

Appendix II-1
Public Service Commission
Determination

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for determination of need for
Citrus County Combined Cycle Power Plant,
by Duke Energy Florida, Inc.

DOCKET NO. 140110-EI
ORDER NO. PSC-14-0557-FOF-EI
ISSUED: October 10, 2014

The following Commissioners participated in the disposition of this matter:

ART GRAHAM, Chairman
LISA POLAK EDGAR
RONALD A. BRISÉ
EDUARDO E. BALBIS
JULIE I. BROWN

FINAL ORDER GRANTING DUKE ENERGY FLORIDA, INC.'S DETERMINATION OF
NEED FOR A COMBINED CYCLE POWER PLANT LOCATED IN CITRUS COUNTY

APPEARANCES:

JOHN T. BURNETT and DIANNE M. TRIPLETT, ESQUIRES,
Duke Energy Florida, Inc.
P. O. Box 14042, St. Petersburg, Florida 33733
MATTHEW R. BERNIER, ESQUIRE,
Duke Energy Florida, Inc.
106 East College Avenue, Suite 800, Tallahassee, Florida 32301
JAMES MICHAEL WALLS and BLAISE N. GAMBA, ESQUIRES,
Carlton, Fields, Jorden, Burt, P.A.,
Post Office Box 3239, Tampa, Florida 33601
On behalf of Duke Energy Florida (DEF).

J.R. KELLY and CHARLES REHWINKLE, ESQUIRES,
Office of Public Counsel
111 West Madison Street, Room 812, Tallahassee, Florida 32399
On behalf of Office of Public Counsel (OPC).

JON C. MOYLE, JR. and KAREN PUTNAL, ESQUIRES,
Moyle Law Firm
118 North Gadsden Street, Tallahassee, Florida 32301
On behalf of Florida Industrial Power Users Group (FIPUG).

JAMES W. BREW, ESQUIRE,
Brickfield, Burchette, Ritts & Stone, PC.
1025 Thomas Jefferson Street NW, Washington, DC 20007
On behalf of White Springs Agricultural Chemicals, Inc. d/b/a PCS Phosphate
(PCS Phosphate).

ROBERT SCHEFFEL WRIGHT and JOHN T. LAVIA, III, ESQUIRES,
Gardner, Bist, Wiener, Wadsworth, Bowden, Bush, Dee, LaVia & Wright, P.A.
1300 Thomaswood Drive, Tallahassee, Florida 32308
On behalf of Calpine Construction Finance Company, L.P. (Calpine).

MARSHA E. RULE, ESQUIRE,
Rutledge - Ecenia, P.A.
119 South Monroe Street, Suite 202, Tallahassee, Florida 32301
RICHARD A. ZAMBO, ESQUIRE,
Richard A. Zambo, P.A.
2336 S.E. Ocean Boulevard, #309 Stuart, Florida 34966
GORDON D. POLOZOLA, ESQUIRE,
NRG Energy, Inc.
112 Telly Street, New Roads, Louisiana 70760
On behalf of NRG Florida, LP (NRG).

LINDA LOOMIS SHELLEY, ESQUIRE,
Buchanan, Ingersoll & Rooney, PC.
101 N. Monroe Street, Suite 1090, Tallahassee, FL 32301
JOHN F. POVILAITIS and ALAN SELTZER, ESQUIRES,
Buchanan, Ingersoll & Rooney, PC.
409 Second Street, Suite 500, Harrisburg, Pennsylvania 17101
On behalf of EFS Shady Hills LLC (Shady Hills).

GEORGE CAVROS, ESQUIRE,
George Cavros, Esq., P.A.
120 E. Oakland Park Blvd, Suite 105, Fort Lauderdale, Florida 33334
On behalf of the Southern Alliance for Clean Energy (SACE).

MICHAEL T. LAWSON, ESQUIRE,
Florida Public Service Commission
2540 Shumard Oak Boulevard, Tallahassee, Florida 32399
On behalf of the Florida Public Service Commission.

MARY ANNE HELTON, DEPUTY GENERAL COUNSEL,
Florida Public Service Commission
2540 Shumard Oak Boulevard, Tallahassee, Florida 32399
Advisor to the Florida Public Service Commission.

BY THE COMMISSION:

BACKGROUND

Pursuant to Order No. PSC-13-0598-FOF-EI, issued on November 12, 2013, in Docket No. 130208-EI, In re: Petition for limited proceeding to approve revised and restated stipulation and settlement agreement by Duke Energy Florida, Inc. d/b/a Duke Energy, this Commission approved a Revised and Restated Stipulation and Settlement Agreement (RRSSA) between DEF (DEF or Company), the Office of Public Counsel (OPC), the Florida Industrial Power Users Group (FIPUG), the Florida Retail Federation, and White Springs Agricultural Chemicals, Inc. (PCS Phosphate). Portions of that Agreement contemplated the construction or acquisition of new power plants or the upgrade or expansion of existing power plants to address a potential need for generation resources in light of the closure or cancellation of several power plants under the terms of the RRSSA.

On May 27, 2014, DEF filed a Petition and supporting testimony to determine the need for a Citrus County Combined Cycle Power Plant (Docket No. 140110-EI) and another Petition for determination of cost-effective generation alternatives to meet need prior to 2018 (Docket No. 140111-EI), pursuant to Sections 366.04 and 403.519, Florida Statutes (F.S.), and Rules 25-22.080, 25-22.081, 25-22.082 and 28-106.201, Florida Administrative Code (F.A.C.). If the proposed projects in either docket are placed into service on the projected dates, the terms of the RRSSA permit DEF to recover the costs of the projects through a separate base rate adjustment.

The Citrus County Combined Cycle Power Plant (Citrus County Plant) will be a natural gas-fired combined cycle power plant with an expected summer and winter rating of 1,640 MW and 1,820 MW respectively. The Citrus County Plant will be built on a site adjacent to DEF's Crystal River Energy Center in Citrus County, Florida, with a completion date of December 2018.

On May 29, 2014, we issued a Notice of Commencement of Proceedings pursuant to Rule 25-22.080(3), F.A.C., and an Order Establishing Procedure for both of the petitions. On May 30, 2014, Calpine Construction Finance Company (Calpine) filed a petition to intervene and OPC filed a notice to intervene for both of the dockets. On June 3, 2014, PCS Phosphate and FIPUG filed a petition to intervene for both dockets. On June 11, 2014, NRG Florida LP (NRG) filed a petition to intervene for both dockets. On July 15, 2014, EFS Shady Hills LLC (Shady Hills) filed a petition to intervene in Docket No. 140110-EI. On August 13, 2014, the Southern Alliance for Clean Energy (SACE) filed a petition to intervene in Docket No. 140110-EI. Intervention for these parties was granted pursuant to several orders.¹ A prehearing conference

¹Order No. PSC-14-0301-PCO-EI, issued June 11, 2014 (OPC).

Order No. PSC-14-0306-PCO-EI, issued June 12, 2014 (Calpine).

Order No. PSC-14-0304-PCO-EI, issued June 12, 2014 (PCS Phosphate).

Order No. PSC-14-0305-PCO-EI, issued June 12, 2014 (FIPUG).

Order No. PSC-14-0340-PCO-EI, issued July 3, 2014 (NRG).

Order No. PSC-14-0397-PCO-EI, issued August 1, 2014 (Shady Hills).

Order No. PSC-14-0435-PCO-EI, issued August 20, 2014 (SACE).

was held on August 13, 2014 and a formal hearing was held on August 26, 2014 through August 27, 2014.

This Order only addresses DEF's Petition for a determination of need for the Citrus County Plant. DEF's Petition for determination of cost-effective generation alternatives to meet need prior to 2018 in Docket No. 140111-EI, involving the Hines Chillers Upstate Project is addressed in a separate Order.

DECISION

Need for Electric System Reliability and Integrity

As proposed, the Citrus County Plant will be built in two 820 MW stages, with the first stage entering into commercial operation in May 2018 and the second stage entering into commercial operation in December 2018. DEF Witness Borsch provided testimony and exhibits concerning DEF's projected reliability need for the proposed Citrus County Plant. As described by Witness Borsch, DEF employs two reliability criteria in its resource planning process: (1) a loss of load probability criterion, and (2) a reserve margin criterion. Witness Borsch stated that DEF's resource plans have been reviewed by this Commission each year since the early 1990s in the annual Ten-Year Site Plan review process.

Witness Borsch asserted that the Company's need for the proposed Citrus County Plant in the summer of 2018 is driven by the aforementioned reserve margin criterion. DEF's minimum reserve margin threshold is 20 percent and the Company calculates its reserve margin based on the relationship between peak load and total capacity available to serve that load. In addition to DEF's claimed need to satisfy its reserve margin criterion, Witness Borsch testified that the Citrus County Plant would provide reliability and stability to the Florida electric grid as determined by the Florida Reliability Coordinating Council, Inc.

Load Forecast

The Company's load forecast is the same forecast that appears in DEF's 2014 Ten-Year Site Plan. DEF forecasts its future load requirements by utilizing statistical modeling techniques. In order to model and forecast load, DEF makes certain assumptions relating to factors that influence energy consumption and demand. DEF's assumptions for forecasting load can generally be described as economic, demographic, and weather related. The demographic and weather related assumptions are what the Company refers to as "General Assumptions." General Assumptions include accounting for normal weather, population and average household size, production conditions/environment concerning phosphate mining, wholesale contracted load, demand side management, and the amount of cogeneration expected by its customers. Economic related assumptions such as inflation, employment, and income are also utilized to model and forecast load requirements.

DEF utilizes its forecast assumptions to produce projections of customer, energy, and peak demand requirements, through the application of both econometric and end-use modeling

methodologies. We note the econometric modeling approach attempts to explain (and thus predict) the Company's energy and demand requirements as a function of relevant (demographic, economic, and weather) variables. The end-use, or statistically adjusted end-use approach, attempts to determine and refine projections of future demand by modeling new and upcoming industry regulations and the characteristics of new electricity-driven devices.

According to DEF's 2014 Ten-Year Site Plan, once customer, energy, and peak demand models are formulated, an overall evaluation process commences. After evaluation, preliminary customer, energy, and demand forecasts are produced. These preliminary forecasts are then evaluated by DEF's Senior Management. Following review by Senior Management, DEF releases its official customer, energy, and demand forecasts. These final forecasts provide the basis for the Company's demand and system requirements.

DEF contends that there will be a need for additional generation capacity on its system in 2018. Witness Borsch stated "[b]y the summer of 2018, when the Citrus County Combined Cycle Plant is expected to come on-line, the summer peak demand is projected to grow to 9,439 MW and by the next summer, when the Citrus County Combined Cycle Power Plant is expected to be fully operational, the summer peak demand is projected to reach 9,813 MW." DEF's forecast presented in this docket represents an annual growth rate of approximately 1.4 over the next ten year projected period. The Company contends that without new capacity in 2018, its reserve margin will be 11.7 percent, which is below the Company's 20 percent commitment.¹

Witness Borsch further testified that the Company's system energy requirement, or net energy for load, is also projected to increase over the same time period due to increasing customer growth and Florida's general improving economic conditions. Net energy for load is expected to grow from 39,801 GWh in 2014, to 41,995 GWh in 2018, or by 2,194 GWh over the period. While net energy for load is expected to grow to 43,013 GWh by 2019 or by 3,212 GWh from 2014 – 2019.

We note, however, that Witness Pollock's Exhibit 85, which details the impact of limiting DEF's net firm summer peak demand to reflect only achieving 50 percent of its projected growth spanning the timeframe of 2014 – 2023, encompassing the Company's 2018 need. Witness Pollock's testimony characterizes this 50 percent load growth adjustment as an illustration of potential forecasting error.

OPC contends in its brief, that DEF's "... load forecast is fraught with uncertainty and demonstrates an optimistic level of growth that may not be warranted in the demand recently exhibited by either retail or wholesale native load that DEF is required to serve." Further OPC argues, "[i]f one layers on to this fragility in the DEF forecast, the potential softness in the wholesale demand represented largely by sales to [Seminole] a real doubt persists with regard to the need for the combined cycle unit in 2018."

² See Order No. PSC-99-2507-S-EU, issued December 22, 1999, in Docket No. 981890-EU, In re: Generic investigation into aggregate electric utility reserve margins planned for Peninsular Florida.

Upon cross examination by OPC, Witness Borsch explained how wholesale contracts factor into DEF's load forecast. OPC questioned Witness Borsch on how the Company's wholesale contracts are generally structured and performed, as well as accounted for within the Company's load forecast. Witness Borsch indicated that all projected wholesale capacity contract amounts are, in fact, actual contracted amounts between the Company and its wholesale customers. OPC asked Witness Borsch a series of questions relating to whether the Company revisits contracts with its wholesale customers, specifically mentioning Seminole. Witness Borsch testified that "... if there are updates from year to year based on new contracts or renegotiation of existing contracts, then the results of those contracts are folded into the Company's next year's Ten-Year Site Plan."

PCS Phosphate presented Witness Borsch with Exhibit 140 titled: "Historic percentage of Summer Net Firm Demand to Average System Demand and adjusted Summer Net Firm Demand Forecast." The conclusion reached in Exhibit 140 is that average summer net firm demand as a percentage of average system demand is higher in the forecast years of 2014 – 2018 than it was for the actual years of 2009 – 2013. Alternatively, DEF is projecting a higher summer peak demand relative to historic average demand for this and the next four years than the past five-year actual period. PCS Phosphate supports its analysis by multiplying the historic (2009 – 2013) average summer net firm demand as a percentage of average system demand, by the forecasted average system demand (2014 – 2023), which results in a 10-year adjusted summer firm peak demand.

One issue concerning DEF's load forecast is the potential for forecast error and associated magnitude. None of the Intervenor filed a load forecast. We agree with Witness Hibbard that forecast assumptions are "just that – assumptions," and in all likelihood, these assumptions will deviate from actual experience. We find the primary assumptions of DEF's load forecast are economic, demographic, and weather related. Furthermore, these are proper inputs and necessary assumptions for modeling and forecasting the future demand and energy needs of the Company's customers. Concerning intervenor testimony filed in this docket, Witness Pollock suggested the possibility of error in DEF's forecast without clearly defining a basis for either its magnitude or direction. When asked if he has concluded that DEF's load forecasted energy growth or the timing of forecasted growth is in error, Witness Hibbard responded "no, I have not." We agree with this assessment.

We understand the deviation in projected summer peak demand may be arbitrary. However, to assess the reasonableness of assumptions by NRG, we compared DEF's forecasts to the adjusted forecasts set forth by Witness Pollock, see Table 1 below:

Table 1: DEF Net Summer Firm Demand Forecast Compared with Hearing Exhibits 85 and 140

Year	DEF ³	NRG ⁴	Percent Difference, NRG to DEF	PCS ⁵	Percent Difference, PCS to DEF
2014	8,812	8,411	(4.55%)	8,068	(8.44%)
2015	9,042	8,525	(5.72%)	8,207	(9.23%)
2016	9,149	8,579	(6.23%)	8,331	(8.94%)
2017	9,307	8,658	(6.97%)	8,387	(9.89%)
2018	9,440	8,725	(7.57%)	8,513	(9.82%)
2019	9,813	8,911	(9.19%)	8,719	(11.15%)
2020	9,935	8,973	(9.68%)	8,919	(10.23%)
2021	9,952	8,980	(9.77%)	9,004	(9.53%)
2022	10,067	9,039	(10.21%)	9,095	(9.66%)
2023	10,173	9,092	(10.63%)	9,215	(9.42%)
2014 - 2023 Average Variation			(8.05%)		(9.63%)

To the extent Witness Pollock raises general issues surrounding forecast error potential, as in, projections will usually differ from actuality, we concur. The level of forecast error for the relevant year of 2018, which is the planned in-service date for the Citrus County Plant, is 50 percent. NRG provided no basis for selecting a 50 percent reduction to DEF's Net Summer Firm Demand Forecast. In as much as NRG did not file an alternative firm summer peak demand forecast, we interpret this Exhibit to be illustrative in nature, highlighting what NRG proffers as a possible forecast error.

Table 1 displays NRG's exhibit relative to DEF's net summer firm demand forecast, which yields a forecast deviation of 7.57 percent from DEF's total projected amount for 2018. We compared this illustrative forecast error to DEF's 2009 forecast error of 2013 demand, which was 10.9 percent. We find this is relevant because they both represent a five year range, thus the forecast error percent in both these instances is comparable. The 2009 Ten-Year Site Plan variance of 2013 demand can largely be attributed to a weak economic recovery stemming from the unforeseen effects of the great recession and associated housing market decline. There is no record evidence to indicate the recession of 2008-2009 has fundamentally altered DEF's

³ Hearing Exhibit Number 49.

⁴ Hearing Exhibit Number 85.

⁵ Hearing Exhibit Number 140.

expected forecast result for 2018 demand in a manner that casts doubt on the reasonableness of the forecast.

