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July 9, 2019

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Item 1

State of Florida



Public Service Commission

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

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

DATE: June 26, 2019

TO: Office of Commission Clerk (Teitzman)

FROM: Office of Industry Development and Market Analysis (Deas) *S.D. A7 CH*
Office of the General Counsel (DuVal, Murphy) *MS*

RE: Application for Certificate of Authority to Provide Telecommunications Service

AGENDA: 7/9/2019 - Consent Agenda - Proposed Agency Action - Interested Persons May Participate

SPECIAL INSTRUCTIONS: None

Please place the following Application for Certificate of Authority to Provide Telecommunications Service on the consent agenda for approval.

<u>DOCKET NO.</u>	<u>COMPANY NAME</u>	<u>CERT. NO.</u>
20190117-TX	Luxury Telecommunications LLC d/b/a Luxury Telecommunications	8936
20190126-TX	QCSTelecom, Inc.	8937

The Commission is vested with jurisdiction in this matter pursuant to Section 364.335, Florida Statutes. Pursuant to Section 364.336, Florida Statutes, certificate holders must pay a minimum annual Regulatory Assessment Fee if the certificate is active during any portion of the calendar year. A Regulatory Assessment Fee Return Notice will be mailed each December to the entity listed above for payment by January 30.

Item 2

State of Florida



Public Service Commission

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

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

DATE: June 26, 2019

TO: Office of Commission Clerk (Teitzman)

FROM: Office of the General Counsel (Davis) *(6)*
Division of Accounting and Finance (Norris) *WBB AMW BG ALM*
Division of Economics (Guffey) *SKG E69 JOT*

RE: Docket No. 20190055-WS – Proposed amendment of Rule 25-30.420, F.A.C., Establishment of Price Index, Adjustment of Rates; Requirement of Bond; Filings After Adjustment; Notice to Customers.

AGENDA: 07/09/19 – Regular Agenda – Rule Proposal – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Polmann

RULE STATUS: Proposal May Be Deferred

SPECIAL INSTRUCTIONS: None

Case Background

Pursuant to Section 367.081(4)(a), Florida Statutes (F.S.), the Commission was given the authority to establish by rule the procedure by which a water and/or wastewater utility may implement an increase or decrease in rates based on the application of the Commission's price index. The price index is based on changes for major categories of the utility's operating costs. Rule 25-30.420, Florida Administrative Code (F.A.C.), sets forth the Commission's price index application procedure. Each year the Commission sends an informational packet to all water and wastewater utilities to notify them of the availability of the price index. Rule 25-30.420(1), F.A.C., is being amended to update and clarify the rule. In particular, staff recommends an amendment to the example form that all water and wastewater utilities may use when applying for index or pass-through rate adjustments.

Docket No. 20190055-WS

Date: June 26, 2019

Notice of the rule development appeared in the September 20, 2018 edition of the Florida Administrative Register, Vol. 44, No. 184. There was no request for a workshop, and no workshop was held. This recommendation addresses the amendment of Rule 25-30.420, F.A.C. The Commission has jurisdiction pursuant to Section 367.081(4)(a), F.S.

Date: June 26, 2019

Discussion of Issues

Issue 1: Should the Commission propose the amendment of Rule 25-30.420, F.A.C., Establishment of Price Index, Adjustment of Rates; Requirement of Bond; Filings After Adjustment; Notice to Customers?

Recommendation: Yes, the Commission should propose the amendment of Rule 25-30.420, F.A.C., as set forth in Attachment A. The Commission should also certify that Rule 25-30.420, F.A.C., is not a rule that the violation of which would be a minor violation pursuant to Section 120.695, F.S. (Davis, Norris, Guffey)

Staff Analysis: Staff is recommending that Rule 25-30.420, F.A.C., be amended as set forth in Attachment A, to update and clarify the rule. Below, staff explains in more detail the substantive recommended amendments to the rule.

Rule 25-30.420, F.A.C., currently references Form PSC/AFD 15 (4/99), titled “Index Application,” which can be obtained from the Commission’s Division of Accounting and Finance and may be used by water and wastewater utilities to apply for index and/or pass-through rate adjustments. The form serves as a guideline for calculating the index rate adjustment and provides sample language to assist in meeting rule requirements, such as noticing. The Commission annually approves a package mailed by the Commission Clerk to every regulated water and wastewater utility that includes the “Index Application” form. In an effort to increase the number of water and wastewater utilities taking advantage of the annual price index and pass-through programs, the package also includes a cover letter from the Director of the Division of Accounting and Finance in order to explain the purpose of the index and pass-through applications and to communicate that Commission staff is available to assist them. Using an administrative process, Commission staff reviews all applications submitted by the utilities for completeness and accuracy prior to any index and/or pass-through rate adjustment being approved.

Staff recommends the Commission amend the rule, Attachment A, to update the example application form. The form currently referenced in the rule would be replaced with Form PSC 1022 (9/18), which is included in Attachment B.

Staff is also recommending that an e-mail address be added to the rule, which will give the utility the option to either file the form with the Division of Accounting and Finance by mail or electronically.

Staff also recommends that, in order to reduce the postage burden, utilities need no longer submit five copies of their documents to be reviewed by the Division of Accounting and Finance. Only one copy would be required if the rule is amended, as recommended by staff.

Staff further recommends that subsection (4) of the rule be amended to change the word “may” to “shall.” This is necessary because use of the word “may” does not comport with Sections 120.52(8)(d), F.S., and 120.545(1), F.S., as it vests the Commission with unbridled discretion.

Date: June 26, 2019

Although no workshop was requested, a comment was filed by the owner of several small water and wastewater utilities. In discussing the “Index Application” form and the suggested language for customer notices that must be mailed out, it was suggested that, in addition to including a customer notice for the price index adjustment and a separate customer notice for the pass-through rate adjustment in the form, there should be combined notices as well. The two customer notices are included for the purpose of providing sample language and may be combined into one notice for a utility filing a combined index and pass-through application. To clarify this practice, staff recommends that a sentence confirming that utilities may combine the notices themselves be included in the yearly application packet cover letter.

Minor Violation Rule Certification

Pursuant to Section 120.695, F.S., beginning July 1, 2017, for each rule filed for adoption the agency head shall certify whether any part of the rule is designated as a rule the violation of which would be a minor violation. Rule 25-30.420, F.A.C., is not a rule for which a violation would be minor because violation of the rule would result in economic harm to ratepayers. Thus, staff recommends that the Commission certify that Rule 25-30.420, F.A.C., is not a rule that the violation of which would be a minor violation pursuant to Section 120.695, F.S.

Statement of Estimated Regulatory Costs

Pursuant to Section 120.54, F.S., agencies are encouraged to prepare a statement of estimated regulatory costs (SERC) before the adoption, amendment, or repeal of any rule. The SERC is appended as Attachment C to this recommendation. The SERC analysis also includes whether the rule is likely to have an adverse impact on growth, private sector job creation or employment, or private sector investment in excess of \$1 million in the aggregate within five years of implementation.

The SERC concludes that the rule will not likely directly or indirectly increase regulatory costs in excess of \$200,000 in the aggregate in Florida within one year after implementation. Further, the SERC concludes that the rule will not likely have an adverse impact on economic growth, private sector job creation or employment, private sector investment, business competitiveness, productivity, or innovation in excess of \$1 million in the aggregate within five years of implementation. Thus, the rule does not require legislative ratification pursuant to Section 120.541(3), F.S. In addition, the SERC states that the rule will not have an adverse impact on small business and will have no impact on small cities or counties. No regulatory alternatives were submitted pursuant to paragraph 120.541(2)(g), F.S. None of the impact/cost criteria established in paragraph 120.541(2)(a), F.S., will be exceeded as a result of the recommended revision.

Conclusion

Staff recommends that the Commission propose the amendment of Rule 25-30.420, F.A.C., as set forth in Attachment A. In addition, the Commission should certify that Rule 25-30.420, F.A.C., is not a rule that the violation of which would be a minor violation pursuant to Section 120.695, F.S.

Date: June 26, 2019

Issue 2: Should this docket be closed?

Recommendation: Yes, if no requests for hearing or comments are filed the rule should be filed with the Department of State, and the docket should be closed. (Davis)

Staff Analysis: If no requests for hearing or comments are filed by affected persons, the rules should be filed with the Department of State, and the docket should be closed.

25-30.420 Establishment of Price Index, Adjustment of Rates; Requirement of Bond; Filings After Adjustment; Notice to Customers.

(1) ~~On or before March 31 of each year, t~~The Commission shall, ~~on or before March 31 of each year,~~ establish a price increase or decrease index as required by Section 367.081(4)(a), F.S. The Office of Commission Clerk shall mail each regulated water and wastewater utility a copy of the proposed agency action order establishing the index for the year and a copy of ~~the application.~~ Form PSC 1022 (9/18) ~~PSC/AFD 15 (4/99)~~, entitled “Index Application”, which is incorporated into this rule by reference and may be obtained from [Dept of State hyperlink] and the Commission’s Division of Accounting and Finance. Applications for the newly established price index will be accepted from April 1 of the year the index is established through March 31 of the following year.

(a) The index shall be applied to all operation and maintenance expenses, except for amortization of rate case expense, costs subject to pass-through adjustments pursuant to Section 367.081(4)(b), F.S., and adjustments or disallowances made in a utility’s most recent rate proceeding.

(b) In establishing the price index, the Commission will consider cost statistics compiled by government agencies or bodies, cost data supplied by utility companies or other interested parties, and applicable wage and price guidelines.

(2) Any utility seeking to increase or decrease its rates based upon the application of the index established pursuant to subsection (1) and as authorized by Section 367.081(4)(a), F.S., shall file ~~an original and five copies of~~ a notice of intention and the materials listed in paragraphs (a) through (i) below with the Commission’s Division of Accounting and Finance either by mail at 2540 Shumard Oak Boulevard, Tallahassee, Florida, 32399 or by e-mail at Applications@psc.state.fl.us at least 60 days prior to the effective date of the increase or decrease. Form PSC 1022 (9/18) is an example application that may be completed by the

CODING: Words underlined are additions; words in ~~struck through~~ type are deletions from existing law.

1 applicant to comply with this subsection. The adjustment in rates shall take effect on the date
2 specified in the notice of intention unless the Commission finds that the notice of intention or
3 accompanying materials do not comply with Section 367.081(4), F.S. or this rule ~~the law, or~~
4 ~~the rules or orders of the Commission.~~ The notice shall be accompanied by:

- 5 (a) Revised tariff sheets;
- 6 (b) A computation schedule showing the increase or decrease in annual revenue that will
7 result when the index is applied;
- 8 (c) The affirmation required by Section 367.081(4)(c), F.S.;
- 9 (d) A copy of the notice to customers required by subsection (6);
- 10 (e) The rate of return on equity that the utility is affirming it will not exceed pursuant to
11 Section 367.081(4)(c), F.S.;
- 12 (f) An annualized revenue figure for the test year used in the index calculation reflecting
13 the rate change, along with an explanation of the calculation, if there has been any change in
14 the utility's rates during or subsequent to the test year;
- 15 (g) The utility's Department of Environmental Protection Public Water System
16 identification number and Wastewater Treatment Plant Operating Permit number;-
- 17 (h) A statement that the utility does not have any active written complaints, corrective
18 orders, consent orders, or outstanding citations with the Department of Environmental
19 Protection ~~(DEP)~~ or the County Health Department(s) or that the utility does have active
20 written complaints, corrective orders, consent orders, or outstanding citations with the
21 Department of Environmental Protection or the County Health Department(s);-
22 (i) A copy of any active written complaints, corrective orders, consent orders, or
23 outstanding citations with the Department of Environmental Protection ~~(DEP)~~ or the County
24 Health Department(s).
- 25 (3) If the Commission, upon its own motion, implements an increase or decrease in the

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1 rates of a utility based upon the application of the index established pursuant to subsection (1)
2 and as authorized by Section 367.081(4)(a), F.S., the Commission will require a utility to file
3 the information required in subsection (2).

4 (4) Upon a finding of good cause, the Commission shall ~~may~~ require that a rate increase
5 pursuant to Section 367.081(4)(a), F.S., be implemented under a bond or corporate
6 undertaking in the same manner as interim rates. For purposes of this subsection, “good
7 cause” shall include:

8 (a) Inadequate service by the utility;

9 (b) Inadequate record-keeping by the utility such that the Commission is unable to
10 determine whether the utility is entitled to implement the rate increase or decrease under this
11 rule.

12 (5) Prior to the time a customer begins consumption at the rates established by application
13 of the index, the utility shall notify each customer of the increase or decrease authorized and
14 explain the reasons therefore.

15 (6) No utility shall file a notice of intention pursuant to this rule unless the utility has filed
16 ~~on file~~ with the Commission an annual report as required by subsection 25-30.110(3), F.A.C.,
17 for the test year specified in the order establishing the index for the year.

18 (7) No utility shall implement a rate increase pursuant to this rule within one year of the
19 official date that it filed a rate proceeding, unless the rate proceeding has been completed or
20 terminated.

21 *Rulemaking Authority 350.127(2), 367.081(4)(a), 367.121(1)(c), (f) FS. Law Implemented*
22 *367.081(4), 367.121(1)(c), (g) FS. History—New 4-5-81, Amended 9-16-82, Formerly 25-*
23 *10.185, Amended 11-10-86, 6-5-91, 4-18-99, 12-11-03, _____*
24
25

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FLORIDA PUBLIC SERVICE COMMISSION
PRICE INDEX APPLICATION
APPLICABLE TEST YEAR _____

Department of Environmental Protection Public Water System ID NO. _____
Department of Environmental Protection Wastewater Treatment Plant ID NO. _____

	WATER	WASTEWATER
Operation & Maintenance Expenses ¹	\$ _____	\$ _____
LESS:		
(a) Pass-through Items:		
(1) Purchased Power	_____	_____
(2) Purchased Water	_____	_____
(3) Purchased Wastewater Treatment	_____	_____
(4) Sludge Removal	_____	_____
(5) Other ²	_____	_____
(b) Rate Case Expense Included in Expenses	_____	_____
(c) Adjustments to Operation & Maintenance Expenses from last rate case, if applicable: ³		
(1) _____	_____	_____
(2) _____	_____	_____
Costs to be Indexed	\$ _____	\$ _____
Multiply by Annual Commission-Approved Price Index	_____ %	_____ %
Total Indexed Costs	\$ _____	\$ _____
Add Change in Pass-Through Items: ⁴		
(1) _____	_____	_____
(2) _____	_____	_____
Divide Index and Pass-Through Sum by Expansion Factor for Regulatory Assessment Fees	<u> .955 </u>	<u> .955 </u>
Increase in Revenue	_____	_____
Divide by Applicable Test Year Revenue ⁵	\$ _____	\$ _____
Percentage Increase in Rates	_____ %	_____ %

FOOTNOTES APPEAR ON THE FOLLOWING PAGE

PSC 1022 (09/18)

PAGE 1 FOOTNOTES

¹This amount must match last year's annual report.

²Other expense items may include increases in required Department of Environmental Protection testing, ad valorem taxes, permit fees charged by the Department of Environmental Protection or a local government authority, National Pollutant Discharge Elimination System fees, and regulatory assessment fees. These items should not be currently embedded in the utility's rates.

³This may include adjustments that follow a methodology referenced in the Order from a utility's last rate case (i.e. averaged bad debt expense or excessive unaccounted for water percentage applied to chemicals expense).

⁴This may include an increase in purchased power, purchased water, purchased wastewater treatment, sludge hauling, required Department of Environmental Protection testing, ad valorem taxes, and permit fees charged by the Department of Environmental Protection or a local government authority providing that those increases have been incurred within the 12-month period prior to the submission of the pass-through application. Pass-through National Pollutant Discharge Elimination System fees and increases in regulatory assessment fees are eligible as pass-through costs but not subject to the twelve month rule. All pass-through items require invoices. See Rule 25-30.425, F.A.C. for more information.

⁵If rates changed after January 1 of the applicable test year, the book revenues must be adjusted to show the changes and an explanation of the calculation should be attached to this form. See Annualized Revenue Worksheet for instructions and a sample format.

ANNUALIZED REVENUE WORKSHEET

Have the rates charged for customer services changed since January 1, of the applicable test year?

- () If no, the utility should use actual revenues. This form may be disregarded.
- () If yes, the utility must annualize its revenues. Read the remainder of this form.

Annualizing calculates the revenues the utility would have earned based upon the previous year's customer consumption at the most current rates in effect. To complete this calculation, the utility will need consumption data for the previous year to apply to the existing rate schedule. Below is a sample format which may be used.

CALCULATION OF ANNUALIZED REVENUES*

Consumption Data for Applicable Test Year

	Number of Bill/Gal. Sold	X	Current Rates	Annualized Revenues
Residential Service:				
Bills:				
5/8"x3/4" meters				
1" meters				
1 1/2" meters				
2" meters				
Gallons Sold				
General Service:				
Bills:				
5/8"x3/4" meters				
1" meters				
1 1/2" meters				
2" meters				
3" meters				
4" meters				
6" meters				
Gallons Sold				
Total Annualized Revenues for the Applicable Test Year				\$

*Annualized revenues must be calculated separately if the utility consists of both a water system and a wastewater system. This form is designed specifically for utilities using a base facility charge rate structure. If annualized revenues must be calculated and further assistance is needed, contact the Commission Staff at (850) 413-6900.

AFFIRMATION

I, _____, hereby affirm that the figures and calculations upon which the change in rates is based are accurate and that the change will not cause _____ to exceed the range of its last authorized rate of return on equity, which is _____.
(name of utility)

This affirmation is made pursuant to my request for a price index and/or pass-through rate increase, in conformance with Section 367.081(4), Florida Statutes.

Further, I am aware that pursuant to Section 367.081(4)(c), Florida Statutes, whoever makes a false statement in in this affirmation, which statement he or she does not believe to be true in regard to any material matter, is guilty of a felony of the third degree, punishable as provided in Sections 775.082, 775.083, or Section 775.084, Florida Statutes.

Signature: _____
Title: _____
Telephone Number: _____
Fax Number: _____

Sworn to and subscribed before me this _____ day of _____, 20__.

My Commission expires:

(SEAL)

Notary Public
State of Florida

STATEMENT OF QUALITY OF SERVICE

Pursuant to paragraphs 25-30.420(2)(h) and (i), Florida Administrative Code,

(name of utility)

[] does not have any active written complaints, corrective orders, consent orders, or outstanding citations with the Department of Environmental Protection (DEP) or the County Health Departments.

[] does have the attached active written complaint(s), corrective order(s), consent order(s), or outstanding citation(s) with the DEP or the County Health Department(s). The attachment(s) includes the specific system(s) involved with DEP permit number and the nature of the active complaint, corrective order, consent order, or outstanding citation.

Name: _____
Title: _____
Telephone Number: _____
Fax Number: _____
Date: _____

NOTICE TO CUSTOMERS

Pursuant to Section 367.081(4)(a), Florida Statutes, water and wastewater utilities are permitted to adjust the rates and charges to its customers without those customers bearing the additional expense of a public hearing. These adjustments in rates would depend on increases or decreases in noncontrollable expenses subject to inflationary pressures such as chemicals, and other general operation and maintenance costs.

On _____, _____ filed its notice of
(date) (name of utility)
intention with the Florida Public Service Commission to increase water and wastewater rates in _____ County pursuant to this Statute. The filing is subject to review by the Commission Staff for accuracy and completeness. Water rates will increase by approximately _____% and wastewater rates by _____%. These rates should be reflected for service rendered on or after _____.
(date)

Exception

_____ hereby waives the right to implement
(name of utility)
a pass-through rate increase within 45 days of filing, as provided by Section 367.081(4)(b),
Florida Statutes, in order that the pass-through and index rate increase may both be implemented
together 60 days after the official filing date of this notice of intention.

Signature: _____

Title: _____

(To be used if an index and pass-through rate increase are requested jointly.)

NOTICE TO CUSTOMERS

Pursuant to Section 367.081(4)(b), Florida Statutes, water and wastewater utilities are permitted to pass through, without a public hearing, a change in rates resulting from: an increase or decrease in rates charged for utility services received from a governmental agency or another regulated utility and which services were redistributed by the utility to its customers; an increase or decrease in the rates that it is charged for electric power, the amount of ad valorem taxes assessed against its used and useful property, the fees charged by the Department of Environmental Protection in connection with the National Pollutant Discharge Elimination System Program, or the regulatory assessment fees imposed upon it by the Commission; costs incurred for water quality or wastewater quality testing required by the Department of Environmental Protection; the fees charged for wastewater bio solids disposal; costs incurred for any tank inspection required by the Department of Environmental Protection or a local governmental authority; treatment plant and water distribution system operator license fees required by the Department of Environmental Protection or a local governmental authority; water or wastewater operating permit fees charged by the Department of Environmental Protection or a local governmental authority; and consumptive or water use permit fees charged by a water management district.

On _____, _____ filed its notice of
(date) (name of utility)
intention with the Florida Public Service Commission to increase water and wastewater rates in _____ County pursuant to this Statute. The filing is subject to review by the Commission Staff for accuracy and completeness. Water rates will increase by approximately _____% and wastewater rates by _____%. These rates should be reflected on your bill for service rendered on or after _____.
(date)

If you should have any questions, please contact your local utility office. Be sure to have account number handy for quick reference.

State of Florida



Public Service Commission

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

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

DATE: November 30, 2018

TO: Lauren Davis, Senior Attorney, Office of the General Counsel

FROM: Sevini K. Guffey, Public Utility Analyst II, Division of Economics *SKG*

RE: Statement of Estimated Regulatory Costs for Proposed Adoption of Rule 25-30.420, Florida Administrative Code (F.A.C.), Establishment of Price Index, Adjustment of Rates; Requirement of Bond; Filings After Adjustment; Notice to Customers

Rule 25-30.420, F.A.C., allows the Commission to establish a price increase or decrease index for all water and wastewater utilities that are regulated by the Commission. The rule references Form PSC/AFD 15 (4/99), titled "Index Application," which is available to all water and wastewater utilities to aid in applying for index or pass-through rate adjustments.

The rule is being revised to reference the updated revised date of September 2018 on Form PSC 1022 (9/18). The form has been also updated to include explanatory notes and instructions that reflect the expansion of eligible pass-through costs permitted by a 2016 statutory change in Section 367.081, F.S.

The attached Statement of Estimated Regulatory Costs (SERC) addresses the considerations required pursuant to Section 120.541, Florida Statutes (F.S.). No rule development workshop was held regarding this rule revision. No regulatory alternatives were submitted pursuant to Section 120.541(1)(a), F.S. None of the impacts/cost criteria established in Section 120.541(2)(a), F.S. will be exceeded as a result of the proposed rule revisions. The rule modifications will only affect utilities requesting an index or pass-through rate increase or decrease. There are no new costs to the utility as a result of the modifications to this rule.

cc: SERC File

FLORIDA PUBLIC SERVICE COMMISSION
STATEMENT OF ESTIMATED REGULATORY COSTS
Rule 25-30.420, F.A.C.

