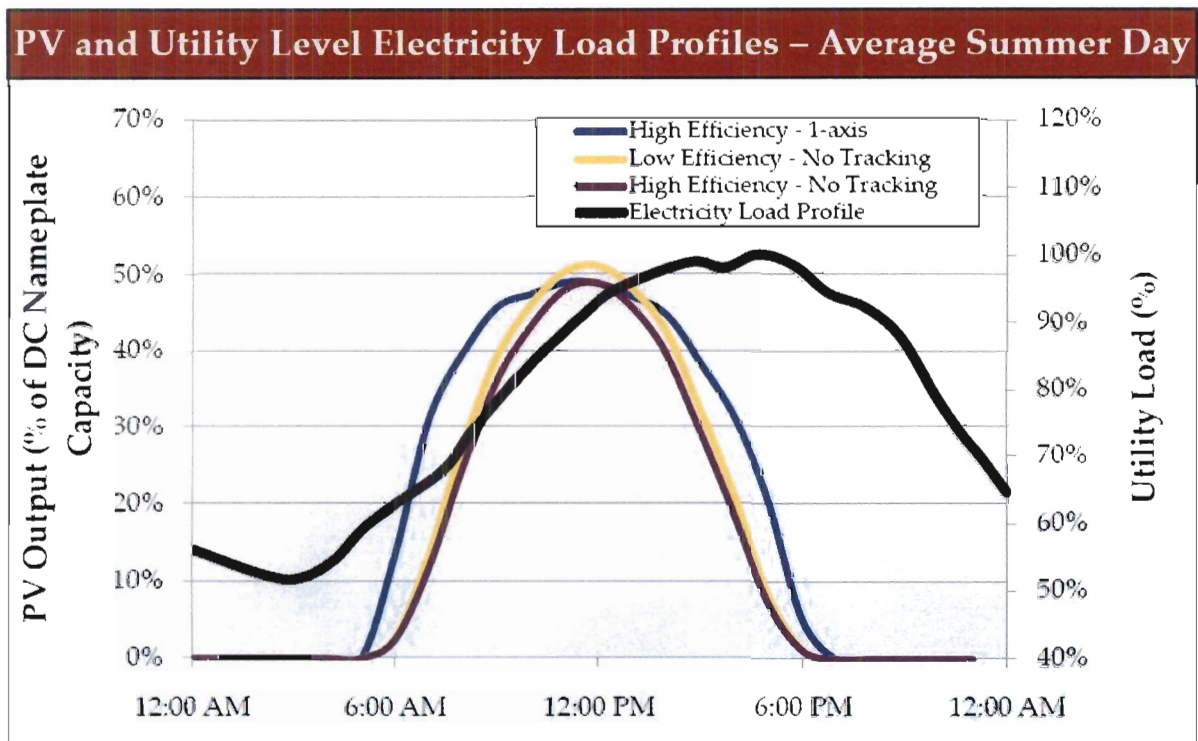
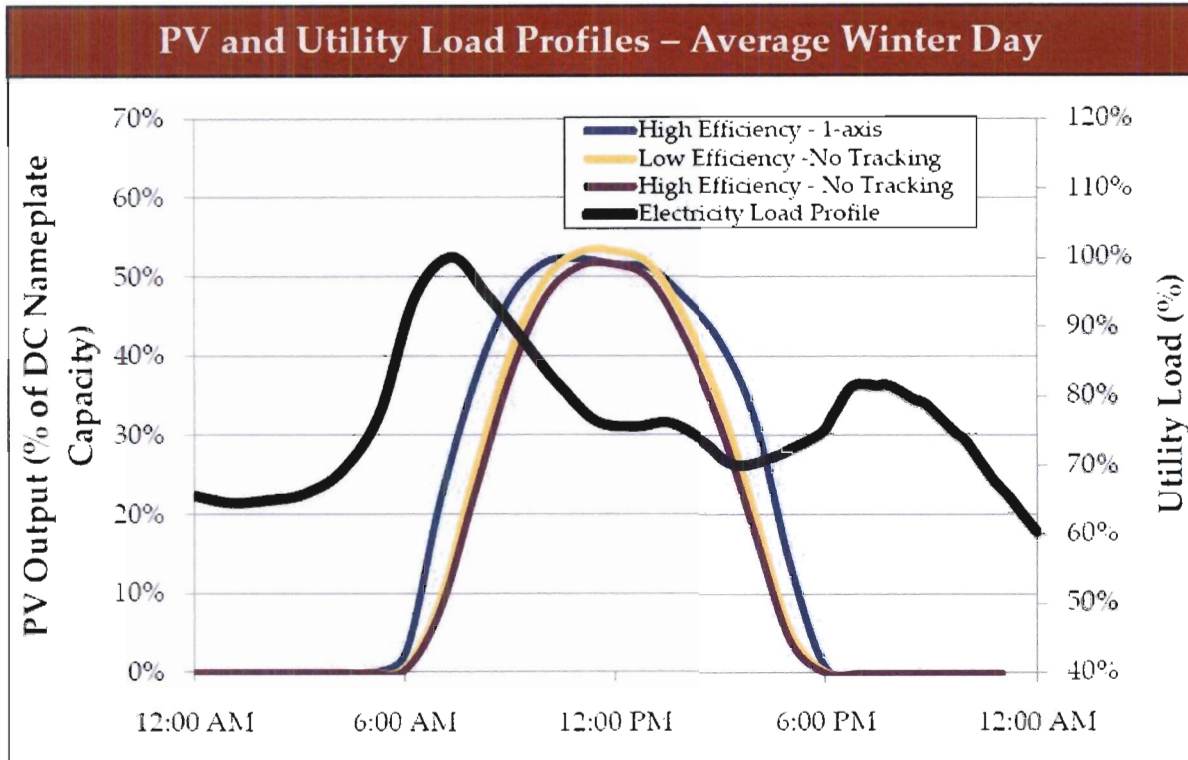
The 2010 Navigant Consulting Report Update estimates that solar power systems have increased in efficiency while overall prices have decreased up to 40 percent from 2008. In spite of these changes, solar power systems continue to have some of the highest capital costs per kW of any renewable generating system. Varying the methods of using solar energy involving solar tracking technology and alternating solar film receptors produce a slight range of energy output and net capacity factors. In addition, the ability of solar PV systems to provide energy are limited to daytime hours. Supplemental battery storage units may alleviate this issue, but the costs of batteries are not included in Navigant Consulting's estimates and would therefore increase the capital and operating and maintenance (O&M) costs shown below in Table 11.

**Table 11. Solar Technology Comparison**

Category	Unit	High Efficiency with Tracking			High Efficiency without Tracking			Fixed Thin Film		
Summer Peak Output	MW <sub>AC</sub>	6.85			6.76			6.82		
Winter Peak Output <sup>A</sup>	MW <sub>AC</sub>	7.89			7.89			7.66		
Net Capacity Factor <sup>B</sup> <sup>C</sup> (DC to AC)	%	18.4-18.8%			14.6-14.8%			15.8-16.1%		
Net Capacity Factor <sup>C</sup> (AC to AC)	%	23.0-23.5%			18.3-18.5%			19.8-20.1%		
Projected Year		2010	2015	2020	2010	2015	2020	2010	2015	2020
Installed Cost <sup>b</sup>	\$/kW <sub>DC</sub>	\$5,800	\$5,000	\$4,200	\$5,100	\$4,500	\$3,900	\$4,600	\$4,000	\$3,250
Fixed O&M <sup>F</sup>	\$/kW <sub>DC-YR</sub>	\$35	\$30	\$26	\$28	\$24	\$21	\$40	\$34	\$30
Chart Notes										
(A) Winter output is higher because the inverse relationship between temperature and output balances out the fact that the sun is directly overhead in the summer.										
(B) The range accounts for slight weather variations between north and south Florida. The values reported here are first year capacity projections. System output will degrade at between 0.3% and 0.7%/Year										
(C) Peak output and capacity factors calculated simulating systems in Florida using the National Renewable Energy Laboratory's Solar Advisory Model										
(D) This cost includes permitting and interest during construction, but does not include interconnection, transmission, or substation upgrade costs.										
(E) This estimate does not include property taxes.										

Even with these advancements, capacity factors of solar panels are projected to remain below 25 percent. Such results indicate that solar PV facilities operate more like a conventional peaking unit and will not replace the need for base-load generating facilities. However, Navigant Consulting also reported that operating characteristics for these systems do not correlate with daily peak load hours. Figure 10 below shows the varying hourly capacity potential against the average daily demand in Florida. Navigant Consulting estimates that the peak output from solar PV facilities reaches a maximum of approximately 50 percent of the rated capacity and occurs after the system's winter peak hour and before the system's summer peak hour. As a result, a solar PV facility's ability to provide reliability benefits appears limited.

Figure 10. Solar PV Output and Utility Seasonal Load Profiles



## Florida's Large Solar Projects

The development of new renewable energy facilities in the state, such as solar, continues to depend largely on continued government subsidies and rebates. To demonstrate the feasibility and viability of clean energy systems, the Florida Legislature passed amendments to Section 366.92, F.S., during the 2008 legislative session. One amendment allows full cost recovery under the environmental cost recovery clause for certain renewable energy projects up to a total of 110 MW.

On July 15, 2008, the Commission approved FPL's petition for the approval of eligibility of cost recovery of three solar energy projects totaling 110 MW, pursuant to Section 366.92(4), F.S. FPL's DeSoto Solar and Space Coast Solar generate 25 MW and 10 MW, respectively. DeSoto Solar uses tracking array solar photovoltaic (PV) panels, while Space Coast Solar uses fixed array solar PV panels. FPL's largest project, Martin Solar, will be a 75 MW solar thermal steam generating facility at the existing Martin Power Plant Site in Martin County, Florida. Martin Solar involves the installation of solar thermal technology integrated into the existing steam cycle for Martin 8, a natural gas-fired combined cycle generating unit. The supplemental steam to be supplied by Martin Solar will be generated from concentrating solar radiation through parabolic trough solar collectors. By using this technology, Martin Solar is designed to serve as a fuel substitution resource and will not provide additional capacity.

At the time of the filing, FPL estimated that the three solar facilities would cost an additional \$573 million above traditional generation costs over the life of the facilities. FPL currently estimates that the three solar facilities will cost an additional \$535 million above avoided cost over the life of the facilities, a slight reduction from what was originally estimated. The result is a monthly increase to a typical residential bill of approximately \$1.01 by 2011, the first full year of operation for the three facilities. The solar facilities are expected to reduce the consumption of oil by 991,000 barrels, natural gas by 44,487,000 MMBtu, and CO<sub>2</sub> production by over 3 million tons over the next 30 years. While the economic impact of reducing oil and natural gas consumption is accounted for in FPL's estimates, the strategic benefits of reducing the use of a finite fossil fuel source are not captured. In addition, if/when Congress passes legislation that regulates the cost of greenhouse gas emissions, then the cost of traditional generation technology will increase, adding to the net value of non-emitting facilities such as solar PV facilities.





## 5. TRADITIONAL ENERGY GENERATION

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Load forecasts continue to indicate that the state's electrical energy needs will exceed even the increased DSM and energy efficiency programs described earlier. While reduced demand has led to the recent delay of several projects, additional traditional generation will be necessary to satisfy reliability requirements and provide sufficient energy to Florida's consumers. Florida's electric utilities must carefully weigh several factors in selecting a supply-side resource for future traditional generation projects. Any capacity addition has certain economic impacts based on the capital required for the project. Typically, more fuel-efficient units have higher capital costs, and the trade-offs between these two characteristics must be carefully considered. The type of fuel used is also important, as a heavy reliance upon any single fuel for a utility's generation fleet exposes the utility's ratepayers to increased risk of fuel price volatility and availability.

Florida's utilities must also contend with increasing environmental concerns, especially those relating to carbon dioxide emissions. Discussions regarding emissions requirements for greenhouse gases are underway at a national level. Potential incremental environmental requirements and costs must be considered to fully evaluate any new supply-side resources.

### Capacity Types

Traditional generating plants are generally classified as one of three capacity types: base load, peaking, or intermediate. A utility's goal for a base load unit is continuous operation, with the exception of planned outages for maintenance requirements. Base load units are characterized by high capital costs, low fuel costs, and long permitting and construction lead times. Peaking units, on the other hand, are operated least frequently at times of highest demand only. These units have lower capital costs, highest fuel costs, and the shortest lead times. Intermediate units supply the middle ground, providing power to follow load for longer durations than peaking units, but not the continuous output of a base load power plant. Correspondingly, the capital costs, fuel costs, and lead times of intermediate units are between those of base load and peaking units.

Once the timing of capacity additions is determined to meet reliability criteria, the technology and fuel type can be determined. The selection of a particular unit can be influenced by various factors, including fuel prices, availability, reliability, and transmission limitations. A utility's daily operations are guided by the principle of economic dispatch, wherein variations in the price of fuel and other market concerns are evaluated to determine the least expensive means of producing electric power. As a result of market fluctuations, the relative usage of each unit varies based on operating fuel costs, and any particular unit may fall into more than one category.

Combustion turbines are the typical peaking unit selected for new generation by Florida's utilities. They are commonly fueled by natural gas, though some have dual-fuel capability with light oil as an alternative. Small utilities also utilize internal combustion engines as peaking units. Steam generators form the backbone of existing base load generation in Florida, with either coal-fired boilers or nuclear steam. Except for new nuclear generation, most new base load generation in Florida is planned to be natural gas-fired combined cycle units, which can also be dispatched as intermediate units.

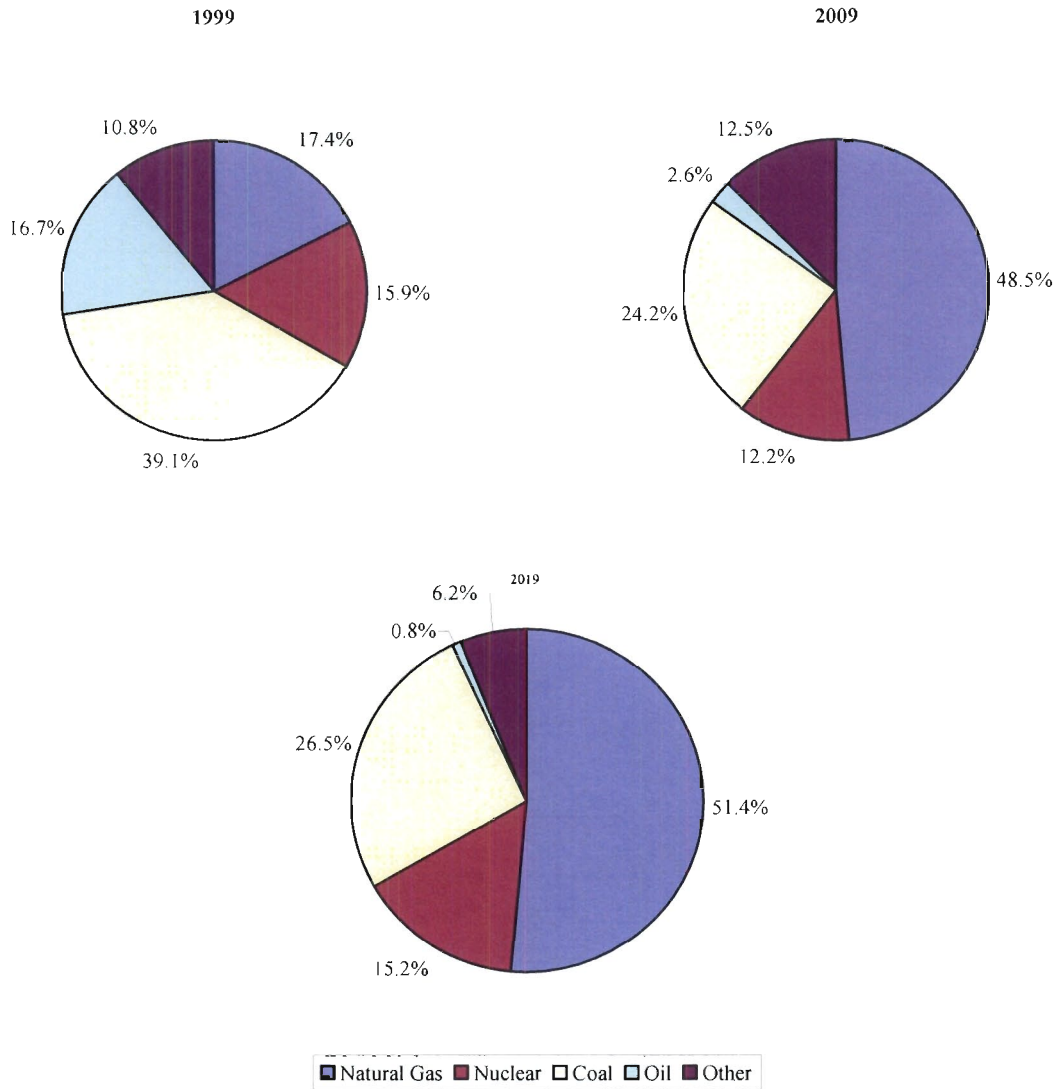
## Fuel Diversity

Prior to the dramatic increase in oil prices in the late 1970s, Florida's utilities used oil as the primary fuel source for generating electricity. In accordance with energy policy established by the Legislature and implemented by the Commission, Florida's utilities made a concerted effort to add generating units that used solid fuels. One early response was the purchase of economical "coal-by-wire" from the Southern Company, which had a temporary surplus of coal-fired generation resources already constructed. The Commission led the utilities' efforts to maintain fuel diversity with regulatory programs such as the Oil Backout Cost Recovery Factor, which gave utilities an incentive to recover costs of converting from oil-based generation to other fuels, and the Energy Broker, a computerized system which matched buyers and sellers of economy energy to minimize the real time fuel costs of the participating utilities.

In 1987, the U.S. Congress repealed the Power Plant and Industrial Fuel Use Act, which restricted the use of natural gas as a boiler fuel and contributed to a significant oversupply of natural gas. Shortly after the repeal, a new era of highly efficient, flexible, environmentally preferred combustion turbine (CT) and combined cycle (CC) units entered the market in response to falling natural gas prices. The addition of these technologies by Florida's utilities fostered an increase in the use of natural gas to produce electricity. Due to the state's continued increase in the demand for electricity and the relatively low natural gas prices during the 1990s, Florida's utilities continued to add gas-fired generating units to satisfy economic and reliability needs.

Natural gas has become the chief fuel used by Florida's electric utilities, with an increase from nearly 17.4 percent of the state's electricity requirements in 1999 to 48.5 percent in 2009. This trend is expected to continue, with projections indicating that natural gas-fired generation will supply 51.4 percent of the state's electrical requirements by 2019. Figure 11 on the next page illustrates Florida's energy generation by fuel type, clearly showing the increasing dependency on a single fuel source.

**Figure 11. State of Florida: Energy Generation by Fuel Type (Percent of Total)**

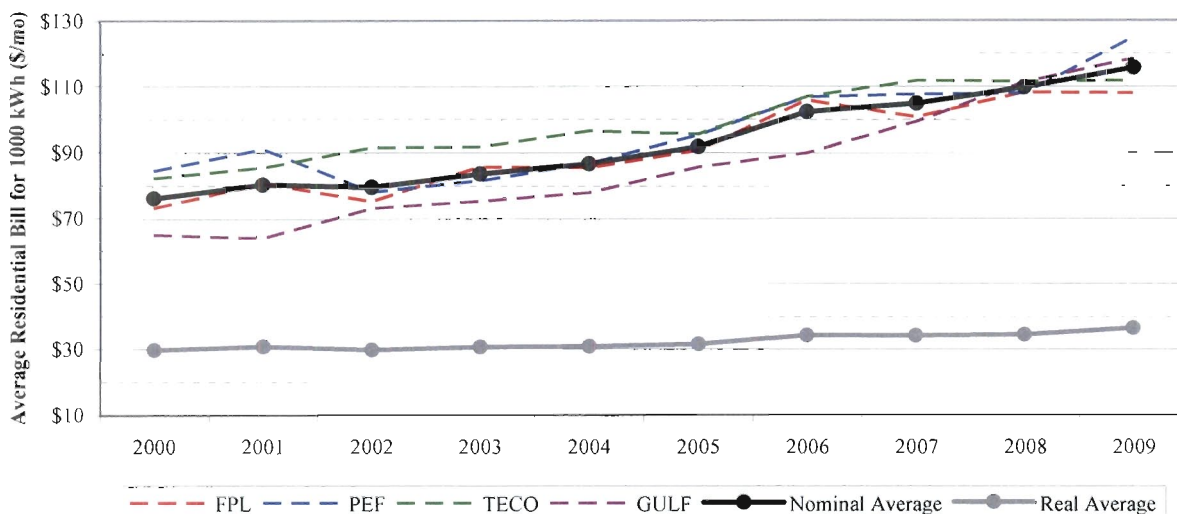


**Impact on Customer Bills**

Between 1980 and 2000, moderate fuel prices, as well as a balanced planning approach used by Florida’s utilities, resulted in relatively stable nominal average electricity prices for Florida’s ratepayers with real prices actually declining. In 2001, natural gas prices began to increase nationwide, and as a result, electricity prices have increased as well. This trend has continued throughout the decade although real prices have remained relatively stable and show only a slight rate of increase. Figure 12 below illustrates this trend for the four largest IOUs.



**Figure 12. IOUs: Average Residential Electric Bill (2000 through 2009)**



Electricity prices have been increasing consistently since 2003, when natural gas prices began to increase nationwide. Natural gas tends to feature a high degree of price volatility, ranging from short-term spikes due to natural gas supply disruptions (such as in 2005 caused by hurricanes and tropical storms in the Gulf of Mexico), to the more dramatic price spike in 2008. Natural gas prices returned to significantly lower levels and remained there during 2009. Volatile natural gas prices have had a dramatic effect on customer bills in Florida and have resulted in several mid-term adjustments of the Fuel Clause. Of customer's retail bills, approximately half is comprised of fuel or purchased power costs, for which the IOUs are not allowed to earn a profit. Such events illustrate the importance of a balanced fuel supply, since fuel diversity can serve as a risk mitigation strategy by providing a dampening effect on fuel price volatility caused by daily market fluctuations.

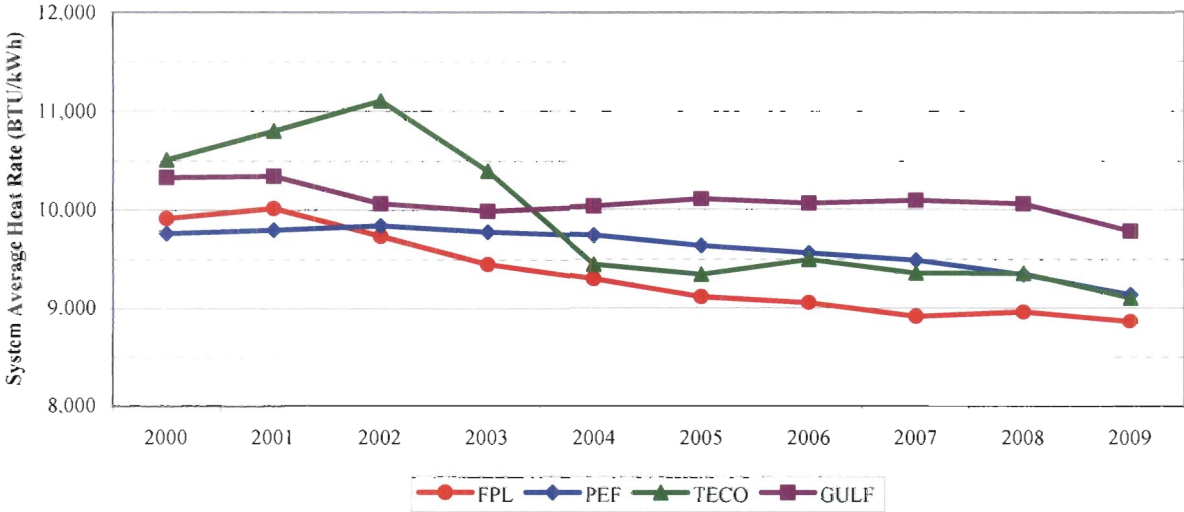
Over the last 20 years, Florida's utilities have increasingly relied upon natural gas to satisfy the state's growing energy demand. Any overdependence upon a single fuel, however, leads to significant risks relating to supply disruptions or price fluctuations, which can result in customer rate increases. Having multiple generating units with different fuel types increases the overall capital cost of a system, but also gives operational advantages. Maintaining a fleet capable of using a variety of fuels allows Florida's electric utilities to better adapt to changes in the economic and regulatory landscape by utilizing the least expensive fuel and meeting emissions standards at a minimum incremental cost to customers.

### Utility Generation Efficiency and Modernization

Maintaining an efficient generation fleet plays an important role in meeting the many environmental, economic, and reliability issues that Florida's electric utilities must address. Increased efficiency results in reduced fuel consumption, which lowers fuel costs, fuel transport requirements, and environmental emissions. Overall, Florida's investor-owned utilities have steadily increased the efficiencies of their generating fleets, as shown in the system average heat rates illustrated in Figure 13 below. A lower heat rate value indicates a more fuel efficient system. Improved efficiency can be

accomplished by the construction of new efficient generating units, the retirement of older and less efficient generating units, or the modernization of existing generating units.

**Figure 13. IOUs: System Average Heat Rates**



The modernization of existing generating units allows for significant improvements in both performance and emissions, typically at a price lower than new construction. Modernization typically involves the conversion of generating units from less efficient fossil steam generation to combined cycle generation. This conversion increases capacity while improving the thermal efficiency of the existing unit, resulting in decreased fuel use and lower emissions. Steam generation can also be improved by installing more advanced equipment, such as the nuclear uprates discussed below.

Since the existing unit must be removed from service for a period of time, a utility’s reliability is affected during the conversion process. As a result, scheduling modernizations during periods of temporary excess capacity is more desirable. With the forecasted decline in load, several of Florida’s utilities may have sufficient reserve margins to allow some of their smaller units to be converted, and the upcoming ten-year planning horizon appears to be an ideal window for completing these types of projects. Not all sites are candidates for modernization due to site layout and other concerns, and to minimize rate impacts, modernization of existing units should be investigated before considering new construction. Utilities should continue to explore potential conversion projects and report the feasibility and economic viability of each conversion in next year’s Ten-Year Site Plans and before any need determination filing.

In response to a staff data request, the Ten-Year Site Plan utilities identified the following facilities that are potentially capable of conversion. Table 12 below summarizes their responses.

**Table 12. IOUs: Fossil Steam Facilities to Consider for Conversion**

Company	Plant Name	Fuel & Unit Type	Combined Summer Capacity (MW)	In-Service Year(s)	Unit Notes
FPL	Riviera Units 3 & 4	Oil Steam	565	1962 - 1963	Approved for Modernization
FPL	Cape Canaveral Units 1 & 2	Oil Steam	792	1965 - 1969	Approved for Modernization
FPL	Cutler Units 5 & 6	Natural Gas Steam	205	1954 - 1955	Inactive Reserve (2010) Not to Return
FPL	Manatee Units 1 & 2	Oil Steam	1,624	1976 - 1977	-
FPL	Martin Units 1 & 2	Oil Steam	1,652	1980 - 1981	-
FPL	Sanford Unit 3	Oil Steam	138	1959	Inactive Reserve (2010) Not to Return
FPL	Turkey Point Unit 1	Oil Steam	396	1967	-
FPL	Turkey Point Unit 2	Oil Steam	392	1968	Inactive Reserve (2010) Returns 2018
FPL	Port Everglades ST1-4	Oil Steam	1,205	1960 - 1965	Inactive Reserve (2010-11) Unit 3 Returns 2019
PEF	Crystal River 1 & 2	Coal Steam	869	1966 - 1969	-
PEF	Suwannee Steam Plants	Oil Steam	131	1953 - 1956	-
PEF	Anclote Steam Plants	Oil Steam	1,011	1974 - 1978	-
Gulf	Plant Scholz Coal Units	Coal Steam	92	1953	-
Gulf	Plant Smith Coal Unit	Coal Steam	357	1965 - 1967	-
	<b>Total Capacity</b>		<b>9,429</b>		

The Commission has already granted determinations of need for two conversions from fossil steam to combined cycle units. The approved conversions, located at FPL’s Cape Canaveral and Riviera sites, represent a significant increase in generating capacity while reusing the plant site and reducing fuel usage and emissions. PEF has also recently conducted a conversion of its Bartow plant from fossil steam to a combined cycle unit. This conversion did not require a PPSA determination of need. PEF currently plans the retirement of Crystal River Units 1 and 2 after Levy Unit 2 has completed its first fuel cycle, due to stipulations relating to environmental issues. Gulf also is evaluating the conversion of two of its smaller coal units, Scholz Units 1 and 2, to biomass fuel.