With regard to arguments raised by OPC concerning wholesale contracts, we are unaware of any other proper treatment for wholesale demand than to include capacity amounts that are actually contracted for the purposes of the Company's load forecast. As Witness Borsch indicated when discussing the Company's summer peak demand forecast, located in Schedule 3.1 of its 2014 Ten-Year Site Plan, "... what we show is what is the contracted capacity that we are expected to provide, expected to be able to provide on peak under the contracts that we have executed with various wholesale entities." Further on this point, OPC asked Witness Borsch, "is it your testimony that you are not aware of any change in the projected sales of power to Seminole for the years 2015 through 2020?" To which Witness Borsch responded, "[i]t's my testimony that as of the time these values were given to me that they represent the contracted amounts that we have. I am not aware of updates to those contracts, which would have occurred since the provision of this load forecast, and so I'm not aware of any other particular changes, no."

Concerning arguments raised by PCS Phosphate, we are unaware of how historic average summer net firm demand as a percentage of average system demand assists with forecasting future demand needs. While the anomaly between the average summer net firm demand as a percentage of average system demand being higher in the forecast years of 2014–2018 than in the actual years 2009–2013, DEF's forecast is based upon normalized weather conditions, while historic demand and energy forecasts represent the actual impact of severe or mild weather conditions on its customers.

We reviewed the Company's assumptions of population, employment, income, prices, weather, and domestic production (amongst others) used to forecast DEF's customers, energy, and demand. Likewise, we reviewed DEF's load forecast methodologies. We find these assumptions, data inputs, and methods are reasonable for predicting future demand and were reasonably estimated. While we are cognizant of forecast error potential generally associated with estimating future system load requirements, DEF's choice of model variables, methodology, and results with respect to its load forecast appear reasonable. Additionally, there is no record evidence to indicate the economic circumstances of 2008-2009 would impact DEF's 2018 forecasted demand. We find, therefore, the results of DEF's load forecast presented in this docket are reasonable for the purposes of determining the need for DEF's proposed Citrus County Plant in 2018.

Total Capacity

Our decision on a need determination petition must be based on the facts as they exist at the time of the filing with the underlying assumptions tested for reasonableness. It is prudent for a utility to continue to evaluate whether it is in the best interests of its ratepayers for a utility to participate in a proposed power plant before, during, and after construction of a generating unit. If conditions, such as load growth or capacity retirements, or capacity additions or any additional

purchased power agreements change from what was presented at the need determination proceeding, then a prudent utility will be expected to respond appropriately.

Witness Borsch asserted that peak load growth contributes to the need for the proposed Citrus County Plant; however, the need is primarily driven by generation retirements. DEF's total capacity includes firm purchased power and installed generating capacity. Prior to the projected 2018 in-service date of the proposed Citrus County Plant, DEF's projected capacity from purchased power agreements (PPA) remains relatively unchanged. DEF is planning to retire several of its existing generating units prior to commercial operation of the proposed Citrus County Plant, including Crystal River Units 1 and 2 (740 MW) in 2018 and Suwannee Steam Units 1-3 (129 MW).

For the purposes of evaluating the need for the Citrus County Plant, DEF assumed that it would satisfy its reliability needs prior to 2017 with the addition of combustion turbines at DEF's Suwannee site (316 MW), and the addition of its proposed Hines Project (220 MW). At the start of the hearing DEF announced a potential PPA/acquisition of Calpine's Osprey Facility (515 MW) in lieu of constructing the proposed Suwannee Project. Based on testimony at the hearing, the terms of the agreement would be a two-year PPA followed by an acquisition of the unit in year three. In light of the described PPA/acquisition, Witness Borsch testified that the Company would not retire Suwannee Steam Units 1-3 until sufficient transmission is in place to support the retirement of those units.

During the hearing the intervening parties discussed several generation scenarios that could affect DEF's projected need in 2018. The majority of the discussion centered on delaying the retirement of Crystal River Units 1 and 2 beyond 2018 and the potential impact associated with a PPA/acquisition of the Osprey Facility.

OPC presented a hypothetical reserve margin calculation that added 515 MW from Calpine's Osprey Facility in 2016, delayed the retirement of Crystal River Units 1 and 2 beyond 2018, and added the Citrus County Plant in 2019. FIPUG additionally raised questions concerning DEF's decision to retire Crystal River Units 1 and 2 in 2018 rather than 2020, which is the term allowable by the existing Florida Department of Environmental Protection (DEP) permit.

Witness Borsch acknowledged that under OPC's hypothetical scenario, DEF would maintain a reserve margin above 20 percent beyond 2018. However, Witness Borsch testified that transmission constraints currently limit DEF from receiving more than 249 MW from the Osprey Facility. Assuming DEF acquires the Osprey Facility at the end of 2016 Witness Borsch explained that the transmission projects necessary to access the full-capacity of the plant would not be complete until 2020 at the earliest.

With respect to continued operation of Crystal River Units 1 and 2, Witness Borsch testified that DEF has reliability concerns about the long-term site-averaging approach at the Crystal River Energy Center. Witness Borsch opined that continued reliance in 2019 on the dependent operational reliability between Crystal River Units 1 and 2 and Crystal River Units 4 and 5 when DEF has a readily available, cost-effective means of remedying that operational

reliability risk is not justified. These reliability concerns were articulated in Commission Order No. PSC-14-0173-PAA-EI. In that Order, we approved certain environmental projects predicated on the following compliance alternative:

Establish a MATS compliance plan for CR 1 and 2 and configure the units to operate in compliance through mid-2018, and establish a resource plan to provide for replacement of combined cycle generation in that timeframe. This alternative includes a competitive solicitation for combined cycle energy and capacity starting in 2018, identification of additional resources needed in 2016 and beyond, and a transmission plan that supports the required resources.

[Emphasis Added]

In that same Order we stated the following with regard to the plan described above:

After DEF established a MATS compliance plan for CR 1 and 2 to operate through mid-2018, the Company performed an economic evaluation comparing the alternatives identified above. When compared to retiring the units in 2016, DEF estimates that the second alternative will result in a net present value savings of approximately \$307 million, with cumulative savings beginning in 2017. Thus, we find that DEF's proposal represents significant savings based on avoided transmission projects and avoided purchased power agreements that would otherwise be needed, for reliability purposes, in the 2016 through 2018 timeframe.

[Emphasis Added]

DEP also recognized that continued operation of Crystal River Units 1 and 2 deferred or resolved significant grid reliability issues identified by the Florida Reliability Coordinating Council in a 2013 study. The study determined that the addition of a combined cycle facility by summer 2018 in the vicinity of the existing Crystal River Energy Center would resolve the reliability issues created by the potential shutdown of Crystal River Units 1 and 2 and the retirement of Crystal River Unit 3.

Upon review of the record, we find there is sufficient information to calculate DEF's reserve margin through 2018 and beyond. As addressed there are two major points of contention with respect to DEF's projected total capacity: (1) How much capacity from the Osprey Facility should be included prior to 2018; and (2) Should DEF delay the retirement of Crystal River Units 1 and 2? Based on the testimony of Witness Borsch, we find DEF has demonstrated that assuming a maximum of 249 MW from the Osprey Facility prior to 2020 is an appropriate assumption.

Based on the evidence in the record, we recalculated DEF's originally filed reserve margin based on the assumptions discussed above and including the continued operation of Suwannee Steam Units 1-3. Table 2 summarizes DEF's original reserve margin calculation and our recalculated reserve margin. As previously stated, DEF's filing assumed the addition of the Suwannee Project and the retirement of Suwannee Steam Units 1-3 in 2016. The calculated

reserve margin assumes the addition of the Osprey Facility in 2016 and no retirement of Suwannee Steam Units 1-3.

Table 2: Summer Reserve Margin Calculations⁶

	DEF as Filed		DEF w/o Suwannee Project	
	Reserve Margin	MW Shortage	Reserve Margin	MW Shortage
2016	20.4%	-	21.0%	-
2017	20.7%	-	21.3%	-
2018	11.7%	785	12.3%	723
2019	6.9%	1,284	7.6%	1,222
2020	4.5%	1,535	5.2%	1,473

Therefore, we find DEF's load forecast presented in this docket to be reasonable for the purposes of determining the need for DEF's proposed Citrus County Plant in 2018. Using DEF's load forecast and assuming the appropriate changes to DEF's installed capacity, the Company's reserve margin would drop to 12.3 percent in 2018, thus demonstrating a reliability need at that time.

Conclusion

There is no record evidence to indicate the recession has fundamentally altered DEF's expected forecast result for 2018 demand in a manner that casts doubt on the forecast. We find DEF's load forecast presented in this docket to be reasonable for the purposes of determining the need for DEF's proposed Citrus County Plant in 2018. Based on the evidence in the record, if DEF did not construct the proposed Citrus County Plant in 2018, the projected reserve margin could drop as low as 12.3 percent in 2018.

Need for Adequate Electricity at Reasonable Cost

DEF asserts that the total cost of the Plant, including the allowance for funds used during construction and transmission interconnection costs, is \$1,514,000,000. DEF states that over 80 percent of this cost is based on fixed or firm price bids. DEF also states that the location of the Citrus County Plant allows DEF to avoid the costs to build separate site and transmission infrastructure for the Citrus County Plant because of its location adjacent to the Crystal River Energy Center.

OPC, FIPUG, PCS Phosphate, Shady Hills, and NRG did not provide arguments directly related to the information discussed in this section. Calpine and SACE did not disagree with DEF on this matter.

⁶ Hearing Exhibit No. 50 and Commission staff Calculation.

DEF's Citrus County Plant is a proposed 1,640 MW power plant located adjacent to the Company's Crystal River Energy Center. As proposed the Citrus County Plant will include four combustion turbines, four heat recovery steam generators, and two steam generators.

DEF Witness Landseidel testified that the Citrus County Plant will be located on a site next to the Company's Crystal River Energy Center that takes advantage of existing infrastructure including transmission facilities. He elaborated that one power block will be connected to the Crystal River Energy Center 500kV transmission system, effectively replacing the generation from the retired Crystal River Unit 3 nuclear unit, and the other power block will be connected to the Crystal River Energy Center 230kV transmission system, effectively replacing Crystal River Units 1 and 2 once those plants are retired. Witness Landseidel testified that DEF's ability to use existing infrastructure facilities at the Crystal River Energy Center for the Citrus County Plant avoids the cost of building separate, similar facilities for the project thus providing cost-savings.

DEF utilized the Strategist resource optimization program to perform the Company's economic evaluation of the proposed Citrus County Plant. Witness Borsch testified that the Strategist model is a utility accepted industry production cost model. Inputs to the Strategist model include the costs and operational characteristics of generating units. Additionally Witness Borsch attested that fuel and emission pricing are typically two of the most sensitive inputs to the production cost model.

Financial Assumptions

DEF used a capital structure consisting of 50 percent equity at cost rate of 10.50 percent and 50 percent debt at a cost rate of 3.75 percent. DEF applied an after-tax discount rate of 6.46 percent based on the effective income tax rate of 35.26 percent. No evidence was presented in the record disputing the reasonableness of these financial assumptions. We find that the financial assumptions used for this evaluation are reasonable.

In evaluating the proposed purchased power agreements (PPA), DEF included the cost of imputed debt by determining the additional equity cost related to the purchased power proposals. Standard and Poor's is the only rating agency that makes an adjustment to offset the expenditures of debt-like commitments associated with the fixed, long-term payments of PPAs. The cost associated with imputed debt was not determinative to the most cost-effective option to the Company.

Generation Cost Estimates and Projected Performance Specifications

DEF estimated that the Citrus County Plant will have an in-service cost of approximately \$1.5 billion. Witness Landseidel presented testimony and exhibits regarding cost estimates and performance projections of the proposed Citrus County Plant. DEF's cost estimates and operational characteristics are based on advanced class gas turbines in a 4 by 2 configuration. DEF relied on a power plant engineering and construction firm, an engineering procurement and construction contractor with advanced gas turbine plant experience in Florida, and the Company's experience with combined cycle projects to develop the cost estimates for the Citrus

County Plant. Witness Landseidel testified that DEF has successfully executed several combined cycle gas turbine projects. Our review of DEF's past cost projections for combined cycle projects, when compared to actual costs indicate that the projects, are often at, or below, the projected cost.

With respect to the operational characteristics of the Citrus County Plant, we compared DEF's estimates and projections to the generic cost and performance projections made by a power plant engineering and construction firm as well as internal DEF resources. We also compared the heat rate to the heat rate projected by Florida Power & Light in its recently approved Port Everglades Energy Center. Based on these comparisons, we find DEF's operational characteristics are reasonable for evaluation purposes. No evidence was presented disputing the reasonableness of these assumptions.

Fuel Costs

DEF's fuel price forecasts were presented by DEF Witness Delehanty. Charts of DEF's base, high, and low fuel price forecasts and other industry natural gas price forecasts were provided as exhibits to Witness Delehanty's direct testimony. DEF's fuel price forecasts were provided in response to Commission staff discovery. DEF's fuel price forecasts of natural gas, coal, and distillate oil represent a combination of short-term fuel price forecasts and long-term fuel price forecasts. The Company's short term forecast is based on available futures market prices, spot market prices, and short-term contract prices. The Company's long term forecast is a forward-looking evaluation of the marginal cost of supply at the expected level of demand, prepared with the assistance of DEF's current industry consultant, Energy Ventures Analysis, Inc.

DEF worked collaboratively with Energy Ventures Analysis, Inc. to ensure that the assumptions and data inputs in its long term commodity price forecasts were consistent with DEF's internal planning assumptions and data inputs. DEF's low and high natural gas price forecasts scenarios were developed by comparing the DEF Energy base natural gas price forecast to recent, recognized industry natural gas price forecasts and applying statistically relevant standard deviations to the data. The low natural gas price forecast is 18 percent lower and the high natural gas price forecast is 14 percent higher than DEF's base natural gas price forecast. No party took a position opposing DEF's fuel price forecasts. We reviewed the record evidence in this case pertaining to DEF's base, high, and low fuel price forecasts and we find they are reasonable projections of fuel prices for the relevant forecast horizon (2014-2041).

Environmental Costs

DEF has consistently included a cost of carbon dioxide (carbon) in its base case for planning purposes since 2006. DEF believes that it is prudent to model a price on carbon as a way of capturing the risk of potential future legislation and pending Environmental Protection Agency regulation of carbon, as well as the impact of a national carbon policy. In order to test the reasonableness of its carbon cost forecast, DEF reviewed carbon dioxide cost estimates from the Energy Information Agency and cost estimates from the failed Waxman-Markey bill. DEF asserted that the carbon price it currently uses has been set at a level the Company believes to be

a reasonable trajectory to represent the risk of federal climate change legislation or regulation given the current uncertainty surrounding such policy. We note that neither the appropriateness for DEF to include the projected carbon cost in its base case of the resource planning nor the actual carbon price used by DEF was challenged by any of the parties in this docket. We find that the proposed Citrus County Plant would lower DEF's carbon emissions profile, which will help Florida in complying with future regulations or future compliance plans. DEF also performed a zero-price carbon case sensitivity analysis as an alternative to its base case. The results of such analyses show that the Citrus County Plant is still the most cost-effective resource for DEF's customers.

Rate Impact

DEF projected a residential base rate increase of approximately \$6.55 on a 1,000 kWh bill when the Citrus County Plant is placed into service. Paragraph 16.b. of the RRSSA states:

[I]f DEF petitions the Commission for a need determination for additional generation, not to exceed 1,800 MW, to be placed into service in 2018, and the Commission grants that determination of need, and DEF constructs and places in-service that additional generation in 2018, DEF's base rates shall be increased by the annualized base revenue requirement for the first 12 months of operation.

Therefore, if the in-service date of the Citrus County Plant is delayed beyond 2018, the base rate increase, per the settlement, will not be applicable.

Conclusion

We find that DEF's assumptions and forecasts in its analysis of the proposed Citrus County Plant are reasonable for evaluation purposes.

Need for Fuel Diversity and Supply Reliability

DEF argues that the abundant supply of natural gas resources ensures that fuel is readily available at a cost-effective price to the Citrus County Plant providing natural gas supply diversity. DEF also asserts that DEF's access to abundant natural gas supplies for the Citrus County Plant through gas transportation pipeline interconnections further provides DEF and its customers with fuel supply diversity by ensuring a reliable fuel supply to the Citrus County Plant. DEF further opines that natural gas is an attractive fuel source because compared to oil and coal, it is a cleaner burning fuel and, therefore, it does not have the same level of environmental costs and related impacts associated with plants using alternative fuels.

None of the Intervenors provided any evidence or arguments concerning fuel diversity and supply reliability that were contrary to the evidence and arguments offered by DEF.

DEF's proposed Citrus County Plant will be fueled by natural gas. Based on the current assumptions the Company's energy generation from natural gas is projected to increase from 56.6 percent in 2013 to 66.2 percent in 2019, the first full year of service for the Citrus County

Plant. As discussed, the proposed Citrus County Plant is replacing coal-fired and nuclear generation at the Company's Crystal River Site. Witness Borsch testified that new coal-fired generation is not feasible at this time given environmental constraints. Additionally, DEF asserted that additional coal generation would generally take six to seven years to construct while new nuclear generation would require at least ten years, which is beyond DEF's projected need in 2018. We also note that only one respondent to DEF's Request for Proposals (RFP) was not natural gas-fired technology. Therefore, we find that natural gas generation is the only reasonable generation option to meet the Company's needs at this time.