1. Will the proposed rule have an adverse impact on small business?
[120.541(1)(b), F.S.] (See Section E., below, for definition of small business.)

Yes ☐

No ☒

If the answer to Question 1 is "yes", see comments in Section E.

2. Is the proposed rule likely to directly or indirectly increase regulatory costs in excess of \$200,000 in the aggregate in this state within 1 year after implementation of the rule? [120.541(1)(b), F.S.]

Yes ☐

No ☒

If the answer to either question above is "yes", a Statement of Estimated Regulatory Costs (SERC) must be prepared. The SERC shall include an economic analysis showing:

A. Whether the rule directly or indirectly:

- (1) Is likely to have an adverse impact on any of the following in excess of \$1 million in the aggregate within 5 years after implementation of the rule?
[120.541(2)(a)1, F.S.]

Economic growth

Yes ☐ No ☒

Private-sector job creation or employment

Yes ☐ No ☒

Private-sector investment

Yes ☐ No ☒

- (2) Is likely to have an adverse impact on any of the following in excess of \$1 million in the aggregate within 5 years after implementation of the rule?
[120.541(2)(a)2, F.S.]

Business competitiveness (including the ability of persons doing business in the state to compete with persons doing business in other states or domestic markets)

Yes ☐ No ☒

Productivity

Yes ☐ No ☒

Innovation

Yes ☐ No ☒

(3) Is likely to increase regulatory costs, including any transactional costs, in excess of \$1 million in the aggregate within 5 years after the implementation of the rule? [120.541(2)(a)3, F.S.]

Yes ☐

No ☒

Economic Analysis: A summary of the recommended rule revisions is included in the attached memorandum to Counsel. Staff believes that none of the impacts/cost criteria established in Paragraph 120.541(2)(a), F.S. will be exceeded as a result of the proposed rule revisions. The proposed rule revisions are not imposing any new regulatory requirements, only reflect and updated revision date of form PSC/AFD 15 (4/99), which is titled "Index Application." The updated revised date is (12/17). The modified rule 25-30.420, F.A.C. outlines the process by which water and wastewater utilities are able to adjust rates based on current specific expenses without applying for a rate case. There are no new costs to the utility as a result of the modification of this rule.

B. A good faith estimate of: [120.541(2)(b), F.S.]

(1) The number of individuals and entities likely to be required to comply with the rule.

The potentially affected entities include 132 investor-owned water and wastewater utilities that serve approximately 178,041 customers in Florida. The proposed revisions will also be applicable to water and wastewater utilities which may come under the jurisdiction of the Commission in the future.

(2) A general description of the types of individuals likely to be affected by the rule.

The 132 investor-owned water and wastewater utilities and customers of those utilities are likely to be affected by this rule.

C. A good faith estimate of: [120.541(2)(c), F.S.]

(1) The cost to the Commission to implement and enforce the rule.

☒ None. To be done with the current workload and existing staff.

☐ Minimal. Provide a brief explanation.

☐ Other. Provide an explanation for estimate and methodology used.

(2) The cost to any other state and local government entity to implement and enforce the rule.

- ☒ None. The rule will only affect the Commission.
- ☐ Minimal. Provide a brief explanation.
- ☐ Other. Provide an explanation for estimate and methodology used.

(3) Any anticipated effect on state or local revenues.

- ☒ None.
- ☐ Minimal. Provide a brief explanation.
- ☐ Other. Provide an explanation for estimate and methodology used.

D. A good faith estimate of the transactional costs likely to be incurred by individuals and entities (including local government entities) required to comply with the requirements of the rule. "Transactional costs" include filing fees, the cost of obtaining a license, the cost of equipment required to be installed or used, procedures required to be employed in complying with the rule, additional operating costs incurred, the cost of monitoring or reporting, and any other costs necessary to comply with the rule. [120.541(2)(d), F.S.]

- ☒ None. The rule will only affect the Commission.
- ☐ Minimal. Provide a brief explanation.
- ☐ Other. Provide an explanation for estimate and methodology used.

E. An analysis of the impact on small businesses, and small counties and small cities: [120.541(2)(e), F.S.]

(1) "Small business" is defined by Section 288.703, F.S., as an independently owned and operated business concern that employs 200 or fewer permanent full-time

Date: June 26, 2019

employees and that, together with its affiliates, has a net worth of not more than \$5 million or any firm based in this state which has a Small Business Administration 8(a) certification. As to sole proprietorships, the \$5 million net worth requirement shall include both personal and business investments.

- ☒ No adverse impact on small business.
- ☐ Minimal. Provide a brief explanation.
- ☐ Other. Provide an explanation for estimate and methodology used.

(2) A "Small City" is defined by Section 120.52, F.S., as any municipality that has an unincarcerated population of 10,000 or less according to the most recent decennial census. A "small county" is defined by Section 120.52, F.S., as any county that has an unincarcerated population of 75,000 or less according to the most recent decennial census.

- ☒ No impact on small cities or small counties.
- ☐ Minimal. Provide a brief explanation.
- ☐ Other. Provide an explanation for estimate and methodology used.

F. Any additional information that the Commission determines may be useful.
[120.541(2)(f), F.S.]

- ☒ None.

Additional Information:

G. A description of any regulatory alternatives submitted and a statement adopting the alternative or a statement of the reasons for rejecting the alternative in favor of the proposed rule. [120.541(2)(g), F.S.]

- ☒ No regulatory alternatives were submitted.
- ☐ A regulatory alternative was received from

☐ Adopted in its entirety.

☐ Rejected. Describe what alternative was rejected and provide a statement of the reason for rejecting that alternative.

Item 3

State of Florida



Public Service Commission

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

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

DATE: June 26, 2019

TO: Office of Commission Clerk (Teitzman)

FROM: Division of Accounting and Finance (Richards, D. Buys, Cicchetti)
Office of the General Counsel (Schrader) *CRB DB ML CUB ALM KS JSC*

RE: Docket No. 20190091-GU – Petition for authority to accrue AFUDC, by Peoples Gas System.

AGENDA: 07/09/19 – Regular Agenda – Proposed Agency Action - Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Administrative

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

Case Background

Peoples Gas System (Peoples Gas or Company) is a natural gas local distribution company providing sales and transportation delivery of natural gas through much of the state of Florida. On April 12, 2019, Peoples Gas filed a petition for authority to accrue an Allowance for Funds Used During Construction (AFUDC) in order to develop three expansion projects totaling \$136 million. The Company subsequently filed an amended petition on May 16, 2019, which included the appropriate schedules.

The Commission has jurisdiction over this matter pursuant to Sections 350.115, 350.127(2), 366.05(1), and 366.06(1), Florida Statutes.

Date: June 26, 2019

Discussion of Issues

Issue 1: Should the Commission authorize Peoples Gas to accrue an Allowance for Funds Used During Construction (AFUDC)?

Recommendation: Yes. The Commission should authorize Peoples Gas to accrue AFUDC. (Richards)

Staff Analysis: In accordance with Rule 25-7.0141, Florida Administrative Code (F.A.C.), Peoples Gas has requested that the Commission allow the Company to accrue AFUDC to develop three expansion projects estimated to cost \$136 million in total. Peoples Gas currently is not authorized to accrue AFUDC and does not have a Commission-approved AFUDC cost rate. Prior to 1995, Rule 25-7.0141, F.A.C., set forth comprehensive eligibility requirements and a methodology regarding AFUDC for gas utilities. In 1995, this rule was amended to state simply that “a utility shall not accrue allowance for funds used during construction without prior Commission approval.”

While the rule regarding AFUDC for natural gas companies does not specify eligibility requirements and methodology, Commission rules regarding AFUDC for electric and water and wastewater utilities do provide such eligibility requirements and methodology.

Rule 25-6.0141(1)(a), F.A.C., (Electric AFUDC Rule) applies to electric utilities, and provides that the threshold requirements for projects to be eligible to accrue AFUDC include the following:

- The projects involve gross additions to plant in excess of 0.5 percent of the sum of the total balance in Account 101 – Utility Plant in Service, and Account 106 – Completed Construction not Classified, at the time the project commence, and
 - Are expected to be completed in excess of one year after commencement of construction, or
 - Were originally expected to be completed in one year or less and are suspended for six months or more, or are not ready for service after one year.

Rule 25-30.116(1)(a), F.A.C., (Water and Wastewater AFUDC Rule) applies to water and wastewater (WAW) utilities and provides that the threshold requirements for projects to be eligible to accrue AFUDC include the following:

- Projects that involve gross additions to plant in excess of \$5,000 and
 - Are expected to be completed in excess of sixty days after commencement of construction or
 - Were originally expected to be completed in sixty days or less but are not ready for service after sixty days.

The Electric and WAW AFUDC Rules would not be controlling on the natural gas industry; however, staff believes these rules can still provide instructive guidance in considering Peoples Gas’s request here.

Date: June 26, 2019

Exhibit C submitted with the Company's petition demonstrates that each proposed project individually exceeds 0.5 percent of the sum of the balances in Gas Plant in Service (Account 101) and Gas Completed Construction not Classified (Account 106); and construction on each project is expected to take in excess of one year to complete, with each project beginning in 2019. The total project cost of \$136 million is approximately 8 percent of Account 101 and Account 106 as of January 31, 2019.

The Company stated that the Commission's approval of its request to accrue AFUDC on the large capital projects, and subsequently future large projects would ensure consistency in regulatory treatment provided to the Florida electric utilities and the water and wastewater utilities.

Staff believes the Company's request to accrue AFUDC is reasonable and appropriate and recommends that the Commission authorize Peoples Gas to accrue AFUDC. Further, if one were to take guidance from the eligibility requirements and methodology used to calculate the AFUDC for Florida electric utilities and Florida water and wastewater utilities, staff believes that the request would be consistent with those requirements and methodologies.

Date: June 26, 2019

Issue 2: Should the Commission approve Peoples Gas's requested AFUDC rate of 5.97 percent?

Recommendation: Yes. The appropriate AFUDC rate for Peoples Gas is 5.97 percent based on a 13-month average capital structure for the period ended December 31, 2018. (Richards)

Staff Analysis: Peoples Gas requested an AFUDC rate of 5.97 percent based on a 13-month average capital structure for the period ended December 31, 2018. Peoples Gas has used the same formulaic approach as the electric industry to determine the appropriate AFUDC rate.

Similarly to the electric industry, Peoples Gas used the midpoint of the last allowed return on common equity, the most recent 13-month average cost of short-term debt and customer deposits and a zero cost rate for deferred taxes and all investment tax credits. The cost of long-term debt was based on end of period cost. The annual percentage rate was calculated to two decimal places.

In support of the requested AFUDC rate of 5.97 percent, Peoples Gas provided its calculations and capital structure in Schedules A and B attached to its request. Staff reviewed the schedules and determined that the proposed rate was calculated correctly. Peoples Gas used the midpoint return on equity of 10.75 percent, which was approved by Order No. PSC-2009-0411-FOF-GU.¹

Based on its review, staff believes the AFUDC rate of 5.97 percent based on a 13-month average capital structure for the period ended December 31, 2018, is appropriate and recommends Commission approval.

¹Order No. PSC-2009-0411-FOF-GU, issued June 9, 2009, in Docket No. 20080318-GU, *In re: Petition for rate increase by Peoples Gas System*.

Date: June 26, 2019

Issue 3: What is the appropriate monthly compounding rate to achieve the requested 5.97 percent annual AFUDC rate?

Recommendation: The appropriate monthly compounding rate to maintain an annual rate of 5.97 percent is 0.484385 percent. (Richards)

Staff Analysis: Peoples Gas requested a monthly compounding rate of 0.484385 percent to achieve an annual AFUDC rate of 5.97 percent. In support of the requested monthly compounding rate of 0.484385 percent, the Company provided its calculations in Schedule C attached to the amended request. The methodology used to calculate the monthly compounding rate is consistent with the methodology used by the Florida electric utilities. Staff reviewed the Company's calculations and determined they are correct. Therefore, staff recommends that the Commission approve a monthly AFUDC rate of 0.484385 percent.

Date: June 26, 2019

Issue 4: Should the Commission approve Peoples Gas' requested effective date of January 1, 2019, for implementing the AFUDC rate?

Recommendation: Yes. The AFUDC rate should be effective as of January 1, 2019. (Richards)

Staff Analysis: Peoples Gas's proposed AFUDC rate was calculated using a 13-month average capital structure for the period ended December 31, 2018. Peoples Gas requests the new AFUDC rate be effective the month following the end of the 12-month period used to establish that rate as is the practice for the Florida electric and water and wastewater utilities.

The Company's requested effective date of January 1, 2019, does not precede the period used to calculate the rate, and therefore the effective date should be approved. Accordingly, staff recommends an effective date as of January 1, 2019.

Issue 5: Should this docket be closed?

Recommendation: If no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of issuance of the order, this docket should be closed upon the issuance of a consummating order. (Schrader)

Staff Analysis: If no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the order, this docket should be closed upon the issuance of a consummating order.

Item 4

State of Florida



Public Service Commission

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

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

DATE: June 26, 2019

TO: Office of Commission Clerk (Teitzman) *BS MA BF AL*

FROM: Division of Accounting and Finance (Snyder, M. Andrews, Mouring, L. Smith, D. Buys) *DRS*
Division of Economics (Doherty, Draper) *EDJ*
Division of Engineering (Graves, King, Knoblauch, Lewis) *CKH TR*
Office of the General Counsel (Trierweiler, J. Crawford, Schrader) *KS*

RE: Docket No. 20190109-GU – Petition for recovery of costs associated with Hurricane Michael and replenishment of storm reserve, by Peoples Gas System.

AGENDA: 07/09/19 – Regular Agenda – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Clark

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

Case Background

On April 25, 2019, Peoples Gas System (Peoples or Company) filed a petition for recovery of approximately \$3.4 million for the incremental restoration costs related to Hurricane Michael and to replenish the Company's storm reserve. In its petition, Peoples asserted that, as a result of Hurricane Michael, it incurred total retail recoverable cost of approximately \$3.3 million, which exceeds and fully depletes the pre-storm balance of \$79,125 in Peoples' storm reserve. Interest and the regulatory assessment fee gross-up add an additional \$70,650. Peoples is also requesting recovery of \$27,255 related to the write-off of accounts receivable for service provided prior to Hurricane Michael.

Peoples has proposed a \$0.76 surcharge per month on the typical residential customer bill for storm recovery and restoration. The charge would be applied to all bills starting the first billing cycle of August 2019 and concluding at the end of the billing cycle when storm costs have been recovered and the reserve is replenished to the September 30, 2018 pre-storm balance of \$79,125. Peoples is requesting that any over-recovery variance between the surcharge dollars and the incremental storm costs be applied to Peoples' storm reserve.

On May 24, 2019, Peoples requested that its request be placed on the July Commission Conference.¹ Peoples discussed this matter with counsel for OPC and all agree with the July date. Peoples waived the 60-day decision requirement under Section 366.06(3), Florida Statutes (F.S.).

The Office of Public Counsel intervened in this docket on May 2, 2019.

The Commission has jurisdiction over this matter pursuant to Sections 366.04, 366.05, 366.06, and 366.076, F.S.

¹Document No. 04543-2019, filed May 24, 2019, in Docket No. 20190109-GU.

Date: June 26, 2019

Discussion of Issues

Issue 1: Should the Commission authorize Peoples Gas System to implement an interim storm restoration recovery charge?

Recommendation: Yes, the Commission should authorize Peoples Gas System to implement an interim storm restoration recovery charge. After the actual costs are reviewed for prudence and reasonableness, and are compared to the actual amount recovered through the interim storm restoration recovery charge, a determination will be made whether any over/under recovery has occurred. The disposition of any over/under recovery, and associated interest, will be considered by the Commission at a later date. (Snyder, Mouring)

Staff Analysis: As stated in the Case Background, Peoples filed a petition to recover costs associated with Hurricane Michael and to replenish its storm reserve. In its petition, Peoples asserted that, as a result of Hurricane Michael, it incurred total retail recoverable cost of \$3.4 million, which fully depletes the pre-storm balance of \$79,125 in the Company's storm reserve. Peoples further asserts that this amount was calculated in accordance with the Incremental Cost and Capitalization Approach methodology prescribed in Rule 25-6.0143, Florida Administrative Code (F.A.C.). Peoples has requested implementing a surcharge starting with the first billing cycle in August 2019 and concluding when the storm reserve has been restored to the pre-storm balance of \$79,125. Peoples anticipates this to occur in December 2019.

The approval of an interim storm restoration recovery charge should be preliminary in nature and subject to refund pending further review once the total actual storm restoration costs are known. After the actual costs are reviewed for prudence and reasonableness, and are compared to the actual amount recovered through the interim storm restoration recovery charge, a determination should be made whether any over or under recovery has occurred. The disposition of any over or under recovery, and associated interest, would be considered by the Commission at a later date.

Based on a review of the information provided by Peoples in its petition, staff recommends that the Commission authorize Peoples to implement an interim storm restoration recovery charge subject to refund. Staff emphasizes that this recommendation only allows Peoples to begin recovery on an interim basis. This interim recovery should be subject to refund pending a hearing or formal proceeding where the veracity and prudence of Peoples' actual restoration costs can be fully vetted.

Date: June 26, 2019

Issue 2: Should the Commission approve Peoples Gas System's proposed tariffs and associated charges?

Recommendation: Yes. The Commission should approve Peoples Gas System's tariffs as proposed in the petition to go into effect with the first billing cycle in August 2019. (Doherty)

Staff Analysis: Peoples is seeking approval of interim storm cost recovery charge factors as shown in proposed original tariff sheet no. 7.101-10 (Attachment A to this recommendation). Exhibit C to the petition shows the calculation of the storm cost recovery charge factors for all rate classes. Exhibit D to the petition includes revisions to all tariffs reflecting the addition of the interim storm recovery charges as shown on tariff sheet no. 7.101-10. A residential customer, with an average monthly usage of 12.8 therms per month, will see a \$0.76 increase on the monthly bill beginning with the first billing cycle in August 2019.

Peoples indicated that the customers will be notified of the interim storm cost recovery charge factors via bill inserts on the first billing cycle in July 2019.

Staff recommends that the Commission approve Peoples' proposed tariffs to go into effect with the first billing cycle in August 2019.

Date: June 26, 2019

Issue 3: What is the appropriate security to guarantee the amount collected subject to refund through the interim storm restoration recovery charge?

Recommendation: The appropriate security to guarantee the funds collected subject to refund is a corporate undertaking. (L. Smith, D. Buys)

Staff Analysis: Staff recommends that all funds collected subject to refund be secured by a corporate undertaking. The criteria for a corporate undertaking include sufficient liquidity, ownership equity, profitability, and interest coverage to guarantee any potential refund. Staff reviewed Peoples' financial statements to determine if the Company can support a corporate undertaking to guarantee the funds collected for recovery of incremental storm restoration costs related to Hurricane Michael. Peoples' 2016, 2017, and 2018 financial statements were used to determine the financial condition of the Company. Peoples' financial performance demonstrates adequate levels of ownership equity, profitability, and interest coverage, but deficient liquidity due to negative working capital. However, Peoples' average net income is 12 times the requested amount.

Staff believes Peoples has adequate resources to support a corporate undertaking in the amount requested. Based on this analysis, staff recommends that a corporate undertaking of \$3.4 million is acceptable. This brief financial analysis is only appropriate for deciding if the Company can support a corporate undertaking in the amount proposed and should not be considered a finding regarding staff's position on other issues in this proceeding.

Date: June 26, 2019

Issue 4: Should this docket be closed?

Recommendation: No, this docket should remain open pending final reconciliation of actual recoverable Hurricane Michael storm costs with the amount collected pursuant to the interim storm restoration recovery charge. The disposition of any over or under recovery, and associated interest, should be considered by the Commission at a later date. (Trierweiler)

Staff Analysis: No, this docket should remain open pending final reconciliation of actual recoverable Hurricane Michael storm costs with the amount collected pursuant to the interim storm restoration recovery charge. The disposition of any over or under recovery, and associated interest, should be considered by the Commission at a later date.

Peoples Gas System
a Division of Tampa Electric Company
Original Volume No. 3

Original Sheet No. 7.101-10

RATE SCHEDULE TEMPORARY STORM RECOVERY SURCHARGE

APPLICABILITY

Applicable to Customers receiving Gas Service under the following rate schedule.

DETERMINATION OF TEMPORARY STORM RECOVERY SURCHARGE

The Temporary Storm Recovery Surcharge will be a per therm rate per month for the bills rendered for meter readings taken on or after August 1, 2019, beginning with the first or applicable billing cycle through the last billing cycle for December 2019. The Customer's monthly bill for Gas Service shall be increased by the Temporary Storm Recovery Surcharge determined in accordance with this tariff.

Temporary Storm Recovery Surcharge factors are shown below:

<u>Rate Schedule</u>	<u>(cents per therm)</u>
<u>RS, RS-SG & RS-GHP</u>	<u>0.05921</u>
<u>SGS</u>	<u>0.03173</u>
<u>GS-1, CS-SG & CS-GHP</u>	<u>0.01476</u>
<u>GS-2</u>	<u>0.01060</u>
<u>GS-3</u>	<u>0.00874</u>
<u>GS-4</u>	<u>0.00640</u>
<u>GS-5</u>	<u>0.00471</u>
<u>SIS</u>	<u>0.00295</u>
<u>IS</u>	<u>0.00143</u>
<u>NGVS</u>	<u>0.00941</u>
<u>CSLS</u>	<u>0.00757</u>

This rate schedule is subject to Rules and Regulations of the Company and the Florida Public Service Commission.

Issued By: T. J. Szelistowski, President
Issued On:

Effective:

Item 5

State of Florida



Public Service Commission

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

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

DATE: June 26, 2019

TO: Office of Commission Clerk (Teitzman)

FROM: Division of Accounting and Finance (Wilson, Golden, Hightower)
Division of Economics (Sibley)
Office of the General Counsel (Dziechciarz)

RE: Docket No. 20190116-SU – Application for staff-assisted rate case in Brevard County, and request for interim rate increase by Merritt Island Utility Company.

AGENDA: 07/09/19 – Regular Agenda – Decision on Interim Rates – Participation is at the Discretion of the Commission

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Clark

CRITICAL DATES: 07/15/19 (60-Day Decision on Interim Rates)

SPECIAL INSTRUCTIONS: None

Case Background

Merritt Island Utility Company, Inc. (Merritt Island or Utility) is a Class C wastewater system serving approximately 141 residential and 1 general service bulk customer. Water service is provided by the City of Cocoa. According to the Utility's 2018 Annual Report, total gross revenues were \$65,442 and total operating expenses were \$73,250, resulting in a net operating loss of \$7,808.