In its 2009 Ten-Year Site Plan, FPL revealed plans to remove from service several of its natural gas-fired and oil-fired steam units and place them into “Inactive Reserve” status. These units, named in Table 12, are all considered candidates for modernization. FPL has determined that by temporarily removing these units, which have high operating costs, the utility can more affordably serve its customers. Changes in customer demand, recent construction of more efficient generating units, and other capacity additions have created excess capacity in FPL’s system; therefore, these units are not required to serve customer demand and will not adversely affect FPL’s reliability due to their unavailability. These units will continue to be maintained and can be returned to service as needed, dependent upon load forecasts.

### Reserve Margin Requirements

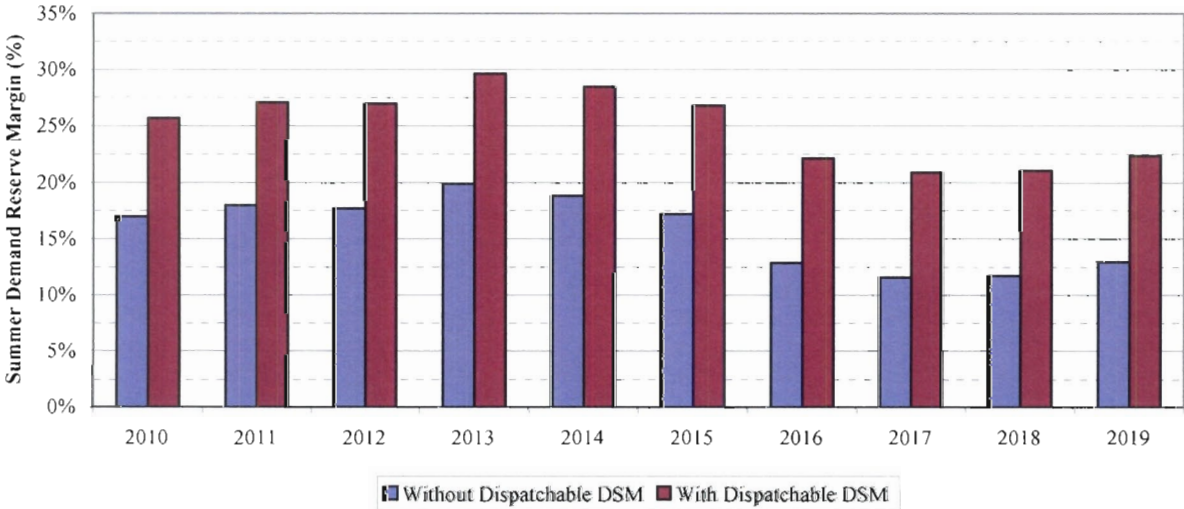
Florida’s utilities adjust their system output constantly to meet the electric demand of customers from moment to moment. In addition, the utilities must be prepared to meet unexpected

spikes in demand due to unforeseen circumstances. Although peak demand is carefully monitored, each utility must maintain a certain amount of “reserve” capacity in the event that demand rises above forecasted levels. This “extra” generating capacity is expressed as a percentage of firm demand and is referred to as the “reserve margin.” Although the FRCC requires a minimum reserve margin of 15 percent, many Florida utilities including FPL, PEF, and TECO maintain a reserve of 20 percent above peak demand. Reserve margins approach the minimum FRCC criteria primarily in the summer season. The lower summer reserve margin is partially due to load forecasting, but the fact that generating units can operate at a higher capacity in the winter than the summer due to ambient temperatures is also a contributing factor.

Although the 20 percent reserve margin employed by FPL, PEF, and TECO provides increased reliability to the state’s system, it is paramount that, in an era of rising rates, utilities should study all options available to mitigate price increases, including possible modification of current planning criteria.

DSM, such as load management and interruptible load, is also included in the region’s reserve margin. Although the FRCC has not set a standard limiting the percentage of the reserve margin that can be met with DSM, utilities have found that when these types of programs are used frequently, customers are more likely to leave the program. The sudden loss of DSM participants can lead to a lower system reliability, so utilities must balance the reserve margin between DSM and generation. As shown in Figure 14 below, the projected reserve margins with DSM are at or above 20 percent for the ten-year period.

**Figure 14. FRCC: Summer Peninsular Reserve Margin Projections**





## **Proposed Generating Units by Fuel Type**

The Florida Public Service Commission is given exclusive jurisdiction by the Legislature, through the Power Plant Siting Act, to be the forum for determining the need for electric power plants. Any proposed steam or solar generating unit of at least 75 MW requires certification under the Power Plant Siting Act. The Commission has granted determinations of need for several generating units of various technology types in recent years.

Approximately 7,200 MW of new generating units are planned to enter service over the next 10-year period, consisting primarily of natural gas-fired combustion turbines and combined cycle units. A majority of this capacity has already received a determination of need from the Commission or is exempted from the statutory requirements of the PPSA. Only one unit, a 970 MW natural gas-fired combined cycle, still requires certification, and a petition requesting this determination of need is expected by approximately 2014.

### **Coal**

Due to a combination of high capital costs and uncertainties regarding fuel costs and potential environmental costs, no plans currently exist to construct coal-fired capacity in Florida. An element of the economic uncertainty relating to coal units is the possibility of a cost for carbon dioxide emissions. While no such state or federal regulation has yet been enacted, a significant concern relating to environmental costs of new generation does exist.

Previously, Seminole Electric Cooperative had received final certification of Seminole Unit 3, a 750 MW coal-fired power plant, but elected to discontinue the project in January 2010. While no major retirements of coal-fired generation are planned during the 2010-2019 period, coal remains a significant portion of Florida's capacity resources. Excluding coal, the only traditional generating fuels remaining available for use are nuclear and natural gas.

### **Nuclear**

Nuclear generation is a technology that produces no greenhouse gas emissions. Strides have been made nationally to bring nuclear generation back to the forefront, including new standardized plant designs pre-approved by the Nuclear Regulatory Commission and streamlined safety and operating licensing to expedite construction. Nevertheless, licensing, certification, and construction of a new nuclear power plant in Florida is expected to take approximately ten years. Coupled with extremely high capital costs, due in part to worldwide industrialization and demand for construction materials and labor, the commitment to the construction of new nuclear power plants entails its own set of financial risks. In an effort to mitigate the economic risks associated with nuclear power plants, the Florida Legislature enacted Section 366.93, F.S., in 2006. This statute directed the Commission to establish new rules to provide early cost recovery mechanisms for costs related to the siting, design, licensing, and construction of nuclear power plants in Florida. Rule 25-6.0423, F.A.C., adopted April 8, 2007, implements the legislative standard for nuclear power plant cost recovery.

Increased nuclear capacity will significantly contribute to both greater system fuel diversity and lower greenhouse gas emissions. Additionally, nuclear generation does not face the same supply

disruptions as fossil fuel generation because nuclear fuel is replenished during refueling outages which typically take place once every 18 to 24 months.

Both FPL and PEF have included additional nuclear capacity from expansion (uprates) of their existing nuclear generating units in their 2010 Ten-Year Site Plans. Combined, the nuclear uprates will add approximately 565 MW of additional nuclear capacity.

In 2008, the Commission also granted both PEF and FPL determinations of need for new nuclear generation. PEF’s Levy Units 1 and 2 are planned for construction on a greenfield site near its existing Crystal River power plant, and FPL’s Turkey Point Units 6 and 7 are planned for an existing nuclear site. All four new units are anticipated to be the new AP 1000 nuclear design with a projected rating of approximately 1,100 MW. The Governor and Cabinet have certified PEF’s Levy Units 1 and 2, but have not yet certified FPL’s Turkey Point Units 6 and 7. Both PEF and FPL have experienced delays in their construction timelines from those presented at the time of need determination.

PEF included Levy Unit 1 in its current Ten-Year Site Plan filing, with plans to begin commercial service in June 2019. However, in its 2010 nuclear cost recovery clause filings, PEF revised the in-service dates to 2021 and 2022 for the two Levy Nuclear units. The delay is a result of multiple factors, including the failure to receive a Limited Work Authorization from the Nuclear Regulatory Commission and an ongoing review on the AP1000 design.

Similarly, FPL’s nuclear units have experienced delays which have pushed the units out of the scope of this Ten-Year Site Plan. In its 2010 nuclear cost recovery clause filings, FPL states that for planning purposes, the in-service dates are approximately 2022 for Unit 6 and 2023 for Unit 7. As a result of these delays, no new nuclear generating units are expected to be built within the 2010 through 2019 period, and the only addition of nuclear capacity will come from the unit uprates previously discussed. A summary of the new nuclear capacity additions is found in Table 13, below.

**Table 13. State of Florida: Nuclear Capacity Additions**

Utility	Generating Unit Name	Summer Capacity (MW)	Dates		
			Need Approved (Commission)	PPSA Certified	In-Service Date
PEF	Crystal River 3	4 & 156	2 / 2007	8 / 2008	2010 & 2011
FPL	St Lucie 1	103	1 / 2008	9 / 2008	2011
FPL	Turkey Point 3	104	1 / 2008	10 / 2008	2012
FPL	St. Lucie 2	94.3	1 / 2008	9 / 2008	2012
FPL	Turkey Point 4	104	1 / 2008	10 / 2008	2012
PEF	Levy 1	1,092	5 / 2008	8 / 2009	2021
PEF	Levy 2	1,092	5 / 2008	8 / 2009	2022
FPL	Turkey Point 6	1,100	3 / 2008	-	2022
FPL	Turkey Point 7	1,100	3 / 2008	-	2023
<b>Total Capacity</b>		<b>4,949</b>			

Nuclear power plant construction is capital-intensive and has a long lead time. The Commission, however, reviews the continued feasibility of both Levy Units 1 and 2 and Turkey Point 6 and 7 during its annual nuclear cost recovery proceedings. Such proceedings provide the Commission with a forum to ensure that construction of the nuclear units continues to be in the best interest of ratepayers.

**Natural Gas**

Natural gas accounts for the majority of capacity being added to Florida’s generation base, followed by nuclear and renewable resources. The 2010 Ten-Year Site Plans include the addition of approximately 6,640 MW of natural gas-fired generation. This figure is a significant decline from the 2009 Ten-Year Site Plan, which estimated approximately 11,000 MW of natural gas-fired generation. This reduction in additional capacity can be attributed to the lower load forecasts and increased DSM goals.

A total of 800 MW of natural gas-fired combustion turbine capacity is expected to enter service by 2019. Because these units are not steam-fired capacity, they do not require siting under the PPSA. A list of all combustion turbine units entering service is included in Table 14.

**Table 14. State of Florida: Natural Gas - Combustion Turbine Additions**

Utility	Generating Unit Name	Summer Capacity (MW)	In-Service Date
JEA	Greenland Energy Center CT1 & 2	284	2011
TECO	Future CT1 - CT4	224	2013
TECO	Future CT5	56	2014
TECO	Future CT6	56	2016
SEC	Unnamed CT1 - CT4	632	2017-2019
PEF	Unknown CT 1	178	2018
<b>Total Capacity</b>		<b>1,430</b>	

The remainder of the natural gas-fired additions come from combined cycle units, which have greater than 75 MW of steam capacity and therefore fall under the PPSA. A majority of the capacity to be added during the current ten-year period has already received a determination of need from the Commission, excluding a single proposed unit. TECO’s Ten-Year Site Plan lists a 970 MW combined cycle unit with an in-service date of May 2018. Given typical lead times associated with combined cycle units, a petition would be expected for this unit by 2014. Table 15 below includes all combined cycle units planned to enter service by 2019.

**Table 15. State of Florida: Natural Gas - Combined Cycle Additions**

Utility	Generating Unit Name	Summer Capacity (MW)	Dates		
			Need Approved (Commission)	PPSA Certified	In-Service Date
OUC	Stanton B	298	6 / 2006	12 / 2006	2 / 2010
FMPA	Cane Island 4	300	8 / 2008	12 / 2008	5 / 2011
FPL	West County 3	1,220	9 / 2008	11 / 2008	6 / 2011
FPL	Cape Canaveral Clean Energy Center	1,210	9 / 2008	10 / 2009	6 / 2013
FPL	Riviera Beach Clean Energy Center	1,212	9 / 2008	11 / 2009	6 / 2014
TECO	Polk CC Conversion	970	-	-	5 / 2018
<b>Total Capacity</b>		<b>5,210</b>			

### Resource Additions

Table 16 below reflects the aggregate net capacity additions contained in the reporting utilities' 2010 Ten-Year Site Plans. At the time of filing, the state's electric utilities planned to add a net summer capacity of 3,203 MW over the next 10 years. This figure is a net value because generation additions and uprates are offset by unit retirements and deratings, in addition to changes in the contractual status of purchases. For example, the unit type of natural gas-fired combustion turbines has a new capacity of 1,430 MW from unit additions, but it only has a net capacity of 623 MW over the planning period due to a combination of unit uprates, derates, retirements, and conversion to combined cycle systems. Negative values in the table reflect the retirement or down rating of fossil steam units or the expiration of firm capacity contracts in excess of any possible unit additions, uprates, or purchases. If new contracts are signed in the future to replace those that expire, these resources will once again be included in the state's capacity mix. The subsequent effects of these additions as well as recent changes are discussed throughout this report. These proposed capacity changes represent a decrease of approximately 7,022 MW in net summer capacity from the 2009 Ten-Year Site Plans. As in past years, the majority of new capacity planned in the 2010-2019 period is expected to come from natural gas-fired units with nuclear generation representing the next largest fuel source.



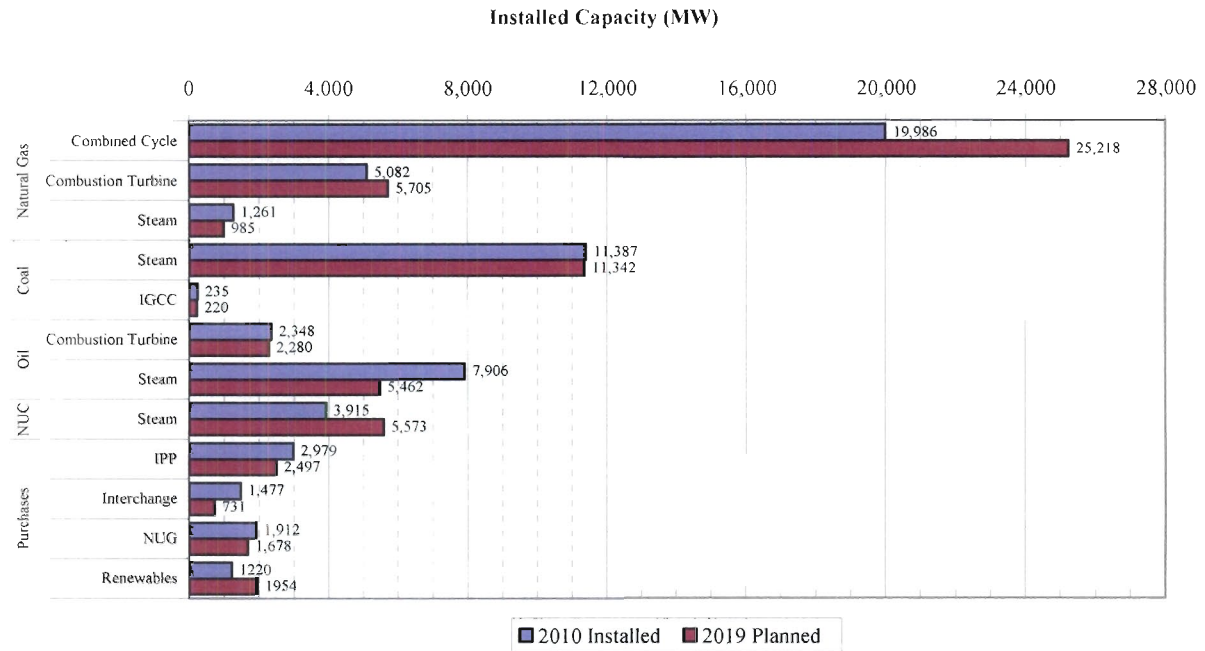
**Table 16. State of Florida: Proposed Capacity Changes As Reported**

Unit Type	Net Summer Capacity Changes (MW)	
	2009 Ten-Year Site Plan (2009-2018)	2010 Ten-Year Site Plan (2010-2019)
<b>Natural Gas (NG)</b>		
Combined Cycle	8,861	5,232
Combustion Turbine	2,130	623
Steam	-277	-276
<b>Coal</b>		
Steam	489	-45
Integrated Coal Gasification	0	-15
<b>Oil</b>		
Combustion Turbine & Diesel	-141	-68
Steam	-2,497	-2,444
<b>Nuclear (NUC)</b>		
Steam	3,838	1,658*
<b>Firm Purchases</b>		
Independent Power Producer (IPP)	-1,993	-482
Interchange	-954	-746
Non-Utility Generator (NUG)	384	-234
Renewables	385	734
<b>Net Capacity Additions</b>	<b>10,225</b>	<b>3,937</b>

\* Includes Levy I which has been delayed beyond 2019 after the Ten-Year Site Plan filing

Figure 15 below illustrates the present and future aggregate capacity mix. The capacity values in Figure 15 incorporate all proposed additions, changes, and retirements from Table 16.

**Figure 15. State of Florida: Electric Utility Summer Capacity (MW) Mix As Reported**



## Outlook

Florida’s utilities are projecting fewer capacity additions in the 2010 through 2019 period compared to that of the 2009 Ten-Year Site Plan. While load forecasts are declining, new generation capacity will be required to continue to reliably meet Florida’s energy requirements. A majority of this generation has already received regulatory approval, with only a single generating unit in the planning horizon that has not yet received a determination of need.

While generation planning requires considerable lead time, plans are subject to change due to factors including changes in fuel cost, energy use projections, evolving technology, and changing energy policy. The primary fuel types remaining in Florida as a viable option for new generation are natural gas or nuclear power plants, but nuclear generation has been delayed to the extent that no new generating units are expected to enter service for over a decade. Natural gas already provides approximately half of Florida’s energy generation and is projected to provide the majority of new generation over the next ten years. Such growth in natural gas generation may impact the volatility of electricity prices to Florida’s ratepayers.

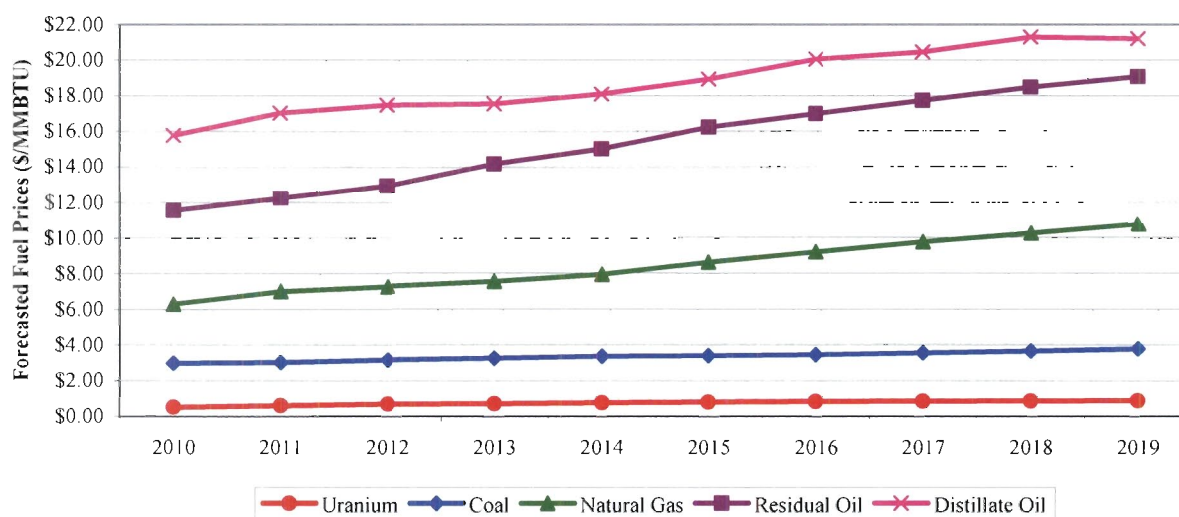


## 6. FUEL PRICE, SUPPLY, AND TRANSPORTATION

Utilities must decide which type of plant to build many years in advance: approximately four years for combined cycle, seven years for coal, and ten or more years for nuclear. Fuel price forecasts play an important role in generation expansion planning. However, because long-term fuel prices cannot be predicted precisely, factors other than price such as supply, transportation, and fuel diversity are also influential.

Section 377.703(2)(e), F.S., requires the Commission to analyze and produce natural gas and electricity forecasts in coordination with the Florida Energy and Climate Commission. Figure 16 below illustrates the weighted average forecasted fuel price for the ten reporting utilities. The forecasted price for each fuel type is weighted by fuel consumption, meaning that utilities that generate large amounts of electricity from a particular fuel type will have more of an influence on the average. Prices for solid fuels, such as nuclear and coal, are forecasted to remain stable compared to oil and natural gas prices.

**Figure 16. Reporting Utilities: 2010 Weighted Average Fuel Price Forecast**



### Natural Gas Price Forecasts and Supply

The reporting utilities provided forecasts of natural gas prices in nominal dollars on a delivered basis. Natural gas prices are driven by factors including weather, inventories, macroeconomic conditions, and refined petroleum products prices. Different assumptions for these factors contained in utilities' forecasting models result in varied forecasts of natural gas prices. For example, the forecasted 2019 prices range from \$8.08 to \$12.87 per million Btu (MMBtu), with the weighted average at \$10.75 per MMBtu.

Based on a comparison of the average prices for equivalent energy shown in Figure 16, the utilities continue to expect a significant cost differential between natural gas and refined petroleum

products (distillate oil and residual oil, which are considered to be close substitutes). For example, the average forecasted 2019 price of natural gas, expected to be \$10.46 per MMBtu lower than that of distillate oil, has been an important factor in electric power generation and industrial use.

Differences in supply and demand conditions between natural gas and fuel oil contribute to the cost differential, on a dollar per MMBtu basis, for the two fuels. Natural gas has rather limited applicability and requires pipelines for transportation from wellheads to users. Historical prices show volatility due to short-term supply issues, such as hurricanes and tropical storms in the Gulf of Mexico. Long-term investment in relatively new natural gas uses, such as electric generation, may have been limited by this price volatility and concerns over declines in production from the mature conventional natural gas regions of the Gulf Coast onshore, Gulf Coast offshore, and Permian Basin.

Evidence of abundant domestic supply is growing due to recent developments in unconventional natural gas production (shale, tight sands, and coal bed methane). Unconventional natural gas production is expected to increase from about 26.5 billion cubic feet per day (Bcf/d) in 2010 to about 44.9 Bcf/d by 2019. Long-term supply reliability and price stability are further improved by recent development and expansion in pipelines, storage, and LNG (liquefied natural gas) facilities. The cost advantage and improving supply will likely drive demand growth for natural gas, resulting in a moderate rise in natural gas prices over the planning period. Other factors, such as climate change legislation, may decrease demand for coal while increasing demand and prices for natural gas.

## **Transportation**

In Florida, greater dependence on natural gas could reduce the reliability of electric utility generation, primarily from the possible disruption of the natural gas supply or its transportation. The North American Electric Reliability Corporation (NERC) established a Gas/Electricity Interdependency Task Force to determine reliability impacts and to recommend mitigating measures in the event reliability risks arise. The NERC task force completed a study in May 2004, concluding in part that natural gas pipeline reliability can substantially impact electric generation and that electric system reliability can also have an impact on natural gas pipeline operations. The FRCC continues to review the recommendations made by the NERC task force to determine where to focus future analyses. The FRCC has recommended that Peninsular Florida maintain adequate pipeline capacity for reliability purposes for both current and future natural gas demand.

Florida has relied primarily on two natural gas pipeline companies, Florida Gas Transmission (FGT) and Gulfstream Natural Gas (Gulfstream), to supply natural gas to electric utilities, large industrial customers, and local distribution companies. FGT operates approximately 5,000 miles of pipeline nationwide, including 3,300 miles in Florida. FGT's system has undergone 7 expansions since its inception in 1959, increasing pipeline capacity from its original 0.278 Bcf/day to its current 2.3 Bcf/day. FGT's Phase VII Expansion Project began service in May 2007. FGT's Phase VIII Expansion Project, authorized by FERC in November 2009, will add 0.82 Bcf/day of capacity. The project consists of approximately 483.2 miles of pipeline facilities and is expected to be completed and in service in the spring of 2011.

Gulfstream has a system pipeline capacity of 1.25 Bcf/day. The first phase of Gulfstream's system, which entered service in 2002, crosses the Gulf of Mexico with more than 430 miles of 36-



inch diameter pipe between Pascagoula, Mississippi, and Manatee County, Florida. The Phase II expansion, a 110-mile extension to FPL's Martin plant site in Martin County, entered service in February 2005. The Phase III expansion, which began service in the summer of 2008, provides service to FPL's West County Energy Center. The Phase IV expansion, completed in the first quarter of 2009, provides pipeline capacity for PEF's Bartow site in Pinellas County.

The newest pipeline system serving Florida is the Cypress Pipeline. Phase I of this project connects the Elba Island LNG facility near Savannah, Georgia, to FGT's system near Jacksonville, Florida. The pipeline began service in May 2007 and provides natural gas to PEF's Hines' units, and provides an incremental 220 million cubic feet per day (MMcf/d) of takeaway capacity. Subsequently, compression facilities installed on the pipeline expand its capacity.

In addition to the Cypress Pipeline, one other LNG project is proposed to serve Florida. Höegh LNG – Port Dolphin, a proposed offshore terminal and submerged buoy system, would be 28 miles offshore and be connected to Port Manatee near Tampa Bay by a 42-mile pipeline. The project is planned with the capability to expand to a peak send-out capacity of 1.2 Bcf/day. The project was approved by the Governor on September 11, 2009, and received its federal deepwater port license in April 2010. Construction of Port Dolphin will proceed in two phases lasting a total of approximately 22 months, with the port expected to commence operations in 2013.

Out-of-state pipeline projects also increase supply options for Florida. The Southeast Supply Header (SESH) project is a 274-mile pipeline from the Perryville hub in Louisiana to interconnect with the Gulfstream Pipeline at Pascagoula, Mississippi. This pipeline began service in September 2008. Major shippers include Southern Co., Tampa Electric Co., Florida Power & Light Co., and Progress Energy Florida. Another out-of-state pipeline, the Destin Pipeline, originates in central Mississippi, terminates at offshore wells in the Mobile Bay area, and interconnects with several pipelines, including FGT and Gulfstream, and with storage facilities such as Petal Gas Storage and Southern Pines Gas Storage. The SESH and the Destin Pipeline are expected to be expanded within the planning period, providing additional capacity to transport unconventional shale gas from Texas and Louisiana to Gulfstream and FGT. In addition, Transcontinental Gas Pipe Line (Transco) is in the process of expanding their Mobile Bay (Zone 4A) lateral, which runs from west central Alabama (Transco compressor station 85) to Mobile and which interconnects with FGT. This lateral will provide additional capacity to allow transport of shale gas into Florida.

## **Coal Price Forecasts and Supply**

The reporting utilities forecasted coal prices on a delivered basis, resulting in differences in the forecasted prices depending on the location of the particular utility's coal plant and the mode of transportation. The forecasts use existing long-term contract prices and estimates of the spot market prices.

The reporting utilities see relatively stable coal prices over the planning horizon. Ample supply of domestic coal and the availability of imported coal, primarily from Colombia and Venezuela, should provide support for stable commodity prices. However, rising transportation costs may contribute to higher delivered prices. Transportation options for reporting utilities include rail and waterborne transportation.