To support the Citrus County Plant's natural gas needs, DEF has contracted for firm gas transportation on the Sabal Trail pipeline beginning on October 1, 2017. DEF Witness Patton testified that Sabal Trail was the best gas transportation solution for the Citrus County Plant because it provides new gas infrastructure that enhances reliability and diversifies DEF's gas transportation portfolio. DEF's capacity from long term firm transportation agreements that support DEF's existing gas plants is nearly equally divided between Gulfstream and Florida Gas Transmission. The estimated percentages of DEF's firm transportation service are Gulfstream (36 percent), Florida Gas Transmission (34 percent) and Sabal Trail (30 percent).

Witness Patton additionally testified that DEF's contract with Sabal Trail will allow direct access to onshore unconventional natural gas resources. Witness Borsch attested that the abundant supply of unconventional natural gas resources achieve one of the primary objectives of fuel diversity, specifically ensuring that fuel is readily available at a cost-effective price. Witness Borsch further indicated that conventional gas resources are also expected to increase in production over the next 25 years. Witness Borsch opined that access to conventional and unconventional natural gas resources ensures a reliable fuel supply in the event of gas supply interruptions.

We concur with Witness Borsch's statement that natural-gas fired combined cycle generation is the most economic large-scale generation technology at this time. Furthermore, we agree that the diversification of DEF's fuel supply provides the benefits of reduced fuel cost volatility and fuel supply reliability associated with fuel diversity.

In prior need determination proceedings, this Commission has recognized dual-fuel capability as an enhancement to fuel-supply reliability. The Citrus County Plant is not designed to burn fuel oil and therefore the plant will not have dual fuel capability. Witness Landseidel testified that dual-fuel capability adds additional engineering, design, and construction cost to the plant. He explained that installing dual fuel capability would incur \$25.7 million in capital costs as well as additional costs in operating and testing the plant and recycling the oil.

DEF commissioned an independent engineering risk analysis for single fuel operation based on natural gas at the Citrus County Plant. Based on this report and DEF's own analysis of fuel supply reliability, DEF concluded that reliance on natural gas as a single fuel source at the Citrus County Plant provided adequate reliability compared to the cost and risk associated with adding dual fuel capabilities at the Citrus County Plant.

We find the testimony of Witness Landseidel adequately supports DEF's decision to operate the proposed Citrus County Plant on a single fuel source. As discussed at the hearing, assuming completion of the Citrus County Plant, between 60 and 65 percent of DEF's combined cycle generation would still have dual fuel capability. This percentage is favorable when compared to the overall Florida state percentage of 48 percent.

Conclusion

We find that DEF's selection of the proposed Sabal Trail pipeline to serve the Citrus County Plant can reduce fuel cost volatility and provide fuel supply reliability. Furthermore, the supply reliability benefits associated with the Sabal Trail agreement and the Company's existing fleet of dual fuel combined cycle power plants supports the Company's decision to operate the proposed Citrus County Plant on a single fuel source.

Renewable Energy Sources, Technologies or Conservation Measures

DEF claims that it has provided sufficient evidence that demonstrates there are no renewable energy sources or conservation measures reasonably available to mitigate the need for the Citrus County Plant in 2018. DEF points out that none of the intervenor witnesses testified to this matter and that SACE was the only party that disputed DEF's evidence. DEF states that despite having an ongoing Request for Renewables (RFR) and the open-ended 2018 RFP, it still did not receive any renewable resources or technologies that would mitigate the need for new generation in 2018. DEF also argues that it included all of its current DSM programs in its analysis and determined that even if it meets all of its program goals (existing or proposed) it will still need the Citrus County Plant in 2018.

SACE also asserts that DEF appears to believe that renewable energy must eliminate the need of the plant in its entirety and therefore did not consider if the size of the plant could be reduced using a mix of additional Demand Side Management (DSM) programs and solar power resources.

FIPUG's position was that DEF could defer the in-service date of the plant, but did not provide any arguments related to this matter in support of its position. OPC, PCS Phosphate, Calpine, and Shady Hills did not dispute DEF on this matter.

DEF determined its future demand and energy needs for 2018 based on an Integrated Resource Planning process (IRP). DEF's load forecast developed during the IRP process incorporated all demand and energy reductions expected from DEF's current DSM programs.

For analysis purposes, DEF assumed that its current DSM programs would continue; however, DEF has proposed new DSM goals that are presently under review and pending approval by this Commission's in Docket No. 130200-EI. If approved, Witness Borsch asserts that the proposed goals will slightly accelerate the need for new generation for the study period, because the goals are lower than the existing goals. By 2018, the cumulative difference between the existing and proposed goals is 91 MW. Therefore, DEF was conservative in this

proceeding by assuming greater DSM savings than the company is currently seeking approval for.

DEF has maintained an open RFR that was first issued on July 19, 2007. Despite having an ongoing RFR, DEF claims that there are not any renewable resources commercially available on a utility-scale for generation capacity at a cost-effective price. DEF also kept its 2018 RFP open to proposals for other types of resources besides gas-fired generation, but only gas-fired proposals were received with the exception of a small existing non-solar renewable generation facility. DEF's load forecast included all of its current firm renewable contracts that all extend beyond 2018 and contribute over 450 MW of power a year. For planning purposes, DEF does not include any of its non-firm renewable contracts such as its solar resources in its forecast because they cannot be counted on to meet the reliability needs of the Company.

Conclusion

DEF's IRP process used to determine its resource needs fully takes into account all projected DSM benefits based on its existing approved programs. DEF's ongoing RFR and open-ended 2018 RFP did not identify any renewable resources that could possibly mitigate DEF's capacity needs in 2018.

Cost Effectiveness

DEF argues that the evidence in the record conclusively demonstrates that the Citrus County Plant is the most cost-effective alternative to meet DEF's customer needs commencing in 2018. DEF asserts that no party or witness identified any error in the Company's IRP process or challenges the selection of the Citrus County Plant as the next planned generating unit as a result of that IRP process.

DEF claims that the high efficiency of the Citrus County Plant coupled with the favorable site location adjacent to the Crystal River Energy Center where site infrastructure can be shared and existing transmission infrastructure capacity exists adds substantial benefits to this plant for DEF's customers. DEF additionally opines that the closest bidder proposal resource plan scenario was over \$470 million less cost-effective for DEF's customers.

FIPUG argues that given DEF's recent decision to invest ratepayer money to make environmental upgrades to Crystal River Units 1 and 2, which DEP has permitted to operate through 2020, and this Commission's finding that ratepayers will save more than \$300 million with net savings beginning in 2017, we should defer approving the Citrus County Facility to allow these savings to be realized as projected.

NRG argues that DEF's acquisition of the Osprey Facility provides DEF with flexibility to defer the Citrus facility, which, based on the testimony of Witness Hibbard, could mean \$59 million in cumulative present value requirement benefits for ratepayers, even while accounting for the increased O&M expenses necessary to operate Crystal River Units 1 and 2 with new pollution controls in place. NRG opines that continued operation of the Crystal River Units 1 and 2 are both feasible and practical.

PCS Phosphate, Shady Hills, and SACE took positions opposed to DEF's; however, they did not provide arguments directly related to the information discussed in this section. OPC, similarly, did not file arguments directly related to the information discussed in this section. Calpine did not disagree with DEF on this matter.

In its initial filing, DEF presented the results of its economic evaluation of the Citrus County Plant compared to other generation alternatives that resulted from the Company's RFP. No party disputed DEF's economic analysis; rather several of the intervening parties challenged the need for the Citrus County Plant in 2018, based on load projections, and the economics of delaying the in-service date of the plant by continuing operation of Crystal River Units 1 and 2 beyond 2018. In response, Witness Borsch presented testimony supporting the economics of delaying the in-service date of the Citrus County Plant by one year. As such, our decision, as it relates to the cost-effectiveness of the Citrus County Plant will address the Company's evaluation of competing bids as well as the Company's evaluation of delaying the in-service date of the proposed Citrus County Plant.

DEF's RFP Evaluation

DEF has a projected reliability need for additional generation beginning in 2018. DEF identified the proposed Citrus County Plant as its next planned generating unit to meet its projected reliability need in 2018. In accordance with the Rule No. 25-22.082 F.A.C., (Bid Rule) DEF issued an RFP on October 8, 2013, soliciting proposals for other generation capacity resources that might prove superior as a supply-side alternative to the Company's proposed Citrus County Plant. Witness Borsch provided testimony and exhibits regarding the Company's RFP and its economic evaluation of the proposed Citrus County Plant and potential alternatives.

DEF received six proposals in addition to the Company's proposed Citrus County Plant. Witness Borsch testified that none of the proposals individually met DEF's request for 820 MW in-service by May 1, 2018. Witness Borsch further attested that the total generation capacity (1,328 MW) offered by all bidders in response to the 2018 RFP was less than that of DEF's proposed Citrus County Plant (1,640 MW). As a result, DEF considered a range of resource plan scenarios that included all bidder proposals and generic combustion turbines to scenarios with less than all or single bidder proposals and either generic combustion turbines or combined cycle units. In all these bidder proposal resource plan scenarios some combination of utility-owned generation was needed both to meet DEF's projected reliability need in 2018 and to "backfill" the bidder proposed generation when it went off-line before the end of the expected service life of the Citrus County Plant.

DEF evaluated multiple resource plan scenarios in addition to two resource plans that included the proposed Citrus County Plant. DEF's initial economic evaluation demonstrated that the resource plan with the Citrus County Plant was the most cost-effective option when considering the Company's reference case assumptions.

Following the initial detailed evaluation, the Company also performed a final detailed evaluation to compare the bidder proposal resource scenarios to DEF's self-build alternative, the Citrus County Plant. The final detailed evaluation involved a more detailed economic analysis,

which included transmission costs and the cost of imputed debt as well as other costs and charges. DEF's final economic evaluation increased the cost-effectiveness of the proposed Citrus County Plant. The resource plan with the proposed Citrus County Plant was demonstrated to be the most cost-effective plan in DEF's initial economic evaluation; therefore, the Company's additional costs were not a determinative factor in the cost-effectiveness analysis. DEF further performed sensitivity analyses, in which it assumed either a high gas price forecast case or a zero carbon cost (CO2) price case. Table 3 below summarizes the results of DEF's economic analysis when comparing alternative resource plans with the Citrus County Plant. Under the base case, the savings associated with the Citrus County Plant, compared to other alternatives range from \$477 to \$1,218 million CPVRR. No sensitivity changed the relative result of DEF's analysis.

Table 3: Summary of Economic Analysis (\$ millions, CPVRR)⁷

Resource Plan	Reference Case	High Gas Case	No CO2 Case
Citrus County	-	-	-
Citrus County + Bid B	29	13	59
Bid A + 2 CTs + 1 CC	477	464	269
Bid C1 + 2 CTs + 1 CC	548	535	399
Bids A and C1 + 1 CC	705	699	655
Bid G + 2 CTs + 1 CC	718	693	464
Bids A and G + 1 CC	748	731	600
Bids B, C1, and G + 1 CC	847	811	784
Bids A, B, C1 and G + 2 CTs	1,218	1,171	1,037

We find DEF's economic analysis of the Citrus County Plant and other resource plans relied on reasonable and fair estimates and forecasts. We find, therefore, that DEF's analysis demonstrates that the Citrus County Plant is cost-effective under a range of potential scenarios. We would also reiterate that no Party contested the economic analysis as presented by the DEF.

DEF's Evaluation of Delaying the Citrus County Plant

As discussed earlier, multiple parties discussed delaying the in-service date of the proposed Citrus County Plant by continuing operation of Crystal River Units 1 and 2 beyond 2018. Witness Borsch testified that such a delay would not be cost-effective. Review of DEF's economic analysis indicates that a one-year delay in the Citrus County Plant would result in a net revenue requirement increase of \$78 million over the life of the plant. Witness Borsch stated that this cost increase is driven primarily by the fuel efficiency of the Citrus County Plant compared to the balance of the fleet, including the extended operation of Crystal River Units 1 and 2 by another year. Table 4 below summarizes the additional cost associated with a one-year delay of the Citrus County Plant.

⁷ Hearing Exhibit No. 60

Table 4: Costs of Delaying Citrus County Plant (\$ millions, CPVRR)⁸

Capital	-65
O&M	-15
Fuel	113
Environmental	28
Other	17
Total	78

Witness Borsch additionally expressed concern that continued operation of Crystal River Units 1 and 2, in to 2019, could result in additional environmental compliance costs. Witness Hibbard provided testimony stating that a one year delay of the Citrus County Plant could result in a savings of \$59 million. Witness Hibbard's estimate of \$59 million in savings appears consistent with DEF's estimated \$65 million savings in capitol costs shown above. At the hearing, Witness Hibbard clarified that these calculated savings were a calculation of the time value of money, associated with delaying the Citrus County Plant, not a cost and benefit analysis.

Based on the preponderance of evidence we do not believe that delaying the in-service date of the Citrus County Plant would be cost-effective. While Witness Hibbard represented potential benefits that could be realized if the plant is delayed, his evaluation did not consider operational costs. Furthermore, we find that the continued operation of Crystal River Units 1 and 2 could cause significant reliability issues.

This Commission's decision on a need determination petition must be based on the facts as they exist at the time of the filing with the underlying assumptions tested for reasonableness. It is prudent for a utility to continue to evaluate whether it is in the best interests of its ratepayers for a utility to participate in a proposed power plant before, during, and after construction of a generating unit. If conditions, such as load growth, capacity retirements, capacity additions, or any additional purchased power agreements change from what was presented at the need determination proceeding, then a prudent utility will be expected to respond appropriately.

Conclusion

We find that DEF's analysis of multiple scenarios, including delaying the in-service date of the project, indicate a high likelihood that the proposed project will result in savings for DEF's customers. Based on DEF's analysis the proposed project will result in a savings of \$477 to \$1,218 million when compared to alternatives received through the Company's RFP.

Need for Evaluation of Alternative Scenarios for Cost Effectiveness

DEF argues that it conclusively demonstrated that it reasonably evaluated all alternative scenarios for cost-effectively meeting DEF's customer needs commencing in 2018. DEF asserts that no intervenor party or witness questioned the fairness or impartiality of the 2018 RFP or

⁸ Hearing Exhibit No. 79

DEF's evaluation of the 2018 RFP that led to the selection of the Citrus County Plant as the most cost-effective generation alternative to meet DEF's need.

DEF additionally states that it developed the 2018 RFP and fairly and impartially implemented it consistently with the Bid Rule to solicit proposals for other generation capacity resources that might prove superior as a supply-side alternative for customers, based on price and non-price attributes, to the Company's Citrus County Plant. DEF further attests that it retained an independent evaluator (DEF Witness Taylor) to ensure the 2018 RFP solicitation documents were clear, fair, and consistent with the Bid Rule. DEF asserts that Witness Taylor confirmed that the 2018 RFP was reasonable and an appropriate document for the solicitation of proposals consistent with the Commission Bid Rule. DEF further states that Witness Taylor independently concluded that DEF's Citrus County Plant is at least \$282 million CPVRR less expensive than the next best bidder proposal portfolio.

DEF explains that it received bid proposals in addition to the Company's self-build proposal for the Citrus County Plant. DEF further expounds that none of these proposals individually or collectively met the Company's reliability need for summer generation capacity commencing in 2018. DEF asserts that it evaluated all bidder proposals to see if there was any combination of them that, individually or collectively with other undeveloped generic Company power plants, provided customers a more cost-effective supply-side generation alternative to the Citrus County Plant. DEF further claims that these combinations, or resource combination scenarios, were quantitatively and qualitatively evaluated against the Citrus County Plant. DEF concludes that the evaluation demonstrated that the Citrus County Plant is the most cost-effective supply-side generation capacity to meet the Company's reliability need in 2018.

FIPUG, PCS Phosphate, NRG, Shady Hills, and SACE took positions opposed to DEF's; however, they did not provide arguments directly related to the information presented by DEF on this matter. OPC, similarly, did not file arguments directly related to the information discussed in this section. Calpine did not disagree with DEF on this matter and as a result did not file any arguments against DEF in their briefs.

Prior to DEF's issuance of its 2018 RFP it held a pre-issuance meeting to discuss the requirements of the 2018 RFP. As a result of the meeting, DEF eliminated a minimum generation capacity limit at the request of a potential bidder.

In response to its RFP, DEF received six bid proposals. As testified by Witness Borsch, none of the proposals met the Company's reliability need for 820 MW coming into service no later than May 1, 2018. Witness Borsch testified that DEF could have rejected the proposals for failure to comply with the 2018 RFP without further evaluation. Witness Borsch additionally testified that there were non-conformance issues or risks associated with the 2018 RFP threshold requirements or technical criteria associated with each of these six 2018 RFP proposals. However, DEF continued its evaluation of these six proposals to see if there was any combination of them that, individually or collectively with other undeveloped generic Company power plants, provided customers a more cost-effective supply-side generation alternative to the Citrus County Plant. As previously discussed, DEF performed a detailed evaluation of the

proposals that included transmission costs and the cost of imputed debt as well as other costs and charges.

DEF also retained an independent monitor/evaluator (Witness Taylor) to ensure that the 2018 RFP solicitation documents were clear, fair, and consistent with the Commission Bid Rule. Witness Taylor concluded that the RFP was sufficiently detailed to provide necessary information to proposers. No party presented any evidence that DEF did not reasonably evaluate all alternative scenarios.