The original owner, Mobile Home Investors, Inc., was initially granted a certificate to operate a wastewater system in existence in 1974.¹ The wastewater system was subsequently transferred several times.² The most recent transfer to Merritt Island was approved in 2017.³

Rate base was last established for the Utility in a 2008 staff-assisted rate case (SARC).⁴ In addition, net book value for transfer purposes was updated to reflect balances as of December 22, 2016, when the system was transferred to Merritt Island. The Utility's test year rates became effective on June 13, 2018, following approval of a 2018 price index rate adjustment.

On May 16, 2019, Merritt Island filed its application for a SARC. In its application, the Utility requested a test year ended March 31, 2019, for interim and final rate purposes.

This recommendation addresses the Utility's interim rates. The Commission has jurisdiction pursuant to Sections 367.082 and 367.0814(4), Florida Statutes (F.S.).

¹Order No. 6365, issued December 2, 1974, in Docket No. 730391-S, *In re: Application of Mobile Home Investors, Inc., for a certificate to operate an existing sewer utility in Brevard County, Florida*.

²Order No. 7296, issued June 28, 1976, in Docket No. 750664-S, *In re: Application of Mobile Home Investors, Inc., and Colony Park Utilities, Inc. for approval of the transfer of assets and Certificate No.137-S from the former to the latter. (Section 367.071, Florida Statutes)*; Order No. PSC-03-0320-FOF-SU, issued March 6, 2003, in Docket No. 020930-SU, *In re: Application for transfer of majority organizational control of Colony Park Utilities, Inc. holder of Certificate No. 137-S in Brevard County, from Robert Warren, Lenore Warren, William Warren, and Carol Kendall to Eileen Rogow, Arthur Rogow, and Philip Young*; Order No. PSC-07-0420-FOF-SU, issued May 14, 2007, in Docket No. 060636-SU, *In re: Application for transfer of majority organizational control of Colony Park Utilities, Inc., holder of Certificate No. 137-S in Brevard County from Eileen Rogow to Michael Abramowitz*; Order No. PSC-14-0673-PAA-SU, issued December 5, 2014, in Docket No. 120285-SU, *In re: Application to transfer wastewater facilities and Certificate No. 137-S in Brevard County from Colony Park Utilities, Inc. to Colony Park Development Utilities, LLC*.

³Order No. PSC-2017-0366-PAA-SU, issued September 27, 2017, in Docket No. 20170018-SU, *In re: Application to transfer wastewater system and Certificate No. 137-S in Brevard County from Colony Park Development Utilities, LLC to Merritt Island Utility Company, Inc.*

⁴Order No. PSC-08-0760-PAA-SU, issued November 17, 2008, in Docket No. 080104-SU, *In re: Application for staff-assisted rate case in Brevard County by Colony Park Utilities, Inc.*

Discussion of Issues

Issue 1: Should an interim revenue increase be approved?

Recommendation: Yes, Merritt Island should be authorized to collect interim revenues as indicated below:

	Test Year Revenues	\$ Increase	Revenue Requirement	% Increase
Wastewater	\$66,595	\$3,584	\$70,179	5.38%

(Wilson, Golden)

Staff Analysis: On May 16, 2019, Merritt Island filed an application requesting an interim increase in its wastewater rates. Section 367.0814(4), F.S., details interim rate increases for staff-assisted rate cases.

Section 367.0814(4), F.S., states:

(4) The commission may, upon its own motion, or upon petition from the regulated utility, authorize the collection of interim rates until the effective date of the final order. Such interim rates may be based upon a test period different from the test period used in the request for permanent rate relief. To establish interim relief, there must be a demonstration that the operation and maintenance expenses exceed the revenues of the regulated utility, and interim rates shall not exceed the level necessary to cover operation and maintenance expenses as defined by the Uniform System of Accounts for Class C Water and Wastewater Utilities (1996) of the National Association of Regulatory Utility Commissioners.

Staff has reviewed the Utility's filed operation and maintenance (O&M) expenses in relation to its revenues. Based on the Utility's filing, staff recommends that Merritt Island has demonstrated a *prima facie* entitlement to an interim rate increase in accordance with Section 367.0814(4), F.S.

Revenue Increase

In order to establish interim rate relief as prescribed by Section 367.0814(4), F.S., staff used the Utility's revenues reflected in its filing for the test year ended March 31, 2019. The test year revenues equal \$66,595 from wastewater service rates. There were no miscellaneous service revenues reported for the test year. The test year O&M expenses equal \$70,018. The difference between the Utility's test year revenues and O&M expenses is \$3,423.

In addition, the interim wastewater increase should be grossed up to include regulatory assessment fees (RAFs). The Commission has previously determined that it would be inappropriate to approve an increase in a utility's rates to cover its operating expenses and deny that same utility the funds to pay RAFs.⁵ Furthermore, by approving an interim rate increase that

⁵Order No. PSC-01-1654-FOF-WS, issued August 13, 2001, in Docket No. 010396-WS, *In re: Application for staff-assisted rate case in Brevard County by Burkim Enterprises, Inc.*

Date: June 26, 2019

allows for the payment of RAFs, the utility should be able to fully cover its O&M expenses. The RAFs associated with the interim increase equal \$161.

In total, Merritt Island should be allowed an interim revenue increase of \$3,584 (\$3,423 + \$161) to produce revenues sufficient to cover O&M expenses and additional RAFs. Thus, staff recommends the appropriate interim revenue requirement should be \$70,179. This is a 5.38 percent increase above the Utility's test year revenues. Table 1-1 illustrates staff's interim increase calculation.

Table 1-1
Determination of Interim Increase

	Water
1. Utility Adjusted Test Year O&M Expenses	\$70,018
2. Less: Utility Test Year Revenues	<u>\$66,595</u>
3. Revenues to Cover O&M Expenses	\$3,423
4. Interim Revenue Increase	\$3,423
5. RAFs on Interim Rate Increase	\$161
6. Total Interim Revenue Increase (\$)	<u>\$3,584</u>
7. Total Interim Revenue Increase (%)	<u>5.38%</u>

Date: June 26, 2019

Issue 2: What are the appropriate interim water rates?

Recommendation: The interim rate increase of 5.38 percent should be applied as an across-the-board increase to the service rates in effect as of March 31, 2019. The rates, as shown on Schedule No. 1, should be effective for service rendered on or after the stamped approval date on the tariff sheets pursuant to Rule 25-30.475(1), Florida Administrative Code (F.A.C.). The Utility should file revised tariff sheets and a proposed customer notice to reflect the Commission-approved rates. In addition, the approved rates should not be implemented until the required security has been filed, staff has approved the proposed customer notice, and the notice has been received by the customers. The Utility should provide proof of the date notice was given within 10 days of the date of the notice. (Sibley)

Staff Analysis: Staff recommends that interim service rates for Merritt Island be designed to allow the Utility the opportunity to generate annual operating revenues of \$70,179. Since there were no miscellaneous service revenues reported by the Utility for the test year, this would result in an increase of \$3,584 (5.38 percent) to service rates.

Staff recommends that the interim rate increase of 5.38 percent should be applied as an across-the-board increase to the service rates in effect as of March 31, 2019.⁶ The rates, as shown on Schedule No. 1, should be effective for service rendered on or after the stamped approval date on the tariff sheets pursuant to Rule 25-30.475(1), F.A.C. The Utility should file revised tariff sheets and a proposed customer notice to reflect the Commission-approved rates. In addition, the approved rates should not be implemented until the required security has been filed, staff has approved the proposed customer notice, and the notice has been received by the customers. The Utility should provide proof of the date notice was given within 10 days of the date of the notice.

⁶The Utility had a 2019 price index effective June 9, 2019. Interim rate increases are applied to the rates in effect at the end of the test year.

Date: June 26, 2019

Issue 3: What is the appropriate security to guarantee the interim increase?

Recommendation: The appropriate security to guarantee the funds collected subject to refund is a corporate undertaking. (Hightower, Wilson, Golden)

Staff Analysis: Pursuant to Section 367.082, F.S., revenues collected under interim rates shall be placed under bond, escrow, letter of credit, or corporate undertaking subject to refund with interest at a rate ordered by the Commission. As recommended in Issue 1, the total annual interim increase is \$3,584. In accordance with Rule 25-30.360, F.A.C., staff calculated the potential refund of revenues and interest collected under interim conditions to be \$2,428. This amount is based on an estimated eight months of revenue being collected from staff's recommended interim rates over the Utility's current authorized rates shown on Schedule No. 1.

The owner/president provided the most recent three years of his personal financial net worth. Staff reviewed the confidential personal financial information provided by the owner/president.⁷ Staff believes that in this circumstance the owner/president has demonstrated the financial ability and wherewithal to guarantee the interim refund in this rate increase, if necessary. Further, the owner/president has provided a personal guarantee in the amount of \$2,428, in this docket.⁸

Pursuant to Rule 25-30.360(6), F.A.C., the Utility should provide a report by the 20th day of each month indicating the monthly and total revenue collected subject to refund. Should a refund be required, the refund should be with interest and undertaken in accordance with Rule 25-30.360, F.A.C. In no instance should maintenance and administrative costs associated with any refund be borne by the customers. Such costs are the responsibility of, and should be borne by, the Utility.

Accordingly, the appropriate security to guarantee the funds collected subject to refund is a corporate undertaking.

⁷ Document No. 04598-2019 (Confidential), in Docket No. 20190116-SU.

⁸ Document No. 05085-2019.

Date: June 26, 2019

Issue 4: Should this docket be closed?

Recommendation: No. The docket should remain open pending the Commission's final action on the Utility's requested rate increase. (Dziechciarz)

Staff Analysis: The docket should remain open pending the Commission's final action on the Utility's requested rate increase.

MERRITT ISLAND UTILITY COMPANY, INC TEST YEAR ENDED MARCH 31, 2019 MONTHLY WASTEWATER RATES			
		SCHEDULE NO. 1 DOCKET NO. 20190116-SU	
	RATES EFFECTIVE 03/31/2019 (1)	CURRENT RATES (2)	STAFF RECOMMENDED INTERIM
<u>Residential Service</u>			
All Meter Sizes			
5/8" x 3/4"	\$10.91	\$11.15	\$11.50
Charge per 1,000 gallons	\$2.91	\$2.97	\$3.07
6,000 gallon cap			
<u>General Service</u>			
5/8" x 3/4"	\$10.91	\$11.15	\$11.50
3/4"	\$16.37	\$16.73	\$17.25
1"	\$27.28	\$27.88	\$28.75
1-1/2"	\$54.55	\$55.75	\$57.50
2"	\$87.28	\$89.20	\$92.00
3"	\$174.56	\$178.40	\$184.00
4"	\$272.75	\$278.75	\$287.50
6"	\$545.50	\$557.50	\$575.00
Charge per 1,000 gallons	\$3.49	\$3.57	\$3.68
<u>Bulk Service</u>			
All Meter Sizes	\$1,309.20	\$1,338.00	\$1,380.00
(120 ERCs)			
Charge per 1,000 gallons	\$3.49	\$3.57	\$3.68
720,000 gallon cap			
<u>Typical Residential 5/8" x 3/4" Meter Bill Comparison</u>			
3,000 Gallons	\$19.64	\$20.06	\$20.71
6,000 Gallons	\$28.73	\$28.97	\$29.92
10,000 Gallons	\$28.73	\$28.97	\$29.92
(1) The interim rate increase was applied to the rates effective on 03/31/2019.			
(2) The current rates became effective June 9, 2019 as a result of a price index.			

Item 6

State of Florida



Public Service Commission

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

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

DATE: June 26, 2019

TO: Office of Commission Clerk (Teitzman)

FROM: Division of Engineering (P. Buys, Graves, King, Knoblauch, Salvador) *PSB NM EK LS TDS*
Office of Industry Development and Market Analysis (Bremen, Eastmond, Wendel, Eichler) *SC*
Office of the General Counsel (Trierweiler, Crawford) *JSC JTB BC DE 87 BMW CH*

RE: Docket No. 20180144-EI – Review of 2019-2021 storm hardening plan, Florida Power & Light Company.

Docket No. 20180145-EI – Review of 2019-2021 storm hardening plan, Tampa Electric Company.

Docket No. 20180146-EI – Review of 2019-2021 storm hardening plan, Duke Energy Florida, LLC.

Docket No. 20180147-EI – Review of 2019-2021 storm hardening plan, Gulf Power Company.

Docket No. 20180148-EI – Review of 2019-2021 storm hardening plan, Florida Public Utilities Company.

AGENDA: 07/09/19 – Regular Agenda – Proposed Agency Action - Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Fay

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

Case Background

The hurricanes of 2004 and 2005 that made landfall in Florida resulted in extensive storm restoration costs and lengthy electric service interruptions for millions of electric investor-owned utility (IOU) customers. On January 23, 2006, the Florida Public Service Commission (Commission) staff conducted a workshop to discuss the damage to electric utility facilities resulting from these hurricanes and to explore ways of minimizing future storm damage and customer outages. State and local government officials, independent technical experts, and Florida's electric utilities participated in the workshop.

On February 27, 2006, the Commission issued Order No. PSC-06-0144-PAA-EI, in Docket No. 20060078-EI, requiring that the IOUs begin implementing an eight-year inspection cycle of their respective wooden poles.¹ In that Order, the Commission noted:

The severe hurricane seasons of 2004 and 2005 have underscored the importance of system maintenance activities of Florida's electric IOUs. These efforts to maintain system components can reduce the impact of hurricanes and tropical storms upon utilities' transmission and distribution systems. An obvious key component in electric infrastructure is the transmission and distribution poles. If a pole fails, there is a high chance that the equipment on the pole will be damaged, and failure of one pole often causes other poles to fail. Thus, wooden poles must be maintained or replaced over time because they are prone to deterioration. Deteriorated poles have lost some or most of their original strength and are more prone to fail under certain environmental conditions such as high winds or ice loadings. The only way to know for sure which poles...must be replaced is through periodic inspections. [p. 2]

On April 25, 2006, the Commission issued Order No. PSC-06-0351-PAA-EI, in Docket No. 20060198-EI, requiring all IOUs to file plans and estimated implementation costs for 10 ongoing storm preparedness initiatives (Ten Initiatives) on or before June 1, 2006.² The Ten Initiatives are:

1. A Three-Year Vegetation Management Cycle for Distribution Circuits
2. An Audit of Joint-Use Attachment Agreements
3. A Six-Year Transmission Structure Inspection Program
4. Hardening of Existing Transmission Structures
5. A Transmission and Distribution Geographic Information System
6. Post-Storm Data Collection and Forensic Analysis
7. Collection of Detailed Outage Data Differentiating Between the Reliability Performance of Overhead and Underground Systems

¹Docket No. 20060078-EI, *In re: Proposal to require investor-owned electric utilities to implement ten-year wood pole inspection program.*

²Docket No. 20060198-EI, *In re: Requirement for investor-owned electric utilities to file ongoing storm preparedness plans and implementation cost estimates.*

8. Increased Utility Coordination with Local Governments
9. Collaborative Research on Effects of Hurricane Winds and Storm Surge
10. A Natural Disaster Preparedness and Recovery Program

These Ten Initiatives were not intended to encompass all reasonable ongoing storm preparedness activities. Rather, the Commission viewed these initiatives as a starting point of an ongoing process.³ By Order Nos. PSC-06-0781-PAA-EI (addressing Tampa Electric Company (TECO), and Florida Public Utilities Company (FPUC)), PSC-06-0947-PAA-EI (addressing Progress Energy Florida, Inc., and Gulf Power Company (Gulf)), and PSC-07-0468-FOF-EI (addressing Florida Power & Light Company (FPL)), the Commission addressed the adequacy of the IOU's plans for implementing the Ten Initiatives.

The Commission also pursued rulemaking to address the adoption of distribution construction standards more stringent than the minimum safety requirements of the National Electrical Safety Code (NESC) and the identification of areas and circumstances where distribution facilities should be required to be constructed underground.⁴ Rule 25-6.0342, Florida Administrative Code (F.A.C.), was ultimately adopted.⁵

Rule 25-6.0342, F.A.C., requires each IOU to file an Electric Infrastructure Storm Hardening Plan for review and approval by the Commission which includes a description of construction standards, policies, practices, and procedures to enhance the reliability of overhead and underground electrical transmission and distribution facilities. The rule calls for, at a minimum, each IOU's plan to address the following items:

- a. Compliance with the NESC
- b. Extreme Wind Loading (EWL) standards for:
 - i. New construction
 - ii. Major planned work, including expansion, rebuild, or relocation of existing facilities
 - iii. Critical infrastructure facilities and along major thoroughfares
- c. Mitigation of damage due to flooding and storm surges

³Order No. PSC-06-0351-PAA-EI, p. 2, issued April 25, 2006, in Docket No. 20060198-EI, *In re: Requirement for investor-owned electric utilities to file ongoing storm preparedness plans and implementation costs estimates*.

⁴Order No. PSC-06-0556-NOR-EU, issued June 28, 2006, in Docket No. 20060172-EU, *In re: Proposed rules governing placement of new electric distribution facilities underground, and conversion of existing overhead distribution facilities to underground facilities, to address effects of extreme weather events*; and Docket No. 20060173-EU, *In re: Proposed amendments to rules regarding overhead electric facilities to allow more stringent construction standards than required by National Electric Safety Code*.

⁵Order No. PSC-07-0043-FOF-EU, issued January 16, 2007, as amended by Order No. PSC-07-0043AFOF-EU, issued January 17, 2007, in Docket No. 20060172-EU, *In re: Proposed rules governing placement of new electric distribution facilities underground, and conversion of existing overhead distribution facilities to underground facilities, to address effects of extreme weather events*; and Docket No. 20060173-EU, *In re: Proposed amendments to rules regarding overhead electric facilities to allow more stringent construction standards than required by National Electric Safety Code*.

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- d. Placement of facilities to facilitate safe and efficient access for installation and maintenance
- e. A deployment strategy that includes:
 - i. The facilities affected
 - ii. Technical design specifications, construction standards, and construction methodologies
 - iii. The communities and areas where the electric infrastructure improvements are to be made
 - iv. The impact on joint-use facilities on which third-party attachments exist
 - v. An estimate of the costs and benefits to the utility of making the electric infrastructure improvements
 - vi. An estimate of the costs and benefits to third-party attachers affected by the electric infrastructure improvements
- f. The inclusion of Attachment Standards and Procedures for Third-Party Attachers

FPL filed its 2016-2018 storm hardening plan updates on March 15, 2016, which was consolidated with its petition for rate increase. FPL's plan was approved at the November 29, 2016 Commission Conference through a settlement.⁶ On May 2-3, 2016, the other four IOU's filed their 2016-2018 storm hardening plan updates. The Commission approved the storm hardening plans for DEF, FPUC, TECO, and Gulf, at the December 6, 2016 Commission Conference.⁷

After four hurricanes impacted Florida in 2016-2017, the Commission opened Docket No. 20170215-EU to review electric utility storm preparedness and restoration actions (Hurricane Review Docket), and to identify areas where infrastructure damage, outages, and recovery time for customers could be minimized in the future. On May 2-3, 2018, the Commission held a workshop during which information was presented by utilities, customers and their representatives, and local governments. Topics discussed at the workshop included preparation and restoration processes, hardened versus non-hardened facility performance, underground versus overhead performance, impediments to restoration, customer and stakeholder communication, and suggested improvements based on lessons learned.

⁶Order No. PSC-16-0560-AS-EI, issued December 15, 2016, in Docket No. 20160021-EI, *In re: Petition for rate increase by Florida Power & Light Company*.

⁷Order No. PSC-16-0569-PAA-EI, issued December 19, 2016, in Docket No. 20160105-EI, *In re: Petition for approval of 2016-2018 storm hardening plan, pursuant to Rule 25-6.0342, F.A.C., by Tampa Electric Company*; Order No. PSC-16-0570-PAA-EI, issued December 19, 2016, in Docket No. 20160106-EI, *In re: Petition for approval of 2016-2018 storm hardening plan, pursuant to Rule 25-6.0342, F.A.C., by Florida Public Utilities Company*; Order No. PSC-16-0571-PAA-EI, issued December 19, 2016, in Docket No. 20160107-EI, *In re: Petition for approval of 2016-2018 storm hardening plan, pursuant to Rule 25-6.0342, F.A.C., by Duke Energy Florida, LLC*; Order No. PSC-16-0572-PAA-EI, issued December 19, 2016, in Docket No. 20160108-EI, *In re: Petition for approval of 2016-2018 storm hardening plan, pursuant to Rule 25-6.0342, F.A.C., by Gulf Power Company*.

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On July 24, 2018, the Commission issued its “Review of Florida’s Electric Utility Hurricane Preparedness and Restoration Action’s 2018.”⁸ At the July 10, 2018 Internal Affairs meeting, the Commission directed staff to open the storm hardening plan review dockets earlier than previously scheduled and to begin collecting additional details related to:

- Meetings with local governments regarding vegetation management and the identification of critical facilities.
- Utility staffing practices at local emergency operations centers (EOC).
- Planned responses to roadway congestion, motor fuel availability, and lodging accommodation issues.
- Alternatives considered before electing a particular storm hardening project.
- The collection of more uniform performance data for hardened versus non-hardened and underground facilities, including sampling data where appropriate.

On March 1, 2019, the five IOUs filed their 2019-2021 storm hardening plan updates as requested. Docket Nos. 20180144-EI (FPL), 20180145-EI (TECO), 20180146-EI (DEF), 20180147-EI (Gulf) and 20180148-EI (FPUC) were opened. Staff did not conduct a workshop for these updated storm hardening plans as data request responses were sufficient in understanding the updated plans.

This recommendation addresses FPL, TECO, DEF, Gulf, and FPUC’s plan updates as required by Rule 25-6.0342, F.A.C. For each utility, staff’s recommendation addresses:

- I. Wooden Pole Inspection Program
- II. Ten Initiatives
- III. National Electric Safety Code (NESC) Compliance
- IV. Extreme Wind Loading (EWL) Standards
- V. Mitigation of Flooding and Storm Surge Damage
- VI. Facility Placement
- VII. Deployment Strategies
- VIII. Attachment Standards and Procedures for Third-Party Attachments

Attachment A describes the storm hardening requirements of the Wooden Pole Inspection Program and the Ten Initiatives for each IOU. Attachments B through F contain a comparison of FPL, TECO, DEF, Gulf, and FPUC’s provisions of the 2016-2018 approved and updated 2019-2021 Wooden Pole Inspection Programs and Ten Initiatives, and the cost of implementing the approved and updated programs and initiatives.

⁸ Document No. 04847-2018, issued July 24, 2018, in Docket No. 20170215-EU, *In re: Review of electric utility hurricane preparedness and restoration actions*.

Docket Nos. 20180144-EI, 20180145-EI, 20180146-EI, 20180147-EI, 20180148-EI

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The Commission has jurisdiction over this matter pursuant to Sections 366.04 and 366.05, Florida Statutes (F.S.).

Discussion of Issues

Issue 1: Should the Commission approve Florida Power and Light's 2019-2021 storm hardening plan filed in Docket No. 20180144-EI?