The Surface Transportation Board (STB) has had increased concern about rising rates imposed by the railroads in recent years. Trade groups such as Consumers United for Rail Equity (CURE) and the National Industrial Transportation League (NIT) have aggressively advocated legislation regarding rail rates, the level of regulation, and ending railroad antitrust exemptions. The American Association of Railroads opposes such legislation. Since the outcome of this dispute remains uncertain, coal prices could be further impacted.

Greater globalization of the waterborne solid fuel trade could also increase the cost of waterborne transportation for Florida electric utilities. Since the supply of coal vessels/ocean barges is limited, more frequent and rapid changes in shipping costs could occur based on global economic conditions. While existing agreements would mitigate the impact of more volatile costs, spot transactions would be immediately affected.

Figure 16 shows that the utilities continue to expect coal prices to be less expensive compared with other fossil fuels, based on equivalent energy contained in the fuel. While new coal plants will likely be challenged by higher capital and environmental costs, existing coal plants will likely continue to play a meaningful role in fuel diversity and lower fuel costs for customers.

## **Residual and Distillate Oil Price Forecast and Supply**

Oil prices depend on global economic growth, other competing energy developments, and geopolitics. Economic growth in India, China, and the Pacific Rim countries has increased demand, and Platts, an energy information service, states that a geopolitical risk premium in oil prices will always exist. Sources of geopolitical risk for oil prices are Venezuela, Nigeria, Russia, the former Soviet states, and the Middle East, which have all contributed to the increased volatility of crude oil prices in recent years. Since residual oil and distillate oil are refined products of crude oil, the prices for these products will track with crude oil.

Only three Florida electric utilities continue to use residual fuel oil (heavy oil) for generation, with declining usage over the planning period. Six Florida electric utilities also use distillate oil (No. 2 fuel oil), but only as a back-up fuel for natural gas plants that are fuel switchable and as a starter fuel for coal plants. Due to the cost advantage and improving supply reliability of natural gas, distillate oil and residual oil are likely to continue their declining significance as a source of electric generation in Florida.

## **Nuclear Fuel Price Forecasts and Supply**

Until about 2004, uranium traded below the \$20/lb price range, mostly driven by excess inventories. Since that time, the uranium market has undergone a period of price volatility due to a change in fundamentals (supply and demand) and the effect of speculation. First, the “nuclear renaissance” – the period, roughly from 2005 to 2008, of increased interest in building new nuclear plants and uprating existing plants – led to the projection of significant increase in demand for uranium. Supply was also reduced due to accidents in major uranium mines between 2006 and 2007. The tight uranium supply attracted interests of hedge funds and speculation that pushed the price up to a market peak at \$137/lb in 2007.

Consequently, the high price of uranium led to plans for increased production at existing mines and the development of new mines. In addition, postponements of new nuclear projects beginning in 2009 led to lower projected demand. With the new supply and demand conditions and reduced speculative demand resulting from the recent financial crisis, prices have come down faster than anticipated. In the future, nuclear fuel is forecasted to be priced closer to basic supply and demand pricing, with a moderate upward trend and some periodic increases due to speculative demand. As with fuel procurement in general, long-term contracts for nuclear fuel can mitigate price volatility.





## 7. TRANSMISSION PLANS

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As generation capacities increase, the transmission system must grow accordingly to maintain the capability of delivering the energy to the end user. The Commission has been given broad authority pursuant to Chapter 366, F.S., to require reliability within Florida's coordinated electric grid and to ensure the planning, development, and maintenance of adequate generation, transmission, and distribution facilities within the state. In addition, the Commission must determine the need for transmission lines of 230 kV and larger pursuant to the TLSA.

### Reliability Standards

Nationwide, electric utilities plan their bulk power systems (100 kV and higher) to comply with the NERC and regional reliability standards. The NERC's mission is to verify that the bulk electric system in North America is reliable, adequate, and secure. Since its formation in 1968, the NERC operated successfully as a self-regulatory organization, and the electric industry voluntarily complied with the NERC's reliability standards. In 2005, Congress required the Federal Energy Regulatory Commission (FERC) to develop a new mandatory system of reliability standards and compliance. The Energy Policy Act of 2005 authorized the creation of an electric reliability organization (ERO) with the statutory authority to enforce compliance with reliability standards among all market participants. The NERC received certification as the ERO from the FERC in July 2006.

NERC/FRCC works with all stakeholder segments of the electric industry, including electricity users, to develop standards for the reliable planning and operation of the bulk power systems. Fundamentally, a power system should always operate in such a way that no credible contingency could trigger cascading outages or another form of instability. Reliability standards are generally applied as follows:

- Under a single-contingency criterion, a utility's transmission system experiences no equipment overloads, voltage violations, or instability following a contingency outage of the single most crucial element, whether that piece of equipment is a generator, a transmission line, or a transformer. The single-contingency criterion is generally the minimum reliability standard at which electric utilities plan their bulk power systems.
- Under a multiple-contingency criterion, a utility's transmission system must withstand the simultaneous failure of two or more elements with a controlled loss of load and no cascading outages which affect neighboring utilities. The transmission system must subsequently be able to adjust so that all elements operate within their emergency ratings for the duration of the outage.

In response to congressional actions to require mandatory reliability standards, which were supported by the Commission, the FRCC has implemented a program that will monitor and enforce compliance with the NERC and the FRCC reliability standards. The program relies on self-assessment, periodic reporting, and on-site audits for compliance. In administering the compliance program, the FRCC works closely with all owners, operators, and users of the state's bulk electric

system. The Commission staff attends FRCC meetings and maintains an open dialog with the FRCC on reliability matters affecting the state. The Commission will continue to work closely with the FRCC, NERC, and FERC to guarantee the adequacy and reliability of Florida's electric grid.

## **FRCC Transmission Planning Process**

One of the benefits attributed to the formation of a regional transmission organization (RTO) is centralized, coordinated transmission planning. In April 2006, the Commission closed a lengthy investigation into the prudence of forming an RTO, known as GridFlorida, because the RTO did not appear to be cost-effective. The Commission directed Peninsular Florida's utilities to coordinate their transmission planning activities through the FRCC in an effort to capture the benefits of an RTO in a more cost-effective fashion and yield a more complete transmission expansion plan from a peninsular perspective. Such a process will make sure that the reliability standards and criteria established by the NERC and the FRCC are met and will use the specific design, operating, and planning criteria employed by Peninsular Florida transmission owners. The Commission staff continues to monitor the FRCC's meetings on transmission planning and, if necessary, will exercise its Grid Bill authority to ensure the adequacy and reliability of Florida's transmission system.

The FRCC performs a long range, ten-year study, as well as a study of the interface between Florida and the Southern Company (Southern). Sensitivity studies test the robustness of Peninsular Florida's transmission system under various conditions and are performed within both studies. Examples of the sensitivities studied are as follows:

- Transmission and/or generation facilities unavailable due to scheduled and/or forced outages
- Weather extremes for summer and winter periods
- Different load levels (e.g., 100-, 80-, 60-, and 40 percent) and/or seasons of the year
- Various generation dispatches that will test or stress the transmission system
- Reactive supply and demand assessment (generator reactive limits and power factor)
- Specific areas of combination/cluster of generation and load serving capability among various transmission owners/providers in the FRCC that continually experience or are expected to experience significant congestion
- Other scenarios or system conditions, such as stability analysis

Consistent with the FRCC transmission planning process, these sensitivity studies will not necessarily call for the construction of transmission facilities identified in the studies, but will furnish insight into how robust the planned transmission system is expected to be.

## 2010-2019 Long Range Transmission Study

The long range transmission study is a steady-state assessment of the adequacy of the FRCC’s bulk and 69 kV transmission system for 2010-2019. The NERC Transmission Planning Standards are used to gauge the adequacy of the transmission system. These transmission planning standards state that the transmission system must remain stable within the applicable thermal and voltage rating limits without cascading outages, under normal system conditions, as well as during single and multiple contingency events. The FRCC’s Long Range Transmission Reliability Study covers both near-term and long-term portions of the planning horizon. The near-term part examines years two through five (2010-2014) and analyzes in detail specific remedies identified for all thermal and/or voltage screening criteria exceptions. The long-term section examines years six through ten (2015-2019) to determine if any trends are developing that would require attention.

The Long Range Transmission Reliability Study for transmission facilities, 69kV and greater, within the FRCC Region concluded that potential thermal and voltage screening criteria violations can be resolved by operator intervention meeting the NERC Transmission Planning Standards. The resolutions were thoroughly reviewed by the transmission owners and found to be adequate to maintain acceptable system performance under all conditions and events. The FRCC found no major projects requiring long lead times.

## Florida-Southern Interface Transfer Capability Study

Currently, Peninsular Florida imports 1,500 MW of firm capacity into the FRCC region from the Southern Control Area within the Southeastern Reliability Council (SERC) region (Southern). The remaining transferrable capacity, nearly 2,100 MW, is available for non-firm energy sales. Firm capacity exports to Southern do not occur at this time, nor are they forecasted to occur during the planning horizon. The FRCC and Southern annually perform an interregional transmission study to confirm the maximum import and export capability between the two regions and to make sure that the transmission plans of both regions jointly meet the NERC reliability standards. Based on studies performed by the FRCC and Southern, there do not appear to be any reliability constraints at the Florida-Southern interface at this time concerning the current use of interface capacity. The 2010 study confirmed the total transfer capabilities between the FRCC and Southern, which are shown in Table 17 below.

**Table 17. Florida-Southern Interface Transfer Capability**

Transfer	Transfer Capability (MW)	
	Summer	Winter
Southern to Florida (import)	3,600	3,800
Florida to Southern (export)	1,000	1,800

## Proposed Transmission Lines Requiring Certification

Many of the transmission lines proposed by the FRCC as needing to be built require TLSA certification. To require certification under Florida’s TLSA, a proposed transmission line must meet the following criteria: a rating of at least 230 kV, crossing a county line, and a length of at least 15 miles. Proposed lines in an existing corridor are exempt from TLSA requirements. The Commission determines the reliability need for and the proposed starting and ending points for lines requiring TLSA certification. The Commission must issue a final order granting or denying a determination of need within 90 days of the petition filing. The proposed corridor route is determined by the DEP during the certification process. The Governor and Cabinet sitting as the Siting Board ultimately must approve or deny the overall certification of the proposed line.

Table 18 below lists all proposed transmission lines in the Ten-Year Site Plans that require TLSA certification.

**Table 18. State of Florida: Proposed Transmission Lines Requiring Certification**

Line Owner	Transmission Line	Line Length (Miles)	Nominal Voltage (kV)	Dates		In-Service Date
				Need Approved	TLSA Certified	
FPL	Manatee - Bob White	30	230	8 / 2006	10 / 2008	12 / 2012
FPL	St. Johns - Pringle	25	230	5 / 2005	4 / 2006	12 / 2013
TEC	Polk - FishHawk	30.5	230	-	-	5 / 2019



## 8. SUMMARY OF STATE, REGIONAL, AND LOCAL COMMENTS

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### All Ten-Year Site Plan Utilities

Fish and Wildlife Conservation Commission: In the interest of providing feedback to the Ten-Year Site Plan Utilities in a proactive manner, the FWC suggest that it would be helpful for the Ten-Year Site Plan Utilities to include point-of-contact information with their submitted update materials.

Florida Department of Transportation: The Siting Coordination Office has reviewed the Ten-Year Site Plans and find these are suitable as planning documents.

### Investor-Owned Utilities

- **Florida Power & Light Company**

Fish and Wildlife Conservation Commission: FPL's Ten-year plan has addressed the wildlife related issues raised in our previous comment concerning the 2009 plan; therefore, we find the 2010 update to FPL's 10-year site plan adequate for planning purposes.

East Central Florida Regional Planning Council: The Ten-Year Site Plan did not include any proposed projects or sites which conflict with the ECFRPC Regional Strategic Policy Plan. The Council encourages Florida Power and Light to continue its efforts towards the incorporation of renewable energy projects.

Treasure Coast Regional Planning Council: FPL's Ten-Year Site Plan is inconsistent with Strategic Regional Policy Plan Goal 9.1, decreased vulnerability of the region to fuel price increases and supply interruptions; and Strategy 9.1.1, reduce the Region's reliance on fossil fuels. The Council urges FPL and the State of Florida to continue developing new programs to: (1) reduce the reliance on fossil fuels as future energy sources, (2) increase conservation activities to offset the need to construct new power plants, and (3) increase the reliance on renewable energy sources to produce electricity. The Council encourages the Florida Legislature to adopt a Renewable Portfolio Standard during the next legislative session in order to provide a mechanism to expand the use of renewable energy in Florida. FPL should address in the next Ten-Year Site Plan about the potential need to provide service to a significant number of additional customers in Indian River County.

St. Johns River Water Management District: In general, the District requires that all new uses and requested increase in consumptive use permit (CUP) allocations demonstrate the use of the lowest quality source; justify the need for the requested allocation; demonstrate efficient use; and not impact springs, wetlands, water bodies, water quality, or existing legal uses. In addition, all other CUP criteria must also be met. When locating a site for a power facility, FPL should consider the availability of water to meet the proposed demands of the facility and potential impacts due to facility water use, as well as the cumulative impacts of locating a facility at a given location.

- **Gulf Power Company**

Fish and Wildlife Conservation Commission: The FWC finds that Gulf Power’s Ten-Year Site Plan 2010-2019 document is suitable for planning purposes. We have determined that Gulf Power proposes no development plans that pose significant fish and wildlife resources issues or potential conflicts for this planning period.

- **Progress Energy Florida, Inc.**

Fish and Wildlife Conservation Commission: The FWC finds PEF’s Ten-Year Site Plan document to be suitable for planning purposes.

East Central Florida Regional Planning Council: The Ten-Year Site Plan did not include any proposed projects or sites which conflict with the ECFRPC Regional Strategic Policy Plan. The Council commends Progress Energy on its efforts towards the incorporation of alternative energy supplies, public and commercial incentive programs, conservation, and education efforts.

Withlacoochee Regional Planning Council: WRPC finds PEF’s 2010 Ten-year site plan to contain positive content that is consistent and well supported by the Strategic Regional Policy Plan for the Withlacoochee Region (SRPP). Furthermore, SRPP policies strongly support increased utilization of renewable energy system technology in power generation as well as collocation of planned facilities with other compatible economic uses. On the preceding basis, WRPC staff would recommend that Progress’ TYSP should be considered “suitable” from the perspective of this regional review.

Southwest Florida Water Management District: All new facilities and expansions within the Southern Water Use Caution Area (SWUCA) will have to conform to applicable rules. Heightened concerns regarding groundwater as well as air quality controls that add to water demands of power generating facilities must be considered.

- **Tampa Electric Company**

Fish and Wildlife Conservation Commission: The FWC found TECO’s 2010 Ten-Year Site Plan document to be suitable for planning purposes.

Southwest Florida Water Management District: All new facilities and expansions within the Southern Water Use Caution Area (SWUCA) will have to conform to applicable rules. Heightened concerns regarding groundwater as well as air quality controls that add to water demands of power generating facilities must be considered.

## **Municipal Utilities**

- **Florida Municipal Power Agency**

Fish and Wildlife Conservation Commission: The FWC finds the 2010 Update to FMPA’s 10-year Site Plan to be adequate for planning purposes.

East Central Florida Regional Planning Council: The Ten-Year Site Plan did not include any proposed projects or sites which conflict with the ECFRPC Regional Strategic Policy Plan. The Council commends the agency on its partnerships and continued work towards alternative energy supplies and conservation efforts.

- **Gainesville Regional Utilities**

Fish and Wildlife Conservation Commission: We recommend that the environmental issues and recommendations identified during the site amendment process for the Gainesville Renewable Energy Center be incorporated into the Ten-year Site Plan. If GRU includes the environmental conditions information recently developed for the Gainesville Renewable Energy Center, we would recommend that the PSC find the 2010 update to Gainesville Regional Utility's Ten-Year Site Plan to be adequate for planning purposes.

Withlacoochee Regional Planning Council: While this utility does not propose to develop projects within the region during the planning period, it has ownership interests in the Crystal River Nuclear Unit 3. The Strategic Regional Policy Plan for the Withlacoochee Region assigns regionally significant status to all power plants due to the necessity to maintain ample regional energy supply. WRPC would recommend that this Ten-Year Site Plan be considered "suitable" from the perspective of this regional review.

Alachua County: The GRU 2010 Ten-Year Site Plan is generally suitable as a planning document. Issues related to the protection of natural resources near the Deerhaven site, fuel procurement and the use of reclaimed water at the Gainesville Renewable Energy Center, and energy demand management and fuel price forecasts are of interest.

- **JEA**

Fish and Wildlife Conservation Commission: We do not find the 2010 update to JEA's Ten-Year Site Plan document to be adequate for planning purposes. This update to the JEA Ten-Year Site Plan report does not have an environmental and land-use section. Specifically, we recommend that JEA include a section on anticipated environmental issues and land-use changes. Further, we recommend that this section include color aerial photographic maps for each of their plants and associated facilities.

Northeast Florida Regional Planning Council: The Northeast Florida Regional Council supports JEA and the State of Florida's efforts to continue to develop new programs to: (1) reduce the reliance on coal and oil as energy sources, (2) increase conservation activities to offset the need to construct new power plants, and (3) plan to develop an environmentally sound power supply strategy that may provide reliable electric service at the lowest practical cost.

- **City of Lakeland**

Fish and Wildlife Conservation Commission: The FWC found Lakeland Electric's Ten-Year Site Plan document to be suitable for planning purposes. If Lakeland Electric decides to expand or enhance existing sites to develop new sites in the future, more detailed information can be provided regarding site location, wildlife occurrences, and habitats, as well as surrounding natural resources.



- **Orlando Utilities Commission**

Fish and Wildlife Conservation Commission: The FWC finds the 2010 Update to OUC's Ten-Year Site Plan to be adequate for planning purposes.

East Central Florida Regional Planning Council: The Ten-Year Site Plan did not include any proposed projects or sites which conflict with the ECFRPC Regional Strategic Policy Plan. The Council commends the commission on its progress towards alternative energy supplies, reducing the commission's carbon footprint and conservation and education efforts.

Withlacoochee Regional Planning Council: While this utility does not propose to develop projects within the region during the planning period, it has ownership interests in the Crystal River Nuclear Unit 3. The Strategic Regional Policy Plan for the Withlacoochee Region assigns regionally significant status to all power plants due to the necessity to maintain ample regional energy supply. WRPC would recommend that this Ten-Year Site Plan be considered "suitable" from the perspective of this regional review.

- **City of Tallahassee**

Fish and Wildlife Conservation Commission: Fish and wildlife resources are not likely to be affected by Tallahassee's facilities plan since no facility projects or enhancements are currently planned; however, fish and wildlife resources will need to be considered if improvements are planned to improve the transmission capabilities of the City. The City of Tallahassee's Ten-Year Site Plan 2010-2019 document is suitable for planning purposes.

## **Rural Cooperatives**

- **Seminole Electric Cooperative**

Fish and Wildlife Conservation Commission: The FWC does not find the 2010 update to Seminole Electric Cooperative's Ten-Year Site Plan document to be adequate. For future reference, we would recommend that Seminole Electric: (1) Perform a GIS analysis of any proposed power plant or transmission line sites and include summary reports of that information in their Ten-Year Site Plan updates, (2) Contact us in advance of preparing their next update if they have any questions about how to address fish and wildlife resources in the vicinity of their properties, and (3) Include contact information in their updates so that we can share our comments with them in a timely fashion.

Withlacoochee Regional Planning Council: While this utility does not propose to develop projects within the region during the planning period, it has ownership interests in the Crystal River Nuclear Unit 3. The Strategic Regional Policy Plan for the Withlacoochee Region assigns regionally significant status to all power plants due to the necessity to maintain ample regional energy supply. WRPC would recommend that this Ten-Year Site Plan be considered "suitable" from the perspective of this regional review.

Southwest Florida Water Management District: All new facilities and expansions within the Southern Water Use Caution Area (SWUCA) will have to conform to applicable rules. Heightened concerns regarding groundwater as well as air quality controls that add to water demands of power generating facilities must be considered.

Appendix A

Agency Comments



## **State Agencies**

### **Fish & Wildlife Commission**

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June 28, 2010

Mr. Phillip O. Ellis  
Strategic Analysis & Government Affairs  
Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

RE: 2010 Update to the Florida Power and Light Company 10-Year Site Plan, Multi-County

Dear Mr. Ellis:

The Division of Habitat and Species Conservation, Habitat Conservation Scientific Services Section of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated our agency's review of the 2010 update to Florida Power and Light Company's (FPL) 10-Year Site Plan and provides the following comments and recommendations in accordance with Section 186.801 of the Florida Statutes.

### Project Description

Section 186.801, Florida Statutes, requires electric generating facilities to submit a ten-year site plan to the Florida Public Service Commission. The 2010 update to FPL's plan identifies modifications, uprates, or expansions at six sites that have been or currently are undergoing review under the Power Plant Siting Act (PPSA): the West County Energy Center; St. Lucie nuclear plant site; Turkey Point nuclear plant site; Cape Canaveral plant site; Riviera plant site; and the Martin County plant site. In addition to ongoing development, the update anticipates a new site for solar generation in Brevard County. Also, this update discusses the potential to develop ten additional sites. Six of the ten are within or adjacent to existing power generation facilities. One of these six potential sites, the Ft. Myers site in Lee County was cause for concern in FPL's 2009 10-year site plan update because of the proposed use of the Caloosahatchee River as a water source. The Ft. Myers site is still being considered as an additional generation site in the 2010 10-year site plan, and the Caloosahatchee River is still the proposed water source. As we mentioned during our 2009 review, the Caloosahatchee River provides habitat for State of Florida listed species, and therefore the FPL should be anticipating the need to address entrainment and impingement issues as well as the potential to impact habitat in the Caloosahatchee River and downstream estuary.

Beyond the six sites mentioned above, there are four sites that are described only down to County level of specificity. These four general locations are as follows:

- Glades County - Florida Heartland Solar, which is located only down to the roadway from which it might be accessed;
- Hendry County - the update indicates that 1500 acres will be needed for a future photovoltaic facility delivering up to 100 megawatts of electricity;
- Northeast Okeechobee County - no detail provided;
- Southwest Indian River County - no detail provided.

Mr. Phillip O. Ellis  
Page 2  
June 28, 2010

### **Recommendations**

As FPL is further investigating potential locations for additional generation facilities, we recommend they coordinate with the FWC to identify locations with the least potential for impacting fish and wildlife resources in those areas. FPL is aware that the Caloosahatchee River provides habitat for a variety of listed species, and they have indicated that they will account for both wildlife impingement/entrainment as well as downstream water quality impacts when considering site selection for the additional Ft. Myers location.

FPL's 10-year plan has addressed the wildlife-related issues raised in our previous comment concerning the 2009 plan; therefore, we find the 2010 update to FPL's 10-year site plan adequate for planning purposes. If you or your staff has any specific questions regarding our comments, I encourage them to contact Jennifer Goff (561-625-5122) or by email at [jennifer.goff@MyFWC.com](mailto:jennifer.goff@MyFWC.com).

Sincerely,



Mary Ann Poole  
Commenting Program Administrator

map/jdg  
ENV 2-11-4/3  
FPL 2010\_2781\_062810



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May 7, 2010

Ms. Traci Matthews  
Division of Regulatory Analysis  
Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

2010 MAY 11 AM 9:26  
DIVISION OF  
REGULATORY COMPLIANCE

RE: Gulf Power 10-Year Site Plan; 2010-2019, Multi-County

Dear Ms. Matthews:

The Division of Habitat and Species Conservation, Habitat Conservation Scientific Services Section of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated our agency's review of the Gulf Power 10-Year Site Plan and provides the following comments and recommendations.

#### Project Description

Section 186.801, Florida Statutes, requires electric generating facilities to submit a ten-year site plan to the Florida Public Service Commission. Gulf Power owns and operates four plants in Northwest Florida: Plant Crist (Escambia County), Plant Lansing Smith (Bay County), Plant Sholtz (Jackson County), and Pea Ridge (Santa Rosa County), and it holds interest in plants in Mississippi and Georgia.

In order to meet its future capacity needs, Gulf Power has continued to evaluate the construction of generating facilities or the acquisition of equivalent capacity resources in coordination with other Southern Electric System (SES) operating companies. Gulf Power indicates that it has satisfied its need for firm capacity through the May 2023 time period. Any new facility construction is deferred during the 2010-2019 planning cycle. However, Gulf Power anticipates the need to develop additional capacity at Plant Crist, Plant Lansing Smith, Plant Scholtz, or at a newly identified site, referred to as the Shoal River property in Walton County, before 2023. Gulf Power anticipates no future upgrades at the Pea Ridge facility.

#### Potentially Affected Resources

Plant Crist (Escambia County) is located adjacent to the Escambia River, which has been designated as Critical Habitat for the Gulf Sturgeon (*Acipenser oxyrinchus desotoi* - Florida-Species of Special Concern (SSC); Federal-Threatened [T]). The undeveloped portion of the site is mixed hardwoods/pines and mixed scrub.

Plant Lansing Smith (Bay County) is located along North Bay of the St. Andrews Bay system. The undeveloped portion of the site is predominantly pine plantation with some wetland areas. It is adjacent to areas that are identified for conservation under the Bay County Sector Plan.



Ms. Traci Matthews  
 Page 2  
 May 7, 2010

Plant Scholtz (Jackson County) is located adjacent to the Apalachicola River. The site consists of a mixture of pine and hardwood forests. The Apalachicola River adjacent to Plant Scholtz has been designated Critical Habitat for the Gulf Sturgeon (*Acipenser oxyrinchus desotoi* - Florida-SSC; Federal-T), and proposed critical habitat for the purple bankclimber (*Elliptoides sloatianus* - Federal-T) and fat three-ridge (*Amblema neislerii* - Federal- Endangered [E]).

The undeveloped Shoal River Site (Walton County) is located on the Shoal River approximately three miles northwest of Mossy Head, Florida. The property is predominantly in pine plantation. The site:

- falls within a federally designated red-cockaded woodpecker consultation area;
- contains primary and secondary habitat for the Florida black bear (*Ursus americanus floridanus* - State- T); and
- is within close proximity to known occurrences of southern sandshell mussel (*Hamiota australis* - federal candidate-E), blackmouth shiner (*Notropis melanostomus* - State-E), bluenose shiner (*Pteronotropis welaka* - State-SSC), Eastern indigo snake (*Drymarchon couperi* - State-T; Federal-T), alligator snapping turtle (*Macrochelys temminckii* - State-SSC), gopher tortoise (*Gopherus polyphemus* - State-T), and pine barrens treefrog (*Hyla andersonii* - State-SSC).

We find that Gulf Power's 10-year Site Plan 2010-2019 document is suitable for planning purposes. We have determined that Gulf Power proposes no development plans that pose significant fish and wildlife resources issues or potential conflicts for this planning period. If you or your staff would like to coordinate further on the recommendations contained in this report, please contact me at 850-410-5272, or email me at [maryann.poole@MyFWC.com](mailto:maryann.poole@MyFWC.com), and I will be glad to help make the necessary arrangements. If your staff has any specific questions regarding our comments, I encourage them to contact Theodore Hoehn at 850-488-3831 or by email at [ted.hoehn@myFWC.com](mailto:ted.hoehn@myFWC.com).

Sincerely,



Mary Ann Poole  
 Commenting Program Administrator

map/tsh  
 ENV 2-11-4/3  
 Gulf Power 2010\_2787\_050710

cc: Susan Ritenour, Gulf Power, [SDRITENO@southernco.com](mailto:SDRITENO@southernco.com)



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June 28, 2010

Mr. Phillip O. Ellis  
Electric Reliability and Cost Recovery Section  
Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

2010 JUN 30 AM 9:10  
NEWELL, T. J.

RE: Progress Energy Florida, Inc. 2010 Ten-Year Site Plan for Electrical Generating Facilities and Associated Transmission Lines

Dear Mr. Ellis:

The Division of Habitat and Species Conservation, Habitat Conservation Scientific Services Section, of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated our agency's review of the Progress Energy Florida, Inc. (PEF) 2010 Ten-Year Site Plan and provides the following comments and recommendations in accordance with Section 186.801, Florida Statutes.

#### Project Description

Section 186.801, Florida Statutes, requires electricity-generating facilities to submit a ten-year site plan to the Florida Public Service Commission. PEF's 10-year plan includes continued operation of the Crystal River Nuclear, P.L. Bartow and Suwannee River plants and installation of a nuclear power unit at the Levy County Greenfield site.