Therefore, we find that DEF's RFP process, including oversight by an independent monitor, was sufficient to ensure a reasonable evaluation of alternative scenarios.

Determination of Need

We find that our analysis of the record evidence in this docket supports the need for the Citrus County Plant in 2018. The following summarizes our review of the proposed plant:

1. DEF's load forecast in this proceeding is reasonable.
2. No cost-effective DSM or renewable resources have been identified that could mitigate the need for the Citrus County Plant.
3. The Citrus County Plant is expected to provide adequate electricity at a reasonable cost to DEF's customers.
4. The Citrus County Plant will increase DEF's fuel diversity and supply reliability by relying on a new fuel transportation provider.
5. DEF performed a reasonable evaluation of alternatives to the Citrus County Plant.
6. Analyses indicate that the Citrus County Plant is the most cost-effective alternative compared to respondents to the Company's RFP and when compared to continuing operation of Crystal River Units 1 and 2.

Therefore, upon consideration of all of the evidence presented in this docket, we grant the requested determination of need since the proposed Citrus County Plant represents the optimal resource option to meet the Company's projected need in 2018.

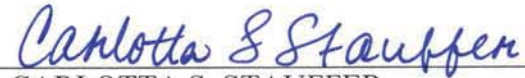
Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that the petition for determination of need, filed by Duke Energy Florida, Inc., is hereby granted as set forth herein. It is further

ORDERED that the findings set forth in the body of this Order are hereby approved. It is further

ORDERED that this docket shall be closed if no appeal is timely filed.

By ORDER of the Florida Public Service Commission this 10th day of October, 2014.



CARLOTTA S. STAUFFER
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399
(850) 413-6770
www.floridapsc.com

Copies furnished: A copy of this document is provided to the parties of record at the time of issuance and, if applicable, interested persons.

MTL

NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

Any party adversely affected by the Commission's final action in this matter may request:

- 1) reconsideration of the decision by filing a motion for reconsideration with the Office of Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, within five (5) days of the issuance of this order pursuant to Rule 25-22.080, Florida Administrative Code and submitted in the form prescribed by Rule 25-22.060, Florida Administrative Code; or 2) judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or the First District Court of Appeal in the case of a water and/or wastewater utility by filing a notice of appeal with the Office of Commission Clerk, and filing a copy of the notice of appeal and the filing fee with the appropriate court. This filing must be completed within thirty (30) days after the issuance of this order, pursuant to Rule 9.110, Florida Rules of Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900(a), Florida Rules of Appellate Procedure.

Appendix II-2
Southwest Florida Water Management District
Agency Report



An Equal
Opportunity
Employer

Southwest Florida Water Management District

2379 Broad Street, Brooksville, Florida 34604-6899

(352) 796-7211 or 1-800-423-1476 (FL only)

WaterMatters.org

Bartow Service Office
170 Century Boulevard
Bartow, Florida 33830-7700
(863) 534-1448 or
1-800-492-7862 (FL only)

Sarasota Service Office
6750 Fruitville Road
Sarasota, Florida 34240-9711
(941) 377-3722 or
1-800-320-3503 (FL only)

Tampa Service Office
7601 U.S. 301 North (Fort King Highway)
Tampa, Florida 33637-6759
(813) 985-7481 or
1-800-836-0797 (FL only)

February 11, 2015

Bobby Bull, P.E.
Florida Department of Environmental Protection
Siting Coordination Office
3900 Commonwealth Blvd. MS 48
Tallahassee, FL 32399

Subject: **SWFWMD AGENCY REPORT**
Duke Energy Florida – Citrus Combined Cycle Project
SCA 77-09A3 – OGC No. 2014027

Dear Mr. Bull:

Enclosed please find the Agency Report submitted by the Southwest Florida Water Management District (District) concerning the above-referenced site certification application. The Agency Report recommends issuance of a site certification for the Citrus Combined Cycle Project, provided the conditions proposed by the District are included in the certification.

If you have any questions concerning the enclosure, please contact me at the District's Tampa Office at the address above, at extension 4660 or by email at:
martha.moore@swfwmd.state.fl.us.

Sincerely,

Martha A. Moore
Assistant General Counsel

MAM/ns

cc: Alba Más
Darren Herbst
Claire Muirhead
Mario Cabana
James Golden
Attached service list

Michael A. Babb
Chair, Hillsborough

Randall S. Maggard
Vice Chair, Pasco

Jeffrey M. Adams
Secretary, Pinellas

David W. Dunbar
Treasurer, Hillsborough, Pinellas

Carlos Beruff
Former Chair, Manatee

H. Paul Senft, Jr.
Former Chair, Polk

Ed Armstrong
Pinellas

Bryan K. Beswick
DeSoto, Hardee, Highlands

Thomas E. Bronson
Hernando, Marion

Wendy Griffin
Hillsborough

George W. Mann
Polk

Michael A. Moran
Charlotte, Sarasota

Vacant
Citrus, Lake, Levy, Sumter

Robert R. Beltran, P.E.
Executive Director

SERVICE LIST

Department of Environmental Protection

Benjamin M. Melnick, Esquire
Office of General Counsel
3900 Commonwealth Boulevard
Tallahassee, Florida 32399
Benjamin.Melnick@dep.state.fl.us

Duke Energy Florida

Kristy B. Parker, Esquire
Associate General Counsel
299 First Avenue N.
St. Petersburg, Florida 33701
Kristy.Parker@duke-energy.com

Brooke E. Lewis, Esquire

James S. Alves, Esquire
Hopping Green & Sams, PA
119 South Monroe Street, Suite 300
Tallahassee, Florida 32301
BrookeL@hgslaw.com
JimA@hgslaw.com

Florida Public Service Commission

Adam Teitzman, Esquire
2450 Shumard Oak Boulevard
Tallahassee, Florida 32399
ateitzma@psc.state.fl.us

Department of Transportation

Kimberly Clark Menchion, Esquire
605 Suwannee Street, MS 58
Tallahassee, Florida 32399
Kimberly.Menchion@dot.state.fl.us

Department of Agriculture & Consumer Services

Forest Watson
Division of Forestry
3125 Connor Boulevard
Tallahassee, Florida 32399
watsonf@doacs.state.fl.us

Department of Economic Opportunity

Aaron Dunlap, Esquire
620 South Meridian Street, MS 5B5
107 East Madison Street
Tallahassee, Florida 32399
Aaron.Dunlap@deo.myflorida.com

Withlacoochee Regional Planning Council

Bruce Day
Planning Director
1241 SW 10th Street
Ocala, Florida 34471
bday@wrpc.cc

Citrus County

Kerry Parsons
County Attorney
110 N. Apopka Ave.
Inverness, FL
Kerry.parsons@bocc.citrus.fl.us

Florida Department of Health

Gerald Briggs
4052 Bald Cypress Way
Tallahassee, Florida 32399
Gerald.Briggs@flhealth.gov

Florida Fish & Wildlife Conservation Commission

Anthony Pinzino, Esquire
Farris Bryant Building
620 South Meridian Street
Tallahassee, Florida 32399-1600
Anthony.pinzino@myfwc.com

Department of State

Deena Woodward
Division of Historical Resources
RA Gray Building, 4th Floor
500 South Bronough Street
Tallahassee, Florida 32399
Deena.woodward@dos.myflorida.com

**VIII. SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT -
FACILITY-WIDE CONDITIONS**

A. Withdrawals, Water Supply Plan & Water Use Summary Report

1. DEF is authorized to withdraw groundwater for construction, operation, maintenance, decommissioning, and/or demolition of Crystal River Energy Complex (CREC) Units 1, 2, 3, 4, and 5, and Citrus Combined Cycle (CCC) Units 1 and 2, as specified in the Water Supply Plan & Specific Conditions attached as Attachment X to these Conditions of Certification. These withdrawals may be reduced by the SWFWMD based on information submitted by the Licensee in its Annual Water Use Summary Report, pursuant to subsection A.2 below.

2. SWFWMD and DEF recognize that future planned activities at the CREC may result in a reduction in the groundwater demand for the facility. By April 1 of each year, following the certification of the CCC Project, DEF shall prepare and submit to SWFWMD, for review and approval, an Annual Water Use Summary Report (Report) for the preceding calendar year that confirms the continued water use allocations identified in Attachment X or any reductions in demand. The report shall include information documenting water demands and updated demand projections for CREC Units 1, 2, 3, 4, and 5 and CCC Units 1 and 2. The Report shall include, but not be limited to, graphs and narratives describing water use at CREC in relation to operation, retirement, or decommissioning of existing generating units, operation of new units, use of alternative water supplies, and other factors that affect water use, and events in the upcoming year that might impact water use. If appropriate, where alternative water sources such as reclaimed water have been implemented by DEF, the Report shall identify allocated quantities to be authorized for standby purposes. Any reductions in demand shall be reflected in the allocations and other appropriate sections of Attachment X. Any planned or proposed increase in demand shall be reviewed as a modification to this certification. The first annual report shall be developed in coordination with the SWFWMD Water Use Permit Bureau to ensure agreement with the report content prior to submittal to the SWFWMD for approval.

3. All groundwater withdrawals associated with CREC Units 1, 2, 3, 4, and 5, and CCC Units 1 and 2 are intended to be consolidated and authorized under these Conditions of Certification rather than via separate water use permit(s). Therefore, within 30 days after the expiration of the time for filing an appeal of the final order of certification for the Citrus CCC Project which includes this Condition of Certification consolidating the facility water use or, if appealed, within 30 days after the final resolution of all appeals, DEF shall submit a request to administratively cancel Water Use Permit No. 20004695.004 issued by SWFWMD and such permit shall be administratively cancelled by SWFWMD pursuant to rule 40D-2.341(3), Florida Administrative Code.

4. The Licensee shall comply with all monitoring, reporting and compliance requirements applicable to CREC Units 1, 2, 3, 4, and 5, as well as the CCC Units 1 and 2

attached as Attachment X to these Conditions of Certification. Such provisions shall be fully enforceable as conditions of this certification. Any violation of such provisions shall be a violation of these Conditions of Certification. The requirements of the Plan shall include the following:

- a). Withdrawal quantities and facilities;
- b). Distribution Flexibility;
- c). Environmental monitoring to evaluate the relative condition of surface waters and wetlands in areas affected by water withdrawals;
- d). Compliance reporting at 10 year intervals to ensure that groundwater withdrawals are continuing to meet the requirements of these Conditions of Certification and the substantive requirements of Chapter 40D-2, Florida Administrative Code, and SWFWMD's Water Use Permit Manual Part B, Basis of Review;
- e). Pumpage and meter reporting;
- f). Water quality sampling;
- g). Water level monitoring; and
- h). Rainfall monitoring

5. The Annual Water Use Summary Report and the Water Supply Plan & Special Conditions (Attachment X) shall be reviewed in accordance with General Condition XX.

6. Wetlands and other surface waters may not be adversely impacted as a result of the water use authorized by these Conditions of Certification. If unacceptable adverse impacts occur, the SWFWMD will request that DEP revoke these Conditions of Certification in whole or in part to curtail or abate the unacceptable adverse impacts, unless the impacts can be mitigated by Licensee.

7. All timeframes in these Conditions of Certification may be altered by agreement of SWFWMD and DEF without modification of these Conditions of Certification.

8. Within sixty (60) days of Certification of CCC Units 1 and 2, the Licensee shall designate a point of contact responsible for receiving and responding to the SWFWMD notices and correspondence related to these Conditions of Certification. Notification to the SWFWMD of the designee, including address and telephone number, shall be in written form and submitted to the SWFWMD Water Use Permit Bureau.

B. Alternative Water Supply Investigation

The Licensee shall investigate the feasibility of using additional reclaimed water or other alternative water supplies as a water source and submit a report to the SWFWMD Water Use Permit Bureau describing the findings of the feasibility investigation no later than April 1, of the 5th anniversary of the effective date of the Final Order of certification for the Citrus Combined Cycle Project and at 5 year intervals thereafter. The report shall contain an analysis of potential alternative water supply sources in the area, including the location of those sources, the quantity of water available, the projected date(s) of availability, and costs associated with obtaining and transporting the reclaimed water or alternative water supplies to the CREC or CCC facility. At such time as the SWFWMD determines that use of additional alternative water supplies are environmentally, technically, and economically feasible, an implementation schedule shall be developed and these Conditions of Certification shall be modified to reduce, by the amount of additional reclaimed water, the quantity of ground water authorized for consumption by the site.

The lowest quality water source, including reclaimed water, surface water and stormwater, must be used for each consumptive use authorized by these conditions of certification when available, except when Licensee demonstrates, as determined by SWFWMD, that the use of the lower quality water source is not economically, environmentally, or technologically feasible, in accordance with the SWFWMD's Water Use Permit Applicant's Handbook, Part B, Sections 2.4.1.

C. Wells

1. Any wells not in use, and in which pumping equipment is not installed shall be capped or valved in a water tight manner in accordance with Chapter 62-532.500(3)(a)(4), F.A.C. (568)

2. Within 90 days of the completion of each proposed well, Licensee shall submit to the SWFWMD specific capacity (well testing) information from any test performed by the Water Well Contractor or pump installer on the well. This information shall include:

- a. Static water level before pumping;
- b. Duration of test pumping;
- c. Gallons per minute pumped; and
- d. Final water level measured during pumping

If step-drawdown tests were performed, the information listed above shall be submitted for each step.

3. Within 90 days of construction, Licensee shall submit to the SWFWMD Water Use Permit Bureau, the specific locations of SWFWMD ID Nos. 14, 15, 16, Licensee ID Nos. PW-8, PW-9a, PW-10a, on an original blue line aerial with a minimum scale of one inch equals 800 feet, or by latitude/longitude. Intake and mainline diameters for each of the above pumps shall be reported at the time of location reporting.

4. For the purpose of determining site-specific transmissivity, a step drawdown and a multi-ell constant rate test shall be performed on one or more of the

following: SWFWMD ID Nos. 14, 15, 16, Licensee ID Nos. PW-8, PW-9a, PW-10a, after the wells have been fully developed. The test shall be performed in accordance with the specifications set forth in Design Aid 3, Water Use Permit Information Manual and an Aquifer Performance Testing (APT) Plan submitted to and approved by the SWFWMD. The APT Plan shall be submitted to the SWFWMD, within 90 days of the approval of these conditions of certification. The APT shall be conducted by the Licensee within 6 months of construction of the wells included in the APT Plan and prior to the use of any of the wells constructed for the APT'S. All recorded raw data shall be submitted to the SWFWMD within thirty (30) days of completion of the APT.

D. Water Conservation

1. Within 90 days of certification issuance, the Licensee shall submit a facility-wide Water Conservation Plan to the SWFWMD for review and approval that includes practices currently employed or planned. For planned components, the Plan shall include an estimated time-frame for implementation for each component. The Plan must document that technically and economically feasible water conservation opportunities have been or will be employed.

ATTACHMENT “X”

**SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
WATER SUPPLY PLAN & SPECIFIC CONDITIONS**

**Crystal River Energy Complex – Units
1, 2, 3, 4 & 5 (CREC) & Citrus
Combined Cycle Facility (Citrus CC) –
Units 1 and 2
15760 West Powerline Street
Crystal River, FL 34428
Citrus County**

CREC - Latitude: 28° 57' 27" N Longitude: 82° 42' 36" W
Citrus CC - Latitude: 28° 58' 6" N Longitude: 82° 40' 16" W

These SWFWMD requirements were developed by the Licensee in conjunction with the SWFWMD's Water Use Permit Bureau to incorporate water use requirements into the Licensee's Conditions of Certification. This attachment incorporates requirements related to Crystal River Energy Complex (CREC) Units 1, 2, 3, 4 and 5 withdrawals, and the new Citrus Combined Cycle (CCC) Units 1 and 2 withdrawals. The SWFWMD is responsible for reviewing and approving all revisions to this document in accordance with its Conditions of Certification.

The following Specific Conditions shall apply facility-wide. Compliance with these Specific Conditions shall be the responsibility of the Licensee.

The Licensee is authorized to withdraw up to 5.309 million gallons per day (mgd) (annual average) and 5.809 mgd (peak demand) of groundwater for construction, operation, maintenance, decommissioning, and/or demolition of CREC Units 1, 2, 3, 4, and 5, and CCC Units 1 and 2, unless reduced by the SWFWMD based on the annual Water Use Summary Report submitted by the Licensee for SWFWMD review and approval, pursuant to Condition VIII.A.2.

District Identification (DID) Nos. 1 through 7, and 14 through 16 shown in Table 1 below were associated with tracking WUP No. 20003672.001 previously issued for CREC Units 3, 4 and 5, while DID Nos. 18 through 22 shown below are transferred from WUP No. 20004695.004 previously issued for CREC Units 1, 2 and 3. These withdrawals are hereby combined and henceforth tracked under WUP No. 20003672.002 issued for CREC Units 1, 2, 3, 4 and 5, and the new CCC Units 1 and 2.