Recommendation: Yes. FPL's updated plan is largely a continuation of its current Commission-approved plan. A review of FPL's plan shows that it has the information required by the Commission's rule and orders. Staff notes that approval of FPL's plan does not mean approval for cost recovery. FPL should consider the rate impact before taking proactive steps to improve its system to withstand severe weather events. (P. Buys, Knoblauch, Salvador, Breman, Eastmond, Wendel, Eichler)

Staff Analysis: On Attachment B, staff provides a summary of FPL's current Wooden Pole Inspection Program and Ten Initiatives and the proposed changes. In addition, where available, staff has shown the costs associated with the Wooden Pole Inspection Program and Ten Initiatives for 2016-2018 and 2019-2021. Components of FPL's updated plan are summarized below.

Wooden Pole Inspection Program

FPL proposes to continue its eight-year Wooden Pole Inspection Program.⁹ FPL completes inspections on its entire pole population to identify poles that require repair, reinforcement or replacement. Currently, FPL has completed its fifth year of its second eight-year cycle. FPL will continue to file the results of these inspections in FPL's Annual Electric Utility Distribution Reliability Report. The costs for 2019 related to the eight-year Wooden Pole Inspection Program are estimated to be between \$45,000,000 and \$55,000,000; however, cost estimates for 2020 and 2021 were not provided. For 2016-2018, FPL spent \$164,000,000 for its Wooden Pole Inspection Program.

Ten Initiatives

Initiative One – Three-Year Vegetation Management Cycle for Distribution Circuits

FPL proposes no changes to its previously approved trim cycle.¹⁰ Currently, FPL has a three-year average trim cycle for feeders and a six-year average trim cycle for distribution laterals. Since a feeder outage affects a larger number of customers than a lateral outage, a shorter trim cycle is utilized for feeders. Additionally, FPL has a mid-cycle trimming program that addresses tree conditions that could result in outages before its next planned trim cycle. This includes targeted trimming and maintenance of tree species that often grow faster than others. FPL also proposes to continue trimming and/or removing trees that are leaning, damaged, dead, or trees reported by customers as needing attention. The cost for 2019-2021 for Initiative One is estimated between \$196,000,000 and \$206,000,000 as compared to \$189,000,000 spent in 2016-2018.

⁹Order No. PSC-07-0078-PAA-EU, issued January 29, 2007, in Docket No. 20060531-EU, *In re: Review of all electric utility Wooden Pole Inspection Programs*.

¹⁰Order No. PSC-07-0468-FOF-EI, issued May 30, 2007, in Docket No. 20060198-EI, *In re: Requirement for investor-owned electric utilities to file ongoing storm preparedness plans and implementation cost estimates*.

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Initiative Two – Audits of Joint-Use Attachment Agreements

There are no proposed changes to this initiative. FPL completes annual audits of joint-use facilities and attachments to the Utility's poles by cable television (CATV) companies and telecommunication companies. These audits are conducted on a five-year cycle with approximately 20 percent of FPL's service territory audited each year. The pole attachment audits focus on compliance with existing pole attachment agreements for all FPL-owned and joint-use poles. FPL proposes to continue conducting pole strength assessments in conjunction with its eight-year Wooden Pole Inspection Program. FPL does not specifically track or budget for the costs associated with Initiative Two.

Initiative Three – Six-Year Transmission Structure Inspection Program

There are no proposed changes to this initiative. FPL's transmission structure inspection program incorporates different cycles depending on the type of inspection and structure. Below is a list of the types of inspections:

1. One-year cycle: Ground level visual inspections (wood, concrete, and steel poles/structures)
2. Six-year cycle: Climbing or bucket truck inspections (wood poles/structures)
3. Ten-year cycle: Climbing or bucket truck inspections (steel and concrete poles/structures)

In addition, FPL also inspects the condition of various transmission pole/structure components, including attachments, insulators, cross-arms, cross-braces, foundations, bolts, conductors, overhead ground wires, guy wires, anchors, and bonding. The 2019-2021 cost for this initiative is estimated to be between \$93,000,000 and \$113,000,000 as compared to \$112,000,000 spent for 2016-2018.

Initiative Four – Hardening of Existing Transmission Structures

There are no proposed changes to this initiative. FPL plans to replace all wooden transmission structures with round spun concrete poles and all ceramic post insulators on concrete poles with polymer post insulators. In addition, FPL has plans to increase the replacement rate for wood transmission structures and ceramic post insulators on square concrete poles. FPL will prioritize these two existing transmission storm hardening initiatives based on factors including proximity to high wind areas, system importance, customer count, and coordination with the distribution critical infrastructure (CIF) storm initiative. FPL reports that at the end of 2018, 93 percent of transmission structures were steel or concrete. The 2019-2021 cost for this initiative is estimated to be between \$105,000,000 and \$150,000,000 as compared to \$136,000,000 spent for 2016-2018.

Initiative Five – Transmission and Distribution Geographic Information System (GIS)

There are no proposed changes to this initiative. FPL has established GIS databases for data on its distribution system, such as pole inspection records (e.g., pole locations and attributes), joint-use audit data, levels of hardening, and information on streetlights. As part of GIS improvements for post-hurricane forensic analysis, FPL developed a mobile tool for electronic inspection,

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which creates routes within the hurricane-force wind area. Using these routes, field employees can collect information on observed damage and document the cause of the damage. FPL will continue to update its GIS as needed and maintain updated information on the Company's distribution system. FPL does not specifically track or budget for the costs associated with Initiative Five.

Initiative Six – Post-Storm Data Collection and Forensic Analysis

There are no proposed changes to this initiative. To conduct forensic data collection and analysis, FPL will collect information on the storm path and corresponding wind bands. For overhead distribution, teams will be assigned to specific areas in the path of the storm, and damage that meets patrol criteria will be investigated. For overhead hardened distribution feeders, forensic teams will cover a statistical sample of feeders that experience an interruption in the impacted area. Damage locations are to include poles, wires, and distribution equipment that are damaged or caused a customer outage. While storm damage data is collected in certain areas, restoration crews will begin their work in other locations. This will allow the collection of sample observations for forensic analysis without impeding early restoration work. FPL was impacted by Hurricanes Matthew and Irma in 2016 and 2017, respectively, and forensic data was collected and analyzed for both storms. FPL does not specifically track or budget for the costs associated with Initiative Six.

Initiative Seven – Collection of Detailed Outage Data Differentiating Between the Reliability Performance of Overhead and Underground Systems

There are no proposed changes to this initiative. FPL's plan proposes to continue managing its assets and performing forensic analysis on the performance of overhead and underground systems; however, these metrics are only available on a non-differentiated basis and are not for overhead and underground separately. This is primarily due to FPL's feeders being overhead/underground hybrids and performing calculations on data that could be differentiated may yield misleading results. Evaluation of equipment performance by type may also be available from forensics, depending on the specific characteristics of a given storm and if forensic teams have time to collect adequate data. Data gathered by the teams will depend on whether the restoration process lasts for an extended period of time, and whether or not the equipment is impacted. FPL does not specifically track or budget for the costs associated with Initiative Seven.

In response to information requested in the Hurricane Review Docket, FPL outlined the type of comparable data that the Utility plans to provide for overhead and underground facilities. FPL stated that it will continue to collect and analyze data concerning the performance of its transmission and distribution facilities when they are impacted by storms. The storm damage forensic data will be collected and obtained through field observations and will include pole failures by the type of damage and whether the pole was hardened or non-hardened. In addition, FPL will collect information on non-hardened and hardened overhead and underground facilities for feeders, laterals, and transmission, which will include the number of customers out of service and the population of customers. FPL indicates that depending on the storm's strength, size, path, damage, and speed of restoration, the samples of observation and collection of forensic infrastructure storm damage will vary.

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Initiative Eight – Increased Coordination with Local Governments

There are no proposed changes to this initiative. FPL proposes to continue meeting with local governments and communities to discuss critical infrastructure functions, line clearing, storm readiness, joint-use of public rights-of-way, fuel/rate adjustments, and underground conversions. The Company uses e-mail communication and an online Government Portal website, which allows governments to access information on customer outages, estimated restoration times, FPL crew resources, and outage maps. In addition, FPL participates in annual hurricane exercises, which provides the Company input on how to better collaborate in emergency situations. FPL does not specifically track or budget for the costs associated with Initiative Eight.

In response to information requested in the Hurricane Review Docket, FPL discussed its coordination with local governments regarding vegetation management and identification of critical facilities. FPL continues to work with cities, counties, and customers to reinforce the importance of tree maintenance and planting the right tree in the right place. Before storm season, FPL meets with local government representatives and officials to prioritize power restoration for identified facilities that are determined to be critical to the needs of the local communities. FPL provided a list of meetings with seven counties and eight cities, which involved discussions on vegetation management issues. FPL also listed 45 meetings with 29 counties to address critical infrastructure and restoration processes.

FPL has 66 staff assigned to EOCs in 26 counties. FPL strives to have two representatives at each county EOC; however, this number may vary based on the populations of FPL customers in the area. In counties with smaller populations, EOCs receive assistance, information, and support from an assigned External Affairs Manager, while staffing at county EOCs with larger populations will receive additional staff. Staffing also depends on the strength and projected landfall of a storm.

Initiative Nine – Collaborative Research on Effects of Hurricane Winds and Storm Surge

There are no proposed changes to this initiative. FPL will continue to participate in the collaborative research effort with the other Florida IOUs, municipalities, and cooperatives. The collaborative research is facilitated by the Public Utility Research Center (PURC) at the University of Florida and focuses on: (1) undergrounding of electric utility infrastructure; (2) hurricane wind effects; and (3) public outreach. FPL entered into an extension of the memorandum of understanding with PURC in 2018 for two years, effective January 1, 2019, with a provision that the memorandum of understanding will be automatically extended for successive two-year terms. FPL does not specifically track or budget for the costs associated with Initiative Nine.

Initiative Ten – Natural Disaster Preparedness and Recovery Program

There are no proposed changes to this initiative. FPL will continue to refine its Storm Emergency Management Plan, which identifies emergency conditions and the responsibilities and duties of the FPL emergency response organization for severe storms. This plan covers the roles and responsibilities of key positions and includes FPL's overall severe storm emergency processes. These processes describe the planning activities, restoration work, public communications, coordination with government, training, practice exercises, and lessons learned evaluation

systems. This plan is reviewed and revised annually. FPL does not specifically track or budget for the costs associated with Initiative Ten.

In response to information requested in the Hurricane Review Docket, FPL provided its contingency plans for roadway congestion, fuel availability, and lodging accommodation issues. In the event of roadway congestion, FPL communicates with local, state, and federal authorities for assistance. This includes support from agencies such as the Department of Transportation, state/local law enforcement, and the National Guard. FPL also utilizes information from the All Hazards Consortium (AHC), which is a non-profit organization with over 45,000 stakeholders in industry and government that works to improve the capacity to prevent, prepare for, respond to and recover from crises. FPL uses information from the AHC to identify road closures, as well as locating open and/or closed fueling stations, which assists with route selection. FPL has contracts in place to guarantee the availability of fuel and maintains fuel tanks at several company facilities. Additional fuel is procured prior to storm season, which FPL stores in multiple areas throughout its service territory. For lodging accommodations, FPL utilizes a third-party vendor to evaluate room availability and secure lodging in needed areas. Additionally, alternative lodging may be employed, which includes mobile sleepers, cots and tents, and cots in fixed facilities.

National Electrical Safety Code Compliance

Prior to 2007, FPL had generally utilized construction Grade B for all distribution lines. Since construction Grade B is stronger than Grade C, FPL's distribution facilities comply with and, in most cases, exceed the minimum requirements of the NESC. FPL's Distribution Engineering Reference Manual and Distribution Construction Standards have been revised as required to ensure compliance with all applicable rules and regulations. FPL's transmission structures are designed to meet EWL under NESC Rule 250C EWL (extreme wind loading) and are constructed to meet construction Grade B under NESC. The Grades of construction are specified in the NESC on the basis of the required strengths for safety. The relative order of Grades is B, C, and N, with Grade B being the highest or strongest.

Extreme Wind Loading (EWL) Standards

FPL's service area covers multiple wind zones on the NESC extreme wind map for Florida, Figure 250-2(d). FPL determined the most effective option for implementing the extreme wind map would be by county. FPL proposes to continue to divide the application of EWL into three wind regions corresponding to expected extreme winds of 105, 130, and 145 mph. The Utility indicated the use of a smaller number of wind regions generates advantages through efficiency of work methods, training, engineering, and administrative aspects. FPL also indicated that using 105, 130, and 145 mph wind zones is a well-balanced approach that recognizes differences in the EWL requirements in the counties within each region.

New Construction

FPL's 2019-2021 Plan continues with its previously approved approach to apply EWL and its Design Guidelines to harden existing feeders and to design and construct new pole lines. FPL indicates this approach will continue to strengthen its electric system.

Major Planned Work

FPL proposes to continue to apply EWL to existing overhead feeders and to the design and construction of major planned work, including pole line extensions, relocations and certain pole replacements. In achieving the EWL design criteria, FPL proposes to continue to utilize its Design Guidelines, which are primarily associated with changes in pole class, pole type, and desired span lengths to be used.

Critical Infrastructure (CIF)

FPL indicated that it has been strengthening its infrastructure by applying the EWL criteria on infrastructure that serve hundreds of critical facilities and other essential community needs, such as hospitals, police and fire stations, grocery stores, and highway crossings. As stated above, FPL will continue to use its Design Guidelines to achieve the EWL design criteria.

Mitigation of Flooding and Storm Surge Damage

FPL reports that approximately 20 percent of its underground distribution infrastructure is within the Category 1 to Category 3 floodplain as defined by the Florida Department of Community Affairs. FPL implemented a storm surge initiative that utilized the installation of submersible equipment to strengthen the 12 above-grade vaults in the downtown Miami distribution network system. FPL indicated these vaults are more susceptible to storm surge/flooding. This was due to lessons learned in 2014 and 2015. In addition, FPL uses 24-inch concrete pads for transformers that are located in more flood prone areas. This provides an additional 18 inches of flood protection. FPL also has guidelines in place for the prompt post-storm inspection and mitigation of damage to equipment exposed to flooding or storm surge. The guidelines include the necessary steps to purge any sand and water that has impacted the equipment and to restore it to service.

Facility Placement

FPL proposes to continue its existing Distribution Guidelines, which address the location of new and replacement poles. The guidelines state that poles should be placed in front lot lines or accessible locations where feasible. It further states that new poles, when making replacements, should be set as close as possible to the existing pole to avoid the creation of a new pole location. Furthermore, it states that concrete poles are not to be placed in inaccessible locations or locations that could potentially become inaccessible.

Deployment Strategies

FPL will continue to prioritize storm hardening projects based multiple on factors including geographic area, system importance, customer count, and cost. FPL's DERM and DCS provide details on specific engineering information about the design and construction of its distribution and transmission systems. FPL revises its DERM and DCS as required to ensure compliance with all applicable rules and regulations. FPL's plan contains its Design Guidelines and Quick Reference Guide. This Guide contains information for determining pole class, type, and desired span lengths for overhead construction.

Facilities Affected, Including Specifications and Standards

FPL lists feeder and lateral projects in all of its service areas. In 2019, FPL will continue to apply EWL to 312 feeders. FPL reported that as current hardening projects are multi-year projects, some projects are carryovers from prior years. In addition to hardening feeders, FPL plans to complete the conversion of 152 overhead laterals to underground. In 2020 and 2021, FPL will target 260-325 feeders for hardening projects and 250-500 overhead laterals for underground projects. The projects will be spread throughout FPL's service territory.

Areas of Infrastructure Improvements

FPL reported that all new feeder hardening projects are considered wind zone projects. FPL no longer tracks the different types of projects, such as 01 switches, highway crossings, or geographic feeder projects, since FPL is planning to harden all feeders by 2024. However, the methods used to achieve EWL for each feeder will be different. The methods that FPL will continue to utilize are:

- Storm Guying: installing a guy in each direction perpendicular to the line.
- Equipment Relocation: moving equipment on a pole to a near by stronger pole.
- Intermediate Pole: installing a single pole when long span lengths are present, which reduces the span length and increases the wind rating of both adjacent poles.
- Upgrading Pole Class: replacing the existing pole with a higher class pole to increase the pole's wind rating.
- Underground Facilities: utilized if there are significant barriers to building overhead or if it is a more cost-effective option for a specific application.

In addition to hardening feeders, FPL began an underground pilot program to convert overhead lateral to underground. FPL will use two design options for the underground project, the North American and European designs. The North American design will be utilized when the lateral is in the front lot and the European design will be utilized when the lateral is in the rear lot. FPL explained that while it prefers and will attempt to relocate existing facilities from the rear to the front of the customer's premises, there would be instances where that option will not be available. As part of the conversion process, FPL will be installing meter base adaptors, which provide a means to receive underground service to the customers by utilizing the existing meter and meter enclosure.

Joint-Use Facilities

FPL's joint-use pole agreements require pole owners, at their own expense, to maintain poles in a safe and serviceable condition. If a pole is identified as unstable or on the verge of failing, then the pole owner has the financial responsibility for the pole replacement regardless of who performs the pole replacement. In its March 1, 2019, status report on storm hardening activities, FPL noted that approximately 20 percent of its jointly used poles are audited annually through its joint-use surveys. Additionally, FPL-owned joint-use poles are inspected through FPL's pole

inspection program.¹¹ As of year-end 2017, FPL owned approximately 1.2 million distribution poles and was attached to approximately 224,000 non-electric utility distribution poles.

Utility Cost/Benefit Estimates

FPL's updated plan includes estimates of costs to be incurred in connection with its updated plan for 2019 through 2021. The estimates are based upon current work methods, products, and equipment and assume the necessary resources will be available to execute the plan. However, the estimates do not include the incremental costs associated with implementing EWL hardening criteria for the design and construction of new pole lines and major planned work, including pole line extensions and relocations and certain pole replacements. FPL indicated the incremental costs are not specifically tracked. FPL spent a total of \$600,800,000 on its wooden pole inspections and Ten Initiatives for 2016-2018. In 2019-2021, FPL estimates it will spend approximately \$2,270,000,000 for its complete storm hardening plan. Part of the increase is attributed to FPL's underground lateral pilot project. FPL expects 72 percent of its system-wide feeder network will be hardened or underground by year-end 2021 with the execution of its 2019-2021 plan.

FPL claims that the hardening of feeders to EWL has provided significant benefits to its customers and FPL expects the benefits to be recognized in the future. Because the lateral undergrounding project has only recently been initiated, there are no historical results or analyses to quantify the benefits. Attachment B shows a comparison of costs associated with implementation of FPL's current and updated wooden pole inspections and Ten Initiatives.

FPL also considers alternatives before implementing storm hardening projects. FPL explained that for feeder projects, each pole on a feeder is evaluated independently, with various alternatives considered for that pole. Within the same feeder, there could be several different hardening alternatives utilized. The alternatives would include the same methods for hardening a feeder as discussed above. FPL explained that the selected alternative would have been determined based on the considerations including sound engineering practices and feasibility, potential to mitigate damage, potential to improve restoration efficiencies and overall cost.

Attachers Cost/Benefit Estimates

FPL shared a draft of its plan with representatives from all of its third-party attaching entities and solicited input and comments. However, only one entity responded with a question concerning base rate impacts. No information was provided by third-party attachers concerning estimates of their respective costs or benefits stemming from FPL's storm hardening plan.

Attachment Standards and Procedures

FPL's updated plan includes Attachment Standards and Procedures addressing safety, reliability, pole loading capacity, and the storm hardening plan. For example, the procedures specify that "before any additional load is added to an FPL owned pole it is incumbent upon the third-party

¹¹FPSC, Florida Power & Light Company's 2019 Status/Update Report on Storm Hardening/Preparedness and Distribution Reliability, <http://www.floridapsc.com/Files/PDF/Utilities/Electricgas/DistributionReliabilityReports/2018/2018%20Florida%20Power%20and%20Light%20Company%20Distribution%20Reliability%20Report.pdf>, accessed June 6, 2019.

attacher to verify that their additions meet FPL's Design Guidelines and Electric Infrastructure Storm Hardening Plan."

Conclusion

FPL's updated plan is largely a continuation of its current Commission-approved plan. Based on the review above, FPL's plan has the information required by the Commission's rule and orders and staff recommends it should be approved. Staff notes that approval of FPL's plan does not mean approval for cost recovery.

Issue 2: Should the Commission approve Tampa Electric Company's 2019-2021 storm hardening plan filed in Docket No. 20180145-EI?

Recommendation: Yes. TECO updated plan is largely a continuation of its current Commission-approved plan. A review of TECO's plan shows that it has the information required by the Commission's rule and orders. Staff notes that approval of TECO's plan does not mean approval for cost recovery. TECO should consider the rate impact before taking proactive steps to improve its system to withstand severe weather events. (P. Buys, Knoblauch, Salvador, Breman, Eastmond, Wendel, Eichler)

Staff Analysis: On Attachment C, staff provides a summary of TECO's current Wooden Pole Inspection Program and Ten Initiatives and the proposed changes. In addition, where available, staff has shown the costs associated with the Wooden Pole Inspection Program and Ten Initiatives for 2016-2018 and 2019-2021. Components of TECO's updated plan are summarized below.

Wooden Pole Inspection Program

TECO proposes to continue its eight-year Wooden Pole Inspection Program.¹² The program identifies poles that require repair, reinforcement or replacement. Currently, TECO has completed its fifth year of its second eight-year cycle. TECO will continue to file the results of these inspections in TECO's Annual Electric Utility Distribution Reliability Report. The estimated cost for 2019-2021 related to the eight-year wooden pole inspection is \$3,349,000 as compared to \$3,290,000 spent for 2016-2018.

Ten Initiatives

Initiative One – Three-Year Vegetation Management Cycle for Distribution Circuits

TECO proposes no changes to its previously approved trim cycle.¹³ Currently, both feeder and lateral circuits are trimmed, on average, every four years. TECO reported that its plan allows for the flexibility to change the prioritization of the feeders and laterals depending on growth, reconfiguration or equipment additions to the distribution system. The estimated cost for 2019-2021 for Initiative One is \$38,699,000 as compared to \$26,546,000 spent for 2016-2018.

Initiative Two – Audits of Joint-Use Attachment Agreements

There are no proposed changes to this initiative. TECO will conduct an audit of all pole attachments on an eight-year cycle at a minimum.¹⁴ TECO conducts a comprehensive loading analysis on the joint-use poles to ensure the poles are not overloaded and meet the NESC or TECO's standards, whichever is more stringent. Once TECO receives an application for permission to attach to its poles, an engineering assessment, which includes a comprehensive

¹²Order No. PSC-06-0144-PAA-EI, issued February 27, 2006, in Docket No. 20060078-EI, *In re: Proposal to require investor-owned electric utilities to implement ten-year wood pole inspection program*; and Order No. PSC-07-0078-PAA-EU, issued January 29, 2007, in Docket No. 20060531-EU, *In re: Review of all electric utility Wooden Pole Inspection Programs*.