Crystal River Nuclear, P.L. Bartow, and Suwannee River Power Plants - PEF's 10-year plan does not anticipate expansions of these sites for the foreseeable future. We do not recommend any additional information be developed for these sites at this time.

Levy County Nuclear Facility - The Levy County site is located 8 miles inland from the Gulf of Mexico, 2.5 miles from the Cross Florida Barge Canal, and 10 miles north of the existing PEF Crystal River Energy Complex. The Levy County site is approximately 3,100 acres, of which 10% will be occupied. The remainder of the site is proposed as a buffer preserve and exclusionary boundary. Chapter 4 of the plan indicates that the site is characterized by pine flatwoods and silviculture. PEF purchased an additional 2,100 acre tract contiguous with the southern boundary of the power plant for the purpose of securing access to a water supply for the site from the Cross Florida Barge Canal, as well as transmission corridors from the plant site.

The FWC is working diligently with PEF and the Siting Office to ensure that minimization and mitigation for potential adverse impacts from the plant and associated facilities, transmission lines, and discharges, as they relate to threatened and endangered species, wildlife species, and aquatic life (freshwater and marine), will be addressed through compliance with the Site Certification Conditions. We have not identified any additional wildlife-related planning information needs for this site at this time. However, in the interest of providing feedback to PEF in a proactive manner, we suggest that it

Mr. Phillip O. Ellis  
Page 2  
June 28, 2010

would be helpful for PEF to include point-of-contact information with their submitted update materials.

In summary, we found PEF's Ten-Year Site Plan document to be suitable for planning purposes. If you or your staff would like to coordinate further on the issues contained in this report, please contact me at 850-410-5272, or email me at maryann.poole@MyFWC.com, and I will be glad to help make the necessary arrangements. If your staff has any specific questions regarding our comments, I encourage them to contact Dr. Joseph Walsh at 778-772-5094 or via email Joe.Walsh@myfwc.com.

Sincerely,



Mary Ann Poole  
Commenting Program Administrator

map/sr  
ENV 2-11-4/3  
Progress Energy 2010\_2784\_062510



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May 14, 2010

Ms. Traci Matthews  
Division of Regulatory Analysis  
Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

RE: Tampa Electric Company 2010 Ten-Year Site Plan for Electrical Generating  
Facilities and Associated Transmission Lines

Dear Ms. Matthews:

The Division of Habitat and Species Conservation, Habitat Conservation Scientific Services Section, of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated our agency's review of the Tampa Electric Company (TECO) 2010 Ten-Year Site Plan and provides the following comments and recommendations.

#### Project Description

Section 186.801, Florida Statutes, requires electricity-generating facilities to submit a ten-year site plan to the Florida Public Service Commission. Tampa Electric Company's existing generating facilities are located at five plant sites: Big Bend Power Station (Big Bend), H.L. Culbreath Bayside Power Station (Bayside), Partnership Power Station (Partnership), Polk Power Station (Polk), and J.H. Phillips Power Station (Phillips). The Big Bend, Bayside, and Partnership sites are located in Hillsborough County; the Polk Power Station is located in southwestern Polk County; and Phillips is located in Highlands County. All of TECO's power stations have multiple generating units with different technologies and fuel types.

#### Referenced Sites and Recommendations

**Big Bend Power Station** – The Big Bend site (1,500 acres) operates four pulverized coal-fired steam units with a total maximum net capacity of 1,590 megawatts (MW) and is equipped with desulfurization scrubbers and electrostatic precipitators. In addition, the station operates one aeroderivative combustion turbine that entered into service in August 2009 and can be fired with natural gas or distilled oil. The station's coal-fired units are currently undergoing the addition of air pollution control systems known as Selective Catalytic Reduction (SCR). Three of the units have been modified and the remaining coal unit will be modified by the end of spring 2010. The planning document does not anticipate any modifications to the existing site's footprint in the foreseeable future. We do not recommend any additional information needs for this site at this time.

**H.L. Culbreath Bayside Power Station** – The Bayside site (213 acres) operates two natural gas-fired combined-cycle units with a total maximum net capacity of 1,839 MW. The planning document does not anticipate any modifications to the existing site's footprint in the foreseeable future. We do not recommend any additional information needs for this site at this time.

**Partnership Power Station** – The Partnership site operates two natural gas-fired internal combustion engines with a total maximum net capacity of 6 MW. This site was developed in partnership with TECO and the City of Tampa. The planning document is not proposing any

Traci Matthews  
Page 2  
May 14, 2010

modifications to this site in the foreseeable future. We do not recommend any additional information needs for this site at this time.

Polk Power Station – The Polk site operates five generating units with a total maximum net capacity of 972 MW. One unit is an integrated gasification combined-cycle unit fired with synthetic gas produced from gasified coal and other carbonaceous fuels. The remaining units are combustion turbines fired primarily with natural gas. Three of the units at this site can also be fired with distilled oil. The planning document does not anticipate any modifications to the existing site's footprint in the foreseeable future. We do not recommend any additional information needs for this site at this time.

J.H. Phillips Power Station – The Phillips site operates two residual or distillate oil-fired diesel engines with a total maximum net capacity of 36 MW. The planning document is not proposing any modifications to this site in the foreseeable future. We do not recommend any additional information needs for this site at this time.

Please note that TECO anticipates adding seven power-generating units, scheduled for construction between 2012 and 2015. While the document indicates that TECO has already developed foundations at their facilities to accommodate these expansions and that no additional lands are required, the distribution of the new units between their existing facilities was not apparent; therefore, if the need to clear additional lands at their facilities should arise, we would anticipate needing to assess any changes for potential impacts to fish and wildlife resources.

In summary, we found Tampa Electric Company's 2010 Ten-Year Site Plan document to be suitable for planning purposes. If you or your staff would like to coordinate further on the issues contained in this report, please contact me at 850-410-5272, or email me at [maryann.poole@MyFWC.com](mailto:maryann.poole@MyFWC.com), and I will be glad to help make the necessary arrangements. If your staff has any specific questions regarding our comments, I encourage them to contact Luis F. Gonzalez by telephone at 863-648-3200 or by email at [luis.gonzalez@myfwc.com](mailto:luis.gonzalez@myfwc.com).

Sincerely,



Mary Ann Poole  
Commenting Program Administrator

map/lg  
ENV 2-11-4/3  
Tampa Electric Company 2010\_2779\_051410  
cc: Stanley Kroh  
Tampa Electric Company  
P.O. Box 111  
Tampa, FL 33601





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June 10, 2010

Mr. Phillip O. Ellis  
Strategic Analysis & Government Affairs  
Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

RE: 2010 Update to Florida Municipal Power Agency 10-Year Site Plan, Multi-County

Dear Mr. Ellis:

The Division of Habitat and Species Conservation, Habitat Conservation Scientific Services Section of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated our agency's review of the 2010 update to Florida Municipal Power Agency's (FMPA) 10-Year Site Plan and provides the following comments and recommendations.

No new proposals for the FMPA facilities have been submitted at this time and none are expected for the next 10 years. If new proposals for the FMPA generating facilities or transmission facilities occur in the future, the FWC will review the submitted information for potential impacts to fish and wildlife and their habitats.

We find the 2010 Update to FMPA's 10-year Site Plan to be adequate for planning purposes. For future reference, we encourage the Public Service Commission to communicate to FMPA that by including company point-of-contact information in their hard copy reports, they can facilitate receipt of any comments we might offer in a timely fashion. If you or your staff would like to coordinate further on this review, please contact Mary Ann Poole in the Office of Policy and Planning Coordination at phone 850-410-5272, or email [maryann.poole@MyFWC.com](mailto:maryann.poole@MyFWC.com). If your staff has any specific questions regarding our comments, I encourage them to contact Steve Lau (772-778-6354) or by email at [steve.lau@MyFWC.com](mailto:steve.lau@MyFWC.com).

Sincerely,

Scott Sanders  
Habitat & Species Conservation Section Leader

ss/map/sl  
ENV 1-3-2  
Florida Municipal Power Agency 2010\_27RA\_061010





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June 28, 2010

Mr. Phillip O. Ellis  
Strategic Analysis & Government Affairs  
Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

PHILLIP O. ELLIS  
Strategic Analysis & Government Affairs  
Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

RE: 2010 Gainesville Regional Utilities 10-Year Site Plan Review

Dear Mr. Ellis:

The Division of Habitat and Species Conservation, Habitat Conservation Scientific Services Section, of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated our agency's review of the 2010 Gainesville Regional Utilities (GRU) 10-Year Site Plan and provides the following comments and recommendations, in accordance with Section 186.801, Florida Statutes.

### Project Description

Section 186.801, Florida Statutes, requires electric generating facilities to submit a ten-year site plan to the Florida Public Service Commission (PSC). The FWC recognizes the efforts on the part of GRU to include alternative and sustainable resources as part of their energy production with the Gainesville Renewable Energy Center, LLC, for biomass energy sources.

### Referenced Sites and Recommendations

**Deerfield Plant** – The GRU has identified the need to expand the Deerfield generating facility. In 2009, GRU and Gainesville Renewable Energy Center (GREC) filed a joint application for a biomass power plant in Alachua County. The existing 1,146-acre generating plant site would be expanded with the addition of 2,328 acres. In accordance with Florida Power Plant Siting Act, FWC recommended conditions of certification for the site certification amendment. We recommend that the environmental issues and recommendations identified during the site amendment process for the Gainesville Renewable Energy Center be incorporated into the 10-year site plan. In the interest of providing feedback to GRU in a proactive manner, we suggest that it would be helpful for GRU to include point-of-contact information with their submitted update materials.

If GRU includes the environmental conditions information recently developed for the Gainesville Renewable Energy Center, we would recommend that the PSC find the 2010 update to Gainesville Regional Utilities' 10-year Site Plan to be adequate for planning purposes. If you or your staff would like to coordinate further on the issues contained in this report, please contact me at 850-410-5272, or email me at maryann.poole@MyFWC.com, and I will be glad to help make the necessary arrangements. If your staff has any specific questions regarding our comments, I



Mr. Phillip O. Ellis  
Page 2  
June 28, 2010

encourage them to contact Dr. Joseph Walsh at 772-778-6354 or via email  
Joe.Walsh@myfwc.com.

Sincerely,



Mary Ann Poole  
Commenting Program Administrator

map/sr  
ENV 2-11-4/3  
Gainesville Regional Utilities 2010\_2783\_062510



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June 29, 2010

Mr. Phillip O. Ellis  
Strategic Analysis & Government Affairs  
Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

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RE: 2010 Update to Jacksonville Electric Authority (JEA) 10-Year Site Plan, Multi-County

Dear Mr. Ellis:

The Division of Habitat and Species Conservation, Habitat Conservation Scientific Services Section, of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated our agency's review of the 2010 update to Jacksonville Electric Authority's 10-Year Site Plan and provides the following comments and recommendations, in accordance with Section 186.801 of the Florida Statutes.

#### Project Description

Section 186.801, Florida Statutes, requires electricity-generating facilities to submit a ten-year site plan to the Florida Public Service Commission (PSC). The Jacksonville Electric Authority (JEA) maintains three generating facilities in the Jacksonville area, holds financial interest in two generating facilities (the St. Johns River Power Park in northeast Florida and the Robert W. Scherer Generating Station in Georgia), and is proposing development of two additional facilities in Florida.

The JEA Electric System consists of generating facilities located on three plant sites within the City: the J. Dillon Kennedy Generating Station (Kennedy), the Northside Generating Station (Northside), and the Brandy Branch Generating Station (Brandy Branch). According to this update to the 10-year site plan, JEA does not anticipate any land-use changes associated with these sites; we did not identify any additional information needs related to fish and wildlife issues for these sites during this review.

St. Johns River Power Park - The St. Johns River Power Park is jointly owned by JEA and Florida Power & Light. According to the current 10-year site plan, JEA does not anticipate any land-use changes with this site; we did not identify any additional information needs related to fish and wildlife issues for this location during this review.

Robert W. Scherer Generating Station - Robert W. Scherer Unit 4 is a coal-fired generating unit, located in Monroe County, Georgia. According to the current 10-year site plan, JEA does not anticipate any land use changes with this site; being that this site is not in Florida, we did not identify any information needs related to fish and wildlife issues associated with this site.

Taylor Energy Center - This site is proposed on 3000 acres located 5 miles southeast of Perry, Florida, within Taylor County. The site is bordered by Highway 27 to the north and Fenholloway River to the west. According to JEA, the need for power petition was submitted in September 2006 to the PSC, and the need hearing was held in January 2007. There is no updated information on this proposed site in the 2010 site plan. Once the PSC has indicated a ruling on the petition and when more detailed information is developed as part of the site specific

Mr. Phillip O. Ellis  
Page 2  
June 29, 2010

permitting process, the FWC will review the submitted information for potential impacts to fish and wildlife and their habitats.

*Greenland Energy Center* - The Greenland Energy Center is proceeding with installation of two combustion engine turbines. It is anticipated that the site will be cleared and developed to include a stormwater retention pond system; however, it is unclear as to the vegetation communities and wildlife usage existing or potentially occurring onsite. As we pointed out in our report in 2009, this update to the JEA 10-year site plan report does not have an environmental and land-use section. Specifically, we recommend that JEA include a section on anticipated environmental issues and land-use changes. Further, we recommend that this section include color aerial photographic maps for each of their plants and associated facilities.

Regarding the anticipation of land-clearing activity, we would anticipate the need to assess any changes for potential impacts to fish and wildlife resources. Minimization and mitigation for potential adverse impacts from the plant and associated facilities, transmission lines, and discharges as they relate to threatened and endangered species, wildlife species, and aquatic life (freshwater and marine) would need to be addressed through compliance with the Site Certification Conditions.

No new proposals for the other JEA facilities have been submitted at this time that would impact fish and wildlife resources. If new proposals for the JEA electrical system, the St. Johns River Power Park bulk power system, or the Robert W. Scherer bulk power system are made, the FWC will review the submitted information for potential impacts to fish and wildlife and their habitats. Also, in the interest of providing feedback to JEA in a proactive manner, we suggest that it would be helpful for JEA to include point-of-contact information with their submitted update materials.

In summary, we do not find the 2010 update to Jacksonville Electric Authority's 10-year Site Plan document to be adequate for planning purposes. If you or your staff would like to coordinate further on the issues contained in this report, please contact me at 850-410-5272, or email me at [maryann.poole@MyFWC.com](mailto:maryann.poole@MyFWC.com), and I will be glad to help make the necessary arrangements. If your staff has any specific questions regarding our comments, I encourage them to contact Dr. Joseph Walsh at 772-778-6354 or email at [Joe.Walsh@myfwc.com](mailto:Joe.Walsh@myfwc.com).

Sincerely,



Mary Ann Poole  
Commenting Program Administrator

map/sr  
ENV 2-11-4/3  
JEA 2010\_2786\_062910



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June 1, 2010

Ms. Traci Matthews  
Division of Regulatory Analysis  
Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

RE: Lakeland Electric Polk County 2010 Ten-Year Site Plan for Electrical Generating  
Facilities and Associated Transmission Lines

Dear Ms. Matthews:

The Division of Habitat and Species Conservation, Habitat Conservation Scientific Services Section, of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated our agency's review of the Lakeland Electric 2010 Ten-Year Site Plan and provides the following comments and recommendations.

### Project Description

Section 186.801, Florida Statutes, requires electric generating facilities to submit a ten-year site plan to the Florida Public Service Commission. Lakeland Electric's existing generating units are located at three different plant sites: Charles Larsen Memorial (Larsen), C.D. McIntosh Jr. (McIntosh), and Winston Peaking Station (Winston). The two main plant sites are located on Lake Parker and the peaking station is approximately 5 miles west of Lake Parker. All of the facilities are found within Polk County. The three plants have multiple units with different technologies and fuel types.

### Referenced Sites and Recommendations

*Charles Larsen Memorial* - The Larsen site is located on the southeast shore of Lake Parker in Lakeland. The site has three units with a total net maximum capacity of 151 megawatts (MW). The units burn natural gas as a primary fuel with diesel as a backup. The planning document does not anticipate any modifications to this site in the foreseeable future. We do not recommend any additional information needs for this site at this time.

*C.D. McIntosh Jr.* - The McIntosh site is located in the City of Lakeland along the northeastern shore of Lake Parker and encompasses 513 acres. The McIntosh site currently includes seven units with a total net maximum capacity of 760 MW. The units burn natural gas and pulverized coal as a primary fuel with diesel as backup. The planning document does not anticipate any modifications to this site in the foreseeable future. We do not recommend any additional information needs for this site at this time.

*Winston Peaking Station* - The Winston site is located in the southeast quadrant of Old Tampa Highway and Airport Road (CR 572), approximately 2.3 miles north of the Lakeland Airport. Lakeland Electric constructed this 50 MW electric peaking station to provide additional quick start generation for Lakeland's system during times of peak

Ms. Traci Matthews  
Page 2  
June 1, 2010

loads. The station consists of 20 reciprocating cylinder engines driving 2.5 MW generators. The units are currently fueled by oil but have the capacity to burn a mix of 5% oil and 95% natural gas. The planning document does not anticipate any modifications to this site in the foreseeable future. We do not recommend any additional information needs for this site at this time.

In summary, we found Lakeland Electric's Ten-Year Site Plan document to be suitable for planning purposes. If Lakeland Electric decides to expand or enhance existing sites or develop new sites in the future, more detailed information can be provided regarding site location, wildlife occurrences and habitats, as well as surrounding natural resources. If you or your staff would like to coordinate further regarding this report, please contact Mary Ann Poole at 850-410-5272, or email her at [maryann.poole@MyFWC.com](mailto:maryann.poole@MyFWC.com), and she will be glad to help make the necessary arrangements. If your staff has any specific questions regarding our comments, I encourage them to contact Luis F. Gonzalez by telephone at 863-648-3200 or by email at [luis.gonzalez@myfwc.com](mailto:luis.gonzalez@myfwc.com).

Sincerely,



Scott Sanders  
Habitat & Species Section Leader

ss/jdg/lg  
ENV 2-11-4/3  
Lakeland Electric 2010\_2782\_060110  
cc: John Juisseppi, Lakeland Electric ([john.juisseppi@lakelandelectric.com](mailto:john.juisseppi@lakelandelectric.com))



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June 10, 2010

Mr. Phillip O. Ellis  
Strategic Analysis & Government Affairs  
Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

RE: 2010 Update to Orlando Utilities Commission 10-Year Site Plan, Multi-County

Dear Mr. Ellis:

The Division of Habitat and Species Conservation, Habitat Conservation Scientific Services Section of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated our agency's review of the 2010 update to Orlando Utilities Commission's (OUC) 10-Year Site Plan and provides the following comments and recommendations.

No new proposals for the OUC facilities have been submitted at this time and none are expected for the next 10 years. If new proposals for the OUC generating facilities or transmission facilities occur in the future, the FWC will review the submitted information for potential impacts to fish and wildlife and their habitats.

We find the 2010 Update to OUC's 10-year Site Plan to be adequate for planning purposes. For future reference, we encourage the Public Service Commission to communicate to OUC that by providing point-of-contact information with their hard copy reports, they could ensure receipt of any comments we might offer in a timely fashion. If you or your staff would like to coordinate further on the issues contained in this report, please contact Mary Ann Poole in the Office of Planning and Policy Coordination at phone 850-410-5272, or email at [maryann.poole@MyFWC.com](mailto:maryann.poole@MyFWC.com). If your staff has any specific questions regarding this review, I encourage them to contact Steve Lau (772-778-6354) or by email at [steve.lau@MyFWC.com](mailto:steve.lau@MyFWC.com).

Sincerely,

Scott Sanders  
Habitat & Species Conservation Section Leader

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Orlando Utilities Commission 2010\_2785\_061010







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May 7, 2010

Ms. Traci Matthews  
Division of Regulatory Analysis  
Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

RE: City of Tallahassee 10-Year Site Plan: 2010-2019, Leon County

Dear Ms. Matthews:

The Division of Habitat and Species Conservation, Habitat Conservation Scientific Services Section of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated our agency's review of the City of Tallahassee 10-Year Site Plan (2010 – 2019) and provides the following comments.

#### **Project Description**

Section 186.801, Florida Statutes, requires electric generating facilities to submit a ten-year site plan to the Florida Public Service Commission. The City of Tallahassee (City) has three plants providing power to the City: Purdom (St. Marks, Florida), Hopkins (Tallahassee), and Corn (Lake Talquin). The City expects that no additional power supply resources will be required in the reporting period to meet future system needs.

The City has been working with its neighboring utilities, Progress Energy and Southern Company, to identify improvements that would ensure the continued reliability and commercial viability of the transmission systems in and around Tallahassee. The City's continuing evaluation of infrastructure indicates that additional projects are needed to address either (1) improvements in capability to deliver power from the Hopkins Plant (on the west side of the City's service territory) to the load center, or (2) the strengthening of the system on the east side of the City's service territory to improve the voltage profile in that area and enhance response to contingencies. If the demand side management does not perform as expected throughout the planning period, a 230-kilovolt (kV) transmission line loop around the City would be necessary by 2016.

#### **Comments**

Fish and wildlife resources are not likely to be affected by Tallahassee's facilities plan since no facility projects or enhancements are currently planned; however, fish and wildlife resources will need to be considered if improvements are planned to improve the transmission capabilities of the City. The City of Tallahassee's 10-year Site Plan 2010 – 2019 document is suitable for planning purposes.

If you or your staff would like to coordinate further on the recommendations contained in this report, please contact me at 850-410-5272, or email me at [maryann.poole@MyFWC.com](mailto:maryann.poole@MyFWC.com), and I will be glad to help make the necessary



Ms. Traci Matthews  
Page 2  
May 7, 2010

arrangements. If your staff has any specific questions regarding our comments, I encourage them to contact Theodore Hoehn at 850-488-3831 or by email at [ted.hoehn@myFWC.com](mailto:ted.hoehn@myFWC.com).

Sincerely,



Mary Ann Poole  
Commenting Program Administrator

map/th  
City of Tallahassee Electric Utility 2010\_2789\_050710  
ENV 1-3-2  
cc: Paul Clark, City of Tallahassee: [paul.clark@talgov.com](mailto:paul.clark@talgov.com)



**Florida Fish  
and Wildlife  
Conservation  
Commission**

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Division of Habitat and  
Species Conservation

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MyFWC.com

June 10, 2010

Mr. Phillip O. Ellis  
Strategic Analysis & Government Affairs  
Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

2010 JUN 11 AM 9:28  
DIVISION OF  
REGULATORY COMPLIANCE

RE: 2010 Update to Seminole Electric Cooperative's 10-Year Site Plan, Multi-County

Dear Mr. Ellis:

The Division of Habitat and Species Conservation, Habitat Conservation Scientific Services Section, of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated our agency's review of the 2010 update to Seminole Electric Cooperative's 10-Year Site Plan and provides the following comments and recommendations.

### Project Description

Section 186.801, Florida Statutes, requires electricity-generating facilities to submit a ten-year site plan to the Florida Public Service Commission. Seminole Electric Cooperative (SEC) identifies the need to develop a new power-generating facility, two transmission rights-of-way, and a switch station.

### Potential Information Needs and Recommendations

**Seminole Generating Station, Putnam County:** The planning document does not anticipate any modifications to this site in the foreseeable future. We do not recommend any additional information needs for this site at this time. An additional power generating unit that was proposed last year has been canceled.

**Midulla Generating Station, Hardee and Polk Counties:** The planning document does not anticipate any modifications to this site in the foreseeable future. We do not recommend any additional information needs for this site at this time.

**Gilchrist Generating Station Site:** The plan outlines SEC's intention to develop this 530-acre site for four new power generating units. In addition, the plan calls for the development of two transmission line rights-of-way and a switching station located at a future intersection with Progress Energy-Florida's Ft. White-Newberry transmission line. Although they provide a general description of the environmental conditions at the proposed new generating station site and a very large scale location map with few details, they do not provide enough detail for a complete site analysis that would enable us to make additional planning recommendations for any of the facilities associated with this project. For example, our review of geographic information system-available data shows that this site within an area of the State that is likely to provide potential habitat for a variety of listed species. Based on known range and preferred habitat, the following table

Mr. Phillip O. Ellis  
Page 2  
June 10, 2010

identifies wildlife species, including 12 that are protected by federal and/or state laws potentially occur within the general area of the project site.

**Table: List of Potentially Occurring Protected Wildlife Species**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Status*</b>
Gopher frog	<i>Rana capito</i>	SSC
American alligator	<i>Alligator mississippiensis</i>	SSC; FT
Gopher tortoise	<i>Gopherus polyphemus</i>	ST
Eastern indigo snake	<i>Drymarchon corais couperi</i>	ST; FT
Short-tailed snake	<i>Stilosoma extenuatum</i>	ST
Little blue heron	<i>Egretta caerulea</i>	SSC
Snowy egret	<i>Egretta thula</i>	SSC
White ibis	<i>Eudocimus albus</i>	SSC
Wood stork	<i>Mycteria americana</i>	SE; FE
Sherman's fox squirrel	<i>Sciurus niger shermani</i>	SSC
Florida black bear	<i>Ursus americanus floridanus</i>	ST
Florida mouse	<i>Podomys floridanus</i>	SSC

\* SSC - Species of Special Concern; ST - State Threatened; SE - State Endangered; FT - Federally Threatened; FE - Federally Endangered

In summary, we do not find the 2010 update to Seminole Electric Cooperative's 10-year Site Plan document to be adequate. For future reference, we would recommend that Seminole Electric:

- Perform a GIS analysis of any proposed power plant or transmission line sites and include summary reports of that information in their 10-year site plan updates;
- Contact us in advance of preparing their next update if they have any questions about how to address fish and wildlife resources in the vicinity of their properties; and
- Include contact information in their updates so that we can share our comments with them in a timely fashion.

If you or your staff would like to coordinate further on this review, please contact Mary Ann Poole in the Office of Planning and Policy Coordination at phone 850-410-5272, or email [maryann.poole@MyFWC.com](mailto:maryann.poole@MyFWC.com). If your staff has any specific questions regarding our comments, I encourage them to contact Steve Lau at (772) 778-6354, or email [steve.lau@myFWC.com](mailto:steve.lau@myFWC.com).

Sincerely,



Scott Sanders  
Habitat & Species Conservation Section Leader

ss/map/sl  
ENV 2-11-4/3  
Seminole Electric 2010\_2780\_061010

## **State Agencies**

### Department of Transportation





**Florida Department of Transportation**

**CHARLIE CRIST  
GOVERNOR**

605 Suwannee Street  
Tallahassee, FL 32399-0450

**STEPHANIE C. KOPELOUSOS  
SECRETARY**

June 21, 2010

Traci Matthews  
Division of Regulatory Analysis  
Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

Dear Ms. Matthews:

The Siting Coordination Office has reviewed the ten-year site plans and find these are suitable as planning documents. If you have any questions please feel free to call me at (850)414-4572.

Sincerely,

A handwritten signature in cursive script that reads "Connie Mitchell".

Connie Mitchell  
Staff Director  
Siting Coordination Office

[www.dot.state.fl.us](http://www.dot.state.fl.us)





# **Regional Planning Councils**

## Central Florida







SERVING THE COUNTIES OF • DE SOTO • HARDEE • HIGHLANDS • OKEECHOBEE • POLK

June 30, 2010

Traci Matthews  
State of Florida Public Service Commission  
Capital Circle Office Center  
2540 Shumard Oak Blvd  
Tallahassee, FL 32399

Dear Ms. Matthews,

The CFRPC received a ten year power plant plan (2010 – 2019) from Tampa Electric (TECO). This plan was completed in April 2010. No report was received from Florida Power and Light (FPL), Progress Energy Florida, Orlando Utilities Commission, Seminole Electric Cooperative, or Lakeland Electric Company (City of Lakeland). However, the CFRPC reviewed the ten year power plant plans for these entities on the Public Service Commission's website.

A portion of Polk County receives electrical service from TECO. TECO offers a Renewable Energy Program that has been recently upgrading from a pilot program to permanent program status. Recently, the State of Florida placed a requirement on local governments to reduce greenhouse gases and improve energy efficiency. This program will help the communities served by TECO meet the state's requirement.

Thank you for the opportunity to review this ten year power plant plan.