A. Withdrawal Quantities and Facilities

Table 1

District ID / Licensee ID	Diameter (In.)	Total Depth (ft. bls)	Cased Depth (ft. bls)	Water Allocation	
				Annual Average Gallons per Day *	Peak Month
1 / PW-1	10	200	35	430,900	430,900
2 / PW-2	10	200	47	430,900	430,900
3 / PW-3	10	200	60	430,900	430,900
4 / PW-4	10	200	41	430,900	430,900
5 / PW-5	10	200	35	430,900	430,900
6 / PW-6	10	200	50	430,900	430,900
7 / PW-7	10	200	50	430,900	430,900
14 / PW-8	12	220	84.5	430,900	430,900
15 / PW-9a	12	200	58.5	430,900	430,900
16 / PW-10a	12	200	58.5	430,900	430,900
18 / PW1A	5	42	42	25,000	37,500
19 / PW1B	8	42	42	25,000	37,500
20 / SPW3	10	90	36	380,000	570,000
21 / SPW4	10	125	37	285,000	427,500
22 / SPW5	10	72	UNK	285,000	427,500
Total =				5,309,000 *	5,809,000**

* Measured on a rolling annual average daily flow (RAADF) basis.

** Based on a 1.500 MGD peak month value allowed for Licensee ID Nos. PW1A, PW1B, SPW3, SPW4 and SPW5.

B. Submit Reports/Data

All reports and data required by condition(s) shall be submitted to the District according to the due date(s) contained in the specific condition. If the condition specifies that a District-supplied form is to be used, the Licensee should use that form in order for its submission to be acknowledged in a timely manner. The Licensee may use the District Permit Information Center (www.swfwmd.state.fl.us/permits/epermitting/) to submit data, plans or reports online. There are instructions at the District website on how to register to set up an account to do so. If the report or data are received on or before the tenth day of the month following data collection, it shall be deemed to be a timely submittal.

All mailed reports and data are to be sent to:
Southwest Florida Water Management District
Tampa Regulation Department, Water Use Permit Bureau
7601 U.S. Hwy. 301 North
Tampa, Florida 33637-6759

Submission of plans and reports: Unless submitted online or otherwise indicated in the COC, the original and two copies of each plan and report, such as conservation plans, environmental analyses, aquifer test results, per capita annual reports, etc. are required.

Submission of data: Unless otherwise indicated in the COC, an original (no copies) is required for data submittals such as crop report forms, meter readings and/or pumpage, rainfall, water level evapotranspiration, or water quality data. (499)

C. Distribution Flexibility

The annual average daily, peak month, and maximum daily, if applicable, quantities shown in the withdrawal point quantity table (Table 1) are estimates based on historic and/or projected distribution of pumpage, and are for water use inventory and impact analysis purposes only. The quantities listed for these individual sources are not intended to dictate the distribution of pumpage from the withdrawal sources. The Licensee may make adjustments in pumpage distribution as necessary up to **125 percent** on a rolling annual average daily flow basis, so long as adverse environmental impacts do not result and the Licensee complies with all other conditions of this certification. In all cases, the total average annual daily withdrawal and the total peak monthly daily withdrawal are limited to the quantities set forth above. (221)

D. Environmental Impacts, Monitoring, and Mitigation: Environmental Assessment

1. Environmental Monitoring Plan

Licensee shall maintain the District-approved Environmental Monitoring Plan. This monitoring plan, at a minimum utilizes the SWFWMD's Wetland Assessment Procedure to evaluate the relative condition of surface waters and wetlands in areas affected by water withdrawals of Licensee from the wells listed in Table 1 above. Monitoring reports associated with the plan shall be provided in the annual monitoring report required by Item 6 below. After two years of monitoring following

groundwater use rising to more than 5 million gallons per day (average annual daily withdrawal quantity) from all the wells included in this site certification, the Licensee may request the SWFWMD release the Licensee from monitoring. If the SWFWMD concurs with the request, this Appendix will be revised accordingly.

2. Data Collection:

Licensee shall maintain and monitor the environmental monitoring sites included in the approved monitoring plan. Water levels for monitor wells and staff gauges for the sites included in the monitoring plan shall be referenced to National Geodetic Vertical Datum (NGVD) and reported in a form acceptable to the SWFWMD by the 10th day of each month for the preceding month. The time and date that the elevation is taken shall be included. Any changes to the methods or frequency of monitoring for any of these data collection programs must be approved by the SWFWMD.

3. Staff Gauges:

Licensee shall install and thereafter maintain SWFWMD-approved staff gauges and shall report measurements of water levels, as indicated in the monitoring plan. Water levels shall be recorded and reported to the SWFWMD on or before the tenth day of the following month. To the maximum extent possible, water levels shall be recorded as indicated in the monitoring plan. The frequency of recording may be modified by the SWFWMD as necessary to ensure protection of the resource.

4. Rain Gauges:

Licensee shall maintain a continuous recording rain gauge (District ID No. 17, Licensee ID No. 17) within the area. Total daily rainfall shall be recorded at this station and submitted to the SWFWMD (on SWFWMD forms or on line) on or before the tenth day of the following month. The reporting period for these data shall begin on the first day of each month and end on the last day of each month.

5. Data Handling:

Licensee shall monitor water levels in the monitor wells and piezometers as specified in the monitoring plan. Reports of the data shall be submitted to the SWFWMD in a form acceptable to the SWFWMD. All data shall be referenced to NGVD. The frequency of water-level recording may be modified by the SWFWMD as necessary to ensure the protection of the resource.

6. Annual Environmental Monitoring Reports

Licensee shall submit an annual environmental monitoring data summary by April 1st of each year for the preceding water year (January 1 – December 31). The Annual Monitoring Report shall include all raw data, essential graphs, tables, and text. Monitoring progress at each site shall be summarized in the Annual Monitoring Report, as specified below. Licensee shall submit three copies of the Annual Monitoring Report each year. Interpretive reports of wellfield environmental conditions shall incorporate all environmental monitoring sites used. The Annual Monitoring Report shall assess relationships between water level fluctuations, well pumpage, atmospheric conditions, and drainage factors related to the environmental condition of the wetlands and surface waters in the vicinity of the conditions of certification area. Pumpage data, wetland, water level data collected from the aquifer and for the region, and environmental parameters collected at the wellfield and in the region shall be used for the report results. Statistical trend analysis, such as double-mass curve analysis, multiple linear regression, time series analysis and/or factor analysis shall be performed to analyze the interactions of rainfall and pumpage on surficial water levels, potentiometric levels in the semi- confined aquifers,

surface waters, and wetland water levels, rate of soil subsidence, and evidence of vegetational succession. Data shall be obtained through field measurements and aerial photo interpretation. A brief summary of any recommended changes to the monitoring requirements shall be provided.

E. Compliance Reporting

The Licensee shall submit a compliance report beginning January 28, 2018 and at 10 year intervals thereafter. The report must contain sufficient information to demonstrate reasonable assurance that the withdrawals and use of water authorized by these conditions of certification continue to meet the substantive requirements set forth in Chapter 40D-2, F.A.C., and SWFWMD's Water Use Permit Information Manual Part B, Basis of Review. The compliance report must include:

1. Information documenting water demands and updated demand projections demonstrating that allocations from all sources in the conditions of certification will continue to be needed for the remainder of the conditions of certification duration;
2. Documentation verifying that the sources are capable of supplying the needs authorized by these conditions of certification without causing harm to water and water-related resources;
3. Documentation verifying that the use of water is efficient and that the Licensee is implementing all feasible water conservation measures;
4. An updated groundwater modeling analysis and data analysis demonstrating that the use of groundwater does not interfere with legal uses existing at the time of issuance of this modification of the conditions of certification;
5. An updated groundwater modeling analysis, along with statistical analyses of water-level and wetland monitoring data, demonstrating that the use does not cause adverse impacts to wetlands, and surface waters, or violations of MFLs;
6. Documentation that groundwater withdrawals by the Licensee are not causing or contributing to significant saltwater intrusion, including but not limited to review and statistical analyses of groundwater level and water quality data collected by the Licensee under these conditions of certification;
7. Information demonstrating that the lowest quality source of water is being used to meet the water demands.

Following review of this report, SWFWMD may seek modification of the conditions of certification or this Appendix to ensure that the use continues to meet the substantive conditions for the consumptive use of water as set forth in Section 373.223, F.S., and Chapter 40D-2, F.A.C.

F. Pumpage Reporting

The withdrawal facilities listed in Table 1 above shall continue to be maintained and operated with existing, non-resettable, totalizing flow meter(s) or other measuring device(s) as approved by the SWFWMD Water Use Permit Bureau Chief. Monthly meter reading and reporting, as well as meter accuracy checks every five years shall be in accordance with instructions in Exhibit A, Metering Instructions, attached to and made part of this Attachment. (719)

G. Water Quality Sampling

Water quality samples from the withdrawal points listed below in Table 2 shall be collected after pumping the withdrawal point at its normal rate for a pumping time specified below, or to

a constant temperature, pH, and conductivity. The frequency of sampling per water quality parameter is listed in the table according to the withdrawal point. The recording and reporting shall begin according to the first sample date for existing wells and shall begin within 90 days of completion of any proposed wells. Samples shall be collected whether or not the well is being used unless infeasible. If sampling is infeasible, the Permittee shall indicate the reason for not sampling on the water quality data form or in the space for comments in the WUP Portal for data submissions. For sampling, analysis and submittal requirements see Exhibit A, Water Quality Sampling Instructions, attached to and made part of this Attachment. (752)

Table 2

District ID No.	Licensee ID No.	Minimum Pumping Time (min.)	Parameter	Sampling Frequency
			Chlorides, Sulfates and TDS	February, May, August, and November
1	PW-1	20		
2	PW-2	20		
3	PW-3	20		
4	PW-4	20		
5	PW-5	20		
6	PW-6	20		
7	PW-7	20		
14	PW-8	20		
15	PW-9a	20		
16	PW-10a	20		
21	SPW4	20		

2. Water quality samples from the monitor sites listed below in Table 3 shall be collected and analyzed for the parameter(s) specified at the frequency indicated. For sampling, analysis and submittal requirements see Exhibit A, Water Quality Sampling Instructions, attached to and made part of this Attachment. (750)

Table 3

District ID No.	Licensee ID No.	Parameter	Sample Frequency
8	MZ-2I	Chlorides,	May, September
9	MZ-2D	Sulfates, and TDS	
10	MZ-2S		
11	MZ-1S		
12	MZ-1I		
13	MZ-1D		

3. The SWFWMD reserves the right to set chloride, sulfate or TDS concentration limits on any production well in the future, based on data collected and after a sufficient data base has been established to determine limits. These limits shall be required after discussions with the Licensee. At such time as the concentration in any water sample reaches or exceeds the designated concentration limits, the Licensee shall take appropriate action to reduce concentrations to below those set for the particular well. If the SWFWMD determines that long-term upward trends or other significant water quality changes are occurring, the SWFWMD may reconsider the quantities included in these conditions of certification. (276)

4. The Licensee shall continue to maintain the monitor well(s) or piezometer(s) listed below in Table 4 and report them to the District at the frequency listed. Water levels shall be recorded relative to National Geodetic Vertical Datum (NGVD), and to the maximum extent possible, recorded on a regular schedule: same time each day, same day each week, same week each month as appropriate to the frequency noted. The readings shall be reported online via the WUP Portal at the District website (www.watermatters.org) or mailed in hardcopy on District-provided forms to the Water Use Permit Bureau, on or before the tenth day of the following month. The frequency of recording may be modified by the SWFWMD Water Use Permit Bureau Chief, as necessary to ensure the protection of the resource. (756)

Table 4

SWFWMD ID. No	Licensee ID No.	Frequency
8	MZ-2I	Monthly
9	MZ-2D	Monthly
10	MZ-2S	Monthly
11	MZ-1S	Monthly
12	MZ-1I	Monthly
13	MZ-1D	Monthly
23	MONW	Monthly

H. Vertical Datum Conversion

Before January 1, 2016, the Permittee shall submit a plan where the existing water level monitoring sites, District ID Nos. 8, 9, 10, 11, 12, 13, and 23, Licensee ID Nos. MZ-2I, MZ-2D, MZ-2S, MZ-1S, MZ-1I, MZ-1D and MONW shall be re-surveyed to North American Vertical Datum 1988. The plan shall specify which monitor sites will be re-surveyed and when it will be done. Following District approval, the plan shall be implemented and a copy of each certified resurvey will be submitted to the District according to the schedule. (850)

I. Standard Conditions

1. With advance notice to the Licensee, SWFWMD staff with proper identification shall have permission to enter, inspect, collect samples, take measurements, observe permitted and related facilities and collect any information deemed necessary to protect the water resources of the area and to determine compliance with the approved plans, specifications and conditions of this permit. The Licensee shall either accompany SWFWMD staff onto the property or make provision for access onto the property. The SWFWMD may require the Licensee to submit water samples when the SWFWMD determines there is a potential for adverse impacts to water quality. (265)

2. All permits or other water use authorizations are contingent upon continued ownership or legal control of all property on which pumps, wells, diversions or other water withdrawal facilities are located. (266)

3. When necessary to analyze impacts to the water resource or existing users, the SWFWMD shall require the Licensee to install flow metering or other measuring devices to record withdrawal quantities and submit the data to the District. (269)

4. The SWFWMD shall collect water samples from any withdrawal point listed in the permit or shall require the permittee to submit water samples when the SWFWMD determines there is a potential for adverse impacts to water quality. (271)

5. A SWFWMD identification tag shall be prominently displayed at each withdrawal point that is required by the SWFWMD to be metered or for which withdrawal quantities are required to be reported to the SWFWMD, by permanently affixing the tag to the withdrawal facility. (277)

6. The Licensee shall mitigate any adverse impact to environmental features or offsite land uses as a result of withdrawals. When adverse impacts occur or are imminent, the SWFWMD shall require the Licensee to mitigate the impacts. Examples of adverse impacts include the following:

- A. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams or other watercourses; or
- B. Damage to crops and other vegetation causing financial harm to the owner; and
- C. Damage to the habitat of endangered or threatened species. (361)

7. The Licensee shall mitigate any adverse impact to existing legal uses caused by withdrawals. When adverse impacts occur or are imminent, the SWFWMD may require the Licensee to mitigate the impacts. Adverse impacts include:

- A. A reduction in water levels which impairs the ability of a well to produce water;
- B. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams or other watercourses; or
- C. Significant inducement of natural or manmade contaminants into a water supply or into a usable portion of an aquifer or water body. (362)

8. Licensee shall notify the SWFWMD in writing within 30 days of any sale, transfer, or conveyance of ownership or any other loss of permitted legal control of the site and / or related facilities from which the permitted consumptive use is made. Where Licensee's control of the land subject to the certification was demonstrated through a lease, the Licensee must either submit documentation showing that it continues to have legal control or transfer control of the permitted system / project to the new landowner or new lessee. All transfers of ownership are subject to the requirements of Rule 40D-1.6105, F.A.C. Alternatively, the Licensee may surrender the consumptive use permit to the SWFWMD, thereby relinquishing the right to conduct any activities under the permit. (382)

9. All consumptive uses authorized by the COCs shall be implemented as set forth in the

conditions, including any documents incorporated by reference in a specific condition. The SWFWMD may request that DEP revoke this certification, in whole or in part, or take enforcement action, pursuant to sections 373.136 or 373.243, F.S., unless a modification has been obtained. (403)

10. Water use authorized under the SWFWMD's conditions do not convey to the Licensee any property rights or privileges other than those specified herein, nor relieve the Licensee from complying with any applicable local government, state, or federal law, rule, or ordinance. (404)

11. The Licensee shall cease or reduce surface water withdrawal as directed by the SWFWMD if water levels in lakes fall below the applicable minimum water level established in Chapter 40D-8, F.A.C., or rates of flow in streams fall below the minimum levels established in Chapter 40D-8, F.A.C. (409)

12. The Licensee shall cease or reduce withdrawal as directed by the SWFWMD if water levels in aquifers fall below the minimum levels established by the SWFWMD. (410)

13. The Licensee is advised that the substantive provisions of section 373.239, F.S., and Rule 40D-2.331, F.A.C., are applicable to modifications relating to SWFWMD conditions for water use. (412)

14. The Licensee shall practice water conservation to increase the efficiency of transport, application, and use, as well as to decrease waste and to minimize runoff from the property. At such time as the SWFWMD adopts specific conservation requirements for the Licensee's water use classification, these conditions shall be subject to those requirements upon notice and after a reasonable period for compliance. (556)

15. The SWFWMD may establish special regulations for Water-Use Caution Areas. At such time as the SWFWMD adopts such provisions, this permit shall be subject to them upon notice and after a reasonable period for compliance. (564)

16. Nothing in these conditions should be construed to limit the authority of the SWFWMD to declare a water shortage and issue orders pursuant to chapter 373, F.S. In the event of a declared water shortage, the Licensee must adhere to the water shortage restrictions, as specified by the SWFWMD. The Licensee is advised that during a water shortage, reports shall be submitted as required by SWFWMD rule or order. (565)

17. The SWFWMD-related conditions of certification are based on information provided by the Licensee demonstrating that the use of water is reasonable and beneficial, consistent with the public interest, and will not interfere with any existing legal use of water. If, during the term of the certification, it is determined by the SWFWMD that a statement in the application and in the supporting data are found to be untrue and inaccurate, the use is not reasonable and beneficial, in the public interest, or does impact an existing legal use of water, the SWFWMD shall seek modification of this COCs The Licensee shall immediately notify the SWFWMD in writing of any previously submitted information that is later discovered to be inaccurate. (566)

Attachment X
Exhibit A - Instructions

METERING INSTRUCTIONS

The Licensee shall meter withdrawals from surface waters and/or the ground water resources, and meter readings from each withdrawal facility shall be recorded on a monthly basis within the last week of the month. The meter reading(s) shall be reported to the SWFWMD Water Use Permit Bureau on or before the tenth day of the following month for monthly reporting frequencies. For bi-annual reporting, the data shall be recorded on a monthly basis and reported on or before the tenth day of the month following the sixth month of recorded data. The Licensee shall submit meter readings online using the Permit Information Center at <http://www.swfwmd.state.fl.us/permits/> or on District-supplied scanning forms unless another arrangement for submission of this data has been approved by the SWFWMD. Submission of such data by any other unauthorized form or mechanism may result in loss of data and subsequent delinquency notifications. Call the Water Use Permit Bureau in Tampa at (813) 985-7481 if difficulty is encountered.