¹³Order No. PSC-12-0303-PAA-EI, issued June 12, 2012, in Docket No. 20120038-EI, *In re: Petition to modify vegetation management plan by Tampa Electric Company*.

¹⁴Order No. PSC-06-0351-PAA-EI, issued April 25, 2006, in Docket No. 20060198-EI, *In re: Requirement for investor-owned electric utilities to file ongoing storm preparedness plans and implementation cost estimates*.

loading analysis, is performed. The estimated cost for 2019-2021 is \$0, as the requesting third-party attacher pays for the comprehensive pole loading analysis. The costs for 2016-2018 were \$0.

Initiative Three – Six-Year Transmission Structure Inspection Program

There are no proposed changes to the plan for this initiative. TECO's transmission structure inspection program is a multi-pronged approach with different types of inspections performed on different cycles. Below is a list of the type of inspections:

1. One-year cycle:
 - (i) Ground patrol
 - (ii) Aerial infrared patrol
 - (iii) Substation inspection
2. Eight-year cycle:
 - (i) Above ground inspection
 - (ii) Ground line inspection

The above ground inspection cycle was shifted from a six-year cycle to an eight-year cycle starting in 2015.¹⁵ TECO will continue the one-year cycle inspections of the transmission structures. TECO will also continue to monitor and evaluate the appropriateness of the inspection program to ensure cost-effective storm hardening or reliability opportunities are taken advantage of. The estimated 2019-2021 cost for this initiative is \$1,511,000 as compared to \$1,264,000 spent for 2016-2018.

Initiative Four – Hardening of Existing Transmission Structures

There are no proposed changes to the plan for this initiative. TECO will continue to replace existing wood transmission structures with non-wood structures by utilizing its inspection and maintenance programs. All new transmission line construction projects, system rebuilds and line relocations will be engineered with non-wood structures. TECO will continue to replace insulators that have deteriorated with polymer insulators. TECO reports that 21 percent of its transmission structures remain to be hardened. The costs for 2019-2021 are estimated to be \$13,607,000 as compared to \$37,605,000 spent for 2016-2018.

Initiative Five – Transmission and Distribution Geographic Information System (GIS)

There are no proposed changes to the plan for this initiative. TECO implemented its GIS in 2010. The GIS database contains all facility data for transmission, substation, and distribution systems. The system will help with post-storm damage assessment, forensic analysis, joint-use administration, and the evaluation of construction standards and potential hardening projects. TECO will continue the development of its GIS to improve the functionality and ease of use. There are no incremental costs associated with this initiative.

¹⁵Order No. PSC-14-0684-PAA-EI, issued December 10, 2014, in Docket No. 20140122-EI, *In re: Petition to modify transmission structure inspection cycle, by Tampa Electric Company*.

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Initiative Six – Post-Storm Data Collection and Forensic Analysis

There are no proposed changes to the plan for this initiative. TECO hired a third-party to collect the following data in the event a major storm causes damage to its service area.

- Pole/Structure:
 - Type of damage
 - Size and type of pole
 - Likely cause of damage
- Conductor:
 - Type of damage
 - Conductor type and size
 - Likely cause of damage
- Equipment:
 - Type of damage
 - Overhead or underground
 - Size
 - Likely cause of damage
- Hardware:
 - Type of damage
 - Size
 - Likely cause of damage

The third-party personnel will perform the forensic analysis on the data to evaluate the root cause of failure and assess future preventive measures where possible and practical. TECO reported the incremental cost is estimated to be approximately \$113,000 per storm, and will depend on the severity of the storm and the extent of its system damage. The costs for 2019-2021 are estimated to be \$330,000 as compared to \$100,000 spent for 2016-2018.

Initiative Seven – Collection of Detailed Outage Data Differentiating Between the Reliability Performance of Overhead and Underground Systems

There are no proposed changes to the plan for this initiative. TECO's overhead and underground facilities are tracked through its Distribution Outage Database (DOD). The DOD is programmed to distinguish between overhead and underground systems when tracking outage data. TECO has also established a process for collecting post-storm data and performing forensic analysis to ensure the performance of overhead and underground systems are correctly assessed. TECO reported the incremental cost of this initiative is estimated to be \$100,000 per storm.

In response to information requested in the Hurricane Review Docket, TECO outlined the type of comparable data that the Utility plans to provide for overhead and underground facilities.

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TECO will collect data on distribution facilities that were impacted by severe storms. The data will include the type of facility damaged, down/broken wires, cause of damage, damage locations, and if the structures were hardened or not. In addition, data will be collected on underground systems, which will include damage to pad mounted equipment. TECO will compare damage to overhead hardened structures to damage of underground facilities in the same geographic areas.

Initiative Eight – Increased Coordination with Local Governments

There are no proposed changes to the plan for this initiative. TECO will continue to participate with local and municipal government agencies within its service area in planning and facilitating joint storm exercises. TECO will also continue to maintain governmental contacts and participate in disaster recovery committees. Participating in the committees will help with collaboration in planning, protection, response, recovery and mitigation efforts during disaster recovery efforts. There is no estimated cost for this initiative.

In response to information requested in the Hurricane Review Docket, TECO discussed its coordination with local governments regarding vegetation management and identification of critical facilities. Annually, TECO communicates with local and state governmental officials on various topics, including vegetation management, joint emergency recovery strategy planning, and resource sharing for clearing power lines from roads. To identify and prioritize critical facilities, TECO works with County Emergency Management officials and other stakeholders throughout the year. Additionally, TECO provided a list of the meetings that took place with local governments, and the topics that were discussed. TECO met with Hillsborough, Pasco, Pinellas, and Polk counties to discuss issues such as prioritization of power restoration, public shelters, and updates for water and wastewater facilities. TECO also met with the City of Temple Terrace and Plant City regarding emergency preparations and push crew options.

Other information that TECO provided was a summary of its staffing practices at local EOCs. The number of staffing varied from two to eight utility staff at each local EOC, depending on several factors such as the magnitude of the event, EOC capacity, amount of damage, EOC operating hours, and available personnel. TECO representatives at the EOCs are responsible for facilitating and responding to critical community issues in support of safety and power restoration.

Initiative Nine – Collaborative Research on Effects of Hurricane Winds and Storm Surge

There are no proposed changes to the plan for this initiative. TECO will continue to participate in the collaborative research effort with the other Florida IOUs, municipalities, and cooperatives. The collaborative research is facilitated by PURC at the University of Florida and focuses on: (1) undergrounding of electric utility infrastructure; (2) hurricane wind effects; and (3) public outreach. TECO signed an extension of the memorandum of understanding with PURC in December 2018 for two years, with a provision that the memorandum of understanding will be automatically extended for successive two-year terms. TECO reported that the incremental cost of this initiative would be determined by the research projects. TECO spent \$0 in 2016-2018 for this initiative.

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Initiative Ten – Natural Disaster Preparedness and Recovery Program

TECO will continue to refine this initiative. TECO's Emergency Management Plan addresses all hazards, including extreme weather events. The plan is reviewed annually. TECO continues to use the policy labeled Emergency Management and Business Continuity, which delineates the responsibility at employee, company, and community levels. TECO will also continue to participate in internal and external preparedness exercises, collaborating with government emergency management agencies, at local, state, and federal levels. TECO has a full time position to work with other utilities and utility trade association committees to bring new technology and best practices to TECO, and guide the implementation and integration into TECO's emergency response plan. TECO will implement a Damage Assessment System software tool, which will automate input, tracking, reporting and dispatching of restoration work by June 2017.

In response to information requested in the Hurricane Review Docket, TECO provided its contingency plans for roadway congestion, fuel availability, and lodging accommodation issues. In the event of roadway congestion, TECO will obtain information to determine any viable alternative routes, or work with local or State EOCs depending on the location, nature and severity of the congestion. With respect to fuel availability, TECO has agreements with two bulk fuel vendors and a mobile fuel vendor to supply diesel and gasoline fuel when needed. The vendors obtain fuel supplies from Port Tampa Bay, or a main fuel supply facility in Georgia if Port Tampa Bay is unable to supply fuel. If lodging is required for mutual aid crews, TECO maintains a list of hotels that it has verbal agreements with to utilize hotel rooms, which are secured pre-storm for post-storm occupancy. During Hurricane Irma, TECO utilized alternative housing, where cots and mattresses were placed in open gym style facilities, as well as employing camp style facilities.

National Electrical Safety Code Compliance

TECO's 2019-2021 storm hardening plan addresses how the Utility complies with the NESC pursuant to Rule 25-6.0345, F.A.C. TECO indicates that its transmission and distribution facilities are designed to meet NESC construction Grade B. The Grades of construction are specified in the NESC on the basis of the required strengths for safety. The relative order of Grades is B, C, and N, with Grade B being the highest.

Extreme Wind Loading (EWL) Standards

TECO's service territory is divided into two wind regions. The western half is in the 120 mph zone and the eastern half is in the 110 mph zone. For design consistency, the 120 mph wind standard is applied on all 69 kV structures throughout the service area. In addition, a 133 mph wind standard is applied to all 138 kV and 230 kV structures throughout TECO's service area. TECO uses pole loading software, PoleForeman and PLS-CADD, to assure compliance with all NESC loading requirements. PoleForeman is used to design distribution facilities. To design transmission facilities, TECO uses PLS-CADD. TECO complies with NESC Rule 250B instead of NESC Rule 250C EWL to design the installation of its distribution structures. TECO asserts that its pole loading analysis has shown that the Utility's design for poles shorter than 60 feet above ground, which relies on the NESC Rule 250B and construction Grade B, meet or exceed the strength requirements of NESC Rules 261A1c, 261A2e, and 261A3d.

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New Construction

TECO utilizes NESC construction Grade B to design new transmission and distribution facilities. To replace its transmission and distribution facilities, TECO also utilizes NESC construction Grade B. All TECO's distribution structures are shorter than 60 feet above ground or water level. TECO's standard for all new distribution poles is chromated copper arsenate treated wood poles. TECO's street light structures are designed to meet NESC Rules 250C, 261A1c, 261A2e, and 261A3d.

Major Planned Work

TECO utilizes NESC construction Grade B loading criteria as the basis for the Company's construction standard for all new construction, major planned work, expansions, rebuilds and relocations on the overhead distribution system.

Critical Infrastructure (CIF)

TECO, in conjunction with local government emergency management, has identified the Utility's critical facilities and associated circuits feeding loads, which are deemed necessary for business continuity and continuity of government. As such, critical community facilities are identified based on being most critical to the overall health of the community. Such facilities include hospitals, emergency shelters, master pumping stations, wastewater plants, major communications facilities, flood control structures, electric and gas utilities, emergency operation centers, as well as police and fire stations. The circuits serving these facilities have the highest restoration priority level. TECO has hardened several circuits, which feed extreme wind criteria data to critical need customers.

Mitigation of Flooding and Storm Surge Damage

TECO has adopted the use of submersible switchgear for critical customers in areas predicted to be impacted by storm surge and in areas prone to flooding as identified by the Federal Emergency Management Agency (FEMA) flood maps. Since 2004, all the primary switchgear has been specified using 100 percent stainless steel enclosures, and since 2008 all pad mounted transformers have been specified using 100 percent stainless steel enclosures to reduce the corrosive effects from salt spray, effluent irrigation spray and to help harden the equipment against the corrosive effects of a saltwater storm surge. TECO has not experienced any storms that have had a significant impact on the underground distribution system. Therefore, no lessons learned have been obtained from actual damage to the Company's underground system.

Facility Placement

TECO proposes to continue placement of all new distribution facilities in the public right-of-way. TECO's policy is that new residential lines must be front lot and truck accessible, while commercial lines may be rear lot but must be truck accessible. In addition, TECO proposes to continue evaluating community and customer requests to relocate overhead facilities from rear lot locations to the front of a customer's property on a case-by-case basis.

Deployment Strategies

TECO's updated plan contains a detailed three-year deployment strategy, which is a continuation of inspection programs, technical design specifications, construction standards and methodologies. TECO indicated that its deployment strategy will enhance system reliability and reduce storm restoration costs.

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Facilities Affected, Including Specifications and Standards

For all new transmission, distribution and substation facilities, TECO will implement its enhanced construction standards. TECO reported that the majority of new distribution facilities are placed underground; however, it has approximately 106 miles of new overhead distribution construction, which included reconductoring, line extensions and new circuits/feeders. TECO plans to construct, rerate or rebuild approximately 41 miles of overhead transmission. TECO's maintenance programs will strengthen and upgrade its system, along with its storm hardening initiatives as addressed above. TECO will continue its construction programs piloting the EWL standard for distribution facilities serving CIF, also addressed above.

Areas of Infrastructure Improvements

TECO's updated plan provides a detailed description of areas where electric infrastructure improvements will be made. Below is a list of projects and a brief description:

- **Downtown Network:** The Downtown Network is considered a CIF. TECO will inspect and test eight low-lying vaults per year and if leaks are found, all pertinent gaskets will be replaced.
- **Overhead to Underground Conversion of Interstate Highway Crossings:** A fallen distribution line over an interstate highway can block traffic and the repairs can be lengthy. To help first responders and others during emergencies, all new distribution line interstate crossings will be underground. TECO has converted 16 interstate highway crossings with 22 remaining left to be converted.
- **Submersible Padmount Switchgear:** TECO is using submersible padmount switchgear designed to withstand intrusion from water while remaining in service. TECO's deployment strategy plan is to deploy the submersible gear for all new CIF and to retrofit switchgears serving CIF loads.
- **Hospital Hardening/Resiliency Improvements:** In 2017, TECO initiated its storm hardening/ resiliency improvements for six major hospitals: Tampa General Hospital, St. Joseph Hospital, Memorial Hospital, South Bay Hospital, South Florida Baptist Hospital and Winter Haven's Women's Hospital. The improvements included installing additional switchgears, loop-thru transformers, underground primary cables, and updating the primary feeds.
- **Advanced Distribution Management System (ADMS) and Advances Metering Infrastructure (AMI):** TECO will be implementing a new ADMS and installing new AMI meters throughout its service territory. The ADMS will increase reliability and provide transparency of information. The benefits will include quicker response time to outages resulting in shorter outage times, efficient integration of distributed energy resources and an overall increased electrical system situational awareness. The customers will have more information on their energy usage, which will provide for better control and increased flexibility. In addition, the customers will have access to more convenient services such as on-demand remote connections or disconnection when moving. At this time, the ADMS is not operational. TECO plans to install a total of 270,000 AMI meters at the end of 2019, with 130,000 meters already installed at the end of March 2019. TECO plans to install 340,000 AMI meters in 2020 and 130,000 AMI meters in 2021.

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- **Tampa General Hospital:** Tampa General Hospital is a CIF and is located on Davis Island. TECO will replace three existing switchgears with submersible switchgears and relocate the primary feeds attached to the bridge. The primary feeds will be placed under the channel adjacent to the hospital.
- **69 kV Transmission Circuit No. 66042:** This transmission circuit has structures currently located in Tampa Bay. TECO plans to underground the section of transmission line currently located in an open tidal area of Tampa Bay.

Joint-Use Facilities

TECO will conduct joint-use audits. The cost of these audits will be shared by all attaching entities. If an unauthorized third-party attacher is found, the attachment owner will be responsible to pay for a complete engineering study and corrective actions required to meet the NESC standards. TECO performs pole loading stress tests as part of its pole inspection program on any joint-use pole that contains new attachments following a new permitting process. If a pole fails the preliminary stress test, a comprehensive pole loading analysis will be conducted to determine if the pole is overloaded. TECO will continue conducting its pole attachment audits to identify the location of each pole, the facilities attached, and to obtain verification of current joint-use agreements. As of year-end 2017, TECO had a total of 262,910 utility distribution poles and was attached to 13,440 non-electric utility distribution poles.

Utility Cost/Benefit Estimates

TECO's updated plan includes estimates of costs to be incurred in connection with its updated plan for 2019 through 2021. This includes pole replacements, inspections of distribution and transmission facilities, vegetation management, and other projects. TECO spent a total of \$68,885,000 on its Ten Initiatives for 2016-2018. In 2019-2021, TECO estimates it will spend approximately \$155,752,000 on the complete storm hardening plan. Attachment B shows a comparison of costs associated with implementation of TECO's current and updated wooden pole inspections and Ten Initiatives.

TECO indicated that the storm hardening projects are determined based upon potential negative impacts on public safety and health, magnitude and impact on customers likely affected by an outage, environmental impacts and access constraints that may exist following a potential major storm. Once a project has been selected, TECO will perform an internal formal cost analysis. Alternatives are considered for each project. Alternatives could include not undergrounding a whole circuit due to excessive costs and only a portion that went through significant tree canopy.

Attachers Cost/Benefit Estimates

TECO states that its updated plan is expected to provide benefit to all joint-users and have minimal impact on third-party attachers to the Company's system. TECO states that the largest impacts will come from increased pole inspections. TECO did not report any additional third-party attacher cost or benefit information.

Attachment Standards and Procedures

TECO's updated plan includes Attachment Standards and Procedures addressing safety, reliability, and pole loading capacity. The updated plan also addresses engineering standards and procedures for attachments by others to the Utility's transmission and distribution poles that meet or exceed the NESC (ANSI C-2) pursuant to Rule 25-6.034, F.A.C.

Conclusion

TECO's updated plan is largely a continuation of its current Commission-approved plan. Based on the review above, it indicates that TECO's plan has the information required by the Commission's rule and orders and staff recommends it should be approved. Staff notes that approval of TECO's plan does not mean approval for cost recovery.

Issue 3: Should the Commission approve Duke Energy Florida, LLC's 2019-2021 storm hardening plan filed in Docket No. 20180146-EI?

Recommendation: Yes. DEF's updated plan is largely a continuation of its current Commission-approved plan. A review of DEF's plan shows that it has the information required by the Commission's rule and orders. Staff notes that approval of DEF's plan does not mean approval for cost recovery. DEF should consider the rate impact before taking proactive steps to improve its system to withstand severe weather events. (P. Buys, Knoblauch, Salvador, Breman, Eastmond, Wendel, Eichler)

Staff Analysis: On Attachment D, staff provides a summary of DEF's current Wooden Pole Inspection Program and Ten Initiatives and the proposed changes. In addition, where available, staff has shown the costs associated with the Wooden Pole Inspection Programs and Ten Initiatives for 2016-2018 and 2019-2021. Components of DEF's updated plan are summarized below.

Wooden Pole Inspection Program

DEF proposes to continue its eight-year Wooden Pole Inspection Program.¹⁶ The program includes inspection of DEF's transmission, distribution, and joint-use wooden poles. Poles are identified that require repair, reinforcement or replacement. Currently, DEF has completed its fourth year of its second eight-year cycle. DEF will continue to file the results of these inspections in its Annual Electric Utility Distribution Reliability Report. The estimated cost for 2019-2021 related to the eight-year wooden pole inspection is \$12,500,000 as compared to \$12,300,000 spent for 2016-2018.

Ten Initiatives

Initiative One – Three-Year Vegetation Management Cycle for Distribution Circuits

DEF proposes no changes to its previously approved trim cycle. Currently, its feeder and lateral circuits are trimmed, on average, every three years and five years, respectively.¹⁷ DEF reported that annual variations for projected miles to be trimmed are expected as the Utility manages its resources and unit cost factors associated with its vegetation management. The estimated cost for 2019-2021 for Initiative One is \$151,300,000 as compared to \$98,050,000 spent in 2016-2018.

Initiative Two – Audits of Joint-Use Attachment Agreements

There are no proposed changes to the plan for this initiative. DEF will conduct an audit of all pole attachments on an eight-year cycle at a minimum.¹⁸ DEF conducts partial audits of its pole attachments throughout the year. The Utility performs a full Joint-Use Pole Loading Analysis on an eight-year cycle. DEF reported that when it discovers unauthorized attachments on its poles, it follows up with the unauthorized attacher. DEF explained that for each group of poles in a tangent line, the pole that had the most visible loading, line angle, and longest or uneven span

¹⁶Order No. PSC-06-0144-PAA-EI, issued February 27, 2006, in Docket No. 20060078-EI, *In re: Proposal to require investor-owned electric utilities to implement ten-year wood pole inspection program.*

¹⁷Order No. PSC-06-0947-PAA-EI, issued November 13, 2006, in Docket No. 20060198-EI, *In re: Requirement for investor-owner electric utilities to file ongoing storm preparedness plans and implementation cost estimates.*

¹⁸Order No. PSC-06-0351-PAA-EI, issued April 25, 2006, in Docket No. 20060198-EI, *In re: Requirement for investor-owned electric utilities to file ongoing storm preparedness plans and implementation cost estimates.*

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length was selected for wind loading analysis. If that pole failed, the next worst-case pole would be analyzed as well. The estimated cost for 2019-2021 is \$1,320,000 as compared to \$1,329,000 spent in 2016-2018.

Initiative Three – Six-Year Transmission Structure Inspection Program

There are no proposed changes to the plan for this initiative. DEF's transmission structure inspection program is on a five-year cycle. DEF inspects transmission circuits, substations, tower structures and poles. DEF performs ground patrol of transmission line structures, associated hardware, and conductors on a routine basis to identify potential problems. DEF reported that the estimated and actual amounts for the transmission inspections include the inspections, emergency response, preventative maintenance, and training. For this initiative, DEF spent \$22,372,000 in 2016-2018. For 2019, DEF provided an estimated cost of \$8,250,000; however, estimated costs for 2020 and 2021 were not available at this level of detail.

Initiative Four – Hardening of Existing Transmission Structures

There is no change in the plan for this initiative. DEF will continue to harden its transmission structures, which includes maintenance pole change-outs, insulator replacements, Department of Transportation/customer relocations, line rebuilds, and system planning additions. DEF notes that the transmission structures are designed to withstand the current NESC requirements and are built utilizing steel or concrete structures. For this initiative, DEF spent \$405,916,000 in 2016-2018. For 2019, DEF provided an estimated cost of \$160,188,000; however, estimated costs for 2020 and 2021 were not available at this level of detail. DEF reported that there was a decrease in governmental (projects requested by the Department of Transportation) and rebuild (projects which will include a complete replacement of transmission line structures, conductors, and all supporting equipment) projects over the last three years.

Initiative Five – Transmission and Distribution Geographic Information System (GIS)

There are no proposed changes to the plan for this initiative. DEF implemented a new GIS, Work Management System, and Asset Management System in 2017, and it is expected that all transmission line assets will be entered into the GIS by the end of 2020. With the utilization of these systems, DEF is able to facilitate compliance tracking, maintenance, planning, and risk management of the major distribution and transmission assets. DEF has created and enhanced key performance indicators that are used to measure and monitor the quality of its GIS and Outage Management System (OMS) data. DEF reports that the consistency, accuracy, and dependability of these systems have led to improvements in the reliability and performance of its system, and it has also contributed to the safety of DEF's field employees. Initiative Five is part of DEF's normal business; therefore, DEF does not track or project the costs associated with this initiative.