Sincerely,

Marisa M. Barmby, AICP  
Senior Planner

CENTRAL FLORIDA REGIONAL PLANNING COUNCIL  
555 EAST CHURCH STREET, BARTOW, FL 33830-3931; P.O. BOX 2089 BARTOW, FL 33831-2089  
(863) 534-7130 • FAX (863) 534-7138 • TOLL FREE (800) 297-8041 • WEBSITE WWW.CFRPC.ORG



# **Regional Planning Councils**

## East Central Florida





## EAST CENTRAL FLORIDA REGIONAL PLANNING COUNCIL

309 Cranes Roost Blvd. Suite 2000 · Altamonte Springs, FL 32701  
Phone (407).262.7772 · Fax (407).262.7788 · www.ecfrpc.org

Philip Laurien, AICP  
Executive Director

### MEMORANDUM

**To:** Traci Matthews, Division of Regulatory Analysis, Florida Public Service Commission

**From:** George Kinney, AICP, Planning Manager  
Tara M. McCue, AICP

**Date:** June 24, 2010

**Subject:** 2010 Ten-Year Site Plans Review

- Florida Power and Light
- Florida Municipal Power Agency
- Orlando Utilities Commission
- Progress Energy

East Central Florida Regional Planning Council staff has completed a review of the 2010 Ten-Year Site Plans for the agencies listed above. Staff comments to each utility are italicized below.

#### Florida Power and Light

*The 10 Year Site Plan did not include any proposed projects or sites which conflict with the ECFRPC Regional Strategic Policy Plan. The Council encourages Florida Power and Light to continue its efforts towards the incorporation of renewable energy projects.*

#### Florida Municipal Power Agency

*The 10 Year Site Plan did not include any proposed projects or sites which conflict with the ECFRPC Regional Strategic Policy Plan. The Council commends the agency on its partnerships and continued work towards alternative energy supplies and conservation efforts.*

#### Orlando Utilities Commission

*The 10 Year Site Plan did not include any proposed projects or sites which conflict with the ECFRPC Regional Strategic Policy Plan. The Council commends the commission on its progress towards alternative energy supplies, reducing the commission's carbon footprint and conservation and education efforts.*

---

#### *Executive Committee*

**Chair**  
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Volusia County League of Cities

**Vice Chair**  
Cheryl Grieb  
City Commissioner  
City of Kissimmee

**Treasurer**  
Elaine Renick  
Commissioner  
Lake County

**Secretary**  
Daniel O'Keefe  
Gubernatorial Appointee  
Orange County

*Serving Brevard, Lake, Orange, Osceola, Seminole, and Volusia Counties.*

**Progress Energy**

*The 10 Year Site Plan did not include any proposed projects or sites which conflict with the ECFRPC Regional Strategic Policy Plan. The Council commends Progress Energy on its efforts towards the incorporation of alternative energy supplies, public and commercial incentive programs, conservation and education efforts.*

Council staff will provide further comments on environmental impacts when new units, projects or transmission lines are proposed and related environmental and wildlife studies are provided.

If you require any further information or comments, please contact Tara McCue, AICP at [tara@ecfrpc.org](mailto:tara@ecfrpc.org) or by phone at (407) 262-7772.

# **Regional Planning Councils**

## North Central Florida





# North Central Florida Regional Planning Council



2009 N.W. 67 PLACE, SUITE A, GAINESVILLE, FLORIDA 32653-1603  
(352) 955-2200      SUNCOM 625-2200      FAX (352) 955-2209

## REGIONAL CLEARINGHOUSE INTERGOVERNMENTAL COORDINATION AND RESPONSE

Date: 6-29-10

### PROJECT DESCRIPTION

#85- Gainesville Regional Utilities 2010 Ten-year Site Plan

---

TO: Traci Mathews  
Division of Regulatory Analysis  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

COMMENTS ATTACHED  
 NO COMMENTS REGARDING THIS PROJECT

---

IF YOU HAVE ANY QUESTIONS REGARDING THESE COMMENTS, PLEASE CONTACT  
STEVEN DOPP, SENIOR PLANNER, AT THE NORTH CENTRAL FLORIDA REGIONAL  
PLANNING COUNCIL AT (352) 955-2200 OR SUNCOM 625-2200, EXT 109.

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## North Central Florida Regional Planning Council



2009 N.W. 67 PLACE, SUITE A, GAINESVILLE, FLORIDA 32653-1603  
(352) 955-2200      SUNCOM 625-2200      FAX (352) 955-2209

### REGIONAL CLEARINGHOUSE INTERGOVERNMENTAL COORDINATION AND RESPONSE

Date: 6-29-10

#### PROJECT DESCRIPTION

#84 - Seminole Electric Cooperative, Inc., Ten Year Site Plan 2010 - 2019

---

TO: Traci Mathews  
Division of Regulatory Analysis  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

COMMENTS ATTACHED

NO COMMENTS REGARDING THIS PROJECT

---

IF YOU HAVE ANY QUESTIONS REGARDING THESE COMMENTS, PLEASE CONTACT  
STEVEN DOPP, SENIOR PLANNER, AT THE NORTH CENTRAL FLORIDA REGIONAL  
PLANNING COUNCIL AT (352) 955-2200 OR SUNCOM 625-2200, EXT 109.

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# **Regional Planning Councils**

## Northeast Florida





*Bringing Communities Together*

Baker • Clay • Duval • Flagler • Nassau • Putnam • St. Johns

June 15, 2010

Ms. Jeanette Sichel  
 Florida Public Service Commission  
 Division of Economic Regulation  
 2540 Shumard Oak Blvd.  
 Tallahassee, FL 32399-0850

*Tom Ballinger*

Dear Ms. Sichel:

Please find attached the Northeast Florida Regional Council's ten-year site plan review for JEA.

JEA Ten-year Site Plan: The ten-year site plan, as required by Section 186.801 of the Florida Statutes (F.S.), was reviewed by the Northeast Florida Regional Council staff.

**Action taken:** Staff's review was approved by the Council and authorized its transmittal to the Florida Public Service Commission.

If you have any further requests or questions, please contact Ms. Ameera Sayeed, Senior Regional Planner, (904) 279-0885, ext. 151 or [asayeed@nefrc.org](mailto:asayeed@nefrc.org).

Sincerely,

*Margo Moehring*

Margo Moehring, AICP, MRTPI  
 Director  
 Planning & Strategic Initiatives

attachment

DIVISION OF ECONOMIC REGULATION  
 10 JUN 18 AM 10:37  
 FLORIDA PUBLIC SERVICE COMMISSION

REGULATION  
 2010 JUN 21 AM 9:52



*Bringing Communities Together*

Baker • Clay • Duval • Flagler • Nassau • Putnam • St. Johns

## MEMORANDUM

**DATE:** May 24, 2010  
**TO:** Northeast Florida Regional Council  
**THRU:** Planning and Growth Management Policy Committee  
**FROM:** Ameera Sayeed, Senior Regional Planner  
**RE:** Review of JEA Ten-Year Power Plant Site Plan 2010-2019

### INTRODUCTION

Each year every electric utility in the State of Florida produces a ten-year site plan that includes an estimate of future electric power generating needs. The purpose of the ten year site plan is to disclose the general location of proposed power plant sites and facilitate coordinated planning efforts. Pursuant to Section 186, Florida Statutes, Council staff reviewed the most recent ten-year site plan prepared by the Jacksonville Electric Authority (JEA). The purpose of this report is to summarize JEA's plans for future power generation and provide comments for transmittal to the Florida Public Service Commission (Commission).

### STATUTORY AUTHORITY

Section 186.801, Florida Statutes, requires that all major generating electric utilities in Florida submit a *Ten-Year Site Plan* to the Commission for review. Each *Ten-Year Site Plan* contains projections of the utility's electric power needs for the next ten years and the general location of proposed power plant sites and major transmission facilities. In accordance with the statute, the Commission performs a preliminary study of each *Ten-Year Site Plan* and must determine whether it is "suitable" or "unsuitable." In conducting its review, the Commission considers the views of appropriate local and state agencies. The Northeast Florida Regional Council reviews electric utility Ten-Year Site Plans within the region and submits comments to the Commission for review. The

**Board Memorandum**  
**May 24, 2010**  
**Page 2**

Commission forwards the *Ten-Year Site Plan* review, upon completion, to the Florida Department of Environmental Protection (DEP) for use in subsequent power plant siting proceedings. To fulfill the requirements of Section 186.801, Florida Statutes, the Commission has adopted Rules 25-22.070 through 25-22.072, Florida Administrative Code. Electric utilities must file the *Ten-Year Site Plan* by April 1st.

**PURPOSE**

The intent of the *Ten-Year Site Plans* is to give state, regional, and local agencies advance notice of proposed power plants and transmission facilities. However, the *Ten-Year Site Plans* are not a binding plan of action on electric utilities. As such, the Commission's classification of a *Ten-Year Site Plan* as suitable or unsuitable has no binding effect on the utility. Such a classification does not constitute a finding or determination in docketed matters before the Commission. The Commission may address any concerns raised by a utility's *Ten-Year Site Plan* at a public hearing. Because the *Ten-Year Site Plans* are planning documents containing tentative data, they may not contain sufficient information to allow regional planning councils, water management districts, and other review agencies to evaluate site-specific issues within their jurisdictions. Each utility is responsible for providing detailed data, based on in-depth environmental assessments, during Power Plant Siting Act or Transmission Line Siting Act certification proceedings.

**Summary of the Plan**

The evaluation has revealed that JEA included in their ten-year plan the necessary analysis to determine the current plan. The existing JEA electric supply resources, forecasts of customer energy requirements and peak demands, forecasts of fuel process and availability, and an analysis of alternative for resources that would meet JEA's future capacity and energy needs were reported in the ten-year plan. JEA forecasts accounted for the system peak demand growth and energy consumption resource plan, in addition to cost considerations, environmental and land use considerations were amply factored into the ten-year plan. JEA covers approximately 900 square miles and services 417,000 customers. JEA had proved population estimates in previous ten year site plans and it appears that the current plan no longer includes the population forecast and accompanying discussion.

JEA consists of three separate entities: The JEA Electric system, the St. Johns River Power Park and the Robert W. Scherer system. The JEA Electric System consists of generating facilities located on three plant sites within the City; the J. Dillon Kennedy generating station, the Northside generating station and the Brandy Branch generating



**Board Memorandum**  
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**Page 3**

station. These are two dual fired plants, meaning petroleum and coke or coal burning. The St. Johns River Power Park is jointly owned by JEA (80 percent and FP&L (20 percent). These are coal fired units. Although JEA is the majority owner of SJRPP, both owners are entitled to 50 percent of the output of SJRPP. The Robert Scherer Unit 4 is a coal fired generating unit with a net output of 846 MW located in Monroe County, Georgia. JEA has a 23.6 percent ownership interest in Unit 4 and proportionate ownership interest in associated common facilities and coal stock pile.

JEA also pursues purchasing power from Southern Company, which is also coal powered and will provide capacity and energy per contract through May 31, 2010. Constellation Energy Commodities Group has been added from the previous year site plan. Constellation and JEA entered into an agreement in October 2006. The Energy Authority (TEA) is generally able to acquire capacity when any of JEA's members require additional resources. Co-generation facilities reduce the demand from JEA's facilities and JEA has customers having Qualifying Facilities located with the JEA service area/territory. Four of these "co-generators" are Anheuser-Busch, Baptist Hospital, Ring Power Landfill and St. Vincent's Hospital.

JEA continues to establish a Clean Power Capacity goal of 7.5 percent clean power capacity by 2015. To support these goals, the JEA has solar photovoltaic panels on high schools and other community buildings. JEA also has the Solar Incentive Program to promote solar energy. Another measure taken by JEA is the Residential Net Metering Policy to encourage the use of customer sited solar photovoltaic systems. JEA also has programs that offer indoor and outdoor lighting services to help in designing efficient light systems and retrofits.

#### **Nuclear Generation**

In March 2008, JEA approved the policy of pursuing nuclear energy partnerships with the goal of providing 10 percent of JEA's power from nuclear sources. In June 2008, JEA entered in to a purchase power agreement with the Municipal Electric Authority of Georgia (MEAG) for a portion of MEAG's entitlement to the Vogtle Units 3 and 4, which are proposed new nuclear units to be constructed at the existing Plant Vogtle located in Burke County, Georgia. JEA is entitled to net firm capacity of 200 MW from the proposed units.

#### **Clean Power and Renewable Energy**

JEA has pursued several clean power initiatives and is in the process of evaluating potential renewable energy resources. JEA has worked with the Sierra Club of Northeast Florida, the American Lung Association and local environmental groups to establish a process to maintain an action plan entitled "Clean Power Action Plan". This

**Board Memorandum**  
**May 24, 2010**  
**Page 4**

Plan includes an advisory Panel which is comprised of community representatives. Also, JEA has included in their review and planning installation of solar photovoltaics, solar thermal, landfill and wastewater treatment biogas capacity and wind capacity.

**Solar**

In 2009 JEA purchased a power agreement with Jacksonville Solar, LLC to provide energy from a 15.0 MW DC rated solar farm, the facility is located in western Duval County and will consist of 200,000 photovoltaic panels on 100 acres and will generate approximately 22,340 MWh of electricity per year.

**Landfill**

JEA owns three internal combustion engine generators that are fueled by the methane gas produced by the landfill. JEA also receives landfill gas from the North landfill, which is fed to the Northside Generating station and is used to generate power at Northside Unit 3.

**Wind**

JEA purchases 10MW of wind capacity from NPPD's (Nebraska Public Power District) and in turn the NPPD buys back the energy at specified on/off peak charges. JEA receives environmental credits associated with green projects.

**Biomass**

JEA has been in research efforts continues to conduct and evaluate the feasibility of this energy source.

**Other renewable** efforts include offshore wind, tidal and energy crops, all requiring more research and development before implementation.

**Greenland Energy Center**

The GEC is a new site and JEA has proceeded with the installation of two combustion units. The scheduled commercial operation date for these units is June 2011. The GEC will convert two simple cycle combustion turbines for operation at the Center site. This site will be dual fueled with natural gas as the primary fuel and oil as a backup fuel. The air quality and water use at the GEC are subject to the review of the FDEP and St. Johns River Water Management District guidelines.

**Staff Evaluation**

Council staff supports JEA and the State of Florida's efforts to continue to develop new programs to: 1) reduce the reliance on coal and oil as energy sources; 2) increase conservation activities to offset the need to construct new power plants; and 3) plan to develop an environmentally sound power supply strategy that may provide reliable electric service at the lowest practical cost.

As stated previously, JEA has submitted in the past data and analyses pertaining to

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•  
  
**Board Memorandum**  
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**Page 5**

population estimates and forecast and it's relation to energy demand and supply. This ten year site plan does not include this data.

**Recommendation**

**Staff recommends that the Committee and Council approve this report and authorize its transmittal to the Florida Public Service Commission.**

# **Regional Planning Councils**

## Treasure Coast



TREASURE COAST REGIONAL PLANNING COUNCIL  
 INDIAN RIVER - MARTIN - PALM BEACH - ST. LUCIE

June 23, 2010

Ms. Traci Matthews  
 Division of Regulatory Analysis  
 Florida Public Service Commission  
 2540 Shumard Oak Boulevard  
 Tallahassee, FL 32399-0850

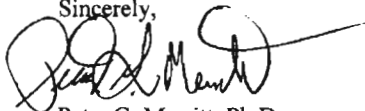
Subject: 2010 Ten Year Power Plant Site Plans

Dear Ms. Matthews:

Treasure Coast Regional Planning Council has reviewed the ten year power plant site plan prepared by Florida Power and Light Company. Council approved the comments in the attached report at a board meeting on June 18, 2010. The report concludes that the FPL Ten Year Power Plant Site Plan, 2010-2019 is inconsistent with Strategic Regional Policy Plan Goal 9.1, decreased vulnerability of the region to fuel price increases and supply interruptions; and Strategy 9.1.1, reduce the Region's reliance on fossil fuels. Council urges FPL and the State of Florida to continue developing new programs to: 1) reduce the reliance on fossil fuels as future energy sources; 2) increase conservation activities to offset the need to construct new power plants; and 3) increase the reliance on renewable energy sources to produce electricity. The report encourages the Florida Legislature to adopt a Renewable Portfolio Standard during the next legislative session in order to provide a mechanism to expand the use of renewable energy in Florida. The report also includes a concern for FPL to address in next years ten year site plan about the potential need to provide service to a significant amount of additional customers in Indian River County.

Please contact me if you have any questions.

Sincerely,



Peter G. Merritt, Ph.D.  
 Regional Ecologist

Attachment

*"Regionalism One Neighborhood At A Time" • Est. 1976*

421 S.W. Camden Avenue - Stuart, Florida 34994  
 Phone (772) 221-4060 - Fax (772) 221-4067 - [www.tcrpc.org](http://www.tcrpc.org)

## TREASURE COAST REGIONAL PLANNING COUNCIL

Report on the

Florida Power &amp; Light Company Ten Year Power Plant Site Plan, 2010-2019

June 18, 2010

Introduction

Each year every electric utility in the State of Florida produces a ten year site plan that includes an estimate of future electric power generating needs, a projection of how those needs will be met, and disclosure of information pertaining to the utility's preferred and potential power plant sites. The Florida Public Service Commission (FPSC) has requested that Council review the most recent ten year site plan prepared by Florida Power and Light Company (FPL). The purpose of this report is to summarize FPL's plans for future power generation and provide comments for transmittal to the FPSC.

Summary of the Plan

The FPL plan describes three primary factors that are driving changes in the 2010 ten year plan. The first primary factor is the FPL plan based on a new long-term load forecast that projects lower growth in electrical demand and energy starting in 2015 compared to the previous forecast. As a result of this new lower load forecast, FPL's current projected need for new resources in the 2010 – 2019 time period is significantly lower than had been projected in 2009. A second primary factor driving changes in the current ten year plan is the FPSC's decision in 2009 to impose significantly higher goals for demand side management (DSM) resources for FPL to add in the 2010 – 2019 period. DMS programs include both conservation initiatives and load management. The third primary factor driving changes in the 2010 plan is that due to regulatory and commercial developments in 2009, the project schedule for Turkey Point nuclear units 6 & 7 is under review. For planning purposes, it is now assumed that the in-service for these future units will not be within the ten year reporting period of the 2010 plan.

Despite the increase in DSM programs, FPL will still require additional capacity from conventional power plants to meet the future demand. The ten year site plan indicates FPL is proposing to add 39 megawatts (MW) of summer capacity to its system from 2010 to 2019 (Exhibit 1). FPL plans to meet some of its needs through power purchases from utilities and other entities. In addition, FPL is planning to increase capacity through modifying existing power plants and developing new generating facilities.

Major additions to FPL's generating capacity are as follows:

- In 2011, FPL plans to add West County Energy Center (WCEC) Unit 3 (1,219 MW) in Palm Beach County;



- In 2012, FPL plans existing nuclear units capacity upgrades to St. Lucie 1 (103 MW), St. Lucie 2 (88 MW) in St. Lucie County, and Turkey Point 3 (104 MW) in Miami-Dade County;
- In 2013, FPL plans to place in service the Cape Canaveral Next Generation Clean Energy Center (1,210 MW) in Brevard County, and existing nuclear units capacity upgrades to Turkey Point 4 (104 MW) in Miami-Dade County; and
- In 2014, FPL plans to place in service the Riviera Beach Energy Center (1,212 MW) in the City of Riviera Beach.

Based on the projection of future resource needs, FPL has identified seven preferred sites for future power generating facilities. The preferred sites include: 1) the WCEC, which is adjacent to the existing Corbett substation in Palm Beach County; 2) the existing St. Lucie Plant site located in St. Lucie County; 3) the existing Turkey Point Plant site in Miami-Dade County; 4) the existing Cape Canaveral Plant site in Brevard County; 5) the existing Riviera Plant site in Palm Beach County; 6) the Space Coast Solar Energy Center in Brevard County; and 7) the Martin Solar Energy Center at the existing Martin Plant site in Martin County.

Also, FPL has identified ten potential sites for new or expanded power generating facilities. The potential sites include: 1) the Babcock Ranch site in Charlotte County; 2) the DeSoto Solar Expansion site in DeSoto County; 3) Florida Heartland Solar in Glades County; 4) the existing Fort Myers Plant site in Lee County; 5) an unidentified location in Hendry County for a photovoltaic facility; 6) the existing Lauderdale Plant site in Broward County; 7) the existing Manatee Plant site in Manatee County; 8) an unidentified location in northeastern Okeechobee County; 9) an unidentified location in southwestern Indian River County; and 10) the West Broward site at the Andytown Substation site in Broward County. The identification of potential sites does not represent a commitment by FPL to construct new power generating facilities at these sites.

In addition to the factors described above, the FPL plan also describes several other items that will also influence FPL's resource planning work. Two on-going system concerns are: 1) maintaining/enhancing fuel diversity in the FPL system, and 2) maintaining a balance between load and generating capacity in southeastern Florida. A third factor that will influence FPL's ongoing resource planning efforts is the Executive Order directive issued by Governor Crist in 2007 calling for reductions in greenhouse gas emissions and for increased contribution from renewable energy resources. A fourth factor that could affect FPL's resource planning is the possibility of the establishment of a Renewable Portfolio Standard (RPS) by the state legislature in the future.

#### Evaluation

One of the main purposes of preparing the ten year site plan is to disclose the general location of proposed power plant sites. The FPL ten year site plan identified four preferred sites and one potential site for future power generating facilities in the Treasure Coast Region (Exhibit 2). The first preferred site is the WCEC. Units 1 and 2 are 1,219 MW natural gas-fired units that were constructed on this site and went into commercial



operation in August, 2009. Unit 3 has been approved by the FPSC and the Secretary of the Florida Department of Environmental Protection (FDEP) in lieu of the Governor and Cabinet and is currently under construction.

The second preferred site is the St. Lucie Plant, which is located on Hutchinson Island in St. Lucie County. The St. Lucie site has been selected as a preferred site for the addition of two types of new generation. The first type of generating capacity addition is an "uprate" project to increase the capacity of the two existing nuclear generating units. FPL is modifying the two 840 MW nuclear generating units to increase their capacity by about 103 MW each. This capacity uprate has been approved by the FPSC. The second type of generating capacity addition is the proposed installation of wind generation turbines at the plant site. Six wind turbines are being proposed that would have a total maximum output of approximately 13.8 MW. The in-service date will depend on the approval and permitting process.

The third preferred site is the Riviera Plant site located in the City of Riviera Beach. This site currently houses two operational 300 MW oil-fired units. FPL will replace the existing units with a high-efficiency combined cycle natural gas unit capable of producing 1,250 MW of electricity. The new design will be sleeker with stacks about half as tall as the existing ones. The modernized plant will have significant economic and environmental benefits. The increase in efficiency will result in the new facility using 33 percent less fuel to produce the same amount of electricity. The new facility will improve air quality by reducing particulate emissions by 88 percent, and the rate of carbon dioxide emissions will improve by 50 percent. The project received final state certification on November 24, 2009, through the issuance of a final order signed by the Secretary of FDEP. The proposal to upgrade this facility is consistent with past requests by Council and the City of Riviera Beach to upgrade this facility.

The fourth preferred site is the Martin Solar Energy Center (MSEC), which will be situated on the existing Martin Power Plant, located west of Indiantown in Martin County. The 11,300-acre Martin Plant site was identified in 1987 as a preferred location for generating facilities. The site has a generating capacity of 3,700 MW derived from two oil-fired units and three natural gas-fired units. The site also has a 10 kilowatt photovoltaic facility in operation. The MSEC project will be constructed in an approximately 600-acre area on the Martin Plant site. The site has been selected as a preferred site for the addition of approximately 75 MW of solar thermal generation. The facility will produce steam that will replace steam that would otherwise have been produced by burning natural gas in one of the existing generating units at the site. The MSEC site certification has been approved and the facility is expected to be in operation by the end of 2010. Council continues to support development of the Martin Solar Energy Center and encourages FPL to develop other projects based on renewable resources.

The only potential site identified in the Treasure Coast Region is an unidentified location in southwestern Indian River County. This area is not projected to have significant future growth. Therefore, selection of a site in southwestern Indian River County does not

appear to be consistent with satisfying FPL's concern for maintaining a balance between load and generating capacity in southeastern Florida.

The ten year plan indicates that fossil fuels will be the primary source of energy used to generate electricity by FPL during the next 10 years (Exhibit 3). The plan indicates in 2010 fossil fuels will account for 65.9 percent of FPL's electric generation (5.7 percent from coal, 1.7 percent from oil, and 58.5 percent from natural gas). In 2019, the plan predicts that 72.9 percent of FPL's electric generation will be derived from fossil fuels (5.4 percent from coal, 1.0 percent from oil, and 66.5 percent from natural gas). During the same period, nuclear sources are predicted to change from 21.8 percent in 2010 to 20.7 percent in 2019.

In regard to utilizing renewable energy, FPL has committed to add 110 MW of solar generating capacity by 2010 through a 75 MW solar thermal facility at the Martin Solar Energy Center, a 25 MW photovoltaic facility in DeSoto County, and a 10 MW facility in Brevard County. Council supports these renewable projects. However, the plan does not predict an increase in the proportion of electricity derived from renewable resources over the next ten years. Furthermore, the plan does not provide an accounting of the amount of electricity derived from renewable resources. Renewable resources are included in the "Other" category in Exhibit 3, which also includes fossil fuel derived energy. Council recommends that future ten year plans provide an estimate of the amount of electricity produced from renewable resources in each year of the planning period.

#### Other Issues

The City of Vero Beach electric utility provides power to a large number of residents living in unincorporated Indian River County and in the Town of Indian River Shores. The City provides this power through franchise agreements with these other local governments. These franchise agreements expire in the year 2017 and 2016, respectively.

During its review of FPL's ten-year plan, Council received communications from Indian River County and the Town of Indian River Shores that they were exploring the possibility of changing their electric utility provider from the City of Vero Beach to FPL. This change will require approval from the Florida Public Service Commission.

If Indian River County and the Town of Indian River Shores are successful in switching to FPL, it will add within the ten-year planning period, over 20,000 new customers to FPL's current system. **It is recommended that FPL describe in next years Ten-Year Power Plant Site Plan any actions FPL has taken or might take to accommodate the new customers.** It should be noted that FPL is currently in discussions with the City of Vero Beach regarding its utility. They both are conducting due diligence to determine if acquiring that system would be in the best interests of FPL customers and the City of Vero Beach.

### Conclusion

The elements of the ten year site plan that do not predict a reduction in reliance on fossil fuels and do not predict an increase in reliance on renewable energy are inconsistent with Strategic Regional Policy Plan Goal 9.1, decreased vulnerability of the region to fuel price increases and supply interruptions; and Strategy 9.1.1, reduce the Region's reliance on fossil fuels. Over the last ten years, Council's findings of inconsistency with the FPL ten-year plans have remained relatively unchanged, because FPL has made little progress toward addressing Council's concerns. One of the main reasons for this is because the State of Florida does not have a Renewable Portfolio Standard or other policies designed to encourage electric utilities to increase fuel diversity by adding a greater proportion of energy from renewable sources, such as solar and wind energy. Council encourages the Florida Legislature to adopt a Renewable Portfolio Standard during the next legislative session in order to provide a mechanism to expand the use of renewable energy in Florida.

In addition to the current efforts by FPL to expand solar and wind derived energy in the region, Council recommends that FPL consider two new strategies to expand reliance on renewable sources. First, FPL should develop a program to install, own, and operate photovoltaic units on the rooftops of private and public buildings. Such a program could be modeled after the Southern California Edison plans to install 250 MW of solar energy on more than 100 buildings in the greater Los Angeles area. This program is currently being expanded. The shift to rooftop photovoltaic systems distributed throughout the area of demand could reduce the reliance on large transmission lines and reduce costs associated with owning property; purchasing fuel; and permitting, constructing, and maintaining a power plant. Another advantage of this strategy is that photovoltaics do not require water for cooling. The incentive for owners of buildings to participate in this strategy is they could be offered a reduced rate for purchasing electricity.

Second, FPL should examine the feasibility of developing an offshore wind farm for generating electricity. An offshore wind farm could take advantage of greater wind speeds available over the ocean, compared with onshore locations. In addition, the development of offshore transmission lines and infrastructure could be beneficial for the future development of ocean current technology, which is currently under investigation by the Florida Atlantic University Center of Excellence in Ocean Energy.