The meters shall adhere to the following descriptions and shall be installed or maintained as follows:

1. The meter(s) shall be non-resettable, totalizing flow meter(s) that have a totalizer of sufficient magnitude to retain total gallon data for a minimum of the three highest consecutive months permitted quantities. If other measuring device(s) are proposed, prior to installation, approval shall be obtained in writing from the Water Use Permit Bureau Chief.
2. The Licensee shall report non-use on all metered standby withdrawal facilities on the scanning form or approved alternative reporting method.
3. If a metered withdrawal facility is not used during any given month, the meter report shall be submitted to the SWFWMD indicating the same meter reading as was submitted the previous month.
4. The flow meter(s) or other approved device(s) shall have and maintain an accuracy within five percent of the actual flow as installed.
5. Meter accuracy testing requirements:
 - A. For newly metered withdrawal points, the flow meter installation shall be designed for inline field access for meter accuracy testing.
 - B. The meter shall be tested for accuracy on-site, as installed according to the Flow Meter Accuracy Test Instructions in this Exhibit B, every five years in the assigned month for the county, beginning from the date of its installation for new meters or from the date of initial issuance of this permit containing the metering condition with an accuracy test requirement for existing meters.
 - C. The testing frequency will be decreased if the Permittee demonstrates to the satisfaction of the District that a longer period of time for testing is warranted.
 - D. The test will be accepted by the District only if performed by a person knowledgeable in the testing equipment used.
 - E. If the actual flow is found to be greater than 5% different from the measured flow, within 30 days, the Permittee shall have the meter re-calibrated, repaired, or replaced, whichever is necessary. Documentation of the test and a certificate of re-calibration, if applicable, shall be submitted within 30 days of each test or re-calibration.
6. The meter shall be installed according to the manufacturer's instructions for achieving accurate flow to the specifications above, or it shall be installed in a straight length of pipe where there is at least an upstream length equal to ten (10) times the outside pipe diameter and a downstream length equal to two

(2) times the outside pipe diameter. Where there is not at least a length of ten diameters upstream available, flow straightening vanes shall be used in the upstream line.

7. Broken or malfunctioning meter:

A. If the meter or other flow measuring device malfunctions or breaks, the Permittee shall notify the District within 15 days of discovering the malfunction or breakage.

B. The meter must be replaced with a repaired or new meter, subject to the same specifications given above, within 30 days of the discovery.

C. If the meter is removed from the withdrawal point for any other reason, it shall be replaced with another meter having the same specifications given above, or the meter shall be reinstalled within 30 days of its removal from the withdrawal. In either event, a fully functioning meter shall not be off the withdrawal point for more than 60 consecutive days.

8. While the meter is not functioning correctly, the Licensee shall keep track of the total amount of time the withdrawal point was used for each month and multiply those minutes times the pump capacity (in gallons per minute) for total gallons. The estimate of the number of gallons used each month during that period shall be submitted on SWFWMD scanning forms and noted as estimated per instructions on the form. If the data is submitted by another approved method, the fact that it is estimated must be indicated. The reason for the necessity to estimate pumpage shall be reported with the estimate.

9. In the event a new meter is installed to replace a broken meter, it and its installation shall meet the specifications of this condition. The permittee shall notify the SWFWMD of the replacement with the first submittal of meter readings from the new meter.

FLOW METER ACCURACY TEST INSTRUCTIONS

1. Accuracy Test Due Dates - The Licensee is to schedule their accuracy test according to the following schedule:

A. For existing metered withdrawal points, add five years to the previous test year, and make the test in the month assigned to your county.

B. For withdrawal points for which metering is added for the first time, the test is to be scheduled five years from the issue year in the month assigned to your county.

C. For proposed withdrawal points, the test date is five years from the completion date of the withdrawal point in the month assigned to your county.

D. For the Licensee's convenience, if there are multiple due-years for meter accuracy testing because of the timing of the installation and/or previous accuracy tests of meters, the Licensee can submit a request in writing to the Water Use Permit Bureau Chief for one specific year to be assigned as the due date year for meter testing. If Licensee has many meters to test it may also request the tests to be grouped into one year or spread out evenly over two to three years.

E. The months for accuracy testing of meters are assigned by county. The Licensee is requested but not required to have their testing done in the month assigned to their county. This is to have sufficient SWFWMD staff available for assistance.

January	Hillsborough
February	Manatee, Pasco
March	Polk (for odd numbered permits)*
April	Polk (for even numbered permits)*
May	Highlands
June	Hardee, Charlotte
July	None or Special Request
August	None or Special Request
September	DeSoto, Sarasota

October	Citrus, Levy, Lake
November	Hernando, Sumter, Marion
December	Pinellas

* The Licensee may request their multiple permits be tested in the same month.

2. Accuracy Test Requirements: The Licensee shall test the accuracy of flow meters on permitted withdrawal points as follows:

A. The equipment water temperature shall be set to 72 degrees Fahrenheit for ground water, and to the measured water temperature for other water sources.

B. A minimum of two separate timed tests shall be performed for each meter. Each timed test shall consist of measuring flow using the test meter and the installed meter for a minimum of four minutes duration. If the two tests do not yield consistent results, additional tests shall be performed for a minimum of eight minutes or longer per test until consistent results are obtained.

C. If the installed meter has a rate of flow, or large multiplier that does not allow for consistent results to be obtained with four- or eight-minute tests, the duration of the test shall be increased as necessary to obtain accurate and consistent results with respect to the type of flow meter installed.

D. The results of two consistent tests shall be averaged, and the result will be considered the test result for the meter being tested. This result shall be expressed as a plus or minus percent (rounded to the nearest one-tenth percent) accuracy of the installed meter relative to the test meter. The percent accuracy indicates the deviation (if any), of the meter being tested from the test meter.

3. Accuracy Test Report: The Licensee shall demonstrate that the results of the meter test(s) are accurate by submitting the following information within 30 days of the test:

A. A completed Flow Meter Accuracy Verification Form, Form LEG-R.014.00 for each flow meter tested. This form can be obtained from the District's website (<http://www.swfwmd.state.fl.us/>) under "Permits and Rules" for Water Use Permits.

B. A printout of data that was input into the test equipment if the test equipment is capable of creating such a printout;

C. A statement attesting that the manufacturer of the test equipment, or an entity approved or authorized by the manufacturer, has trained the operator to use the specific model test equipment used for testing;

D. The date of the test equipment's most recent calibration that demonstrates that it was calibrated within the previous twelve months, and the test lab's National Institute of Standards and Testing (N.I.S.T.) traceability reference number.

E. A diagram showing the precise location on the pipe where the testing equipment was mounted shall be supplied with the form. This diagram shall also show the pump, installed meter, the configuration (with all valves, tees, elbows, and any other possible flow disturbing devices) that exists between the pump and the test location clearly noted with measurements. If flow straightening vanes are utilized, their location(s) shall also be included in the diagram.

F. A picture of the test location, including the pump, installed flow meter, and the measuring device, or for sites where the picture does not include all of the items listed above, a picture of the test site with a notation of distances to these items.

WATER QUALITY INSTRUCTIONS

The Licensee shall perform water quality sampling, analysis and reporting as follows:

1. The sampling method(s) from both monitor wells and surface water bodies shall be designed to collect water samples that are chemically representative of the zone of the aquifer or the depth or area of the water body.

2. Water quality samples from monitor wells shall be taken after pumping the well for the minimum

time specified (if specified) or after the water reaches a constant temperature, pH, and conductivity.

3. The first submittal to the SWFWMD shall include a copy of the laboratory's analytical and chain of custody procedures. If the laboratory used by the Licensee is changed, the first submittal of data analyzed at the new laboratory shall include a copy of the laboratory's analytical and chain of custody procedures.

4. Any variance in sampling and/or analytical methods shall have prior approval of the SWFWMD Water Use Permit Bureau Chief.

5. The Licensee's sampling procedure shall follow the handling and chain of custody procedures designated by the certified laboratory which will undertake the analysis.

6. Water quality samples shall be analyzed by a laboratory certified by the Florida Department of Health utilizing the standards and methods applicable to the parameters analyzed and to the water use pursuant to Chapter 64E-1, Florida Administrative Code, "Certification of Environmental Testing Laboratories."

7. Analyses shall be performed according to procedures outlined in the current edition of Standard Methods for the Examination of Water and Wastewater by the American Public Health Association-American Water Works Association-Water Pollution Control Federation (APHA-AWWA-WPCF) or Methods for Chemical Analyses of Water and Wastes by the U.S. Environmental Protection Agency (EPA).

8. Unless other reporting arrangements have been approved by the SWFWMD Water Use Permit Bureau Chief, reports of the analyses shall be submitted to the SWFWMD Water Use Permit Bureau, online at the SWFWMD WUP Portal or mailed in hardcopy on or before the tenth day of the following month. The online submittal shall include a scanned upload of the original laboratory report. The hardcopy submittal shall be a copy of the laboratory's analysis form. If for some reason, a sample cannot be taken when required, the Permittee shall indicate so and give the reason in the space for comments at the WUP Portal or shall submit the reason in writing on the regular due date.

9. Water quality samples shall be collected based on the following timetable for the frequency listed in the special condition:

10. The parameters and frequency of sampling and analysis may be modified by the SWFWMD as necessary to ensure the protection of the resource.

Frequency Timetable

Weekly Same Day of each week Monthly Same week of each month

Quarterly Same week of February, May, August, November

Semi-annually Same week of May, November

Appendix II-3
Florida Fish and Wildlife Conservation Commission
Agency Report



**Florida Fish
and Wildlife
Conservation
Commission**

Commissioners

Richard A. Corbett
Chairman
Tampa

Brian Yablonski
Vice Chairman
Tallahassee

Ronald M. Bergeron
Fort Lauderdale

Richard Hanas
Oviedo

Aliese P. "Liesa" Priddy
Immokalee

Bo Rivard
Panama City

Charles W. Roberts III
Tallahassee

Executive Staff

Nick Wiley
Executive Director

Eric Sutton
Assistant Executive Director

Jennifer Fitzwater
Chief of Staff

Office of the
Executive Director

Nick Wiley
Executive Director

(850) 487-3796
(850) 921-5786 FAX

*Managing fish and wildlife
resources for their long-term
well-being and the benefit
of people.*

620 South Meridian Street
Tallahassee, Florida
32399-1600
Voice: (850) 488-4676

Hearing/speech-impaired:
(800) 955-8771 (T)
(800) 955-8770 (V)

MyFWC.com

February 11, 2015

Justin B. Green
Siting Coordination Office
Florida Department of Environmental Protection
2600 Blair Stone Road, MS 5500
Tallahassee, FL 32399
Justin.B.Green@dep.state.fl.us

Re: Site Certification Application, Duke Energy Florida, Citrus County, Florida; PA77-09A3,
Agency Report

Dear Mr. Green:

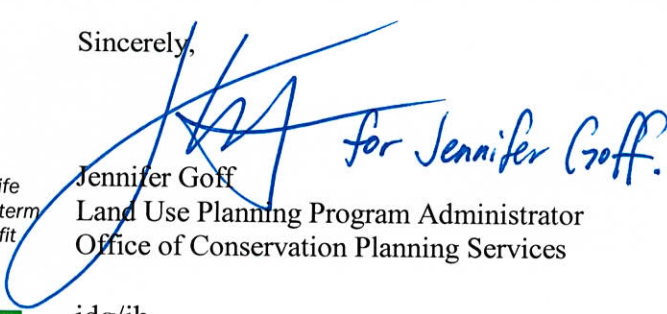
Florida Fish and Wildlife Conservation Commission (FWC) staff has coordinated our agency's review of the Site Certification Application, Citrus County Combined Cycle and associated linear facilities portion of the Duke Energy Florida Citrus County Combined Cycle and provides the attached Agency Report and Recommendations for Conditions to be included in the Citrus County Combined Cycle Certification in accordance with 403.507(2)(a)4, Florida Statutes.

Duke Energy Florida will need to comply with the State of Florida's listed species requirements found in Chapter 68-27A, Florida Administrative Code (F.A.C.), prior to construction of the Citrus County Combined Cycle, associated non-linear facilities, and associated linear non-transmission facilities. This also includes requirements specified in the Bald Eagle Management Plan.

We recommend approval of the Duke Energy Florida Citrus County Combined Cycle Site, associated non-linear facilities, and associated linear non-transmission facilities with the inclusion of recommended conditions related to listed species and their habitat; biological survey and monitoring (pre- and post-construction); and mitigation for impacts.

We appreciate the opportunity to review this project. If you would like to coordinate further, please contact Ms. Jane Chabre at (850) 410-5367 or by email to FWCConservationPlanningServices@myfwc.com, and she will be glad to make the necessary arrangements. If you should have technical questions regarding the information in the attached report, please contact Jason Hight at (850) 413-6966 or by email at Jason.Hight@myFWC.com.

Sincerely,


Jennifer Goff
Land Use Planning Program Administrator
Office of Conservation Planning Services

jdj/jh

Duke Energy Florida Citrus County Combined Cycle_19622_02112015
ENV 1-3-2

Enclosure

cc: Amy Dierolf, Duke Energy Florida (Amy.Dierolf@duke-energy.com)
Bobby Bull, Florida Department of Environmental Protection
(Robert.Bull@dep.stat.fl.us)
Brooke Lewis, Hopping, Green & Sams, P.A. (BrookeL@hgslaw.com)

Agency Report and Proposed Conditions to be Included in the State Certification

Project Description

Duke Energy Florida proposes to build and operate two gas-fired generating units, each with an approximate electrical output of 830 megawatts; and supporting buildings, facilities, and equipment at a site adjacent to the existing coal-fired Units 4 and 5 of the Crystal River Energy Complex. The project includes two new units and associated linear facilities including: closed-cycle mechanical draft cooling towers, an administration/warehouse building and parking, an auxiliary boiler, emergency diesel generators, a firewater pump, water treatment and storage tank facilities, a switchyard, a stormwater management system and detention ponds, and a wastewater percolation pond. Linear facilities include four 230-kilovolt (kV) and three 500-kV transmission lines, pipelines for cooling water makeup and blow down water, flow-augmentation water, and a well water supply.

Affected Resources

Effects on State-Listed Species

The Citrus County Combined Cycle Project, associated non-linear facilities, and associated linear facilities will likely impact federally and state-listed species, as described in the application. A listing of all the state- and federally listed species potentially impacted by the proposal and their listing status is included in the proposed conditions.

There are a number of listed species either observed within the Citrus County Combined Cycle Project Site, associated non-linear and linear non-transmission facilities or with a moderate to high likelihood of occurring including the least terns, eastern indigo snake, and gopher tortoise. The application identifies an eagle nest on site; while the bald eagle has been both state and federally delisted, it is still governed by the state bald eagle management plan and the federal Bald and Golden Eagle Protection Act. The site lies within the secondary range of the Florida black bear. The Florida black bear has been delisted from the state's Endangered and Threatened Rule; however, the species is still governed by the Florida Black Bear Management Plan and addressed by the bear conservation rule.

Each impacted species must be addressed on a case-by-case basis. If there is evidence that any individuals of these species are present, then the applicant must report the findings to the FWC. If impacts to these species cannot be avoided, then the applicant must contact the FWC before taking any action that might result in an impact to those species.

Proposed Conditions

We recommend approval of the Duke Energy Florida's Citrus County Combined Cycle Project Site, associated non-linear facilities, and associated linear non-transmission facilities with inclusion of the following proposed conditions. We request these conditions be included in the

special conditions as part of the certification related to specific listed species and their habitat; biological survey and monitoring (pre- and post- construction); and mitigation for impacts.

CITRUS COUNTY COMBINED CYCLE CONDITIONS OF CERTIFICATION

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

A. *Listed Species Conditions*

The following table contains state and federally listed species that occur in the State of Florida and may occur within the Duke Energy Florida's Citrus County Combined Cycle Project Site and associated linear facilities right-of-way. The table below contains species that are potentially impacted by the activities proposed on the Duke Energy Florida Citrus County Combined Cycle Project Site and associated linear facilities right-of-way. Therefore, these conditions of certification apply to the species listed in these tables.