Initiative Six – Post-Storm Data Collection and Forensic Analysis

There are no proposed changes to the plan for this initiative. DEF has established forensic teams that collect information regarding poles damaged during storm events and data at failure sites to determine the nature and causes of failure. DEF also collects available performance information on overhead and underground facilities as part of its storm restoration process. In collaboration with University of Florida's PURC, DEF and the other IOUs developed a common format to

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collect and track data related to damage discovered during forensic investigations. In addition, weather stations were installed across Florida as part of the collaboration with PURC and the other IOUs. As a result, DEF is now able to correlate experienced outages with nearby wind speeds. This type of information is augmented with on-site forensic data following a major storm event. For this initiative, DEF spent \$327,400 in 2016-2018. For 2019, DEF provided an estimated cost of \$257,500; however, estimating the cost is difficult as it will depend on whether DEF is impacted by a major storm event and the level of damage.

Initiative Seven – Collection of Detailed Outage Data Differentiating Between the Reliability Performance of Overhead and Underground Systems

There are no proposed changes to the plan for this initiative. As referenced above, DEF collects available performance information on overhead and underground facilities as part of its storm restoration process. DEF uses its OMS, its Customer Service System, and GIS to help analyze the percentage of storm caused outages on overhead and underground systems. One hundred percent of the overhead and underground distribution systems are in the GIS, as well as one hundred percent of the underground transmission system. For the overhead transmission system, there is less than one percent of the data remaining to be entered into the GIS, which should be completed by 2020. Initiative Seven is part of DEF's normal business; therefore, DEF does not track or project the costs associated with this initiative.

In response to information requested in the Hurricane Review Docket, DEF outlined the type of comparable data that the Utility plans to provide for overhead and underground facilities. For performance comparisons between hardened versus non-hardened facilities for wind impacts, DEF will conduct Forensic Damage Assessments of both types of facilities immediately following extreme weather events. A database of hardened line segments and comparative non-hardened line segments in the same area will be used, ensuring that both samples assessed experienced similar extreme weather conditions. Since underground facilities are more susceptible to storm surge and water intrusion, and overhead facilities are more susceptible to debris being blown by high winds, another means of comparison is needed to complement the Forensic Damage Assessment., such as reliability trends over a period of time.

Initiative Eight – Increased Coordination with Local Governments

There are no proposed changes to the plan for this initiative. DEF's storm planning and response program is operational year-round with over 40 employees assigned full-time to coordinate with local governments on issues such as emergency planning, vegetation management, undergrounding, and service related issues. DEF will continue to visit the different EOCs to review storm procedures and participate in several different storm drills. DEF also offers electronic outage information that can be imported into county GIS systems, as well as an interactive outage map that provides county-specific power restoration estimates. Initiative Eight is part of DEF's normal business; therefore, DEF does not track or project the costs associated with this initiative.

In response to information requested in the Hurricane Review Docket, DEF discussed its coordination with local governments regarding vegetation management and identification of critical facilities. DEF meets with cities and counties prior to initiating a vegetation management

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projects in local areas, and works with local governments regarding the “Right Tree, Right Place” concept. DEF also works with local governments and county EOCs to identify and prioritize infrastructure and feeder circuits that are determined to be critical prior to a storm. DEF identified over 90 meetings with cities and counties in 2018, including topics that were discussed and any pending or follow-up issues, such as addressing hurricane preparedness and response.

DEF has six Government and Community Relations Managers who act as the main point of contact for communities during a storm event. Additionally, for EOCs that are not staffed in person, a manager or representative will provide the needed support by phone. While there are one or more designated DEF employees assigned to each EOC, staffing is scalable and will depend on the individual storm.

Initiative Nine – Collaborative Research on Effects of Hurricane Winds and Storm Surge

There are no proposed changes to the plan for this initiative. DEF will continue to participate in the collaborative research effort with the other Florida IOUs, municipalities and cooperatives. The collaborative research is facilitated by PURC at the University of Florida and focuses on: (1) undergrounding of electric utility infrastructure; (2) hurricane wind effects; and (3) public outreach. DEF signed an extension of the memorandum of understanding with PURC in December 2018 for two years, with a provision that the memorandum of understanding will be automatically extended for successive two-year terms. In addition to DEF’s involvement with PURC, DEF actively engages as both participant and presenter with different organizations. These organizations, such as, Southeastern Electric Exchange, Edison Electric Institute, and Institute of Electrical and Electronics Engineers, review and assess hardening alternatives. Initiative Nine is part of DEF’s normal business; therefore, DEF does not track or project the costs associated with this initiative.

Initiative Ten – Natural Disaster Preparedness and Recovery Program

DEF will continue to refine this initiative. DEF’s storm recovery plan is reviewed and updated annually based on lessons learned from the previous storm season and organizational needs. The Distribution System Storm Operational Plan and the Transmission Storm Plan incorporates organizational redesign at DEF, internal feedback, suggestions, and customer survey responses. DEF uses the EWL standards in accordance with the NESC in all planning of transmission upgrades, rebuilds and expansions of existing facilities. Initiative Ten is part of DEF’s normal business; therefore, DEF does not track or project the costs associated with this initiative.

In response to information requested in the Hurricane Review Docket, DEF provided its contingency plans for roadway congestion, fuel availability, and lodging accommodation issues. In the event of roadway congestion, DEF communicates with the Department of Transportation and highway patrol/police escorts to determine which roadways are safe and for assistance in route selection. Plans for fuel and lodging are reviewed and updated annually to assure the resources are available in the event of a storm. These resources are secured prior to landfall, and if needed, DEF coordinates with the State EOC and county EOCs for additional support.

National Electrical Safety Code Compliance

DEF’s 2019-2021 storm hardening plan is based on accepted industry practices designed to meet or exceed the requirements of the NESC. These standards, practices, policies, and procedures are

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followed on all new construction, rebuilding, and relocations of existing facilities. DEF utilizes construction Grade B for all its transmission facilities. DEF utilizes construction Grade C to design its distribution facilities at all places except for those locations where construction Grade B is required per NESC Section 242. The Grades of construction are specified in the NESC on the basis of the required strengths for safety. The relative order of Grades is B, C, and N, with Grade B being the highest.

Extreme Wind Loading Standards

All DEF new transmission structures are being designed to comply with the NESC Rule 250C EWL. DEF utilizes the PLS-CADD software to design transmission facilities. DEF uses pole loading software, PoleForeman and PLS-CADD, to assure compliance with all NESC loading requirements. PoleForeman is used to design distribution facilities. To design transmission facilities DEF uses PLS-CADD. Most DEF distribution poles are less than 60 feet in height. DEF states that all its distribution poles shorter than 60 feet meet the loading requirements of NESC Rules 261A1c, 261A2e, or 261A3d for extreme wind.

New Construction

With respect to new construction for transmission poles, DEF's transmission department is building all new construction with either steel or concrete pole material. Virtually all new transmission structures exceed a height of 60 feet above ground and are being designed using the NESC EWL criteria. Construction Grade B is utilized for new construction, replacements, and relocations of transmission facilities. DEF indicated that the NESC does not call for the extreme wind design standard for distribution poles under 60 feet in height. However, as discussed above, all DEF distribution poles shorter than 60 feet meet the loading requirements of NESC Rules 261A1c, 261A2e, or 261A3d for extreme wind, which imply compliance with NESC Rule 250C EWL.

Major Planned Work

DEF utilizes NESC Rule 250C EWL for all major planned transmission work, including expansions, rebuilds, and relocation of existing facilities. DEF's distribution poles meet the loading requirements of NESC Rules 261A1c, 261A2e, or 261A3d for extreme wind, which imply compliance with NESC Rule 250C EWL.

Critical Infrastructure (CIF)

DEF stated in its filing that it has not adopted the extreme wind standard for its distribution level critical infrastructure. However, DEF has also stated that its poles shorter than 60 feet meet the extreme wind loading requirements of NESC Rule 250C EWL when analyzed without conductors, which is what the NESC requires. DEF believes that installing distribution poles constructed to extreme wind standards around facilities such as hospitals and police stations in DEF's service territory would unnecessarily increase costs and restoration time if those poles are knocked down by fallen trees or flying debris such as roofs or signs. DEF states that its current level of construction, around critical facilities and around all other facilities, has performed well during weather events. DEF indicated that there were no storm hardened structures failures during the 2017 and 2018 hurricanes.

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Mitigation of Flooding and Storm Surge Damage

In areas where underground equipment may be exposed to minor storm surge and/or shorter-term water intrusion, DEF has used its prioritization model to identify areas where certain mitigation projects will be put into place to test whether flood mitigation techniques and devices can be used to protect equipment such as switchgears, pad mounted transformers and pedestals. In these selected project sites, DEF will test: (1) stainless steel equipment; (2) submersible connectors; raised mounting boxes; (3) cold shrink sealing tubes; and (4) submersible secondary blocks. DEF will continue to adapt its flood and storm surge strategies based on information that it collects, as well as information gathered by other utilities in Florida and throughout the nation. Following Hurricane Michael, multiple pad mounted transformers that had been raised to resist flooding at Alligator Point and St. George Island were pushed off their fiberglass pads by the storm surge. DEF is reviewing its current specifications to determine if other solutions exist.

Facility Placement

DEF reported that it will continue to use front lot construction for all new distribution facilities and all replacement distribution facilities unless specific operational, safety, or other site-specific reasons exist. As specified in DEF's Distribution Engineering Manual, lines outside of a residential development should be located to allow for truck access and reduced tree exposure and trimming on one side of the line when possible.

Deployment Strategies

DEF engaged Davies Consulting to develop a comprehensive prioritization model. DEF uses the model to help identify potential hardening projects, procedures, and strategies. DEF reported that the model has been improved and enhanced to better reflect the changes in its overall storm hardening strategy throughout the years. DEF will continue to adjust its prioritization model as appropriate.

DEF's prioritization model is set up to analyze hardening alternatives as part of its Grid Investment Plan (GIP). The GIP includes:

- Targeted Underground Program (TUG): This activity attempts to eliminate tree and debris related outages by converting heavily vegetated neighborhoods prone to power outages from overhead to underground facilities to decrease outages, reduce momentary interruptions, improve major storm restoration time, and reduce costs.
- Deteriorated Conductor Program: This activity replaces over burdened overhead conductors that are prone to outages due to its brittle composition, small load capacity and poor connection qualities. The small copper conductor will be replaced with aluminum conductors to improve overall reliability.
- Transformer Retrofit Program: This activity retrofits Completely Self-Protected (CSP) transformers. The retrofit activity includes replacing aged or problematic fuse cutouts and adding fuses where they previously did not exist. In addition, the retrofit includes adding external fused cutouts, replacing bare copper wires with covered copper, and adding animal mitigation. DEF indicated that the retrofitting of the CSP transformers in lieu of replacing the transformers is a cost-effective method of reducing outages.

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- **Self-Optimizing Grid (SOG) Program:** This activity will utilize automated switching devices (ASDs) and an automation program to isolate faults and automatically reconfigure the system to reduce the number of customers experiencing an outage. SOG program will provide:
 - Connectivity with automated switching.
 - Capacity on the circuits to allow most circuits to be restored from alternate sources.
 - Automated control with Supervisory Control and Data Acquisition (SCADA)-enable ASDs to isolate faults and reconfigure the system.
 - Segmentation such that distribution circuits have much smaller line segments, which reduces the number of customers affected by outages.
- **Live Front Switchgear Replacement Program:** This activity will replace aged Live Front Switchgear prior to failure. This will improve overall reliability, result in faster outage restoration and improve safety when working in the switchgears.

The development of the prioritization model begins with DEF's engineers and field personnel providing a list of desired projects. The projects are evaluated based on the following criteria:

- Major storm outage reduction impact
- Community storm impact
- Third-party impact
- Overall reliability
- Financial cost

Facilities Affected, Including Specifications and Standards

All of DEF's facilities are affected by its standards, policies, procedures, practices, and applications discussed in its storm hardening plan. Specific facility types are addressed within the plan (e.g., upgrading all transmission poles to concrete and steel, using front lot construction for all new distribution lines where possible). As a result, all areas of DEF's service territory are impacted by its storm hardening efforts.

Areas of Infrastructure Improvements

All areas of DEF's service territory are impacted by its storm hardening efforts. Below is a list of the proposed 2019-2021 distribution projects:

- **Apopka:** two overhead (OH) to underground (UG) conversion, one backlot conversion, six transformer retrofit, one SOG, eight deteriorated conductor, one TUG, and two switchgear replacement.
- **Buena Vista:** one deteriorated conductor, two feeder tie, one SOG, nine switchgear replacement, three transformer retrofit, and one TUG.
- **Clearwater:** two deteriorated conductor, one SOG, two switchgear replacement, and four TUG.

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- Clermont: one feeder tie and one TUG.
- Deland: nine deteriorated conductor, two SOG, one transformer retrofit, and eleven TUG.
- Highlands: two deteriorated conductor, five feeder tie, three transformer retrofit and one SOG.
- Inverness: one backlot conversion, six submersible UG, five switchgear replacement, two transformer retrofit, and twenty-nine TUG.
- Jamestown: four SOG, one deteriorated conductor, eleven switchgear replacement, and one TUG.
- Lake Wales: three deteriorated conductor, one feeder tie, two SOG, four transformer retrofit, and five TUG.
- Longwood: one OH to UG conversion, one SOG, five transformer retrofit, and three TUG.
- Monticello: three deteriorated conductor, two feeder tie, twelve transformers retrofit, one SOG, and forty-three TUG.
- Ocala: two deteriorated conductor, one feeder tie, one SOG, two switchgear replacement, one transformer retrofit, and seven TUG.
- SE Orlando: two OH to UG conversion, one switchgear replacement, seven transformer retrofit, and two deteriorated conductor.
- Seven Springs: two deteriorated conductor, two feeder tie, one switchgear replacement, three TUG.
- St. Petersburg: one feeder tie, one SOG, two transformer retrofit, and one TUG.
- Walsingham: two transformer retrofit and six TUG.
- Winter Garden: one deteriorated conductor, two feeder tie, one SOG, four switchgear replacement and one transformer retrofit.
- Zephyrhills: one deteriorated conductor and two TUG.

DEF's approach in deciding the storm hardening projects is to consider the unique circumstances of each potential location. Below are the variables DEF considers:

- Operating history and environment
- Community impact and customer input
- Exposure to storm surge and flooding
- Equipment condition
- Historical and forecast storm experience
- Potential impacts on third-parties

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DEF believes this approach leads to the best solution for each discrete segment of its system. As discussed in Initiative Four, DEF is planning to continue to replace transmission poles with either concrete or steel poles. Most projects are identified during the transmission pole inspections. For the North Florida area, DEF listed 56 new, rebuilds, or relocation projects for its transmission system. The projects are planned over the three-year period 2019 through 2021. For the South Florida area, DEF listed 90 transmission projects for the same time period.

Joint-Use Facilities

In accordance with DEF's Joint-Use Pole Attachment Guidelines, DEF notifies third-parties that transfers are needed when DEF determines that a pole replacement is necessary. DEF conducts joint-use pole attachment audits on a seven-year cycle, with its most recent audit being completed in 2013. Currently, DEF is in the seventh year of its second round of wooden pole inspections and expects to complete them by year-end 2020. As of year-end 2017, DEF owned approximately 1.1 million electric utility distribution poles and was attached to 16,213 non-electric utility distribution poles.

Utility Cost/Benefit Estimates

DEF's updated plan includes estimates of costs to be incurred in connection with its updated plan for 2019 through 2021. This includes pole replacements, inspections of distribution and transmission facilities, vegetation management, and other projects. For 2016 through 2018, DEF spent a total of \$651,405,943 on its storm hardening plan. DEF estimates it will spend approximately \$179,400,000 for 2019. Attachment D shows a comparison of costs associated with implementation of DEF's current and updated Wooden Pole Inspection Program and Ten Initiatives.

As discussed above, DEF's selection process for storm hardening projects is a combination of the following items: (1) major storm outage reduction; (2) community storm impact; (3) third-party impact; and (3) overall reliability and cost. In addition, each storm hardening project type utilizes historic reliability information to drive the target selection process, such as the system average interruption frequency index (SAIFI), customers experiencing multiple interruptions (CEMI), and events per miles. DEF's storm hardening projects are reviewed on a case-by-case basis. This provides an added benefit to DEF and its customers to ensure that the right type of storm hardening project is performed for that unique area.

Attachers Cost/Benefit Estimates

DEF provided information to third-parties who would be affected by its storm hardening projects. DEF believes that, in addition to itself, any entity jointly attached to its equipment would benefit from its proposed storm hardening projects. DEF provided available cost/benefit information to the third-party attachers. DEF did not report any responses from third-party attachers regarding cost or benefit information.

Attachment Standards and Procedures

DEF's updated plan includes Joint-Use Pole Attachment Guidelines addressing its joint-use process, construction standards, timelines, financial responsibilities, and key company contacts responsible for completing permit requests. DEF reports that all newly proposed joint-use attachments are field checked and designed using generally accepted engineering practices to assure that the new attachments do not overload the poles.

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Conclusion

DEF's updated plan is largely a continuation of its current Commission-approved plan. Based on the review above, DEF's plan has the information required by the Commission's rule and orders and staff recommends it should be approved. Staff notes that approval of DEF's plan does not mean approval for cost recovery.

Issue 4: Should the Commission approve Gulf Power Company's 2019-2021 storm hardening plan filed in Docket No. 20180147-EI?

Recommendation: Yes. Gulf's updated plan is largely a continuation of its current Commission-approved plan. A review of Gulf's plan shows that it has the information required by the Commission's rule and orders. Staff notes that approval of Gulf's plan does not mean approval for cost recovery. Gulf should consider the rate impact before taking proactive steps to improve its system to withstand severe weather events. (P. Buys, Knoblauch, Salvador, Breman, Eastmond, Wendel, Eichler)

Staff Analysis: On Attachment E, staff provides a summary of Gulf's current Wooden Pole Inspection Program and Ten Initiatives and the proposed changes. In addition, where available, staff has shown the costs associated with the Wooden Pole Inspection Program and Ten Initiatives for 2016-2018 and 2019-2021. Components of Gulf's updated plan are summarized below.

Wooden Pole Inspection Program

Gulf proposes to continue its eight-year Wooden Pole Inspection Program.¹⁹ Gulf utilizes an inspection matrix that ensures that all poles receive a visual inspection with sounding, boring, and excavation as appropriate. The program identifies poles that require repair, reinforcement or replacement. Currently, Gulf has completed its fifth year of its second eight-year cycle. Gulf will continue to file the results of these inspections in its Annual Electric Utility Distribution Reliability Report. The estimated cost for 2019-2021 related to the eight-year Wooden Pole Inspection Program is \$8,379,000 as compared to \$6,841,000 spent in 2016-2018.

Ten Initiatives

Initiative One – Three-Year Vegetation Management Cycle for Distribution Circuits

Gulf proposes no changes to its previously approved trim cycle.²⁰ Currently, the feeders are trimmed on a three-year cycle and lateral circuits are trimmed on a four-year cycle. Gulf's vegetation management plan includes an annual inspection and corrective action plan on the remaining two-thirds of the main feeders that are not part of the trim cycle that year. Lateral distribution lines are managed on a reliability-based program to achieve a four-year average cycle. Gulf began a pilot program in 2016 to procure easements from private property owners for select feeders. This allows Gulf to address vegetation management concerns for feeders that serve key customers, experience reliability issues, and have heavy exposure to off right-of-way vegetation. The estimated cost for 2019-2021 for Initiative One is expected to be between \$15,000,000 to \$18,000,000 as compared to \$19,631,000 spent in 2016-2018.

¹⁹Order No. PSC-07-0078-PAA-EU, issued January 29, 2007, in Docket No. 20060531-EU, *In re: Review of all electric utility Wooden Pole Inspection Programs*.

²⁰Order No. PSC-10-0688-PAA-EI, issued November 15, 2010, in Docket No. 20100265-EI, *In re: Review of 2010 Electric Infrastructure Storm Hardening Plan filed pursuant to Rule 25-6.0342, F.A.C., submitted by Gulf Power Company*.

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Initiative Two – Audits of Joint-Use Attachment Agreements

There are no proposed changes to the plan for this initiative. Gulf performs field audits of joint-use poles every five years as outlined in contractual agreements with third party attachers. Both utility-owned poles with third party attachers and non-utility poles where Gulf is the third party attacher, are included in the audit. Gulf's last audit of attachments on its distribution system was conducted in 2016. Gulf reported that any dangerous situations identified during the audits are immediately reported to the pole owner. Dangerous conditions may include buckling, splitting or broken poles, or low hanging conductors or cables. Gulf anticipates similar data will be collected and/or verified in the next field audit scheduled for 2021. The estimated cost for 2019-2021 is \$500,000 compared to \$496,000 for 2016-2018.

Initiative Three – Six-Year Transmission Structure Inspection Program

There are no proposed changes to the plan for this initiative. Gulf's transmission line inspections include a ground line treatment inspection, a comprehensive walking inspection, and aerial inspections. The transmission inspections are based on two alternating 12-year cycles, which results in structures being inspected at least once every 6 years. Gulf inspects all of its substations at least once annually. The inspections include visual inspections of all structures. The estimated cost for this initiative for 2019-2021 is \$900,000 as compared to \$769,000 spent in 2016-2018.

Initiative Four – Hardening of Existing Transmission Structures

There are no proposed changes to the plan for this initiative. Gulf will continue the design and construction of its new facilities based on the NESC and EWL. The standard for all new transmission lines used by Gulf is Grade B construction. Gulf's main objective is to design a structure that has a capacity greater than the maximum expected load. Gulf's previous plan was to continue the replacement of wooden H-frame cross-arms with steel cross-arms on transmission facilities. However, based on data and the performance of wooden structures on the transmission system during Hurricane Michael, Gulf plans to begin replacing all wooden structures with concrete or steel in a systematic approach moving forward. Currently, Gulf has 4,817 wooden structures on its transmission system, with 75-250 structures planned to be replaced with concrete or steel in 2019, and 100-400 wood structures replaced in years 2020 and 2021. The cost for 2019-2021 is estimated between \$22,000,000 to \$55,000,000 as compared to \$6,862,000 spent in 2016-2018.

Initiative Five – Transmission and Distribution Geographic Information System (GIS)

There are no proposed changes to the plan for this initiative. Gulf reported that its GIS uses database information that is continuously maintained and updated with transmission, distribution and land information across its service area. Gulf completed its distribution facilities mapping transition to its Distribution GIS in 2009. The transmission system has been completely captured in the Transmission GIS database. The Distribution GIS and Transmission GIS are continually updated with any additions and changes as the associated work orders for maintenance, system improvements, and new business are completed. This ongoing process provides Gulf sufficient information to use with collected forensic data to assess performance of its overhead and underground systems in the event of a major storm. During the period 2019-2021, Gulf will be transitioning its GIS data to systems utilized by NextEra Energy as part of the Company's

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acquisition; however, the GIS data will be maintained and updated as needed. There are no incremental costs associated with this initiative.