**Council considers the FPL Ten Year Power Plant Site Plan for 2010-2019 to be inconsistent with Regional Goal 9.1 and Strategy 9.1.1 of the SRPP. Council urges FPL and the State of Florida to continue developing new programs to: 1) reduce the reliance on fossil fuels as future energy sources consistent with the Governor's Executive Order 07-127 calling for utilities to produce at least 20 percent of their electricity from renewable sources with a strong focus on solar and wind energy; 2) increase conservation activities to offset the need to construct new power plants; and 3) increase the reliance on renewable energy sources to produce electricity. The complete costs of burning fossil fuels, such as the costs to prevent environmental**

**pollution and costs to the health of the citizens need to be considered in evaluating these systems. State legislators should adopt a Renewable Portfolio Standard and amend the regulatory framework to provide financial incentives for the power providers and the customers to increase conservation measures and to rely to a greater extent on renewable energy sources. Also, the State should reconsider the currently used test for energy efficiency and choose a test that will maximize the potential for energy efficiency and renewable energy resources. The phasing in of photovoltaic and other locally available energy sources will help Florida to achieve a sustainable future.**

Attachments

EXHIBIT 1

Table III.B.1: Projected Capacity Changes for FPL

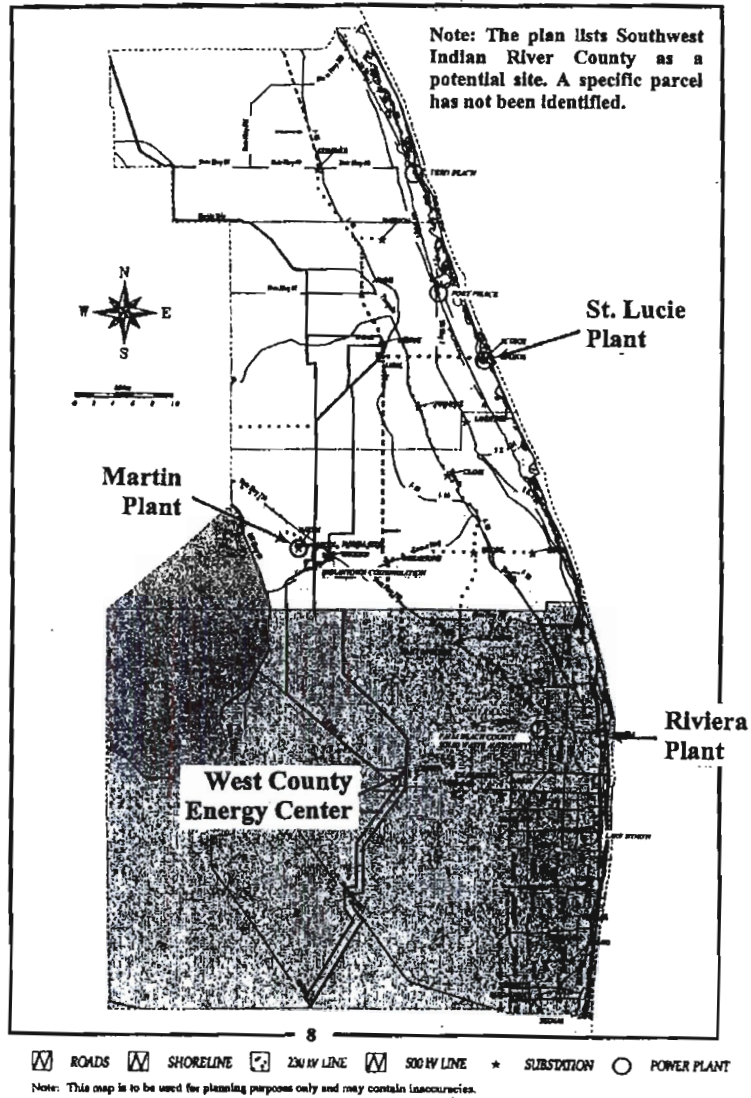
Projected Capacity Changes and Reserve Margins for FPL <sup>(1)</sup>			
Year	Projected Capacity Changes	Net Capacity Changes (MW)	
		Winter <sup>(2)</sup>	Summer <sup>(3)</sup>
2010	Marlin Next Generation Solar Energy Center (Solar Thermal) <sup>(7)</sup>	—	—
	Space Coast Next Generation Solar Energy Center (PV) <sup>(8)</sup>	—	—
	Changes to Existing Purchases <sup>(4)</sup>	—	(50)
	Riviera Unit 3 - offline for modernization	(280)	(277)
	Riviera Unit 4 - offline for modernization	(291)	(288)
	Cape Canaveral Unit 1 - offline for modernization	—	(398)
	Cape Canaveral Unit 2 - offline for modernization	—	(398)
	Changes to Existing Units	149	15
Inactive Reserve of Existing Units - offline <sup>(5)</sup>	(775)	(769)	
2011	Changes to Existing Purchases <sup>(4)</sup>	(90)	(45)
	Cape Canaveral Unit 1 - offline for modernization	(398)	—
	Cape Canaveral Unit 2 - offline for modernization	(398)	—
	West County Unit 3 <sup>(6)</sup>	—	1,219
	Inactive Reserve of Existing Units - offline <sup>(5)</sup>	(394)	(1,171)
	Changes to Existing Units	0	0
2012	Changes to Existing Purchases <sup>(4)</sup>	—	(100)
	West County Unit 3 <sup>(6)</sup>	1,335	—
	Changes to Existing Units	3	3
	Inactive Reserve of Existing Units - offline <sup>(5)</sup>	(783)	—
	Existing Nuclear Units Capacity Upgrades - St. Lucie 1	103	103
	Existing Nuclear Units Capacity Upgrades - St. Lucie 2	—	88
	Existing Nuclear Units Capacity Upgrades - Turkey Point 3	—	104
2013	Changes to Existing Purchases <sup>(4)</sup>	(180)	—
	Cape Canaveral Next Generation Clean Energy Center	—	1,210
	Existing Nuclear Units Capacity Upgrades - St. Lucie 2	88	—
	Existing Nuclear Units Capacity Upgrades - Turkey Point 3	104	—
	Existing Nuclear Units Capacity Upgrades - Turkey Point 4	104	104
2014	Cape Canaveral Next Generation Clean Energy Center	1,356	—
	Riviera Beach Next Generation Clean Energy Center	—	1,212
2015	Riviera Beach Next Generation Clean Energy Center	1,344	—
2016	Changes to Existing Purchases <sup>(4)</sup>	(931)	(1,308)
2017	Changes to Existing Purchases <sup>(4)</sup>	(375)	—
2018	Inactive Reserve of Existing Units - online <sup>(6)</sup>	0	392
2019	Inactive Reserve of Existing Units - online <sup>(6)</sup>	394	387
<b>TOTALS =</b>		<b>84</b>	<b>38</b>

(1) Additional information about these resulting reserve margins and capacity changes are found on Schedules 7 & 8 respectively.  
(2) Winter values are forecasted values for January of the year shown. FPL's actual 2010 Winter peak was significantly higher than forecasted.  
(3) Summer values are forecasted values for August of the year shown.  
(4) These are firm capacity and energy contracts with CF, utilities, and other entities. See Table I.B.1 and Table I.B.2 for more details.  
(5) All new unit additions are scheduled to be in-service in June of the year shown. All additions assumed to start in June are included in the Summer reserve margin calculation starting in that year and in the Winter reserve margin calculation starting with the next year.  
(6) Because of the intermittent nature of the photovoltaics (PV) resource, FPL is currently assigning no firm capacity benefit to these generating additions. FPL will reassess this once actual operating data from the PV facilities at these locations is available. This location-specific information is needed in order to gauge consistent output during the peak hours which are accounted for in FPL's reserve margin calculations.  
(7) The Marlin solar thermal facility is designed to provide steam for FPL's existing Marlin Unit 8 combined cycle unit, thus reducing FPL's use of natural gas. No additional capacity (MW) will result from the operation of the solar thermal facility.  
(8) A number of existing FPL power plants are being temporarily removed from service and placed on Inactive Reserve status. FPL plans to return these units to active service in the future as needed. The timing of the return of these units to full-time active status is uncertain at this time primarily due to the uncertainty regarding FPL's future load. However, for planning purposes, FPL is showing in this document that these units begin to return to active service starting in 2016.



EXHIBIT 2

Treasure Coast Region  
FPL Preferred and Potential Power Plant Sites



**EXHIBIT 3**

**Schedule 6.3  
Energy Sources % by Fuel Type**

Energy Source	Units	Actual <sup>1/</sup>		Forecasted									
		2006	2008	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
(1) Annual Energy Interchange <sup>2/</sup>	%	9.1	8.8	7.7	5.5	5.1	4.8	4.7	4.8	0.5	0.0	0.0	0.0
(2) Nuclear	%	21.6	20.8	21.8	20.0	20.8	23.8	22.7	21.8	21.8	21.8	21.1	20.7
(3) Coal	%	8.8	6.7	6.7	6.8	5.8	6.4	5.6	6.0	5.7	5.5	5.3	6.4
(4) Residual (FOE) -Total	%	5.1	4.1	1.7	1.2	0.8	0.4	0.4	0.4	0.8	0.9	1.0	1.0
(5) Steam	%	5.1	4.1	1.7	1.2	0.8	0.4	0.4	0.4	0.8	0.9	1.0	1.0
(6) Distillate (FOE) -Total	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(7) Steam	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(8) CC	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(9) CT	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(10) Natural Gas -Total	%	53.0	58.4	58.6	62.3	62.9	60.7	61.4	61.0	65.6	65.5	66.2	66.8
(11) Steam	%	6.8	7.8	1.8	2.5	1.8	6.8	6.8	0.9	1.7	1.8	2.1	2.8
(12) CC	%	48.2	48.2	86.5	68.7	61.1	58.8	60.8	60.1	63.8	63.7	64.0	63.8
(13) CT	%	0.2	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
(14) Other <sup>3/</sup>	%	5.3	4.7	4.7	4.4	5.1	5.1	5.5	5.1	5.7	5.1	5.2	5.4
		100	100	100	100	100	100	100	100	100	100	100	100

<sup>1/</sup> Source: A Schedule.  
<sup>2/</sup> The projected figures are based on estimated energy purchases from SJRPP and the Southash Companies.  
<sup>3/</sup> Represents a forecast of energy expected to be purchased from Qualifying Facilities, Independent Power Producers, net of Economy and other Power Sales.

May 17 10 12:30p City Manager Office

561-840-3353

p.2

EXHIBIT 4



CITY OF RIVIERA BEACH

600 WEST BLUE HERON BLVD.  
(561) 845-4010

RIVIERA BEACH, FLORIDA 33404  
FAX (561) 840-3353

OFFICE OF  
CITY MANAGER

RECEIVED

MAY 17 2010

TREASURE COAST  
REGIONAL PLANNING COUNCIL

May 13, 2010

Peter Merritt, Ph.D.  
Regional Ecologist  
TCRPC  
421 S.W. Camden Avenue  
Stuart, Fl. 34994

Subject: FPL 10 Year Power Plant Site Plan

Dear Mr. Merritt:

This letter is drafted in response to your letter dated April 29, 2010 requesting comments on FPL's 10 Year Power Plant Site Plan. We have reviewed the information you provided, specifically as it relates to the City of Riviera Beach and offer the following comments.

The City of Riviera Beach approved a site plan in 2009 for the proposed Riviera Beach Next Generation Clean Energy Center (RBEC). The RBEC plan proposes to remove the existing steam units from the site and replace the plant with a highly efficient, lower emission clean energy center.

By way of the City's approval of the RBEC site plan, the City endorses the chapter of the FPL 10 Year Power Plant Site Plan that references the improvements for the City.

Thank you for providing us the opportunity to comment on the Plan. If you need any additional information, please do not hesitate to contact Mary McKinney, Director of Community Development at (561) 845-4060.

Sincerely,

Ruth C. Jones  
City Manager

Cc Pamela Ryan, City Attorney  
Paul White, Assistant City Manager  
Mary McKinney, Director of Community Development  
FPL Power Plant File



BOARD OF COUNTY COMMISSIONERS

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Chairman  
District 4

Bob Solari  
Vice Chairman  
District 5



Wesley S. Davis  
District 1

Joseph E. Flescher  
District 2

Gary C. Wheeler  
District 3

February 2, 2010

Mr. Armando J. Olivera  
President and Chief Executive Officer  
Florida Power & Light  
P. O. Box 025576  
Miami, FL 33102

Subject: Franchise Agreement between Indian River County and the City Vero Beach

Dear Mr. Olivera:

Indian River County has a Franchise Agreement (Resolution 87-12) with the City of Vero Beach (COVB) which allows the City to use County right of way "to construct, maintain and operate an electric system in... certain unincorporated areas of Indian River County, FL". These areas of unincorporated Indian River County (County) are included in a 1981 Service Territory Agreement between Florida Power & Light (FP&L) and the COVB. Also, the County has Ordinance 2007-015 with FP&L which authorizes FP&L to operate an electric system in unincorporated portions of the County.

Section 12 of the 87-12 franchise agreement states "The Franchise Territory will be expanded or contracted to include or exclude lands," either by city annexation, "and/or the Service Territory Agreement between the Grantee (COVB) and Florida Power & Light is amended and the Public Service Commission of the State of Florida approves of such change(s) in service boundaries."

The franchise agreement will expire in March of 2017 if the County does not give notice by March 2012 to COVB of the County's intent to renew the franchise agreement.

During the last several years, there has been a considerable demand by some of the 19,000 County residents being served by the COVB to allow for another electric service provider. As the current electric service provider for the 55,000 customers in the remainder of the unincorporated County, FP&L would be a logical choice to take over the electric service area currently being serviced by the COVB.

Building A  
1801 27<sup>th</sup> Street  
Vero Beach, FL 32960-3388  
Telephone: 772-226-1490 FAX: 772-770-5334

Franchise Agreement Letter  
 February 2, 2010  
 Page Two

This letter requests FP&L to provide the County with information which the County could review, discuss with you, and make a decision on whether to request that you provide the electric service for the entire unincorporated area of the County. If that were the case, we would want to discuss with you how to approach the Public Service Commission (PSC) which must approve such a change by amending the existing Public Service Commission Service Territory Agreement between the COVB and FP&L to allow FP&L to provide electric service to all areas of unincorporated Indian River County that are currently being served by COVB, as allowed by Florida Statutes Ch. 366.04(2)(e).

Points that we would like to be included in your analysis, recommendations, and report should include, but are not limited to:

- How would/could FP&L transfer COVB customers in the County when County Resolution 87-12 expires in 2017?
- What are the pros and cons of such a transfer for the transferred County customers?
- What changes would the transferred County customers encounter with FP&L in billing, administration, service, reliability, etc., compared to COVB?
- What additional economic and financial benefits or disadvantages such as rebates, additional rate structures, etc., would the County customers experience compared to COVB?
- Would FP&L provide the same rates to COVB customers FP&L transferred in the County as it does to current FP&L customers in County?
- What does FP&L expect the retail rate comparisons with COVB to be over the next 10 years for common residential and commercial KWH usage categories?
- What would be the estimated assessed property tax value and increase in County/taxing districts tax revenue if FP&L purchased existing COVB facilities in County?
- What is the fair market value of COVB facilities located in the unincorporated area of Indian River County, e.g., Transmission & Distribution, and is that the price that FP&L would pay the COVB for such T&D?
- Would it be expected that the proceeds from such a purchase by FP&L of COVB facilities in the unincorporated County would be first used by COVB to defease any liabilities related to such a transfer of County customers from COVB to FP&L?
- Would FP&L request a change in the existing the PSC approved Territorial Agreement if requested to, and/or supported by, County? What is the mechanism for this?

Please contact me as soon as possible to initiate discussions and to advise us how long such a report would take considering that the County must give at least 5-years advance notice (in 2012) to COVB and the County must have time prior to 2012 to consider and discuss the report results within the County, with you, and with COVB and/or the Town of Indian River Shores as well.

Sincerely,  
  
 Peter D. O'Bryan, Chairman  
 Indian River County Board of County Commissioners

## Policy must match energy goals

By LEW HAY

Last year, for the first time, China built more wind farms than the United States. The year before, China leapfrogged the West to become the world's largest manufacturer of solar panels. And the "nuclear renaissance"



Hay

we've been hearing so much about? Its happening elsewhere. More than 50 new nuclear plants are being built around the globe, compared with one here.

The United States hasn't lost the clean energy race, but we're falling further behind. The question is what we're going to do about it.

So far, the answer is not much. For all of the political rhetoric in support of clean and renewable energy, the fact remains that the United States has no price on greenhouse gas emissions, no national renewable energy standard, and no transmission superhighway to carry renewable energy to population centers.

We say we want clean energy, but let's not kid ourselves: The policies we have in place in the United States today are still incredibly pro-carbon. If nothing else, perhaps the gulf oil spill will remind us that fossil fuels can appear cheap but have high social costs that are seldom reflected in the price.

The simple fact is that clean and renewable energy do not compete on a level playing field with fossil fuels, and until we put a policy framework in place to enable them to do so, we will struggle to compete in energy industries that we invented, such as wind and nuclear power. Here's

### *The U.S. is lagging on clean energy.*

what has to happen.

First, we need a price on carbon. Only with the proper economic signals in the marketplace can we build a world class clean energy industry in the United States. Right now, carbon is not priced, which makes fossil fuel generation look artificially cheap. With a gradually escalating price on carbon that reflects the full social costs of burning fossil fuels, low-emissions fuel sources can compete on fair terms with their high-carbon counterparts.

Second, we need a national Renewable Energy Standard. Even if Congress acts to put a price on carbon, it will be many years before the price rises to a level sufficient to enable clean energy to deploy on its own. An RES that requires power producers to get a certain percentage of their electricity from renewable sources is the necessary bridge from our high-carbon electricity system to the low-carbon future.

Third, we need a stronger federal role in ensuring that high-voltage transmission lines get built. We need legislation to give the federal government siting authority for electric transmission, just as it has for other critical national infrastructure such as railroads and natural gas pipelines. And the Federal Energy Regulatory Commission should use the authority it already has to ensure that the cost of building new transmission lines is shared broadly and fairly.

Sens. John Kerry, D-Mass., and Joe Lieberman, I-Conn., have put forward energy and climate legis-

lation that moves us in the right direction on all three of these issues. Clean energy companies are not asking for the kinds of subsidies that have been used in Europe and China to give their renewables industries a boost. We are asking that carbon carry a price equal to its cost to society, that we guarantee a market for renewables until that price phases in, and that we make transporting clean energy at least as high a national priority as moving natural gas.

At the state level, the sooner policymakers allow utilities to build more renewables, the faster we can continue the clean energy revolution our state so desperately needs to strengthen its economic and environmental security. Thirty states already have policies in place to encourage renewable energy. Florida is not one of them. We face the very real risk that the clean-energy economy we hope to build will find a home in California, Arizona, Texas or some other state.

Collectively, we need to decide what we want our energy future to look like. In its recent forecast for the U.S. energy sector, the Energy Information Administration predicted how the world will look 25 years from now if we keep our current energy policies in place: The amount of electricity generated by renewables will be stuck below 20 percent, and carbon dioxide emissions will rise by 9 percent.

In other words, we will have lost the clean energy race for good.

*Lew Hay is chairman and CEO of NextEra Energy Inc., parent company of Florida Power & Light Co. and NextEra Energy Resources.*

# **Regional Planning Councils**

## Withlacoochee



MICHAEL R. MOEHLMAN  
EXECUTIVE DIRECTOR

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http://www.wrpc.cc



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JOSEPH JOHNSTON, III  
VICE - CHAIR

June 1, 2010

Ms. Traci Mathews  
Public Service Commission  
Capital Circle Office Center  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

RE: Regional Review of *Progress Energy Florida, Inc. Ten-Year Site Plan, 2010-2019*

Dear Ms. Mathews:

Pursuant to Section 186.801 of the Florida Statutes and Rule 25-22.071 of the Florida Administrative Code, Withlacoochee Regional Planning Council (WRPC) staff hereby submits regional review comments for the above referenced site plan as applicable to Citrus, Hernando, Levy, Marion and Sumter counties. Documents forwarded annually by PSC staff are reviewed for consistency with the *Strategic Regional Policy Plan for the Withlacoochee Region* (SRPP). WRPC staff writes this statement for the benefit of the public and all interested parties to convey clearly any scope of impact on SRPP goals and policies.

During the planning period of 2010 to 2019, Progress Energy Florida (PEF) has scheduled power generation capacity and transmission projects for development within the region. Primarily, projects consist of the Levy Nuclear Plant and associated transmission lines. WRPC staff participated in the state-level, interagency application review process for the construction and operation of these facilities. Staff comments for the proposed Levy Nuclear Power Plant are contained in a final agency report dated December 8, 2008.

Overall, it should be noted ten-year site plan content complements SRPP policies relating to renewable energy resource development and energy conservation. WRPC staff note that during the planning period up to 205 MW of additional electric generation capacity will be added at one existing PEF plant location. Schedule 9, *Status Report and Specifications of Proposed Generating Facilities as of January 1, 2010*, on page 3-8, identifies natural gas and distillate fuel oil as intended primary and alternate fuels, respectively. WRPC staff would encourage PEF to consider how renewable energy, alternative fuels or hybrid technology might play a larger role in options for project development.

Ms. Traci Mathews  
May 21, 2010  
Page 2

In summary, WRPC staff finds PEF's 2010 ten-year site plan to contain positive content that is consistent and well supported by the SRPP. Furthermore, SRPP policies strongly support increased utilization of renewable energy system technology in power generation as well as collocation of planned facilities with other compatible economic uses. On the preceding basis, WRPC staff would recommend that the *Progress Energy Florida, Inc. Ten-Year Site Plan, 2010-2019* should be considered "suitable" from the perspective of this regional review. A copy of WRPC staff's Ten Year Site Plan Review has been enclosed for reference.

I look forward to future opportunities to participate in the annual plan review process.

Thank you.

Sincerely,



David Connolly, AICP  
Senior Planner

Enclosure: WRPC Ten-Year Site Plan Review for the Florida Municipal Power Agency

Cc: Kevin Smith, Citrus County Planning Department  
Shenley Neely, Levy County Planning Department  
Ron Pianta, Hernando County Planning Department  
Jimmy Massey, Marion County Planning Department  
Brad Cornelius, Sumter County Planning Department



Ms. Traci Mathews  
May 21, 2010  
Page 3

## TEN-YEAR SITE PLAN REVIEW

### REGIONAL IMPACT

Within the region, Citrus, Hernando, Levy, Marion and Sumter counties are located in the Progress Energy Florida, Inc. (PEF) service area. PEF owns numerous electric generating plants statewide, with installed capacity to generate up to 9,942 MW of electric power. The electric utility purchases an additional 1,645 MW of power. To transfer electricity to market, Progress Energy Florida maintains approximately 5,000 miles of transmission lines connecting to the electricity transmission grid as well as the systems of 22 municipalities and 9 rural electric cooperatives.

As summarized in its 2010 Ten-Year Site Plan, PEF has obtained state site certification to construct a new nuclear plant in unincorporated Levy County, Florida during the planning period. WRPC staff participated in the state-level, interagency application review process for the construction and operation of the Levy Nuclear Plant (LNP) and associated transmission line facilities. Similarly, in 2007, an uprate of the existing Crystal River Energy Complex Nuclear Unit 3, which is now ongoing, was the subject of regional review pursuant to a site certification application. In both instances, WRPC final agency reports made necessary recommendations to ensure consistency with the region's adopted Strategic Regional Policy Plan (SRPP) but did not raise formal objection to project development.

Opportunities exist within the region to add electric generation capacity through the development of renewable energy systems. The *Strategic Regional Policy Plan for the Withlacoochee Region* would support the concept of enhanced use of solar, biomass, waste-to-energy, and/or hydrokinetic power to generate regional power supply. When implemented, renewable energy power generation projects would have regionally significant status. Currently, PEF purchases renewable energy from a variety of operations including municipal solid waste facilities, photovoltaic (solar), and residual sources. Commitment to greater and expanded use of renewable energy as proportion of total supply is demonstrated by Progress Energy Florida's request for proposals seeking additional suppliers of renewable energy.

Specifically, staff notes the planned addition of up to 205 MW as a result of combustion turbine technology at an existing plant location by 2018 as stated in the Base Expansion Plan. Because the Withlacoochee region has no available fossil fuel resources, the SRPP encourages all opportunities to diversify the supply of fuel inputs used to generate electric power. At a minimum, planned capacity addition may represent an opportunity to utilize renewable energy through biomass gasification, biodiesel/biofuel or other alternative fuel input in a secondary or alternative capacity. PEF might also investigate whether use hybrid powers offer any benefits such as greater system efficiency, reliability or enhanced opportunities to collocate other economic uses onsite.



Ms. Traci Mathews  
 May 21, 2010  
 Page 4

#### SRPP GOALS AND POLICIES CITED

- Goal 2.3 Cultivate an economic climate that provides economic stability, maximizes job opportunities and increases per capita income for the region's residents.
- Goal 2.12 To provide for the development and maintenance of adequate infrastructure and resources to support continued economic development in areas identified for growth in the local government comprehensive plans.
- Policy 2.3.10 Increase intra-regional cooperation in attraction/expansion of industry dependant upon close proximity to one another or actual co-location.
- Goal 4.14 Maintain the region's concentrations of all air pollutants for which standards have been established at levels less than the maximums allowed by state and federal standards.
- Goal 4.15 Attain per capita renewable energy consumption rates in the region that equal or exceed state averages.
- Policy 4.15.1 Use renewable energy sources wherever feasible.
- Goal 4.16 Achieve a rate of per capita electrical energy consumption no greater than state averages.
- Policy 4.16.1 Encourage energy efficient building techniques, and enforce the Florida Energy Efficiency Code.
- Policy 4.16.2 Encourage electrical utilities to implement load management strategies to reduce the peak electrical demand of their customers, and energy efficiency programs to reduce the overall energy consumption of customers.

#### RECOMMENDATION

Withlacoochee Regional Planning Council staff find Progress Energy Florida's 2009 Ten-Year Site Plan to contain positive content that is consistent and well supported by the *Strategic Regional Policy Plan for the Withlacoochee Region*. On the preceding basis, WRPC staff would recommend the *Progress Energy Florida, Inc. Ten-Year Site Plan, 2010-2019* should be considered "suitable" from the perspective of this regional review.

MICHAEL R. MOEHLMAN  
 EXECUTIVE DIRECTOR  
 1241 S.W. 10th Street  
 OCALA, FLORIDA 34471-0323  
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 http://www.wrpc.cc



OFFICERS  
 RONALD ALLEN  
 CHAIR  
 JOSEPH JOHNSTON, III  
 VICE - CHAIR

June 1, 2010

Ms. Traci Mathews  
 Public Service Commission  
 Capital Circle Office Center  
 2540 Shumard Oak Boulevard  
 Tallahassee, FL 32399-0850

RE: Regional review of *Gainesville Regional Utilities 2010 Ten-Year Site Plan*, *2010 Ten-Year Site Plan Orlando Utilities Commission*, and *Seminole Electrical Cooperative, Inc. Ten-Year Site Plan (2010-2019)*

Dear Ms. Mathews:

Pursuant to Section 186.801 of the Florida Statutes and Rule 25-22.071 of the Florida Administrative Code, Withlacoochee Regional Planning Council (WRPC) staff hereby submits regional review comments for the above referenced site plans as applicable to Citrus, Hernando, Levy, Marion and Sumter counties. Documents forwarded annually by PSC staff are reviewed for consistency with the *Strategic Regional Policy Plan for the Withlacoochee Region* (SRPP). WRPC staff writes this statement for the benefit of the public and all interested parties to convey clearly any scope of impact on SRPP goals and policies.

While none of the 10-Year Site plans listed above schedule or propose to develop projects within the region during the planning period, all three electric generating utilities have ownership interests in the 838 MW pressured water reactor of Crystal River Nuclear Unit 3. *The Strategic Regional Policy Plan for the Withlacoochee Region* assigns regionally significant status to all power plants due to the necessity to maintain ample regional energy supply. Therefore, activity described by subject plan documents, in connection to this region, is consistent and well supported by SRPP content. Beyond the existing relationship to Crystal River Unit 3 for energy supply planning requirements, WRPC staff review of 10-Year Site Plans for Gainesville Regional Utilities, the Orlando Utilities Commission and the Seminole Electrical Cooperative identified no other direct impacts to SRPP content.