Table 1. Terrestrial Species

Common Name	Scientific Name	Status
Gopher frog	<i>Lithobates capito</i>	SSC
American alligator	<i>Alligator mississippiensis</i>	FT(SA)*
Eastern indigo snake	<i>Drymarchon corais couperi</i>	FT
Gopher tortoise	<i>Gopherus polyphemus</i>	ST
Bald eagle	<i>Haliaeetus leucocephala</i>	**
Florida sandhill crane	<i>Grus canadensis pratensis</i>	ST
Limpkin	<i>Aramus guarauna</i>	SSC
Little blue heron	<i>Egretta caerulea</i>	SSC
Red-cockaded woodpecker	<i>Picoides borealis</i>	FE
Snowy egret	<i>Egretta thula</i>	SSC
Southeastern American kestrel	<i>Falco sparverius paulus</i>	ST
Tricolored heron	<i>Egretta tricolor</i>	SSC
White ibis	<i>Eudocimus albus</i>	SSC
Wood stork	<i>Mycteria americana</i>	FT
Florida black bear	<i>Ursus americanus floridanus</i>	***
Florida mouse	<i>Peromyscus floridanus</i>	SSC
Sherman's fox squirrel	<i>Sciurus niger shermani</i>	SSC

Table 2. Coastal/Marine Species

Gulf sturgeon	<i>Acipenser oxyrhynchus desotoi</i>	FT
Green sea turtle	<i>Chelonia mydas</i>	FE
Hawksbill sea turtle	<i>Eretmochelys imbricata</i>	FE
Kemp's ridley sea turtle	<i>Lepidochelys kempii</i>	FE
Leatherback sea turtle	<i>Dermochelys coriacea</i>	FE
Loggerhead sea turtle	<i>Caretta caretta</i>	FT
Least tern	<i>Sterna antillarum</i>	ST
West Indian manatee	<i>Trichechus manatus</i>	FE

FE = Federally designated Endangered; FT = Federally designated Threatened; ST = State-designated Threatened; SSC = State Species of Special Concern

* Due to similarity to another federally threatened species

** While the bald eagle has been both state and federally delisted, it is still governed by the state bald eagle management plan and the federal Bald and Golden Eagle Protection Act.

*** The Florida black bear has been delisted from the state's Endangered and Threatened Rule; however, the species is still governed by the Florida Black Bear Management Plan and protected by the bear conservation rule.

Note: Florida's Endangered and Threatened species rule changed in November 2010. The list is now comprised of federally designated endangered and threatened species or state-designated threatened species. Additionally, the Species of Special Concern (SSC) designation has been retained in the rule until those species designated as SSC are evaluated for listing as state-designated threatened species.

[Article IV, Sec. 9, Florida Constitution; Chapters 68A-27 and 68A-16, Florida Administrative Code (F.A.C.)]

B. General Listed Species Survey

1. The Licensee shall coordinate with the Florida Fish and Wildlife Conservation Commission (FWC) to obtain and follow the current survey protocols for all listed species that may occur within the Duke Energy Florida's Citrus County Combined Cycle Project Site, associated non-linear facilities, and associated linear non-transmission facilities rights-of-way, as well as accessible appropriate buffers within Duke Energy Florida property or rights-of-way as

defined by the listed species' survey protocols, prior to conducting detailed surveys.

2. Surveys shall be conducted prior to clearing and construction in accordance with the survey protocols. The results of those detailed surveys shall be provided to FWC in a report, and coordination shall occur with the FWC on appropriate impact avoidance, minimization, or mitigation methodologies.

[Article IV, Sec. 9, Florida Constitution; Section 379.2291 Florida Statutes (F.S.); and Rule 68A-27, F.A.C.].

C. Specific Listed Species Surveys

Before land clearing and construction activities within the Duke Energy Florida's Citrus County Combined Cycle Project Site and associated linear facilities right-of-way occurs, the Licensee shall conduct an assessment for terrestrial listed species and shall note all habitat, occurrence or evidence of listed species. Listed species to be included in this survey shall include those species listed in Table 1 in paragraph A above. Wildlife surveys shall be conducted during the reproductive or "active" season for each species that falls before the projected clearing activity schedule unless otherwise approved by FWC. For species that are difficult to detect, the Licensee may make the assumption that the species is present and plan appropriate avoidance/mitigation measures after consultation with FWC. The Licensee will submit avoidance/mitigation measures for FWC post-certification review and approval at least 60 days prior to commencing clearing or construction activities within the surveyed area. The surveys required by these conditions of certification may be conducted prior to issuance of the final order of certification, in which case this condition would be considered satisfied.

1. This survey shall be conducted in accordance with U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS) or FWC guidelines and methodologies by a person or firm that is knowledgeable and experienced in conducting flora and fauna surveys for each potentially occurring listed species.
2. This survey shall identify any wading bird colonies within the Duke Energy Florida's Citrus County Combined Cycle Project Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way that may be affected.
3. This survey shall identify locations of breeding sites, nests, and burrows for listed wildlife species. Nests and burrows shall be recorded with global positioning system (GPS) coordinates, identified on an aerial photograph, and submitted with the final listed species report. Although nests and burrows may be recorded individually with GPS, the FWC prefers that any applicable protection radii surrounding groups of nest sites and burrows be included on a site-specific basis, rather than around individual nests and burrows, and be physically marked so that clearing and construction shall avoid impacting them.
4. This survey shall include an estimate of the acreage and percent cover of each existing vegetation community (Florida Land Use, Cover and Forms Classification System, or FLUCFCS, at the third degree of detail) of each community that is contained within the Duke Energy Florida's Citrus County Combined Cycle Project Site, associated non-linear

facilities, and associated linear non-transmission facilities rights of way prior to land clearing and construction activities using a geographic information system (GIS). Examples of such wildlife-based habitat classification schemes include Florida's State Wildlife Action Plan (FWC 2012), Descriptions of Vegetation and Land Cover Types (FWC 2004), or Natural Communities Guide (Florida Natural Areas Inventory 2010)*.

[Article IV, Sec. 9, Florida Constitution; Section 379.2291 F.S.; and Rules 68A-27, 68A-4, and 68A-16, F.A.C.]

*Florida Fish and Wildlife Conservation Commission. 2012. Florida's State Wildlife Legacy Initiative: Florida's State Wildlife Action Plan. Tallahassee, Florida.

Florida Natural Areas Inventory. 2010. Guide to the natural communities of Florida: 2010 edition. Florida Natural Areas Inventory, Tallahassee, Florida.

Stys, B., R. Kautz, D. Reed, M. Kertis, R. Kawula, C. Keller, and A. Davis. 2004. Florida vegetation and land cover data derived from 2003 Landsat ETM+ Imagery. Florida Fish and Wildlife Conservation Commission, Tallahassee, Florida.

D. Listed Species Locations

Where any suitable habitat or evidence is found of the presence of listed species, including but not limited to those specified in 3 through 7 below, within the Duke Energy Florida's Citrus County Combined Cycle Project Site and associated linear facilities' right-of-way, the Licensee shall report those locations to, and confer with, the FWC to determine whether additional pre-clearing surveys are warranted, and to identify potential mitigation, or avoidance recommendations. If pre-clearing surveys are required by FWC as appropriate and as specified in these conditions of certification, they shall occur in the reproductive season prior to the anticipated date for the start of construction within the Duke Energy Florida's Citrus County Combined Cycle Project Site and associated linear facilities' right-of-way. The Licensee shall not construct in areas where evidence of listed species was identified during the initial survey until the particular listed species issues have been resolved as follows:

1. Listed Wildlife Species: If listed wildlife species are found, their presence shall be reported to the DEP Siting Coordination Office, the FWC, USFWS, and NMFS.
2. Species Management Plan: If total avoidance of state-listed wildlife species is not feasible, the Licensee shall consult with the FWC to determine the steps appropriate for the species involved to avoid, minimize, mitigate, or otherwise appropriately address potential impacts. For wildlife species, these steps shall be memorialized in a Species Management Plan and submitted to the FWC for review and approval.

[Article IV, Sec. 9, Florida Constitution; Section 379.2291 F.S.; and Rule 68A-27, F.A.C.]

E. Bald Eagle

1. The Licensee shall avoid impacts to bald eagle (*Haliaeetus leucocephalus*) nests where possible. If construction activities cannot be avoided within a 660-foot nest buffer zone, construction activities shall be conducted consistent with the FWC Eagle Management Guidelines as outlined in the FWC-approved Bald Eagle Management Plan dated April 9, 2008 (or any subsequent FWC-approved versions). In areas where bald eagle nests are present, all reasonable and practicable efforts shall be made to avoid construction activities during the nesting season (October 1 - May 15, or when eagles are present before October 1 or after May 15).
2. In accordance with the FWC Eagle Management Guidelines, for construction areas that fall within 330 feet of an active or alternate bald eagle nest, as defined in the Bald Eagle Monitoring Guidelines, construction activities shall be conducted only during the non-nesting season (May 16 - September 30). Any construction activities that fall within 660 feet of the nest during the nesting season shall be conducted following USFWS-approved Bald Eagle Monitoring Guidelines, dated 2007, or subsequent USFWS-approved versions.
3. In areas where adverse impacts to nests cannot be avoided, resulting in nest disturbance, the information required for an FWC Eagle Permit shall be obtained from the FWC, as authorized by Rule 68A-16.002, F.A.C., and minimization and conservation measures outlined in the FWC Bald Eagle Management Plan shall be followed, as applicable.

[Article IV, Sec. 9, Florida Constitution; Rules 68A-27, and 68A-16.002, F.A.C.]

F. Gopher Tortoise

1. The Licensee shall conduct surveys for gopher tortoises (*Gopherus polyphemus*), in accordance with the FWC-approved Gopher Tortoise Management Plan (as revised) and the FWC-approved Gopher Tortoise Permitting Guidelines, or subsequent FWC-approved versions of the Plan or Guidelines. A burrow survey covering a minimum of 15% of the potential gopher tortoise habitat to be impacted by development is required in order to apply for a relocation permit. Immediately prior to capturing tortoises for relocation, a 100% survey is required to effectively locate and mark all potentially occupied tortoise burrows and to subsequently remove the tortoises. Burrow survey methods are outlined in Appendix 4 of the Gopher Tortoise Permitting Guidelines, "Methods for Locating Gopher Tortoise Burrows on Sites Slated for Development." Surveys must be conducted as described in F.3 below. Surveys shall not be conducted within 30 days of any ground disturbance or clearing activities on the donor site. All surveys completed by authorized agents or other licensees are subject to field verification by the FWC.
2. The FWC is not required to provide a monitoring compliance assessment for activities that occur more than 25 feet from a gopher tortoise burrow entrance, provided that such activities do not harm gopher tortoises or violate rules protecting gopher tortoises. Examples of such violations noted in the past by the FWC include, but are not limited to, killing or injuring a tortoise more than 25 feet away from its burrow, harassing a tortoise

by blocking access to its burrow, and altering gopher tortoise habitat to such an extent that resident tortoises are taken.

3. The Licensee shall coordinate with and provide the FWC detailed gopher tortoise relocation information in accordance with the FWC-approved Gopher Tortoise Management Plan and Gopher Tortoise Permitting Guidelines as a post-certification submittal. This information shall provide details on the location for on-site recipient areas and any off-site FWC-approved temporary contiguous habitat, as well as appropriate mitigation contributions per tortoise, as outlined in the Gopher Tortoise Permitting Guidelines.
4. Any commensal species observed during the burrow excavations that are listed by the FWC shall be handled in accordance with the applicable guidelines for that species in accordance with Appendix 9 of the Gopher Tortoise Permitting Guidelines.
5. To the maximum extent practicable or feasible, all staging and storage areas shall be sited to avoid impacts to gopher tortoise burrows and habitat.

[Article IV, Sec. 9, Florida Constitution; Section 379.2291, F.S.; and Rule 68A-27, FA.C.]

G. Least Tern

1. The Licensee shall coordinate with the FWC before construction to develop and implement an FWC-approved plan to avoid attracting least terns to the construction site as a result of the temporary placement of gravel substrates.

[Article IV, Sec. 9, Florida Constitution; Section 379.2291, F.S.; and Rule 68A-27, FA.C.]

H. Florida Black Bear

1. The Licensee shall take proper precautions during clearing and construction to protect Florida black bears from accidental injury due to conditions on site during construction. These precautions may include:
 - covering open trenches while dormant to reduce the likelihood bears becoming trapped
 - creating areas within the trench to aide in exiting, such as berms or sides with a shallow gradient to allow the bear or other animal to escape
 - electric fencing along the construction boundary.
2. FWC literature concerning the use of electric fencing as a black bear deterrent has been provided to the Licensee and this effort shall be coordinated with an FWC biologist.
3. If there is any chance that food waste will be stored on or near the site at any time, bear-resistant garbage containers or dumpsters shall be used.
4. Additional construction policies and practices to protect bears shall be used whenever feasible. These include:

- a. Prohibit clearing, blasting and burning of forested habitat during the December-March denning season for bears while in a primary or secondary bear range.
- b. Require clean construction sites with wildlife-resistant containers for workers to use for food-related and other wildlife attractant refuse; require frequent trash removal and the use of proper food storage and removal on work sites.
- c. Adjust trucking activities and material delivery schedule to mandate slower speed in wooded zones, at dawn and dusk, and during the June and July breeding season for bears.
- d. Conduct frequent and unannounced site inspections and reward site managers that keep a bear-smart worksite.
- e. Incorporate preferential purchasing policies and bid selection guidelines to select consultant, contractor, sub-contractor, and material suppliers with progressive ecological policies, conservation strategies, and use of materials appropriate for wildlife habitat.

[Article IV, Sec. 9, Florida Constitution; Rule 68A-4.009(b), F.A.C.]

I. *Eastern Indigo Snake*

1. The Licensee shall consult with the USFWS and the FWC to develop a plan to avoid the “take” of eastern indigo snakes on Duke Energy Florida’s Citrus County Combined Cycle Project Site and associated linear facilities right-of-way during construction and operation.

[Article IV, Sec. 9, Florida Constitution; Rule 68A-27, F.A.C.]

J. *Florida Manatee*

1. Manatee identification cataloging and visual monitoring of manatees utilizing the Crystal River Energy Center (CREC) discharge canal under these general guidelines:
 - a. Monitoring will be performed during at least one winter period prior to cessation of all once-through condenser cooling water flow at the CREC. Duke Energy Florida will endeavor to monitor for two winter periods based on the timing of certification and approval of the Manatee Management Plan.
 - b. Monitoring after full cessation of once-through condenser cooling water flow during two or three winter periods, depending on observed manatee response.

- c. Monitoring protocols will include a visual assessment of external cold-stress signs along with behavioral assessments of animals in the field.
- d. Discharge canal temperature monitoring, including ambient temperature, cooling tower blowdown discharge temperature, and temperature of any significant natural thermal spring seeps present in the discharge canal.
- e. Plan communications, contacts, response to cold-stress animals, and reporting requirements.
- f. For all project components in and/or over water accessible to manatees, Duke Energy Florida will implement the Standard Manatee Conditions for In-Water Work, July 2011 and/or other specific Manatee Management Plan requirements.

[Article IV, Sec. 9, Florida Constitution; and Rule 68A-27, F.A.C.]

K. *Smalltooth sawfish, Gulf sturgeon, Sea turtles*

- 1. For all project components in and/or over water accessible to smalltooth sawfish, Gulf sturgeon, or sea turtles, Duke Energy Florida will implement the Sea Turtle and Smalltooth Sawfish Construction Conditions, March 2006.

[Article IV, Sec. 9, Florida Constitution; and Rule 68A-27, F.A.C.]

L. *Biological Survey and Monitoring Conditions*

The Licensee may request modification of the following applicable conditions upon issuance by the Department of Environmental Protection, in consultation with the FWC, of Final National Pollution Discharge Elimination System permit FL0000159-014-IWS.

- 1. **Discharge Monitoring** - Within 180 days following certification of the Citrus Combined Cycle (CCC) Project or such other date as agreed to by Duke Energy Florida and FWC, Duke Energy Florida will submit to FWC and the Department a CCC Project Discharge Monitoring Plan (DMP) for review and approval in accordance with Condition XX, Postcertification Submittals. Unless otherwise agreed to by Duke Energy Florida and FWC, the DMP will include the following components:
 - a. Preoperational surveys of seagrass and hardbottom resources starting 1 year in advance of the CCC Project beginning commercial operation.
 - b. Postoperational surveys for 1 year following the shutdown of Crystal River Units 1 and 2 in conjunction with commercial operation of the CCC Units.

- c. Surveys and monitoring of stations within the historical thermally-affected areas of Crystal Bay with a pre- and postoperational comparison of survey and monitoring results.
 - d. Schedules, specific survey and monitoring locations, sampling frequencies and methods, and specific parameters to be surveyed.
 - e. Surveys will include protocols to monitor seagrass and hardbottom resources. Monitoring of physical and chemical parameters shall include surface and bottom temperature, salinity, dissolved oxygen, and water column transparency data collection.
 - f. Preparation of reports, including all data and statistical analyses resulting from the surveys and monitoring, will be included as part of the DMP.
2. **Intake Monitoring** - Within 180 days following certification of the CCC Project or such other date as agreed upon by FWC and Duke Energy Florida, Duke Energy Florida will submit to FWC and the Department a CCC Project Intake Characterization and Monitoring Plan (ICMP) for review and approval in accordance with Condition XX, Postcertification Submittals. Unless otherwise agreed to by Duke Energy Florida and FWC, the ICMP will include the following components:
- a. A detailed outline and schedule for the submittal of ICMP components.
 - b. A narrative description of source water bodies, physical water body configuration data, location and configuration of the intake structure, operation of the cooling water system, and proportions of water used.
 - c. Source water baseline biological characterization data including the relative diversity and abundance of species potentially susceptible to impingement and entrainment based on existing identified historic records and data, including any threatened and endangered or other protected species.
 - d. Description and schedule for any proposed additional studies or data collection, if needed, to fill any potential data gaps in support of the biological characterization component.
 - e. A narrative description of the impingement and entrainment mortality reduction plan utilizing a closed-cycle recirculating cooling system and cooling water intake structure that has a maximum through-screen design intake velocity of 0.5 fps or less.
 - f. Demonstration requirements that the closed-cycle cooling system flow reduction and cooling water intake structure are operating and functioning as designed.