Initiative Six – Post-Storm Data Collection and Forensic Analysis

There are no proposed changes to the plan for this initiative. Contractors will aid Gulf in the collection of field data after a major storm. In addition, data will be collected on pre-determined projects constructed to EWL criteria and in other designated overhead and underground areas. The information collected by Gulf's contractors will be utilized to perform a forensic analysis. Gulf reported that this "fact finding" assessment of existing facilities would help in the evaluation of its construction standards going forward.

Initiative Seven – Collection of Detailed Outage Data Differentiating Between the Reliability Performance of Overhead and Underground Systems

There are no proposed changes to the plan for this initiative. Gulf will continue its record keeping and analysis of data associated with overhead and underground outages. Gulf collects data on outages as they occur, for the following situations:

- If underground cables are:
 - Direct buried
 - Direct buried with injection treatment
 - In a conduit
- Whether the pole type is:
 - Concrete
 - Wood
 - Steel

In response to information requested in the Hurricane Review Docket, Gulf outlined the type of comparable data that the Utility plans to provide for overhead and underground facilities. Gulf will continue to collect forensic data on damaged facilities following a major event. The goal of the data collection would be to capture damage based on map tiles that were affected by the storm path. Gulf explained the pre-determined map tiles have been identified that would possibly allow for the collection of valid forensic data on hardened overhead, non-hardened overhead, and underground facilities that experienced similar weather conditions. The data for overhead facilities would include location, circuit information, damage description, break location, and cause of damage. The data collected for underground facilities would include location, identifier, damage description and cause of damage.

Initiative Eight – Increased Coordination with Local Governments

There are no proposed changes to the plan for this initiative. Gulf meets with governmental entities for all major projects, as appropriate, to discuss the scope of the project and coordinate activities involved with project implementation. Gulf maintains year-round contact with city and county officials to ensure cooperation in planning, good communication, and coordination of activities. Gulf assigns employees to county EOCs throughout Northwest Florida to assist during

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emergencies. Gulf also conducts a storm drill each year. There is no estimated cost for this initiative.

In response to information requested in the Hurricane Review Docket, Gulf discussed its coordination with local governments regarding vegetation management and identification of critical facilities. Gulf works with city and county representatives to ensure that they are aware of upcoming trimming activities, as some areas require noticing prior to the initiation of trimming. Gulf meets regularly with officials to discuss topics such as storm restoration plans, procedures, and priorities. A sample of Gulf's meetings with several cities and counties was provided, and Gulf will have this information available going forward.

Gulf has 12 employees that are currently available to support county EOCs, depending on the event and needs of the county. Gulf also has personnel that staff the State EOC during activations. Their responsibilities are to obtain, prioritize, and process information from the State EOC, then provide progress reports and restoration status to EOC personnel and management.

Initiative Nine – Collaborative Research on Effects of Hurricane Winds and Storm Surge

There are no proposed changes to the plan for this initiative. Gulf will continue to participate in the collaborative research effort with other Florida IOUs, municipalities, and cooperatives. The collaborative research is facilitated by PURC at the University of Florida and focuses on: (1) undergrounding of electric utility infrastructure; (2) hurricane wind effects; and (3) public outreach. Gulf signed an extension of the memorandum of understanding with PURC in December 2018 for two years, with a provision that the memorandum of understanding will be automatically extended for successive two-year terms. Gulf estimated the cost for 2019-2021 for this initiative would be \$60,000 comparably, the same amount was spent in 2016-2018.

Initiative Ten – Natural Disaster Preparedness and Recovery Program

Gulf will continue to refine this initiative. Gulf uses the strategy described in its Storm Restoration Procedures Manual to respond to any natural disaster that may occur. Annually, Gulf develops and refines its planning and preparations for the possibility of a natural disaster. Gulf's restoration procedures establish a plan of action to be utilized for the operation and restoration of generation, transmission, and distribution facilities during disasters. Gulf continues to provide annual refresher training in the area of storm preparedness for various storm roles at minimal cost. Mock hurricane drills are held annually. There is no estimated cost for this initiative.

In response to information requested in the Hurricane Review Docket, Gulf provided its contingency plans for roadway congestion, fuel availability, and lodging accommodation issues. In the event of roadway congestion, Gulf communicates with local, state, and federal authorities for assistance, as well as coordinating with law enforcement to route crews, resources, and equipment to affected areas. For fuel availability, Gulf has a primary fuel supplier for "blue sky" days, along with two backup suppliers who can also provide fueling equipment and support personnel when needed. For large storm events, contracts are in place with vendor lodging and can be utilized, while for smaller events, Gulf assesses the availability of local hotel accommodations.

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National Electrical Safety Code Compliance

Gulf's distribution system complies with all applicable sections of the NESC. Gulf's transmission system complies with all applicable sections of the NESC in effect at the time of initial construction. For its substations, Gulf uses the American Society of Civil Engineers 7 EWL criteria for structural design and selection. Gulf uses construction Grade B on all new transmission lines. The Grades of construction are specified in the NESC on the basis of the required strengths for safety. The relative order of Grades is B, C, and N, with Grade B being the highest.

Extreme Wind Loading (EWL) Standards

As a result of Gulf's system performance during Hurricane Michael and the associated data obtained from forensic analysis, combined with the sharing of FPL's experience with its own storm hardening initiatives, Gulf is proposing to increase its future storm hardening efforts. Initially, in addition to continuing other aspects of its previously approved plans that have proven to be beneficial, Gulf is proposing to invest approximately \$5 to \$12 million in 2019 and an estimated \$14 to \$40 million over the remainder of this plan in projects associated with strengthening existing critical infrastructure facilities to current EWL standards per the NESC. Gulf uses pole loading software, PoleForeman and PLS-CADD, to assure compliance with all NESC loading requirements. PoleForeman is used to design distribution facilities. To design transmission facilities Gulf uses PLS-CADD.

New Construction

Gulf will continue the design and construction of new facilities based on the NESC. In addition, when practical and feasible, consideration will be given to upgrade existing transmission facilities when capital maintenance is performed.

Major Planned Work

Gulf utilizes NESC Rule 250C EWL to design all new and replacement structures on the transmission system, as well as on the distribution system.

Critical Infrastructure (CIF)

Initially, Gulf's process for identifying storm hardening projects was focused on interstate crossings, double circuit pole lines, key infrastructure, and areas that were difficult to repair or would affect a large number of customers. Storm hardening projects then migrated toward focusing on critical infrastructures such as hospitals, storm shelters, emergency operations centers, and others. More recent projects continue to be directed at critical infrastructures and may include more commercial corridors that would provide needed community support. Gulf learned during Hurricane Michael that mitigating damage to critical facilities and minimizing restoration time are crucial to the communities Gulf serves. Gulf proposes all new construction and work performed on critical infrastructure facilities meet the EWL standards.

Mitigation of Flooding and Storm Surge Damage

Gulf has developed overhead and underground storm hardening specifications to minimize damage in areas subject to flooding and storm surges. These specifications will continue to evolve as Gulf continues to seek out best practices and learns from the review of gathered forensic data with respect to storm hardening and storm surge mitigation. All future underground

transmission projects located within the possible storm surge area will be engineered to consider the impact of flooding or storm surge from weather events.

Facility Placement

Gulf proposes to continue placement of all new distribution facilities in the public right-of-way. Gulf reported that it would continue to promote replacement of facilities adjacent to public roads; to use easements, public streets, roads, and highways; to obtain easements for underground facilities; and to use road right-of-ways for conversions of overhead to underground facilities.

Deployment Strategies

Gulf's updated plan contains a detailed three-year deployment strategy, which is a continuation of inspection programs, technical design specifications, construction standards and methodologies.

Facilities Affected, Including Specifications and Standards

Gulf will continue to develop overhead and underground storm hardening specifications for its distribution system. Gulf reported that these specifications would continue to evolve as the Utility seeks out best practices and learns from the review of gathered forensic data. As discussed, Gulf will continue to use the EWL standards for all new construction, major projects and maintenance work. Gulf also will continue to utilize overload and strength factors greater than or equal to those required in the NESC for its transmission system. These design criteria are used on all new installation and completed rebuild projects throughout Gulf's service area.

Gulf performed a risk assessment on all its substations. The risk assessment was completed based on information provided by the National Oceanic and Atmospheric Administration's (NOAA) Sea, Lake and Overland Surges from Hurricanes (SLOSH) model. Gulf will implement flood monitoring on vulnerable substations and review switch house construction standards for possible replacement and strengthening. Gulf's Emergency Response Plan has been established for all substations.

Areas of Infrastructure Improvements

Gulf's updated plan provides a detailed description of the electric infrastructure improvements that will be made. All three regions (Central, Eastern, and Western) of Gulf's service territory will be impacted. Below is a brief description of some projects:

- **Feeder Patrols:** Gulf reports annually, by June 1, all of its critical lines would be inspected up to the first protective device for loose down guys, slack primary and leaning poles. Gulf will correct all problems found during the inspection.
- **Infrared Patrols:** Also, annually, by June 1, Gulf will perform infrared inspections of critical equipment on main line three-phase feeders. The devices with problems, such as feeder switches, capacitors, regulators and automatic over-current protective devices will be repaired.
- **Distribution Automation:** Gulf proposes to continue the installation of additional distribution automation devices to further segment the feeders for outage restoration. The devices will protect its customers by limiting the affect of temporary faults and sustained outages. The devices will be either controlled by Gulf's Distribution

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Supervisory Control and Data Acquisition (DSCADA) system and/or function as part of automated restoration schemes.

- Strategic Installation of Automated Overhead Faulted Circuit Indicators (FCI): Gulf explained that FCIs are devices designed to indicate the passage of fault current. An FCI will reduce customer outage time by expediting the location of outage causes, thereby aiding in the isolation of the problem. This will help to restore service to some customers while Gulf is correcting the problem.

Gulf's proposed storm hardening projects for 2019 are listed below. Gulf indicated that each of the projects will be implemented using EWL construction standards as part of the upgrade.

- Valparaiso: one CIF
- Panama City: two CIF
- Panama City Beach: one coastal feeder
- Escambia County: five community feeders

Joint-Use Facilities

Third-party attachment notification protocols are contained within contracts held by Gulf. Before third-parties attach, upgrade, or overlash cables to any Gulf structure, they must comply with a pre-notification process designed to inform Gulf of any proposed actions. The pre-notification involves a field pre-inspection with pole measurements, strength and loading calculations, work order preparation (if necessary), and a post-inspection of all work that is paid for by the requesting third-party attacher. As of year-end 2017, Gulf had a total of 202,706 utility distribution poles and was attached to 62,826 non-electric utility distribution poles. Gulf conducts field audits of its joint-use pole attachments on a five-year cycle, with its last audit completed in 2016. Gulf's next field audit is scheduled for 2021.

Utility Cost/Benefit Estimates

Gulf's updated plan includes estimates of costs to be incurred in connection with its updated plan for 2019 through 2021. These costs include continuation of its transition and implementation of Grade B construction, CIF improvements, feeder patrols, and other projects. For 2016 through 2018, Gulf spent a total of \$78,808,293 on its storm hardening plan. Gulf estimates it will spend approximately \$184,000,000 to \$265,000,000 for 2019 through 2021. Gulf attributes the increase in costs to an increase in storm hardening projects throughout its service territory and the replacement of wooden structures on the transmission system as opposed to just replacing the wooden cross-arms on the transmission system. In addition, as a result of Gulf's acquisition by NextEra Energy, Gulf will begin using FPL's construction standards and best practices for its storm hardening projects, which will increase the costs of the projects. Attachment E shows a comparison of costs associated with implementation of Gulf's current and updated wooden pole inspections and Ten Initiatives.

As a benefit to the Utility and its customers, Gulf's process for identifying storm hardening projects has evolved from focusing on feeders that were hard to repair and had a large number of customers affected to critical infrastructures to feeders that provide commercial community support. Gulf evaluates possible projects based on input and collaboration from employees in

each district as well as determining feeders that contain critical customers, large number of customers, and/or feeders that may have experienced below normal reliability performance.

Attachers Cost/Benefit Estimates

Gulf requested input from third-party attachers in the development of its storm hardening plan. Gulf provided third-party attachers information about its updated plan. No cost and benefit data was received from third-party attachers prior to the published date of Gulf's plan. Gulf reported that it would continue to coordinate with interested third-party attachers to discuss major company and customer construction projects, construction standards, inspection programs, and operational issues.

Attachment Standards and Procedures

Gulf's updated plan includes EWL standards as specified by Figure 250-2(d) of the NESC. Also included in its plan are engineering standards for overhead and underground storm hardening that meet or exceed the NESC pursuant to Rule 25-6.034, F.A.C., and procedures for attachments by others to the Utility's systems.

Conclusion

Gulf's updated plan is largely a continuation of its current Commission-approved plan. Based on the review above, it indicates that Gulf's plan has the information required by the Commission's rule and orders and staff recommends it should be approved. Staff notes that approval of Gulf's plan does not mean approval for cost recovery.

Issue 5: Should the Commission approve Florida Public Utilities Company's 2019-2021 storm hardening plan filed in Docket No. 20180148-EI?

Recommendation: Yes. FPUC's updated plan is largely a continuation of its current Commission-approved plan. A review of FPUC's plan shows that it has the information required by the Commission's rule and orders. Staff notes that approval of FPUC's plan does not mean approval for cost recovery. FPUC should consider the rate impact before taking proactive steps to improve its system to withstand severe weather events. (P. Buys, Knoblauch, Salvador, Breman, Eastmond, Wendel, Eichler)

Staff Analysis: On Attachment F, staff provides a summary of FPUC's current Wooden Pole Inspection Program and Ten Initiatives and the proposed changes. In addition, where available, staff has shown the costs associated with the Wooden Pole Inspection Program and Ten Initiatives for 2016-2018 and 2019-2021. Components of FPUC's updated plan are summarized below.

Wooden Pole Inspection Program

FPUC is continuing its eight-year Wooden Pole Inspection Program.^{21,22} The program identifies poles that require repair, reinforcement or replacement. An outside contractor, Osmose Utilities Services, Inc., performs all wooden pole inspections, including strength and loading tests. Currently, FPUC completed its third year of its second eight-year cycle. FPUC will continue to file the results of these inspections in its Annual Electric Utility Distribution Reliability Report. The estimated cost for 2019-2021 related to the eight-year Wooden Pole Inspection Program is \$1,305,000 as compared to \$2,032,000 spent for 2016-2018.

Ten Initiatives

Initiative One – Three-Year Vegetation Management Cycle for Distribution Circuits

FPUC proposes no changes to its previously approved trim cycle. Currently, its feeder and lateral circuits are trimmed, on average, every three years and six years, respectively.²³ FPUC reported that it has 139.63 miles of feeders and 570.87 miles of laterals. FPUC will continue to communicate with customers and local governments to address vegetation management. The estimated cost for 2019-2021 for Initiative One is \$3,285,000 as compared to \$2,933,000 spent for 2016-2018.

Initiative Two – Audits of Joint-Use Attachment Agreements

There are no proposed changes to the plan for this initiative. FPUC has joint-use agreements with multiple third-party attachers. In 2016, GIS mapping information was used in conducting an audit on all joint-use attachers in order to determine the number of attachments and identify any existing violations. A total of 7,101 telecommunication and 12,568 cable television attachments

²¹Order No. PSC-06-0144-PAA-EI, issued February 27, 2006, in Docket No. 20060078-EI, *In re: Proposal to require investor-owned electric utilities to implement ten-year wood pole inspection program.*

²²Order No. PSC-07-0078-PAA-EU, issued January 29, 2007, in Docket No. 20060531-EU, *In re: Review of all electric utility Wooden Pole Inspection Programs.*

²³Order No. PSC-10-0687-PAA-EI, issued November 15, 2010, in Docket No. 20100264-EI, *In re: Review of 2010 Electric Infrastructure Storm Hardening Plan filed pursuant to Rule 25-6.0342, F.A.C., submitted by Florida Public Utilities Company.*

within the distribution system were identified. Additionally, FPUC was attached to 513 other company poles. FPUC does not perform strength and loading assessments during the joint-use audits as these tests are performed during the wooden pole inspections. The audits include:

- Pole Locations
- Owner of the pole
- City and county location
- Pole type, height, class and treatment
- Pole date manufactured, inspected, and retreated
- Joint-use attacher name and type (telecommunication, cable)
- Violations
- Miscellaneous comments

Data collected from the audit will be analyzed to determine the number of poles found to be overloaded, number of unauthorized attachers and customer outages related to these situations. Instances where a pole failure could occur will be addressed immediately. The estimated cost for 2019-2021 is \$0 as compared to \$83,000 spent for 2016-2018.

Initiative Three – Six-Year Transmission Structure Inspection Program

There are no proposed changes to the plan for this initiative. FPUC's transmission structure inspection program includes a detailed inspection of its 138 kV and 69 kV transmission lines on a six-year cycle and transmission substations on an annual cycle. The program includes inspecting transmission towers and transmission-supporting equipment such as insulators, guying, grounding, conductor splicing, cross-braces, cross-arms, and bolts. The program also includes inspecting all structures, buss work, insulators, grounding, bracing and bolts at the transmission substations. The estimated cost for this initiative for 2019-2021 is \$51,000 as compared to \$55,250 spent for 2016-2018.

Initiative Four – Hardening of Existing Transmission Structures

There are no proposed changes to the plan for this initiative. FPUC's 138 kV transmission system is constructed using concrete and steel structures. In December 2018, the six-year transmission inspection was completed by a contractor, and any identified structure or material failures will be addressed by FPUC. The 69 kV transmission system consists of 217 poles, with 105 of them being concrete. FPUC will continue to replace the wooden poles when it is necessary due to construction requirements or concerns with the integrity of the pole. FPUC reports that by the end of 2021, there will be approximately 40 percent of its transmission structures left to be hardened. The costs for 2019-2021 are estimated to be \$1,900,000 as compared to approximately \$2,573,000 spent in 2016-2018.

Initiative Five – Transmission and Distribution Geographic Information System (GIS)

There are no proposed changes to the plan for this initiative. FPUC implemented its GIS in 2008. The GIS identifies the distribution and transmission facilities on a land base map. This allows

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FPUC the ability to record data on all physical assets. The system communicates with FPUC's Customer Information System and functions as an Outage Management System (OMS) that allows collection of data used in determining reliability. FPUC's GIS also collects information regarding joint-use attachments, which provide additional information in conducting the joint-use audits. The costs for 2019-2021 are estimated to be \$120,000 as compared to \$299,000 spent in 2016-2018.

Initiative Six – Post-Storm Data Collection and Forensic Analysis

There are no proposed changes to the plan for this initiative. FPUC has a forensics team to coordinate communications, schedule data collection, and to report the findings. FPUC utilizes a contractor to collect, analyze and report on field data collected, which is entered into FPUC's OMS. The contractor will perform a forensic investigation at damage locations. The criteria for damage locations include, but are not limited to: poles, wires, cross-arms, insulators, transformers, reclosers, capacitor banks, cutouts, and any other equipment that is damaged or has caused a customer outage. Data will also be collected on damaged facilities as defined as broken poles, leaning poles, broken or downed wires, damaged line equipment, and any other incident that has caused a customer outage. The costs spent for 2016-2018 were \$1,629,000 for Initiative Six. The estimated costs for 2019-2021 have not been determined at this time.

Initiative Seven – Collection of Detailed Outage Data Differentiating Between the Reliability Performance of Overhead and Underground Systems

There are no proposed changes to the plan for this initiative. FPUC will continue to collect outage data for overhead and underground systems in order to evaluate the reliability associated with the two systems. The forensic team report form allows for both overhead and underground damage to be entered. The data will be entered separately for each incident.

In response to information requested in the Hurricane Review Docket, FPUC outlined the type of comparable data that the Utility plans to provide for overhead and underground facilities. FPUC will collect data on a sample of its facilities that have had significant impact from wind and will include both storm hardened and non-hardened facilities. Included in the data collected will be where the location is, what type of facilities failed, and what caused the failure. In order to compare overhead and underground performance, FPUC plans to review physical performance, outage rates, and restoration times to make comparisons.

Initiative Eight – Increased Coordination with Local Governments

There are no proposed changes to the plan for this initiative. FPUC reports that it actively participates with local governments in pre-planning and coordinating activities for emergency situations. FPUC will have personnel located at the county EOCs on a 24-hour basis during emergencies, and as needed at the State EOC. FPUC will continue discussing undergrounding and vegetation management issues with local governments. To reduce impacts to overall reliability, FPUC reported that there is continued cooperation between all parties to address vegetation management in a cost-effective approach whenever possible. To ensure customer issues are quickly addressed, FPUC has a dedicated manager who is responsible for maintaining relationships with local and state governments, as well business and community leaders.

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In response to information requested in the Hurricane Review Docket, FPUC discussed its coordination with local governments regarding vegetation management and identification of critical facilities. FPUC stated that formal meetings with local governments were not documented; however, FPUC met with two cities and three counties, and provided a list of topics discussed. FPUC works closely with local governments on a routine basis on vegetation management activities, and to maintain a list of critical facilities. During a storm event, FPUC employees are located at a county or city EOC, if requested, and up-to-date contact information with local governments is verified on an annual basis. FPUC staffs five employees in two county and one city EOC, with staffing for several other EOCs on an as-needed basis.

Initiative Nine – Collaborative Research on Effects of Hurricane Winds and Storm Surge

There are no proposed changes to the plan for this initiative. FPUC will continue to participate in the collaborative research effort with the other Florida IOUs, municipals and cooperatives. The collaborative research is facilitated by PURC at the University of Florida and focuses on: (1) undergrounding of electric utility infrastructure; (2) hurricane wind effects; and (3) public outreach. FPUC will continue to support PURC's effort but does not intend to conduct other types of research at this time. The costs for 2019-2021 are estimated to be \$3,000 as compared to \$3,000 spent in 2016-2018.

Initiative Ten – Natural Disaster Preparedness and Recovery Program

FPUC will continue to refine this initiative. FPUC's Disaster Preparedness and Recovery Plan provides guidelines under which the Utility will operate in emergency conditions. In order to ensure orderly and efficient service restoration, the guidelines address the following objectives:

- Safety of employees, contractors, and the general public
- Early damage assessment
- Request additional manpower
- Provide for orderly restoration activities
- Provide all logistical needs for employees and contractors
- Provide ongoing preparation of FPUC's employees, buildings, and equipment
- Provide support and additional resources for FPUC's employees and families

FPUC will utilize the plan to prepare for storms annually. The plan will also ensure that all employees are aware of their responsibilities during the storms.

In response to information requested in the Hurricane Review Docket, FPUC discussed contingency planning for roadway congestion, fuel availability, and lodging accommodation. For roadway congestion, FPUC coordinates with EOCs in impacted areas for assistance from state and local law enforcement. For fuel availability, FPUC has an emergency fueling contract with a supplier that provides fuel during events as needed, as well as emergency fuel tanks on Amelia Island. To ensure lodging accommodations are met, FPUC has lodging plans in place, which are made annually, and are adjusted based on the track and intensity of a storm. A variety of hotels

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are utilized to ensure sufficient lodging accommodations are available in the event a storm threatens or impacts FPUC's service areas.