Ms. Traci Mathews  
May 21, 2010  
Page 2

WRPC staff would recommend that all Ten-Year Site Plans referenced above be considered "suitable" from the perspective of this regional review. I look forward to future opportunities to participate in this annual plan review process.

Thank you.



Sincerely,

David Connolly  
Senior Planner, AICP

cc: Mr. Kevin Smith, Citrus County Department of Planning

# **Water Management Districts**

## South Florida





## SOUTH FLORIDA WATER MANAGEMENT DISTRICT

June 8, 2010

Traci Matthews  
 Division of Regulatory Analysis  
 Florida Public Service Commission  
 2540 Shumard Oak Boulevard  
 Tallahassee, FL 32399-0850

2010 JUN 10 AM 9:30  
 DIVISION OF  
 REGULATORY COMPLIANCE

Dear Ms. Matthews:

**Subject: Electric Utility 2010 Ten Year Site Plans**

In response to your request, the South Florida Water Management District (SFWMD) has completed its review of the 2010 Ten Year Site Plans for the Florida Power and Light Company (FPL), the Florida Municipal Power Agency (FMPA), the Orlando Utilities Commission (OUC), and the Tampa Electric Company (TECO). Based on the information provided in the FPL, FMPA, and OUC Site Plans, the SFWMD does not have any comments regarding the "suitability" of the proposed sites. In addition, please note that no portion of the TECO service area is located within SFWMD jurisdictional boundaries.

Thank you for the opportunity to comment on the Ten Year Site Plans. If I can be of further assistance, please do not hesitate to contact me at (561) 682-6862.

Sincerely,

James J. Golden, AICP  
 Lead Planner  
 Intergovernmental Policy and Planning Division

/jig

c: Thomas Mayton, SJRWMD  
 Rand Frahm, SWFWMD



# **Water Management Districts**

## Southwest Florida





**Phillip Ellis**

From: Dianne Davies [Dianne.Davies@swfwmd.state.fl.us]  
 Sent: Thursday, July 01, 2010 3:00 PM  
 To: Phillip Ellis; Traci Matthews (TMatthews@PSC.state.fl.us)  
 Cc: Rand Frahm; Roy A. Mazur; Terri Behling  
 Subject: Electric Utility Ten-Year Site Plans  
 Follow Up Flag: Follow up  
 Flag Status: Blue

Traci Matthews  
 Mr. Phillip Ellis  
 Florida Public Service Commission

Re: Review of Electric Utility Ten-Year Site Plans  
 Seminole Electric Cooperative, Inc. (SEC)  
 Progress Energy Florida (PEF)  
 Tampa Electric Company (TECO)

In accordance with Chapter 186.801, Florida Statutes, the staff of the Southwest Florida Water Management District (District) has reviewed the above referenced Electric Utility Ten-Year Site Plans (TYSP). The District reviews TYSPs for water resource impacts, including water quality impacts, current water supply and use and potential future demands. We take into consideration service area population projections and the type of technologies for power generation, cooling and air pollution control technologies. We look at existing facilities chapters, schedules 8 and 9 and the land use and environmental chapters. The following comments are provided for your consideration in the review process.

All new facilities and expansions to potentially be located in the Southern Water Use Caution Area (SWUCA) and require additional quantities of water for process and cooling water, will have to conform, not only to Water Use Permitting (WUP) and/or Site Certification requirements, but also to SWUCA rules. The SWUCA is an area designated by the District in response to salt water intrusion, lowered lake levels and reduced stream flows, which have been caused by excessive groundwater withdrawals. The District has heightened concerns regarding potential impacts due to future groundwater demands within the SWUCA and the future availability of groundwater within these areas. Because water supply is limited in the SWUCA, the District advises that land uses that can be developed in various locations and terrains be located elsewhere (outside the SWUCA) or be designed to use alternative water sources (e.g., reclaimed water, surface water, desalination). This would help the District achieve the goals outlined in the SWUCA Recovery Strategy.

Federal regulations requiring the enhancement of air quality controls to desulfurize emissions from coal-fired generating facilities may add to the water demands of power generating facilities. Additional water supply for process, cooling and/or air pollution control would potentially require regulatory review and approval via either the Water Use Permitting process and/or through a modification of the Site Certification. Utilities should continue to recognize the importance of the use of sources other than groundwater, as well as water conservation, and reflect this in future TYSPs.

The District's Regional Water Supply Plan (RWSP) Draft 2010 Update projects the need for an additional 15.7 mgd for all Industrial/Commercial/Mining & Dewatering/Power Generation for the 2010 to 2030 planning horizon. Additional information can be found in the District's RWSP and SWUCA Recovery Strategy. These documents can be found at the web address, <http://www.swfwmd.state.fl.us/documents/>.

**Seminole Electric Cooperative Inc. (SEC):**

- SEC's Schedule 8 shows this utility has planned, additional capability in Citrus County (SEC has interest in one nuclear powered unit at Progress Energy's Crystal River Nuclear Power Plant), which utilizes seawater for cooling purposes.
- An increase in capability in 2 units in Hardee County, which are fueled by natural gas are also planned. These two units are located within the SWUCA. In the Environmental and Land Use chapter, Section 6.2 states the presence of a cooling reservoir at the Midulla facility in Hardee County. SEC holds a WUP (#11122.001) allowing withdrawals of an annual average of 3.8 million gallons per day (MGD) and 8.64 MGD peak. While these units will be powered by natural gas, any additional water needs would require regulatory review and approval via either the Water Use Permitting process and/or through a modification of the Site Certification and would be subject to SWUCA rules.

**Progress Energy Florida (PEF):**

- PEF's Schedule 8 shows 7 planned, sited capability changes. Of these, Crystal River Unit 4 steam turbine (fueled with Bituminous Coal) capabilities will be increased and then decreased as a result of air pollution control equipment upgrades. Crystal River nuclear powered Unit 3 capabilities will also be increased. However, cooling water for the Crystal River units is supplied by seawater intake.
- Two Avon Park peaker units in Highlands County and four Higgins peaker units in Pinellas County, all natural gas burning combustion turbines, are shown in Schedule 8 as planned, prospective or committed to be put on cold stand-by or retired by June 2016.
- Construction on the Levy County nuclear power plant is planned to begin in 2013 and completed in 2019. It is understood that cooling water for this unit will be withdrawn from the Cross Florida Barge Canal.
- An additional combustion turbine unit expansion is planned, but currently unsited. Fuel for this unit is not listed. This unsited expansion could potentially be located within the SWUCA and potentially be dependent on groundwater for cooling (depending on the fuel type, which is not listed) and air pollution control. No information regarding potential future demands or sources to meet those demands is included for this site. Additional water needs for this expansion would require regulatory review and approval via either the Water Use Permitting process and/or through a modification of the Site Certification and would be subject to SWUCA rules.

**Tampa Electric Company (TECO):**

- There are also 4 combustion turbine units to be converted to natural gas powered combined cycle units planned at the Polk Power Station in Polk County. These are to be located within the SWUCA. TECO holds a WUP (#11747.002) allowing withdrawals of an annual average of 6.4 million gallons per day (MGD) and 9.2 MGD peak. New quantities of water will require regulatory review and approval via the Water Use Permitting process and would be subject to SWUCA rules. A modification of the Site Certification may also be required. While these units will be powered by natural gas, any additional water needs would require regulatory review and approval via either the Water Use Permitting process and/or through a modification of the Site Certification and would be subject to SWUCA rules.
- TECO's Schedule 8 shows this utility has unsited additional capacity planned, consisting of 6 units, all gas turbines. While these units will be powered by natural gas, if located within the SWUCA, any additional water needs would require regulatory review and approval via either the Water Use Permitting process and/or through a modification of the Site Certification and would be subject to SWUCA rules.

10/7/2010

The District appreciates the opportunity to participate in the review of Electric Utility TYSPs. However, while some utilities provide water source information and strive to develop alternative sources (i.e., other than fresh groundwater), current Florida Statutes which govern the electric utility TYSP process do not require utilities to provide information regarding current and future water demands and sources. Utilities are not required to provide the information, in TYSPs, that the District requires to effectively evaluate the needs and availability of water for power plants. We have, in the past, recommended the Public Service Commission consider seeking the necessary statutory and rule changes such that future water demands of potential new power plants are adequately considered in this planning process.

In lieu of that scenario, in 2009 District Planning Department staff coordinated with the Public Service Commission (Mr. Robert Graves) regarding additional information to be requested from electric utilities, in order to assess their water use and future demands. A questionnaire was suggested with the following information to be requested.

- A separate question sheet should be submitted for each existing facility, as well as each additional unit that is undergoing the regulatory approval process, is under construction, construction completed (but not yet operational) or has been "planned" and "sited" (not necessary for prospective and unsited units). Each questionnaire should inquire about:
  - Current water sources and demands/use for existing units for process, cooling, air pollution control and potable supply
  - WUP/CUP information for these sources
  - Projected demands for additional units that are undergoing regulatory approval, under construction, construction completed (but not yet operational) or have been "planned" and "sited" (not necessary for prospective and unsited units)
  - Information regarding type of use (i.e., process, cooling method, air pollution control, potable needs (if they have their own supply, etc.) and associated water demands for each existing and additional unit
  - Conservation practices currently in use at existing facilities and projected for use in additional units
- It would also be very helpful if there was a "standard" calculated amount of water it takes to produce a KW of electricity for each production technology and associated uses (cooling method(s) demands, air pollution control demands, etc.).

Again, the District appreciates the opportunity to review these utility TYSPs in coordination with the PSC. We would be glad to offer our assistance to the Public Service Commission (and/or electric utilities) in obtaining the necessary information for effective TYSP review or in the event the PSC seeks rule changes. If we can be of further assistance, please do not hesitate to contact us.

Sincerely,

O. Dianna Davies, AICP  
 Water Resources Planner, Planning Dept.  
 Southwest Florida Water Management District  
 (352) 796-7211, ext. 4419  
[dianna.davies@watermatters.org](mailto:dianna.davies@watermatters.org)  
[www.watermatters.org](http://www.watermatters.org)

To accomplish great things, we must not only act, but also dream; not only plan, but also believe.  
 Anatole France

IMPORTANT NOTICE: All E-mail sent to or from this address are public record and archived. The Southwest Florida Water Management District

10/7/2010

# **Water Management Districts**

## St. John's River





# St. Johns River Water Management District

Kirby B. Green II, Director • David W. Flek, Assistant Executive Director

4049 Reid Street • P.O. Box 1429 • Palatka, FL 32178-1429 • (386) 329-4500  
On the Internet at [floridaswater.com](http://floridaswater.com).

June 16, 2010

Ms. Traci Matthews  
Division of Regulatory Analysis  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850

RE: 2010 Ten-Year Site Plans Comments

Dear Ms. Matthews:

St. Johns River Water Management District (District) staff have reviewed the 10-year site plans for Florida Power and Light Company (FPL), Florida Municipal Power Agency (FMPA), Gainesville Regional Utilities (GRU), JEA, and Orlando Utilities Commission (OUC) relative to their suitability as planning documents. District staff reviews were conducted in accordance with Section 186.801, *Florida Statutes*, and Chapter 25-22.071, *Florida Administrative Code*.

Pursuant to subsection II, A.1.f., of the 2007 operating agreement concerning regulation between the District and the Florida Department of Environmental Protection (FDEP), FDEP shall review and take final action on all applications for permits and petitions for variances or waivers for power plants and electrical distribution and transmission lines and other facilities related to the production, transmission, and distribution of electricity. District staff have no comments on the FMPA, GRU, JEA, and OUC 10-year site plans. District staff comments on the FPL 10-year site plan are provided below.

#### FPL

In general, the District requires that all new uses and requested increases in consumptive use permit (CUP) allocations demonstrate the use of the lowest quality source; justify the need for the requested allocation; demonstrate efficient use; and not impact springs, wetlands, water bodies, water quality, or existing legal uses. In addition, all other CUP criteria must also be met. When locating a site for a power facility, FPL should consider the availability of water to meet the proposed demands of the facility and potential impacts due to facility water use, as well as the cumulative impacts of locating a facility at a given location.

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#### GOVERNING BOARD

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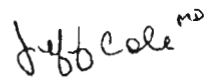
W. Leonard Wood, CHAIRMAN FERNANDINA BEACH	Hervey "Herby" Hyltunen, SECRETARY ENTERPRISE	Hans G. Tinsler III, TREASURER JACKSONVILLE	Douglas C. Bourlique VERO BEACH
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			John A. Mills ORLANDO

---

Letter to Traci Matthews  
June 16, 2010  
Page 2 of 2

This letter does not substitute for or constitute permit review. We appreciate the opportunity to provide general comments. If you have any questions, please contact District Policy Analyst Steve Fitzgibbons at (386) 329-4436 or [sfitzgib@sjrwmd.com](mailto:sfitzgib@sjrwmd.com).

Sincerely,

Handwritten signature of Jeff Cole in cursive script.

Jeff Cole, Director  
Office of Communications and Governmental Affairs

JC/sf

cc: Jim Quinn, Florida Department of Environmental Protection  
Kraig McLane, St. Johns River Water Management District  
Richard Burklew, St. Johns River Water Management District  
Patricia Renish, St. Johns River Water Management District

# **Local Governments**

## County of Alachua







## Alachua County Board of County Commissioners

Cynthia Moore Chestnut, *Chair*  
Lee Pinkoson, *Vice Chair*  
Paula M. DeLaney  
Rodney J. Long  
Mike Byerly

**Administration**  
Randall H. Reid  
*County Manager*

June 22, 2010

Ms. Traci Matthews  
Florida Public Service Commission  
Division of Regulatory Analysis  
2540 Shumard Oak Blvd.  
Tallahassee, Florida 32399-0850

**RE: 2010 Ten-Year Site Plan for Gainesville Regional Utilities**

Dear Ms. Matthews:

Alachua County has received your request for comment on the 2010 Ten-Year Site Plan for Gainesville Regional Utilities (GRU). According to your April 21st letter, comments should focus on suitability or unsuitability of the Ten-Year Site Plan as a planning document.

The GRU 2010 Ten-Year Site Plan is generally suitable as a planning document. The enclosed comments identify issues and information pertaining to future planning and implementation activities relating to aspects of the Ten-Year Site Plan, including protection of natural resources for the area adjacent to the existing Deerhaven power plant site, use of reclaimed water for the proposed biomass-fueled power generation facility known as the Gainesville Renewable Energy Center, consideration of energy demand management alternatives, and fuel price forecast assumptions. The Plan also notes that an additional mini power delivery station (PDS) is planned for the service area. If this facility will be located in the unincorporated area, then it must be established consistent with policies and procedures contained in the Alachua County Comprehensive Plan and Land Development Code.

Comments related to minimum sustainability standards for biomass fuel procurement, as they relate to the Gainesville Renewable Energy Center, are also included. Alachua County has engaged in productive dialogue with the City and GRU on this issue over

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TDD (352) 491-4430

Commissioners' E-Mail: [bocc@alachuacounty.us](mailto:bocc@alachuacounty.us) ■ Home Page: [www.alachuacounty.us](http://www.alachuacounty.us)

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Page 2

the past few months, and looks forward to working cooperatively to address this issue in the future.

If you would like to discuss these issues further, please contact Ken Zeichner, Principal Planner with the Alachua County Department of Growth Management, at (352)374-5249.

Sincerely,



Cynthia Moore Chestnut, Chair  
Alachua County Commission  
chr10.108

CMC/BC/bc

Enclosures:

Alachua County Comments on Gainesville Regional Utilities 2010 Ten-Year Site Plan  
Deerhaven Site Map

cc: Alachua Board of County Commissioners  
Randall H. Reid, Alachua County Manager  
Richard Drummond, Assistant County Manager  
Dave Wagner, Alachua County Attorney  
Steve Lachnicht, Alachua County Department of Growth Management  
Ken Zeichner, Alachua County Department of Growth Management  
Chris Bird, Alachua County Department of Environmental Protection  
Sean McLendon, Alachua County Sustainability Program Manager  
Mayor Craig Lowe, City of Gainesville  
Russ Blackburn, City Manager, City of Gainesville  
Mark Garland, City of Gainesville Public Works  
Ed Regan, GRU Assistant General Manager for Strategic Planning  
Todd Kamhoot, Gainesville Regional Utilities  
Department File

**Alachua County Comments on  
Gainesville Regional Utilities 2010 Ten-Year Site Plan**

On Page 28 and 57 of the Ten-Year Site Plan document, there is discussion of the site for a proposed biomass-fueled power generation facility, which is known as the Gainesville Renewable Energy Center (GREC). Per discussion with Gainesville Regional Utilities (GRU) staff, we understand that the planned GREC facility will be located within the same site as the existing GRU Deerhaven power plant. This site ("Original Deerhaven Site" on attached map) is approximately 1,146 acres located within the City of Gainesville, and is governed by the City's Comprehensive Plan. According to Section 4.2.1 of the GRU 2010 Ten-Year Site Plan (Land Use and Environmental Features, pg. 57), the existing land uses for the 1,146-acre portion of the site are "industrial (i.e., electric power generation and transmission and ancillary uses such as fuel storage and conveyance; water combustion product, and forest management)", and apparently most of the site has been previously impacted by these uses.

Pages 57 and 58 of the Ten-Year Site Plan also make reference to the Deerhaven area which "encompasses approximately 3,474 acres." The 3,474-acre site includes the 1,146-acre "Original Deerhaven Site" referenced above, in which the proposed GREC facility is planned. The 3,474 acres also includes 2,300+ acres which are owned by the City of Gainesville/GRU (identified as "Parcel A", "Parcel B", "Parcel C", and "Parcel D" on the attached map) and are located adjacent to the Original Deerhaven Site. GRU staff has indicated that there are no immediate plans for facilities in these adjacent areas.

The adjacent 2,300+ acres were annexed into the City of Gainesville several years ago, and because the City has not yet amended its Comprehensive Plan to include these areas, they are still governed by the Alachua County Comprehensive Plan which designates the areas as Rural/Agriculture and also identifies them as Strategic Ecosystems. The series of Issues and Recommendations below on "Natural Resource Protection for Areas Adjacent to Original Deerhaven Site" are intended for consideration as part of future planning efforts for the 2,300+ acres adjacent to the Original Deerhaven Site.

**Natural Resource Protection for Areas Adjacent to Original Deerhaven Site**

Various natural resource protection concerns about the areas adjacent to the Original Deerhaven Site were previously identified in a June 18, 2008 letter to the PSC as part of the County's review of the 2008 GRU Ten Year Site Plan. These concerns are summarized below and are still applicable.

There are many environmentally sensitive features in and around the Deerhaven area. Some of the best ways to protect these critical natural resources are to use designs that minimize the development footprint on the property, protect sensitive areas under conservation easements, and continue sustainable silviculture activities under Best Management Practices. At such time when future development is proposed for this area, GRU should address these environmental concerns and identify clear environmental perimeters and have strict protection guidelines to balance the long-term goals of the Deerhaven property with effective environmental stewardship.

Issue: The area is within the Hague Flatwoods Strategic Ecosystem. This system is part of the headwaters of both Rocky Creek and Turkey Creek. The undeveloped areas are former pine flatwoods forest converted to planted pine with scattered wetland swamps. Areas designated as Strategic Ecosystems are considered conservation areas under the Alachua County Comprehensive Plan and are afforded stringent protection under the Land Development Code. As discussed above, the property is now located within the City limits of Gainesville, however,

this ecosystem crosses jurisdictional boundaries and any development of this area will have impacts to other parts of the ecosystem that are located in the unincorporated county or other jurisdictions.

Recommendations: Any expansion or new development on the property should be designed to maintain the ecological integrity of strategic ecosystems. The Alachua County Comprehensive Plan includes standards for strategic ecosystem protection which address resource-based planning, minimizing impacts and protecting upland habitat, and wetlands, and wetland buffers. The City of Gainesville is in the process of developing similar protection standards for strategic ecosystems as those provided in the Alachua County Comprehensive Plan. The County hopes that the City will expedite adoption of these standards, and recommends that these types of standards be in place to address natural resource protection issues for any development of future facilities in this area.

Issue: Soil conditions for the area are characteristic of flatwoods and depressional wetlands. These soils are typically somewhat poorly to very poorly-drained.

Recommendations: Site disturbance and vegetation clearing during and after site development should be minimized. Strategies should include low percentage of impervious areas through building design, narrow road widths, and Low-Impact Development (LID) practices like site fingerprinting (only clear areas for structures, access, and defensible place, and leave the remaining area undisturbed), rain gardens, swales, cisterns to collect rain water and other practices and designs that will reduce flooding issues. Impacts to wetlands and wetland buffers should be avoided.

Issue: There are extensive wetlands scattered throughout the property. Based on desktop information, it is estimated that approximately 60- 80% of the surface area consists of wetlands and/or is within the 100-year floodplain.

Recommendations: Wetland acreage and function should be protected, and wetland impacts should be avoided. This area floods under current conditions, so it is recommended that future development in this area should be designed with floodplain and wetland concerns in the forefront. Future development should avoid locating stormwater ponds, infrastructure, and impervious areas within wetlands and wetland buffers, and it is recommended that a 75 ft. average buffer or larger be maintained around wetlands (as required by County Code). The protection of the Floridan, intermediate and surficial aquifers or systems is critical in this area.

Issue: A large portion of the wetlands in the Hague Flatwoods forms the headwaters of Rocky Creek, a tributary of the Santa Fe River

Recommendations: Maintaining large intact natural buffers is crucial to maintaining the water quality of Rocky Creek. It is recommended that the headwater wetlands be identified and maintained, and that wetland buffers wider than default or minimum requirements should be implemented. It is also recommended that alteration of buffers be prohibited, including the placement of stormwater ponds within the wetland buffers. Limit potential point sources (i.e. large stormwater ponds and hazardous material storage sites), require strong restrictions on fertilizer, pesticide, and herbicide use, and limit well construction and septic tanks, if applicable.

Issue: The property has the potential to contain many rare and endangered species, including the Sherman's Fox Squirrel (*Sciurus niger shermani*), black bear (*Ursus americanus floridanus*), little blue heron (*Egretta caerulea*), snowy egret (*Egretta thula*), tricolored heron (*Egretta tricolor*), limpkin (*Aramus guarauna*), white ibis (*Eudocimus albus*), wood stork (*Mycteria Americana*).



Bachman's sparrow (*Aimophila aestivalis*), Cooper's hawk (*Accipiter cooperii*), gopher tortoise (*Gopherus polyphemus*), eastern diamondback rattlesnake (*Crotalus adamanteus*), flatwoods salamander (*Ambystoma cingulatum*), Florida pine snake (*Pituophis melanoleucus mugitus*), eastern indigo snake (*Drymarchon corais couperi*), and short-tailed snake (*Stilosoma extenuatum*). The isolated wetlands are important amphibian breeding sites and provide feeding habitat for wading birds. The area also has potential habitat for a number of listed terrestrial orchids, butterworts, and rare wildflowers, including Catesby's lily (*Lilium catesbaei*).

Recommendations: Within and adjacent to areas to be impacted, it is recommended that an evaluation of the property and survey for listed species be conducted. Identify habitat needs for maintaining species diversity and sustainability. Require conservation easements and management plans (include exotic control and prescribed burns) for areas to be preserved. Prescribed burns are an important component to maintaining and enhancing wildlife habitat and reducing the risk of wildfire. Require connectivity between habitats, minimize fragmentation, protect habitat and needs of listed species. Maintain connectivity with the Buck Bay Strategic Ecosystem.

### **Energy Demand Management Alternatives**

The GRU 2010 Ten-Year Site Plan addresses existing and planned demand-side management programs. As provided on pages 29 through 32, currently available demand side management programs include energy audits and low income household whole-house energy efficiency improvements. GRU also offers various rebates and other financial incentives as detailed in the Ten-Year Site Plan.

GRU's demand-side management programs are key factors in the community's efforts to enhance energy conservation and efficiency measures. The utility was also of service to Alachua County in the development of its Energy Conservation Strategies Commission Report, a 100-year visionary document with recommendations to create a more energy efficient and resource resilient community.

Alachua County is developing a comprehensive Energy Element to be adopted in its Comprehensive Plan. Among the community-wide goals of the Energy Element are to reduce or mitigate the effects of rising energy costs; create energy independence from fossil fuels; reduce greenhouse gas emissions; and promote the long-term economic security of the residents of Alachua County through energy conservation, efficiency and alternative energy deployment.

Recommendation: To achieve these goals, Alachua County and GRU should continue their partnership with an emphasis on aligning and expanding conservation and efficiency objectives, meeting a common greenhouse gas reduction goal, and developing a common greenhouse gas accounting methodology.

### **Fuel Price Forecast Assumptions**

Fuel price forecasts are provided on Pages 34 to 36 and 48 of the GRU Ten-Year Site Plan for distillate fuel oil, residual fuel oil, natural gas, performance coal, compliance coal, and nuclear. The forecasts rely on US Department of Energy projections, PIRA Energy Group, and contractual agreements as sources.

In projecting future fuel prices, the cost of fuel as a commodity and the transportation cost are included as part of the total cost. Pages 34 and 35 of the Ten Year Site Plan state that the fuel price forecasts account for the specific transportation costs associated with delivery of various

fuel types to GRU's sites. Future fuel oil prices, therefore, will affect the projected price of all sources of fuel used by GRU for power generation.

Page 35 of the Ten Year Site Plan provides that distillate fuel oil was used to produce 0.06% of GRU's total net power generation during the 2009 calendar year. Residual fuel oil was used to produce 0.21% of GRU's total net power generation during the 2009 calendar year. Although these figures indicate that the quantity of fuel oils used by GRU for power generation is low, fuel oils are used for various extraction, processing, and shipping activities which indirectly affect the delivered price of other fuel sources such as coal, which comprised 71.5% of GRU's total net power generation in 2009.

**Recommendation:** GRU has been a leader in the State for alternative energy programs and demand-side management. Though perhaps beyond the scope of this planning document, to hedge against the volatility of fuel oil prices, GRU in conjunction with Alachua County and the community at large should continue to explore strategies for decreasing fossil fuel use, enhancing demand-side management programs, and increasing alternative energy production over the next 10 years.

#### **Proposed Mini Power Delivery Station**

Page 50 of the Ten-Year Site Plan notes that an additional mini power delivery station (PDS) is planned for the northern part of the service area near US 441 no earlier than 2015. The specific location of the planned PDS is not identified, and it is unclear whether the location is within the jurisdiction of unincorporated Alachua County. If the proposed PDS will be located in the unincorporated area, please note that it must be established consistent with the policies and procedures contained in the Alachua County Comprehensive Plan and Unified Land Development Code.

#### **Use of Reclaimed Water for Proposed Biomass Facility**

Page 58 of the Ten Year Site Plan discusses the potential water usage for the proposed biomass fueled power generating facility known as the Gainesville Renewable Energy Center (GREC). According to the Plan, "industrial water usage associated with the new unit could be as much as two million gallons per day (MGD)", and that reclaimed water from GRU's Main St. and/or Kanapaha wastewater treatment plants may be made available to the site to supply industrial process and cooling water needs. The Plan also indicates that "other water conservation measures may be identified during the design of the project".

The County believes water conservation is a concern in our area, and recommends that the City of Gainesville and GRU implement water conservation strategies, such as the use of reclaimed water for industrial process and cooling water needs at the proposed GREC facility, based on an evaluation of all options.