[Article IV, Sec. 9, Florida Constitution; and Rule 68A-27, FA.C.]

Appendix II-4
Department of Transportation
Agency Report



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JIM BOXOLD
SECRETARY

Office of General Counsel
Mail Station 58
850/414-5265

February 19, 2015

Justin B. Green, Acting Program Administrator
Florida Energy and Siting Coordination Office
Department of Environmental Protection
2600 Blair Stone Road, MS 48
Tallahassee, Florida 32399-2400

RE: Duke Energy Florida Citrus County Combined Cycle Project
Power Plant Siting Application No. PA77-09A3
DOAH Case No. 14-3632EPP
DEP OGC Case No. 14-0431

Dear Mr. Green:

Enclosed is the Florida Department of Transportation's Revised Agency Report for the Duke Energy Florida Citrus County Combined Cycle Project Power Plant Siting Application No. PA77-09A3.

If you have any questions, please call me at 414-5293 or Jasmin Raffington, Siting Coordinator, at 414-5266. Thank you.

Sincerely,

Kimberly C. Menchion
Assistant General Counsel

KCM/als

cc: All Parties of Record
Jasmin Raffington

**FLORIDA DEPARTMENT OF TRANSPORTATION
Revised Agency Report Submitted February 19, 2015**

**Duke Energy Florida, Inc.
Citrus Combined Cycle Project
Site Certification Application (77-09A3)**

SECTION I. CORRIDOR LOCATION ISSUES

No outstanding issues.

SECTION II. OUTSTANDING SUFFICIENCY ISSUES

No outstanding issues.

SECTION III. VARIANCES TO STANDARDS

No variances requested.

SECTION IV. SPECIAL USE PERMISSIONS

No special use permissions requested.

SECTION V. RECOMMENDATION FOR CERTIFICATION

The Florida Department of Transportation recommends the certification of the proposed power plant. This recommendation is made contingent upon the conditions of Section VI being addressed/met.

SECTION VI. PROPOSED CONDITIONS OF CERTIFICATION

6.1 REQUEST FOR RESTRICTED AREAS

No requests for restricted areas are necessary.

6.2 POST CERTIFICATION REVIEW ITEMS

Access Management to the State Highway System: Any access to the State Highway System will be subject to the requirements of Rule Chapters 14-96, State Highway System Connection Permits, and 14-97, Access Management Classification System and Standards, Florida Administrative Code.

Authority: Chapters 14-96 and 14-97, F.A.C.

Overweight or Overdimensional Loads: Operation of overweight or overdimensional loads by the applicant on State transportation facilities during construction and operation of the utility facility will be subject to safety and permitting requirements of Chapter 316, Florida Statutes, and Rule Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, Florida Administrative Code.

Authority: Chapter 316, F.S.; Chapter 14-26, F.A.C.

Use of State of Florida Right of Way or Transportation Facilities: All usage and crossing of State of Florida right of way or transportation facilities will be subject to Rule Chapter 14-46, Utilities Installation or Adjustment, Florida Administrative Code; Florida Department of Transportation's Utility Accommodation Manual (Document 710-020-001); Design Standards for Design, Construction, Maintenance and Utility Operation on the State Highway System; Standard Specifications for Road and Bridge Construction; and pertinent sections of the Florida Department of Transportation's Project Development and Environmental Manual. US 19 has been identified as a Florida Intrastate Highway System (FIHS) and Strategic Intermodal System (SIS) facilities. The placement of the transmission line and pipeline should take into consideration the planned widening of these facilities. The cost of relocating or reconstructing the transmission line and pipeline will be borne by the applicant to the extent required by Section 337.403, Florida Statutes, and Rule Chapter 14-46, Florida Administrative Code.

Authority: Sections 337.403 and 337.404, F.S.; Chapters 14-15 and 14-46, F.A.C.

Standards: The Manual on Uniform Traffic Control Devices; Florida Department of Transportation's Design Standards for Design, Construction, Maintenance and Utility Operation on the State Highway System; Florida Department of Transportation's Standard Specifications for Road and Bridge Construction; Florida Department of Transportation's Utility Accommodation Manual; and pertinent sections of the Department of Transportation's Project Development and Environmental Manual will be adhered to in all circumstances involving the State Highway System and other transportation facilities.

Authority: Chapter 14-15, F.A.C.

Drainage: Any drainage onto State of Florida right of way and transportation facilities will be subject to the requirements of Rule Chapter 14-86, Drainage Connections, Florida Administrative Code, including the attainment of any permit required thereby.

Authority: Chapter 14-86, F.A.C.

Use of Air Space: Any newly proposed structure or alteration of an existing structure will be subject to the requirements of Chapter 333, Florida Statutes, and Rule 14-60.009, Florida Administrative Code. Additionally, notification to the Federal Aviation Administration (FAA) is required prior to beginning construction, if the structure exceeds notification requirements of 14 CFR Part 77, Objects Affecting Navigable Airspace, Subpart B, Notice of Construction or Alteration. Notification will be provided to FAA Southern Region Headquarters using FAA Form 7460-1, Notice of Proposed Construction or Alteration in accordance with instructions therein. A subsequent determination by the FAA stating that the structure exceeds any federal

obstruction standard of 14 CFR Part 77, Subpart C, for any structure that is located within a 10-nautical-mile radius of the geographical center of a public-use airport or military airfield in Florida will be required to submit information for an Airspace Obstruction Permit from the Florida Department of Transportation or variance from local government depending on the entity with jurisdictional authority over the site of the proposed structure. The FAA Determination regarding the structure serves only as a review of its impact on federal airspace and is not an authorization to proceed with any construction. However, FAA recommendations for marking and/or lighting of the proposed structure are made mandatory by Florida law. For a site under Florida Department of Transportation jurisdiction, application will be made by submitting Florida Department Transportation Form 725-040-11, Airspace Obstruction Permit Application, in accordance with the instructions therein.

Authority: Chapter 333, F.S.; Rule 14-60.009, F.A.C.

SECTION VII. BEST MANAGEMENT PRACTICES

Traffic control during facility construction and maintenance will be subject to the standards contained in the Manual on Uniform Traffic Control Devices; Rule Chapter 14-94, Statewide Minimum Level of Service Standards, Florida Administrative Code; Florida Department of Transportation's Design Standards for Design, Construction, Maintenance and Utility Operation on the State Highway; Florida Department of Transportation's Standard Specifications for Road and Bridge Construction; and Florida Department of Transportation's Utility Accommodation Manual, whichever is more stringent.

It is recommended that the applicant encourage transportation demand management techniques by doing the following:

- Placing a bulletin board on site for car pooling advertisements.
- Requiring that heavy construction vehicles remain onsite for the duration of construction to the extent practicable.

If the applicant uses contractors for the delivery of any overweight or overdimensional loads to the site during construction, the applicant should ensure that its contractors adhere to the necessary standards and receive the necessary permits required under Chapter 316, Florida Statutes, and Rule Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, Florida Administrative Code.

Authority: Chapter 316, F.S.; Chapter 14-26, F.A.C.

Appendix II-5
Department of State
Division of Historical Resources Correspondence



FLORIDA DEPARTMENT of STATE

RICK SCOTT
Governor

RECEIVED
FEB 02 2015
DIVISION OF AIR
RESOURCE MANAGEMENT

KEN DETZNER
Secretary of State

Mr. Justin B. Green
Florida Department of Environmental Protection
Siting Coordination Office
2600 Blair Stone Road, MS 5500
Tallahassee, Florida 32399

January 27, 2015

RE: DHR Project File No.: 2015-0348/Additional Information Received by DHR: January 23, 2015
Project: *Duke Energy Florida Citrus CCC Project – Revised Stormwater Pond Design Basis*
County: Citrus

Dear Mr. Green,

This agency reviewed the referenced amendment request in accordance with Chapters 403 and 267, *Florida Statutes*, for possible impact to historic properties listed, or eligible for listing, in the National Register of Historic Places, or otherwise of historical, architectural or archaeological significance.

This office previously commented on the Duke Energy Florida Citrus County Combined Cycle project on December 2, 2014 (DHR #2014-5417). Those comments still stand.

For any questions concerning our comments, please contact Mary Berman, Historic Sites Specialist, by phone at 850.245.6333 or by electronic mail at Mary.Berman@dos.myflorida.com.

Sincerely,

Robert F. Bendus, Director
Division of Historical Resources and State Historic Preservation Officer

Attachment: DHR Letter # 2014-5417



Division of Historical Resources
R.A. Gray Building • 500 South Bronough Street • Tallahassee, Florida 32399
850.245.6333 • 850.245.6439 (Fax) dos.myflorida.com/historical
Promoting Florida's History and Culture VivaFlorida.org





FLORIDA DEPARTMENT of STATE

RICK SCOTT
Governor

RECEIVED
FEB 02 2015
DIVISION OF AIR
RESOURCE MANAGEMENT

KEN DETZNER
Secretary of State

Mr. Bobby Bull
Department of Environmental Protection
Siting Coordination Office
3900 Commonwealth Blvd. MS 48
Tallahassee, Florida 32399

December 02, 2014

RE: DHR Project File No.: 2014-5417/ Received by DHR: November 18, 2014
Project: *Duke Energy Florida SCA 77-09A3 Preliminary Statement of Issues*
County: Citrus

Dear Mr. Bull,

This agency reviewed the referenced amendment request in accordance with Chapters 403 and 267, *Florida Statutes*, for possible impact to historic properties listed, or eligible for listing, in the National Register of Historic Places, or otherwise of historical, architectural or archaeological significance.

Our office notes that a cultural resources assessment survey was conducted for this project area in May of 2014 (DHR Project #2014-3808). The survey identified one previously unrecorded archaeological site (8CI1455) and a segment of the Seaboard Coast Line Railroad (8CI1456) within the project area. These resources have both been determined ineligible for listing on the National Register of Historic Places. Based on the information provided, our office concurs that the proposed project will have no effect on cultural resources listed, or eligible for listing in the NRHP, or otherwise of archaeological, historical, or architectural significance. However, please observe the following conditions regarding unexpected discoveries during ground disturbing activities: If prehistoric or historic artifacts are encountered at any time within the project area, the permitted project should cease all activities involving disturbance in the immediate vicinity of such discoveries. The permittee should contact this office, as well as the appropriate permitting agency.

For any questions concerning our comments, please contact Mary Berman, Historic Sites Specialist, by phone at 850.245.6333 or by electronic mail at Mary.Berman@dos.myflorida.com.

Sincerely,

Robert F. Bendus, Director
Division of Historical Resources and State Historic Preservation Officer



Division of Historical Resources
R.A. Gray Building • 500 South Bronough Street • Tallahassee, Florida 32399
850.245.6300 • 850.245.6436 (Fax) dos.myflorida.com/historical
Promoting Florida's History and Culture VivaFlorida.org



www.flheritage.com

Appendix II-6
Citrus County
Agency Report



Board of County Commissioners
DEPARTMENT OF PLANNING AND DEVELOPMENT
3600 W. Sovereign Path, Lecanto, FL 34461-8070
(352) 527-5226 Fax (352) 527-5317
Web Address: www.bocc.citrus.fl.us

In reply, refer to: DS-15-004

February 3, 2015

VIA ELECTRONIC MAIL AND U.S. MAIL
Bobby Bull, Professional Engineer
Florida Department of Environmental Protection
Siting Coordination Office
2600 Blair Stone Road, MS 5500
Tallahassee, Florida 32399-2400
robert.bull@dep.state.fl.us

SUBJECT: Duke Energy Florida's Citrus Combined-Cycle Project
Power Plant Siting Application No. PA77-09A3
FDEP OGC No. 14-0431/DOAH Case No. 14-3632 EPP
Citrus County

RE: Agency Report – Citrus County, Florida

Dear Mr. Bull:

Citrus County, a political subdivision of the State of Florida, in accordance with Florida Statute 403.507(2)(a), has completed its analysis of the above-captioned site certification application concerning Duke Energy Florida's proposed combined-cycle gas plant project in Citrus County. This serves to advise the Florida Department of Environmental Protection and the applicant that Citrus County finds this application consistent with the Citrus County Comprehensive Plan, Citrus County Land Development Code and other applicable local ordinances, and thereby recommends Approval with the following proposed conditions of certification that the County would want added to the final Site Certification.

CITRUS COUNTY PROPOSED CONDITIONS OF CERTIFICATION

1. **Compliance with Building Code and Floodplain Management Regulations** —This certification shall not affect in any way the right of Citrus County to require that construction be in compliance with applicable Citrus County building construction code provisions and floodplain management regulations or to charge appropriate fees required under applicable Citrus County requirements in Articles I and VI, Chapter 18, and Citrus County Code of Ordinances (dated 6-11-13), for construction of the administration building/warehouse. Duke Energy Florida (DEF) shall not, however, be required to obtain separate permits or approvals from Citrus County.

Administration	Building Division	Code Compliance Division	Geographic Information Systems Division	Land Development Division
Suite 109 (352) 527-5220 FAX 527-5317	Suite 111 (352) 527-5310 FAX 527-5394	Suite 147 (352) 527-5350 FAX 527-5523	Suite 140 (352) 527-5544 FAX 527-5252	Suite 141 (352) 527-5239 FAX 527-5428

A. No later than 180 days following certification, or such later date as agreed upon by DEF and Citrus County, DEF shall meet with Citrus County to discuss a mutually agreeable timeline and process for completion of the inspections of the administration building/warehouse required by Section 18-10 and for submittal of final certification for elevation as required by Section 18-200 for Citrus County Code of Ordinances (dated 6-11-13).

B. All applicable fees related to inspection of the administration building/warehouse pursuant to Section 18-9, Citrus County Code of Ordinances (dated 6-11-13), shall be paid prior to occupancy of the administration building and warehouse.

Authority: Section 403.511(1), and Section 403.511(4), Florida Statutes; Articles I and VI, Chapter 18, Citrus County Code of Ordinances (dated 6-11-13).

2. **Impact Fees**—DEF shall pay applicable impact fees, if any, prior to occupancy of the administration building and warehouse. The amount of impact fees shall be based upon the impact fee schedule in effect in Citrus County as of the date of the final order of certification, Impact fees, if any, shall be assessed only on the administration building/warehouse.

Authority: Section 403.511(4), Florida Statutes; Citrus County Ordinance No. 2001-A03; Citrus County Administrative Regulation AR: 13.04-4; Citrus County Ordinance No. 2015-A02, amending ordinance 2001-A03 by providing for temporary suspension of impact fees.

3. **Environmental Resources**—DEF shall provide copies of any post-certification submittals, if any, required by General Condition A.XXIX (“Environmental Resources”) to Citrus County for informational purposes.

Authority: Section 6310, Citrus County Land Development Code.

4. **Tree Preservation and Mitigation**—DEF shall comply with the Tree Preservation and Mitigation Plan dated January 5, 2015. DEF shall make the payment to the Citrus County Landscape Enhancement Fund required by the Tree Preservation and Mitigation Plan prior to the commencement of construction of the electrical power plant, including associated facilities.

Authority: Section 5700, et seq., Citrus County Land Development Code.

5. **Noise** – DEF shall comply with sound level limits contained in the Citrus County Code of Ordinances.

Authority: Article II. Noise, Chapter 21, Part II - Citrus County, Florida Code of Ordinances

If you have any questions concerning the above or wish to discuss further, please feel free to contact me at the Department of Planning and Development at my direct line 352-527-5220 or via email at jenette.collins@bocc.citrus.fl.us.

Sincerely,



Jenette Collins, AICP
Director
Department of Planning and Development

JBC/rls

CC: Randy Oliver, County Administrator
Denise A. Dymond Lyn, Interim County Attorney
Carl Jones, CBO, CFM, Building Division Director
Joanna Coutu, AICP, Land Development Division Director

Parties of record Via Email

Kristy.Parker@duke-energy.com; Aaron.Dunlap@deo.myflorida.com; BrookeL@hgslaw.com;
Martha.Moore@swfwmd.state.fl.us; JimA@hgslaw.com; ateitzma@psc.state.fl.us; Bday@wrpc.cc;
Anthony.pinzino@myfwc.com; Benjamin.Melnick@dep.state.fl.us; Kimberly.Cupp@dep.state.fl.us;
DEP.Defense@dep.state.fl.us; Kimberly.menchion@dot.state.fl.us; Gerald.Briggs@flhealth.gov;
watsonf@doacs.state.fl.us; Deena.woodward@dos.myflorida.com; denise.lyn@bocc.citrus.fl.us