#### **Minimum Sustainability Standards and Stewardship Incentive Plan for Biomass Fuel Procurement**

On February 12, 2010, the Board of County Commissioners sent a letter to the City of Gainesville regarding an evaluation of Gainesville Renewable Energy Center's pending application for Site Certification as required by the Florida Power Plant Siting Act, and the proposed Minimum Sustainability Standards and Stewardship Incentive Plan for Biomass Fuel Procurement. The Alachua County Board of County Commissioners continues to commend the Gainesville City Commission and GRU for bold and innovative leadership in building local

Page 7

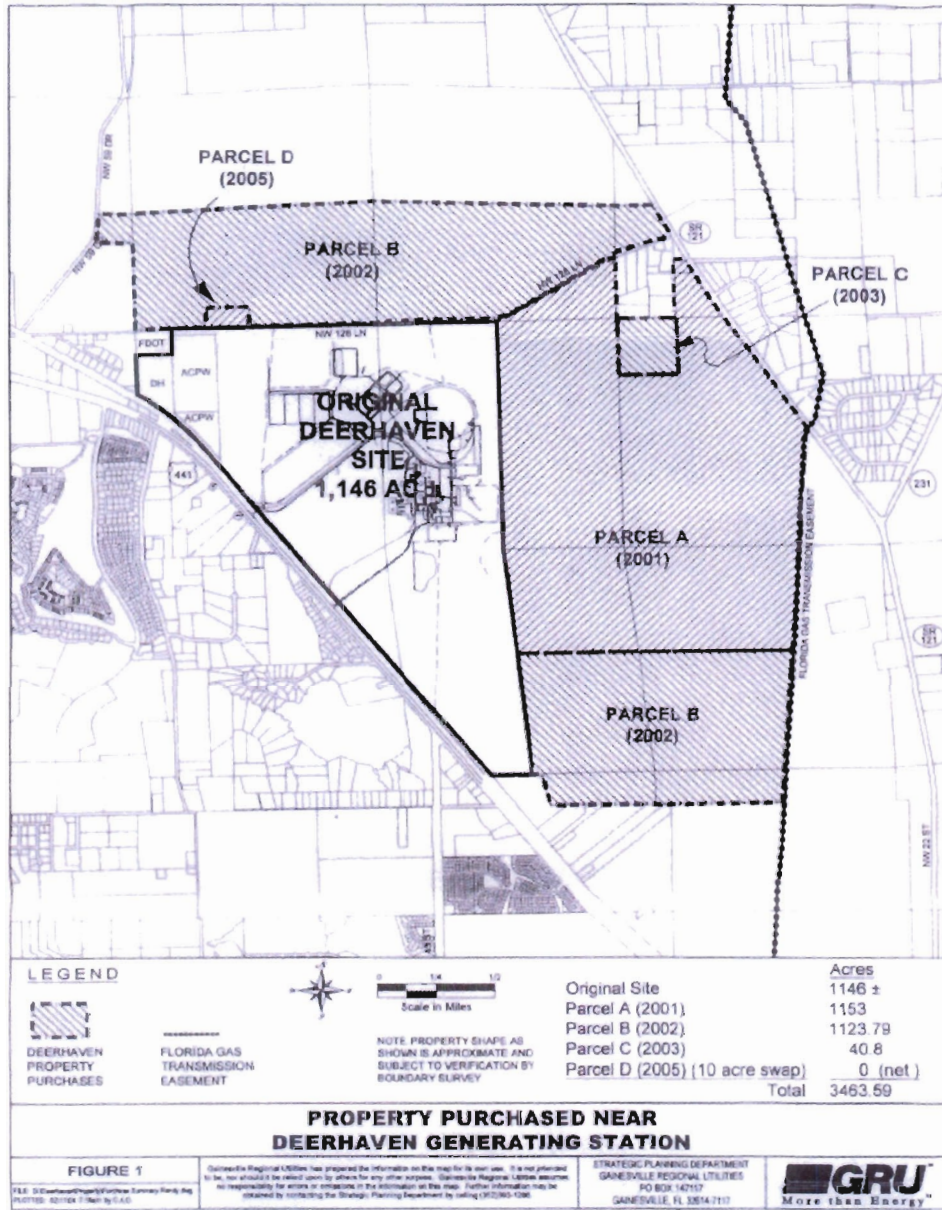
capacity for renewable sources of energy production. The February 12 letter identified opportunities for strengthening the proposed minimum standards and incentives related to biomass fuel procurement in order to further reduce adverse environmental impacts.

Alachua County staff has participated in a series of productive discussions with GRU and GREC representatives regarding the technical details of the proposed Minimum Sustainability Standards and Stewardship Incentive Plan for Biomass Procurement. The February 12 letter identified the following areas of concern: 1) harvesting of diverse hardwood hammocks, 2) harvesting of wetlands and floodplain forests, 3) impacts related to increased competition for wood resources, and 4) opportunities to strengthen the specific compliance/enforcement language associated with the proposed standards and incentives.

The collaborative dialogue between the County, GRU and GREC on these issues is expected to continue in order to ensure a sustainable framework for biomass fuel procurement activities by strengthening the proposed Stewardship Incentive Plan and Minimum Sustainability Standards.



Deerhaven Site Map







State of Florida



## Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD  
TALLAHASSEE, FLORIDA 32399-0850

**-M-E-M-O-R-A-N-D-U-M-**

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**DATE:** December 6, 2010

**TO:** Timothy J. Devlin, Executive Director

**FROM:** Robert J. Casey, Public Utilities Supervisor, Division of Regulatory Analysis  
Richard A. Moses, Chief of Service Quality, Division of Service, Safety & Consumer Assistance  
Cindy B. Miller, Senior Attorney, Office of the General Counsel *CM*

**RE:** Draft Ex Parte Comments in Response to the Federal Communications Commission Public Notice regarding implementation of the requirement for a National Deaf-Blind Equipment Distribution Program as set forth in Section 105 of the Twenty-First Century Communications and Video Accessibility Act of 2010.

**CRITICAL INFORMATION:** Please place on the December 14, 2010 Internal Affairs. **COMMISSION APPROVAL OF THE DRAFT COMMENTS IS SOUGHT.**

---

In this Public Notice, the Federal Communications Commission (FCC) seeks comment on issues related to the FCC's implementation of the requirement for a National Deaf-Blind Equipment Distribution Program (NDBEDP) as set forth in Section 105 of the Twenty-First Century Communications and Video Accessibility Act of 2010 (Accessibility Act).<sup>1</sup> Specifically, the FCC is looking for comments on eligibility, covered equipment, state program options, logistics and criteria for funding support, and oversight and reporting. **COMMISSION APPROVAL OF THE DRAFT COMMENTS IS SOUGHT.**

In accordance with Section 427.702(2), Florida Statutes, specialized telecommunications devices are provided at no charge to the Deaf, Hard-of-Hearing, Deaf-Blind, and Speech-Impaired citizens of Florida without regard to level of income. The Accessibility Act allows for distribution of up to \$10 million of specialized telecommunications devices per year to the low-income Deaf-Blind community in the United States. Although Florida provides equipment to qualified citizens without regard to level of income, participation in a federal program which distributes specialized telecommunications devices to the low-income Deaf-Blind community would be beneficial for Florida. The present equipment distributed by Florida

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<sup>1</sup> The Accessibility Act, which was signed into law by President Obama on October 8, 2010, requires the FCC to take measures to ensure that people with disabilities have access to emerging communications technologies in the 21st Century. Section 105 of this law directs the FCC to establish rules that define as eligible for relay service support those programs approved by the FCC for the distribution of specialized customer premises equipment designed to make telecommunications service, Internet access service, and advanced communications, including interexchange services and advanced telecommunications and information services, accessible by low income individuals who are deaf-blind.



Telecommunications Relay, Inc (FTRI) to a Deaf-Blind consumer ranges in price from \$7,000 - \$8,500. Florida would be able to distribute the equipment provided by the federal program to the qualified low-income consumer through FTRI's network of twenty-three regional distribution centers in Florida.

The Draft Comments urge the FCC to consider the following:

1. Applying the definition of "qualifying low-income customer" as used in the Federal Universal Service Low-Income Program would provide the most efficient means to determine eligibility for the NDBEDP;
2. States that operate their own Lifeline/Link-Up programs should be allowed to maintain the flexibility to develop their own certification procedures including acceptable documentation to certify consumer eligibility under an income-based criterion for the NDBEDP;
3. Applicants for equipment provided under the NDBEDP should be allowed to qualify by participation in a Lifeline-qualifying program as defined by the states, or provide evidence of income as required by 47 CFR § 54.410;
4. The Deaf-Blind Communicator should be included in the list of covered equipment under the NDBEDP;
5. State Equipment Distribution Programs should become the primary means of distributing equipment under the NDBEDP;
6. The amount of funding per state should not be capped under the NDBEDP;
7. State programs approved by the NDBEDP to distribute equipment should be allowed to work within their existing state qualification requirements or criteria; and,
8. Records regarding distribution of equipment and certification of equipment users under the NDBEDP should be kept for the preceding three years in addition to maintaining the documentation for as long as the consumer uses the equipment.

RJC  
Attachment  
cc: Charles Hill



**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

**DRAFT**

In the Matter of: )  
 )  
PN Comments – Specialized CPE ) CG Docket No. 10-210  
Distribution Program )

**EX PARTE COMMENTS OF  
THE FLORIDA PUBLIC SERVICE COMMISSION**

**FLORIDA PUBLIC SERVICE COMMISSION**

CHAIRMAN ART GRAHAM  
COMMISSIONER LISA POLAK EDGAR  
COMMISSIONER NATHAN A. SKOP  
COMMISSIONER RONALD A. BRISÉ  
COMMISSIONER EDUARDO E. BALBIS

December 14, 2010



## INTRODUCTION AND SUMMARY

The Florida Public Service Commission (FPSC) submits these ex parte comments in response to the Public Notice<sup>2</sup> (PN) released on November 3, 2010. In this PN, the Federal Communications Commission (FCC) seeks comment on issues related to the FCC's implementation of the requirement for a National Deaf-Blind Equipment Distribution Program (NDBEDP) as set forth in Section 105 of the Twenty-First Century Communications and Video Accessibility Act of 2010 (Accessibility Act).<sup>3</sup> Specifically, the FCC is looking for comments on eligibility, covered equipment, state program options, logistics and criteria for funding support, and oversight and reporting.

The Deaf-Blind community in Florida is becoming increasingly active. The Florida Deaf-Blind Association (FDBA) was formed in 2004 to enhance independence through economic and social opportunities for all people who are Deaf-Blind in Florida. A new Web site for the FDBA was created in 2010,<sup>4</sup> along with an e-mail group of the Florida Deaf-Blind that communicate on a regular basis. The Helen Keller National Center For Deaf-Blind Youths and Adults (HKNC)<sup>5</sup> registry includes 321 Deaf-Blind Floridians. According to the Southeast Regional Representative of HKNC, this does not include many others, especially the large number of senior citizens who do not self-identify as Deaf Blind or are not aware of reporting

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<sup>2</sup> CG Docket No. 10-210, Released November 3, 2010, Consumer and Governmental Affairs Bureau seeks comment on implementation of requirement to define programs for distribution of specialized customer premises equipment used by individuals who are deaf-blind.

<sup>3</sup> The Accessibility Act, which was signed into law by President Obama on October 8, 2010, requires the FCC to take measures to ensure that people with disabilities have access to emerging communications technologies in the 21st Century. Section 105 of this law directs the FCC to establish rules that define as eligible for relay service support those programs approved by the FCC for the distribution of specialized customer premises equipment designed to make telecommunications service, Internet access service, and advanced communications, including interexchange services and advanced telecommunications and information services, accessible by low income individuals who are deaf-blind.

<sup>4</sup> <http://www.fldeafblind.org/>

<sup>5</sup> Authorized by an Act of Congress in 1967, the Helen Keller National Center for Deaf-Blind Youths and Adults, located in Sands Point, New York, is a national rehabilitation program serving youth and adults who are deaf-blind.



their names to the HKNC registry. According to the Florida Coordinating Council for the Deaf and Hard of Hearing, nearly three million deaf, hard-of-hearing, deaf-blind, and speech-impaired citizens live in Florida.<sup>6</sup> Florida is the fourth largest state in the U.S. and has the second highest percentage of population who are deaf, hard of hearing, or deaf-blind.<sup>7</sup>

### **Eligibility**

In order to receive specialized telecommunications devices, Florida Statutes require a certification of persons as deaf or hard of hearing, speech impaired, or dual sensory impaired which includes a statement attesting to such impairment by a licensed physician, audiologist, speech-language pathologist, hearing aid specialist, or deaf service center director; by a state-certified teacher of the hearing impaired; by a state-certified teacher of the visually impaired; or by an appropriate state or federal agency. The licensed physician, audiologist, speech-language pathologist, hearing aid specialist, state-certified teacher of the deaf or hard of hearing, or state-certified teacher of the visually impaired providing statements which attest to such impairments shall work within their individual scopes of practice according to their education and training.<sup>8</sup>

Florida Telecommunications Relay, Inc. (FTRI), a non-profit corporation formed by Florida statute,<sup>9</sup> serves as the administrator for the distribution of the specialized telecommunications devices in Florida. FTRI works with the Florida Division of Blind Services to qualify a deaf-blind applicant as eligible to receive equipment. Applicants must have both a hearing and vision loss and be able to read Braille efficiently to qualify. FTRI employs a qualified trainer that communicates with each applicant to determine Braille efficiency and the

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<sup>6</sup> 2009 Florida Coordinating Council for the Deaf and Hard of Hearing Report to the Governor and Legislature of the State of Florida.

<sup>7</sup> 2007 Florida Coordinating Council for the Deaf and Hard of Hearing Report to the Governor and Legislature of the State of Florida.

<sup>8</sup> Section 427.705(5)(a), Florida Statutes.

<sup>9</sup> Section 427.704(2), Florida Statutes.



type of equipment that best fits the needs of the person. Florida's program does not have an income test for eligibility. Equipment is provided to any citizen without regard to level of income.

For purposes of implementing the National Deaf-Blind Equipment Distribution Program (NDBEDP) for low-income consumers, the FPSC believes that using the definition of "qualifying low-income customer" as used in the Federal Universal Service Low-Income Program would provide the most efficient means to determine eligibility under the Accessibility Act. In Order 04-87,<sup>10</sup> the FCC agreed with the Federal Universal Service Joint Board that states that operate their own Lifeline/Link-Up programs should maintain the flexibility to develop their own certification procedures including acceptable documentation to certify consumer eligibility under an income-based criterion. The FPSC agrees with the FCC statement that this flexibility will permit states to develop certification procedures that best accommodate their own Lifeline participants based on the available resources of state commissions, each state's eligibility criteria, and local conditions. This same state certification flexibility should apply to the NDBEDP. Applicants for equipment provided under the NDBEDP should be allowed to qualify by participation in a Lifeline-qualifying program as defined by each states' relay oversight authority, or provide evidence of income as required by 47 CFR § 54.410.<sup>11</sup> Since each state has its own Lifeline-eligible program criteria and income criteria already in place, implementation of the NDBEDP should provide little difficulty.

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<sup>10</sup> In the Matter of Lifeline and Link-Up, WC Docket No. 03-109, Report and Order and Further Notice of Proposed rulemaking, FCC 04-87, ¶29, Released April 29, 2004.

<sup>11</sup> Acceptable documentation of income eligibility includes the prior year's state, federal, or tribal tax return, current income statement from an employer or paycheck stub, a Social Security statement of benefits, a Veterans Administration statement of benefits, a retirement/pension statement of benefits, an Unemployment/Workmen's Compensation statement of benefits, federal or tribal notice letter of participation in General Assistance, a divorce decree, child support, or other official document.



**Covered Equipment**

Florida currently distributes the Deaf-Blind Communicator (DBC) manufactured by Humanware. FTRI purchases the DBC directly from Humanware which offers repair and maintenance services along with extended warranties. Cost of the equipment with the extended warranty ranges from \$7,000 to \$8,500 each. The NDBEDP should include provisions for software upgrades and on-going maintenance costs of the equipment.

The specialized telecommunications devices distributed by FTRI remain the property of FTRI but are available to individuals as long as they remain qualified to participate in the program. FTRI does not generally exchange equipment when there is a modification or upgrade but does exchange equipment when needed because of maintenance. Exchanges are generally on a like-model for like-model basis so long as the equipment is available.

**State Program Option**

To date, over 430,000 individuals have received some type of equipment that allows them to access the telecommunications system as authorized by Florida law. Providing reliable and effective equipment to the deaf-blind community has been challenging up until the recent development of the DBC. FTRI has distributed 14 DBCs since August 2009.

The FPSC believes that state Equipment Distribution Programs should become the primary means of distributing equipment under the NDBEDP. In Florida, FTRI has a proven and sound infrastructure with nearly 20 years of experience and desires to remain the distributor of specialized telecommunications equipment. FTRI has an excellent reputation for providing timely and quality services throughout the state. In addition to its central office located in Tallahassee, Florida, FTRI has twenty three regional distribution centers across Florida to handle



the distribution of equipment and training of users of the equipment. State programs, as approved by NDBEDP, should be allowed to submit actual cost of equipment, extended warranty, training (to include related travel and support Service Provider for trainers who are deaf-blind), on-going maintenance, technological software upgrades, hardware equipment upgrades, and administrative costs on a monthly basis for reimbursements. Copies of the deaf-blind application, actual CPE manufacturer and training invoices plus the administrative fee should be sufficient documentation.

**Logistics and Criteria for Funding Support**

State programs that are currently mandated under state statutes to distribute specialized telecommunications equipment should be approved upon submission of a letter of interest along with a copy of the respective state statute or similar document. Programs approved by the NDBEDP to distribute equipment should be allowed to work within their existing state qualification requirements or criteria. Generally, state programs, through experience and networking with each other, are best situated to make decisions on appropriate equipment for their targeted population. It is in the best interest of state program administrators and deaf-blind consumers to select equipment that best meets their needs.

Florida has existing procedures to effectively qualify individuals for their program and therefore additional screening or assessment is unnecessary. FTRI employs a deaf-blind individual that assesses and trains qualified applicants for the DBC. The trainer reports to FTRI the outcome of the training and whether additional training is necessary. Subsequent training is scheduled and will continue to be available as long as the individual needs it.

Florida limits the number of basic pieces of equipment an individual may receive but if there are multiple members in a household who are eligible for a piece of equipment, they each



individually are eligible to qualify. FTRI does provide maintenance on equipment which it distributes, generally through a warranty. Equipment will remain with the program for the life of the equipment. If equipment is under warranty, it may be refurbished and reissued to another client. The more expensive equipment may be repaired beyond the life of the warranty depending upon a number of considerations.

As to funding for existing programs, equipment funded under the NDBEDP should be funded 100% of the actual cost to approved state programs. Capping the amount of funding per state would defeat the purpose of ensuring that deaf-blind consumers get served under this Act. As previously mentioned, Florida is the fourth largest state in the U.S. and has the second highest percentage of population who are deaf, hard of hearing, or deaf-blind. Capping the amount of funding per state may hinder services to the Florida deaf-blind population which needs the services to communicate with families, friends, and the workplace.

### **Oversight and Reporting**

Records regarding distribution of equipment and certification of equipment users should be kept for the preceding three years in addition to maintaining the documentation for as long as the consumer uses the equipment. This policy would coincide with the record retention requirements governing the Lifeline/Link-Up programs found in 47 CFR § 54.417.

FTRI has a database that captures client information and can provide reports reasonably necessary. Active client information remains in the database as long as the client is a participant of the program. Inactive client information is archived. By statute, FTRI produces an audited annual report which is submitted to the FPSC. FTRI would be able to provide this along with a separate special report on the number of CPE distributed and funded by the NDBEDP.



**Conclusion**

In conclusion, the FPSC urges the FCC to consider the following points:

9. Applying the definition of "qualifying low-income customer" as used in the Federal Universal Service Low-Income Program would provide the most efficient means to determine eligibility for the NDBEDP;
10. States that operate their own Lifeline/Link-Up programs should be allowed to maintain the flexibility to develop their own certification procedures including acceptable documentation to certify consumer eligibility under an income-based criterion for the NDBEDP;
11. Applicants for equipment provided under the NDBEDP should be allowed to qualify by participation in a Lifeline-qualifying program as defined by the states, or provide evidence of income as required by 47 CFR § 54.410;
12. The Deaf-Blind Communicator should be included in the list of covered equipment under the NDBEDP;
13. State Equipment Distribution Programs should become the primary means of distributing equipment under the NDBEDP;
14. The amount of funding per state should not be capped under the NDBEDP;
15. State programs approved by the NDBEDP to distribute equipment should be allowed to work within their existing state qualification requirements or criteria; and,
16. Records regarding distribution of equipment and certification of equipment users under the NDBEDP should be kept for the preceding three years in addition to maintaining the documentation for as long as the consumer uses the equipment.

The FPSC appreciates the opportunity to provide comments in this Public Notice.

Respectfully submitted,

/ s /

Cindy B. Miller, Senior Attorney  
Office of the General Counsel

FLORIDA PUBLIC SERVICE COMMISSION  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850  
(850) 413-6082

DATED: December 14, 2010





State of Florida



## Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD  
TALLAHASSEE, FLORIDA 32399-0850

**-M-E-M-O-R-A-N-D-U-M-**

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**DATE:** December 7, 2010

**TO:** Timothy J. Devlin, Executive Director

**FROM:** James S. Polk, Regulatory Analyst II, Division of Regulatory Analysis *JP*  
Robert J. Casey, Public Utilities Supervisor, Division of Regulatory Analysis *RJC*

**RE:** Draft Cover Letter to Governor, Senate President, and Speaker of the House for 2010 Lifeline Report. **CRITICAL INFORMATION:** Please place on the December 14, 2010 Internal Affairs. **ACTION IS NEEDED:** Commission Approval of the Draft Cover Letter is Sought. The 2010 Lifeline Report is due to the Governor, President of the Senate, and Speaker of the House by December 31, 2010.

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The 2010 Lifeline Report was approved by Commissioners at the November 30, 2010 Internal Affairs Meeting. At that meeting, staff was directed to draft a cover letter for submittal of the Lifeline Report to the Governor, Senate President, and Speaker of the House. Based upon Commissioner comments at the November 30, 2010 Internal Affairs, staff drafted the attached letter for review by Commissioners. Commission Approval of the Draft Cover Letter is Sought.

RJC  
Attachment  
cc: Charles Hill



ART GRAHAM  
CHAIRMAN

STATE OF FLORIDA



Capital Circle Office Center  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850  
(850) 413-6040

## Public Service Commission

December 14, 2010

The Honorable Charlie Crist  
Governor of Florida  
The Capitol  
Tallahassee, FL 32399-1050

**DRAFT**

Dear Governor Crist:

The Florida Public Service Commission is required by Section 364.10(3)(i), Florida Statutes, to report annually to the Governor, President of the Senate, and Speaker of the House of Representatives on the number of customers subscribing to Lifeline service and the effectiveness of procedures to promote participation.

Enclosed is a copy of the 2010 report, "Number of Customers Subscribing To Lifeline Service and the Effectiveness of Procedures to Promote Participation." The report describes the Lifeline Assistance Program and presents data and analysis on Lifeline subscribership. Information on regulatory actions impacting Lifeline, the development of procedures to promote Lifeline, and analysis on the effectiveness of procedures to promote participation is also addressed within the report. Net Lifeline customer growth was 3.8 percent this year. As of June 30, 2010, the number of eligible customers participating in the Florida Lifeline program was 642,129.

I would like to take this opportunity to make you aware of a Universal Service issue which is affecting all Floridians. There is a huge disparity between the amount of money collected from Florida customers for the federal Universal Service Fund (USF) and the amount of money coming back into Florida to eligible telecommunications carriers (ETCs) through the federal USF. For the year 2008, Floridians paid \$482 million into this fund and received back \$178 million for a net contribution from Florida into the fund of (\$304 million). Florida has been the largest net contributor to the federal USF for at least 10 years (1999-2008).

The goals of Universal Service, as mandated by the Telecommunications Act of 1996, are:

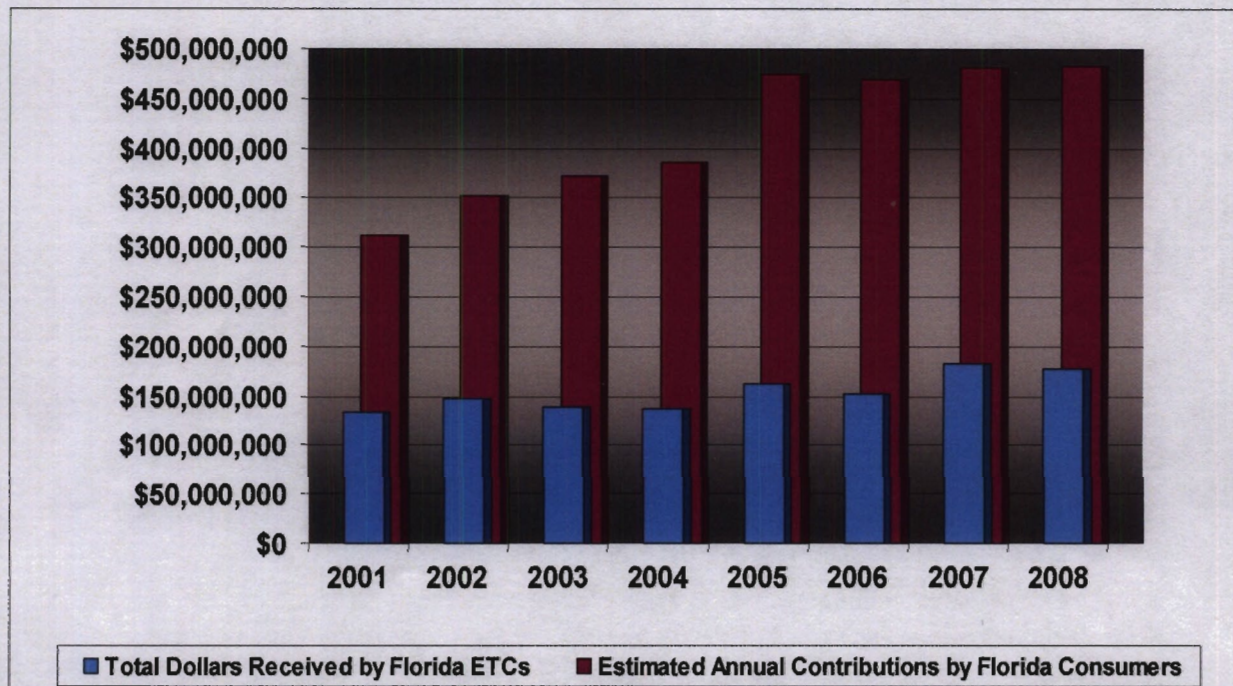
- to promote the availability of quality services at just, reasonable, and affordable rates;
- to increase access to advanced telecommunications services throughout the Nation; and



- to advance the availability of such services to all consumers, including those in low income, rural, insular, and high cost areas at rates that are reasonably comparable to those charged in urban areas.

I am concerned about the inequity in the amount Florida customers are paying into the federal USF versus the amount the USF is disbursing to the State of Florida. The following chart shows the inequities in the contributions provided to the USF and the payments received over the last several years.

#### Universal Service Program Contributions by Florida and Total Receipts to Florida ETCs



There are four programs which make up the Universal Service program: High Cost, Low-Income, Rural Health Care, and Schools and Libraries. Each program within the fund is designed to meet the enumerated fund goals with each having a particular area of emphasis. For 2010, the High-Cost programs represent 54 percent of total funds disbursed and is designed to ensure that consumers in rural, insular, and high-cost areas have access to telecommunications services at rates that are affordable and reasonably comparable to those in urban areas. By comparison, the Lifeline and Link-Up programs nationally represent only 17 percent of USF in 2010.

Federal Communications Commission (FCC) rules require all telecommunications carriers providing international and interstate telecommunications services, excluding some Voice over Internet Protocol providers, to contribute to the USF. Most, if not all, carriers elect to pass this cost on to their subscribers.



The Commission is aggressively working on ideas to ameliorate this inequity. I would welcome the opportunity to meet with you or your staff to further discuss the nuances of the program and possible strategies for attacking this issue. Please do not hesitate to contact the Commission if you have questions concerning this report or the issues relating the broader USF that I have identified in this letter.

Sincerely,

Art Graham  
Chairman

Enclosure

## II. Outside Persons Who Wish to Address the Commission at Internal Affairs

***OUTSIDE PERSONS WHO WISH  
TO ADDRESS THE COMMISSION AT***

***INTERNAL AFFAIRS  
December 14, 2010***

<b><u>Speaker</u></b>	<b><u>Representing</u></b>	<b><u>Item #</u></b>
Jon Moyle	FIPUG	2
Ken Hoffman	Florida Power & Light	2

# III. Supplemental Materials Provided During Internal Affairs

**NOTE:** The records reflect that there were no supplemental materials provided to the Commission during this Internal Affairs meeting.