National Electrical Safety Code Compliance

FPUC distribution and transmission facilities have been installed in accordance with NESC requirements in effect at the time of installation. Specifications have been developed that will allow for all future installations to meet NESC EWL standards. FPUC's 2019-2021 storm hardening plan includes a provision that all remaining wood transmission poles will be replaced with concrete poles that will meet or exceed the NESC EWL standards. FPUC uses construction Grade B for its distribution and transmission facilities. The grades of construction are specified in the NESC on the basis of the required strengths for safety. The relative order of Grades is B, C and N, with Grade B being the highest.

Extreme Wind Loading Standards

FPUC incorporates EWL standards as specified in NESC Rule 250C EWL and in Figure 25-2(d) of the 2017 NESC. FPUC will use these standards to design new construction and major planned projects. In some cases FPUC exceeded the EWL standards. For example, FPUC's structures and facilities in Fernandina Beach were designed to withstand wind loading of 130 mph instead of the 120 mph required by the NESC Rule 250C EWL.

New Construction

FPUC designs new construction to comply with the NESC Rule 250C EWL utilizing construction Grade B. FPUC uses PoleForeman software to design its distribution poles to assure compliance with all NESC loading requirements. FPUC's transmission poles are designed by outside engineering companies that use PLS-CADD and PLS-Pole softwares.

Major Planned Work

As addressed above, FPUC designs new construction and major planned work to comply with the NESC Rule 250C EWL utilizing construction Grade B for new construction and replacements of distribution and transmission facilities.

Critical Infrastructure (CIF)

Critical infrastructures such as hospitals, storm shelters, water plants, sewer treatment plants, and distribution facilities along major highways are the primary focus in FPUC's 2019-2021 storm hardening plan. During FPUC's review of its lessons learned from the hurricane restoration activities of the last three years, additional critical loads locations were identified. The distribution lines serving those locations were added to FPUC's storm hardening project list. In addition, FPUC is replacing fused cutouts on those critical infrastructure distribution lines with new technology trip savers that reclose after faults, improving reliability.

Mitigation of Flooding and Storm Surge Damage

FPUC provides electric service to more than 28,000 customers in two non-contiguous service territories: the Northeast Division and the Northwest Division. FPUC's transmission facilities are located only in the Northeast Division. The transmission lines are constructed near and across coastal waterways. Foundations and castings were used to stabilize the structures due to the soil conditions. Overhead distribution lines are located in both divisions and are subject to storm surges and flooding. If needed, additional supporting mechanisms, such as storm guys or pole

bracing, will be installed. Reclosers, capacitors, and regulators that require electronic controls will be mounted above the maximum surge or flood levels. FPUC's underground distribution lines that are subject to storm surges and flooding are mainly located in the Northeast Division. When selecting underground projects, FPUC always considers the terrain characteristics, especially where nearby trees are located. FPUC underground projects have not experienced any flooding issues during the recent hurricanes.

Facility Placement

FPUC's facilities are located in areas that are easily accessible. The facilities will be placed along public right-of-ways or located on private easements that are readily accessible from public streets. FPUC reports that these requirements are necessary to efficiently and safely perform installation and maintenance on the facilities. FPUC notes that facilities placed along rear lot lines will only be constructed as a "last resort."

Deployment Strategies

FPUC's plan contains its deployment of its storm hardening strategy that will have an impact on future storm restoration activities.

Facilities Affected, Including Specifications and Standards

The significant areas of implementation from the deployment of FPUC's storm hardening strategy are:

- Wooden poles will be inspected at least every eight years.
- Vegetation management activities will ensure that feeders are trimmed every three years and laterals are trimmed every six years.
- Joint-use audits will be conducted every five years to identify pole loading issues.
- Detailed climbing inspections on all transmission facilities will be conducted every six years.
- FPUC will continue to replace wood transmission structures with concrete.
- FPUC will continue to rebuild its CIF to EWL.
- FPUC will use techniques to mitigate damage from storm surges and floods.
- FPUC will continue to place facilities on public right-of-ways.

Areas of Infrastructure Improvements

Most of the items listed above will affect all areas of FPUC's service territory. However, the transmission inspection and replacement of transmission structures will only affect the Northeast Division. The Northwest Division does not have any transmission facilities. The rebuilding of CIF to EWL will equally benefit both divisions. Below is a list of FPUC's proposed projects for 2019 through 2021.

- NW Division, Kelson Ave, 2019: Health facilities and wastewater lift stations.
- NW Division, Wastewater Plant, 2019: Critical wastewater treatment plant in Marianna.

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- NE Division, South Fletcher Phase 2, 2019: Distribution line on Amelia Island along a highly populated area immediately adjacent to the Atlantic Ocean that experiences salt spray which causes corrosion on line hardware.
- NE Division, 69 kV Replacement Poles, 2019: Wood to concrete pole replacement.
- NW Division, Industrial Park Backup Feed, 2020: Backup feed to critical loads including new school (storm shelter), airport, Health department and fire station in Marianna.
- NW Division, Cottondale, 2020: Service critical loads including police station, city offices, high school and fire station.
- NE Division, 69 kV Replacement Poles, 2020: Wood to concrete pole replacement.
- NW Division, Hospital, 2021: Backup feeder for Jackson Hospital in Marianna.
- NE Division, Baptist Hospital, 2021: Storm hardened backup feeder to Baptist hospital in Fernandina Beach.
- NE Division, 69 kV Replacement Poles, 2020: Wood to concrete pole replacement.

Joint-Use Facilities

FPUC's joint-use pole procedures follow processes found in the language of current contracts FPUC has with joint-use entities. When a non-electric utility pole is determined to be dangerous to public safety, FPUC replaces the pole. After completion of the work, FPUC informs the non-electric utility that the pole was replaced and the circumstances that necessitated the replacement. If a non-electric utility company is found to not be performing inspections of its company-owned poles, FPUC has the option to perform the inspection in addition to the eight-year pole inspection cycle. If a pole is then identified as needing replacement, FPUC notifies the non-electric utility company of the need to replace the pole or FPUC performs the replacement of the pole. As of year-end 2017, FPUC had a total of 26,548 utility distribution poles and was attached to 513 non-electric utility distribution poles. FPUC completed the joint-use pole attachment audit during the last quarter of 2016. FPUC's next joint-use audit is scheduled to take place in 2021.

Utility Cost/Benefit Estimates

FPUC's updated plan includes estimates of costs to be incurred in connection with its updated plan for 2019 through 2021. This includes pole replacements, inspections of distribution and transmission facilities, vegetation management, and other projects. For 2016 through 2018, FPUC spent a total of \$14,529,663 on its storm hardening plan. FPUC estimates it will spend \$9,328,657 for 2019 through 2021. FPUC did not estimate an amount for its forensic data collection as it is dependent on the storm damage. In addition, there are no third-party joint audits scheduled for 2019, 2020, and 2021. Attachment F shows a comparison of cost associated with implementation of FPUC's current and updated Wooden Pole Inspection Program and Ten Initiatives.

One benefit to FPUC and its customers is the critical factors that are included in the analysis to identify storm hardening projects. FPUC will consider whether the facilities provide electrical service to critical customers and to areas that historically have the highest number of customer outages. In addition, FPUC considers whether the facilities provide electrical service to areas that are physically located near the ocean or can be impacted by floodwaters. Facilities that provide

service to businesses that affect the overall economy (such as grocery stores and gas stations) and are inaccessible or have heavy vegetation are also considered. FPUC weighs the options for certain storm hardening projects on a case-by-case basis. The alternatives considered include factors such as cost, storm damage that could happen, restoration efforts, and location of the projects.

Attachers Cost/Benefit Estimates

Other than ongoing dialogue and negotiation on language in the joint-use agreements, no specific costs or benefits to third-party attachers were reported by FPUC.

Attachment Standards and Procedures

FPUC's updated plan includes the current Joint-Use Attachment Specifications addressing safety, reliability, and pole loading capacity. The current contracts with third-party attachers continue to govern attachment standards and procedures. If additional specifications are developed, third-party attachers will have the ability to provide input on new specifications.

Conclusion

FPUC's updated plan is largely a continuation of its current Commission-approved plan. Based on the review above, FPUC's plan has the information required by the Commission's rule and orders and staff recommends it should be approved. Staff notes that approval of FPUC's plan does not mean approval for cost recovery.

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Issue 6: Should these dockets be closed?

Recommendation: Yes. At the conclusion of the protest period, if no protest is filed these dockets should be closed upon the issuance of the consummating orders. Separate orders will be issued for each docket to reflect the Commission's vote. For each such order, if no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the respective docket's order, that docket should be closed upon issuance of a separate consummating order. A protest by an affected person in a docket will not preclude the non-protested dockets from closing. (Trierweiler)

Staff Analysis: At the conclusion of the protest period, if no protest is filed these dockets should be closed upon the issuance of the consummating orders. Separate orders will be issued for each docket to reflect the Commission's vote. For each such order, if no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the respective docket's order, that docket should be closed upon issuance of a separate consummating order. A protest by an affected person in a docket will not preclude the non-protested dockets from closing.

Storm Hardening Requirements: Wooden Pole Inspection Program & Ten Initiatives

Eight-Year Wooden Pole Inspection Program
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| 1. Implement an eight-year wooden pole inspection cycle by Order Nos. PSC-06-0144-PAA-EI and PSC-07-0078-PAA-EU. |
| 2. File an annual report with the Commission. |
| 3. Provide cost estimates. |

Initiative 1 – A Three-Year Vegetation Management Cycle for Distribution Circuits
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| 1. Three-year tree trim cycle for primary feeders (minimum). |
| 2. Three-year cycle for laterals as well, if not cost-prohibitive. |
| 3. Provide cost estimate. |

Initiative 2 – Audit of Joint-Use Attachment Agreements
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| 1. (a) Each investor-owned electric utility shall develop a plan for auditing joint-use agreements that includes pole strength assessments. |
| (b) These audits shall include both poles owned by the electric utility poles owned by other utilities to which the electric utility has attached its electrical equipment. |
| 2. The location of each pole, the type and ownership of the facilities attached, and the age of the pole and the attachments to it should be identified. |
| 3. Each investor-owned utility shall verify that such attachments have been made pursuant to a current joint-use agreement. |
| 4. Stress calculations shall be made to ensure that each joint-use pole is not overloaded or approaching overloading for instances not already addressed by Order No. PSC-06-0144-PAA-EI. |
| 5. Provide compliance cost estimate and cost estimate for alternative action, if any. |

Initiative 3 – Six-Year Transmission Inspection Program
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| 1. Develop a plan to fully inspect all transmission towers and other transmission supporting equipment (such as insulators, guying, grounding, splices, cross-braces, bolts, etc.). |
| 2. Develop a plan to fully inspect all substations (including relay, capacitor, and switching stations). |
| 3. Provide compliance cost estimate and cost estimate for alternative actions, if any. |

Initiative 4 – Hardening of Existing Transmission Structures

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| 1. Develop a plan to upgrade and replace existing transmission structures. Provide a scope of activity, limiting factors, and criteria for selecting structure to upgrade and replace. |
| 2. Provide a timeline for implementation. |
| 3. Provide compliance cost estimate and cost estimate for alternative actions, if any. |

Initiative 5 – Transmission and Distribution Geographic Information System
1. To conduct forensic review.
2. To assess the performance of underground systems relative to overhead systems.
3. To determine whether appropriate maintenance has been performed.
4. To evaluate storm hardening options.
5. Provide a timeline for implementation.
The utilities have the flexibility to propose a methodology that is efficient and cost-effective.

Initiative 6 – Post-Storm Data Collection and Forensic Analysis
1. Develop a program that collects post-storm information for performing forensic analyses.
2. Provide a timeline for implementation.
The utilities have the flexibility to propose a methodology that is efficient and cost-effective.

Initiative 7 – Collection of Detailed Outage Data Differentiating between the Reliability Performance of Overhead and Underground Systems
1. Collect specific storm performance data that differentiates between overhead and underground systems, to determine the percentage of storm-caused outages that occur on overhead and underground systems, and to assess the performance and failure mode of competing technologies, such as direct bury cable versus cable-in-conduit, concrete poles versus wooden poles, location factors such as front-lot versus back-lot, and pad-mounted versus vault.
2. Provide a timeline for implementation.
The utilities have the flexibility to propose a methodology that is efficient and cost-effective.

Initiative 8 – Increased Coordination with Local Governments
1. Each utility should actively work with local communities year-round to identify and address issues of common concern, including the period following a severe storm like a hurricane and also ongoing, multi-hazard infrastructure issues such as flood zones, area prone to wind damage, development trends in land use and coastal development, joint-use of public right-of-way, undergrounding facilities, tree trimming, and long-range planning and coordination.
2. Incremental plan costs.

Initiative 9 – Collaborative Research
1. Must establish a plan that increases collaborative research.
2. Must identify collaborative research objective.
3. Must solicit municipals, cooperatives, educational and research institutions.
4. Must establish a timeline for implementation.
5. Must identify the incremental costs necessary to fund the organization and perform the research.

Initiative 10 – A Natural Disaster Preparedness and Recovery Program
1. Develop a formal Natural Disaster Preparedness and Recovery Plan that outlines the utility's disaster recovery procedures if the utility does not already have one.

Florida Power and Light Company

Eight-Year Wooden Pole Inspection Program

Current Plan	Updated Plan
1. Implement an eight-year wooden pole inspection cycle for distribution poles.	1. No change
2. File the progress of this inspection in the Annual Reliability Report.	2. No change
3. Costs for 2016-2018 were \$164,000,000.	3. Costs for 2019 are estimated to be between \$45,000,000 - \$55,000,000.

Initiative 1 – A Three-Year Vegetation Management Cycle for Distribution Circuits

Current Plan	Updated Plan
1. Average three-year trim cycle for feeders.	1. No change
2. Average six-year trim cycle for laterals. Targeted trimming is also achieved through its “mid-cycle” program that addresses critical circuits.	2. No change
3. Costs for 2016-2018 were \$189,000,000.	3. Costs for 2019-2021 are estimated to be between \$196,000,000 - \$206,000,000.

Initiative 2 – Audit of Joint-Use Attachment Agreements

Current Plan	Updated Plan
1. (a) Includes auditing 20% of its joint-use facilities annually.	1. (a) No change
(b) Includes auditing all FPL-owned and third-party poles during the eight-year wooden pole inspection cycle.	(b) No change
2. All required data will be collected during inspections and stored in the attachment information database.	2. No change
3. Verify attachments have been made pursuant to current joint-use agreements through a five-year system wide pole attachment survey.	3. No change
4. Stress calculations will be performed during eight-year wooden pole inspection cycle.	4. No change

Initiative 3 – Six-Year transmission Inspection Program	
Current Plan	Updated Plan
1. Wooden pole inspection activities (PSC-06-0144-PAA-EI, Docket No. 060078-EI). Structures on either annually, six-year cycle or ten-year cycle.	1. No change.
2. Substations are fully inspected quarterly.	2. No change
3. Costs for 2016-2018 were \$112,000,000.	3. Costs for 2019-2021 are estimated to be between \$93,000,000 - \$113,000,000.

Initiative 4 – Hardening of Existing Transmission Structures	
Current Plan	Updated Plan
1. Incremental upgrades during relocations and other maintenance. Upgrade un-guyed single wooden pole structures. Ceramic post line insulator replacements.	1. No change
2. In 2008, FPL enhanced its hardening initiative to include replacement of all wooden transmission structures over the next 25 to 30 years.	2. No change
3. Costs for 2016-2018 were \$136,000,000.	3. Costs for 2019-2021 are estimated to be between \$105,000,000 - \$150,000,000.

Initiative 5 – Transmission and Distribution Geographic Information System	
Current Plan	Updated Plan
1. FPL's plan includes forensic reviews.	1. No change
2. FPL's plan includes underground versus overhead.	2. No change
3. Plan includes determination of appropriate maintenance.	3. No change
4. Plan includes evaluation of storm hardening options.	4. No change
5. Currently being implemented.	5. No change

Initiative 6 – Post-Storm Data Collection and Forensic Analysis	
Current Plan	Updated Plan
1. Divide a sample of damaged poles among forensics teams; observations will be made on all damaged samples. Capture information such as location, attachments, and area wind speed.	1. No change
2. Data is dependent upon storm events in FPL’s service area.	2. No change

Initiative 7 – Collection of Detailed Outage Data Differentiating between the Reliability Performance of Overhead and Underground Systems	
Current Plan	Updated Plan
1. FPL’s distribution feeders are hybrids, i.e., they contain both overhead and underground facilities. FPL will utilize laterals as a proxy for assessing overhead versus underground system performance.	1. No change
2. Implementation is ongoing and storm performance results are obtained from forensics and available storm work tickets.	2. No change

Initiative 8 – Increased Coordination with Local Governments	
Current Plan	Updated Plan
1. FPL focuses on storm preparation coordination and communication with External Affairs representatives working with county planners and post-storm communications. In addition, FPL implements ongoing planning with External Affairs representative, special e-mail program, government websites, and Community Outreach Teams.	1. No change

Initiative 9 – Collaborative Research	
Current Plan	Updated Plan
1. Collaborative research efforts, led by PURC, which began in 2007.	1. No change
2. Research vegetation management during storm and non-storm times, wind during storm and non-storm events, hurricane and damage modeling towards further understanding the costs and benefits of undergrounding.	2. No change
3. FPL will solicit participation from other utilities and organizations.	3. No change
4. Implementation is ongoing	4. FPL has entered into a Memorandum of Understanding with the University of Florida’s PURC, which extends research through December 31, 2018.

Initiative 10 – A Natural Disaster Preparedness and Recovery Program	
Current Plan	Updated Plan
1. Disaster Preparedness/Recovery Plan has been developed and filed.	1. Continue to refine.

Tampa Electric Company

Eight-Year Wooden Pole Inspection Program	
Current Plan	Updated Plan
1. Implement an eight-year wooden pole inspection cycle for distribution poles.	1. No change
2. File the progress of this inspection in the Annual Reliability Report.	2. No change
3. Costs for 2016-2018 were \$3,290,000.	3. Costs for 2019-2021 are estimated to be \$3,349,000.

Initiative 1 – A Three-Year Vegetation Management Cycle for Distribution Circuits	
Current Plan	Updated Plan
1. Average four-year trim cycle for feeders.	1. No change
2. Average four-year trim cycle for laterals. Targeted trimming is also achieved through its “mid-cycle” program that addresses critical circuits.	2. No change
3. Costs for 2016-2018 were \$26,546,000.	3. Costs for 2019-2021 are estimated to be \$38,699,000.

Initiative 2 – Audit of Joint-Use Attachment Agreements	
Current Plan	Updated Plan
1. (a) Perform pole strength assessment during eight-year wooden pole inspection cycle.	1. (a) No change
(b) Audit all TECO-owned poles and third-party poles per Joint-Use contract agreements on an eight-year cycle.	(b) No change
2. All required data will be collected during eight-year wooden pole inspection cycle and stored in GIS database.	2. No change
3. Verify attachments have been made pursuant to current joint-use agreements during the eight-year wooden pole inspection cycle.	3. No change
4. Stress calculations will be performed during eight-year wooden pole inspection cycle.	4. No change
5. Costs for 2016-2018 were \$0 due to paying the requesting third-party attacher for the analysis.	5. Costs for 2019-2021 are estimated to be \$0 due to paying the requesting third-party attacher for the analysis.

Initiative 3 – Six-Year transmission Inspection Program	
Current Plan	Updated Plan
1. Wooden pole inspection activities (PSC-06-0144-PAA-EI, Docket No. 060078-EI). Structures on a six-year cycle, all other portions of the system inspected annually.	1. Per Order No. PSC-14-0684-PAA-EI, Docket No. 140122-EI, the inspection cycle was shifted from a six-year cycle to an eight-year cycle starting in 2015.
2. Substations inspected annually.	2. No change
3. Costs for 2016-2018 were \$1,264,000.	3. Costs for 2019-2021 are estimated to be \$1,511,000.

Initiative 4 – Hardening of Existing Transmission Structures	
Current Plan	Updated Plan
1. Incremental phase out of wooden transmission structures during all new construction, relocations, and other maintenance.	1. No change
2. Plan is ongoing with no completion date.	2. No change
3. Costs for 2016-2018 were \$37,605,000.	3. Costs for 2019-2021 are estimated to be \$13,607,000.

Initiative 5 – Transmission and Distribution Geographic Information System	
Current Plan	Updated Plan
1. Forensic reviews on statistical sampled basis.	1. No change
2. Forensic review with respect to types of materials and construction, and location.	2. No change
3. Plan includes determination of appropriate maintenance.	3. No change
4. Access future preventive measures where possible.	4. No change
5. Implementation began in 2010.	5. No change

Initiative 6 – Post-Storm Data Collection and Forensic Analysis	
Current Plan	Updated Plan
1. Hire consultant to perform forensic analyses.	1. No change
2. Implementation is dependent on the severity of the weather event.	2. No change

Initiative 7 – Collection of Detailed Outage Data Differentiating between the Reliability Performance of Overhead and Underground Systems	
Current Plan	Updated Plan
1. Measures are in place should it experience a major storm.	1. No change
2. Implementation will begin when TECO experiences major storm activity.	2. No change

Initiative 8 – Increased Coordination with Local Governments	
Current Plan	Updated Plan
1. TECO’s Plan calls for building on past community involvement by including local government, fire, police and water officials in storm preparation workshops, including local government in local Emergency Operations Centers, increased vegetation management including government and consumer education, undergrounding planning and education, and damage reporting prior, during, and after storms.	1. No change
2. Costs for 2016-2018 were \$0.	2. Costs for 2019-2021 are estimated to be \$0.

Initiative 9 – Collaborative Research	
Current Plan	Updated Plan
1. Collaborative research efforts, led by PURC, which began in 2007.	1. No change
2. Research vegetation management during storm and non-storm times, wind during storm and non-storm events, hurricane and damage modeling towards further understanding the costs and benefits of undergrounding.	2. No change
3. TECO will solicit participation from other utilities and organizations.	3. No change
4. Implementation is ongoing	4. TECO has entered into a Memorandum of Understanding with the University of Florida’s PURC, which extends research through December 31, 2018.
5. Costs for 2016-2018 were \$0.	5. Costs would be determined by the research projects.

Initiative 10 – A Natural Disaster Preparedness and Recovery Program	
Current Plan	Updated Plan
1. Disaster Preparedness/Recovery Plan has been developed and filed.	1. Continue to refine.
2. Costs for 2016-2018 were \$0.	2. Costs for 2019-2021 are estimated to be \$0.

Duke Energy Florida, LLC

Eight-Year Wooden Pole Inspection Program	
Current Plan	Updated Plan
1. Implement an eight-year wooden pole inspection cycle for distribution poles.	1. No change
2. File the progress of this inspection in the Annual Reliability Report.	2. No change
3. Costs for 2016-2018 were \$12,300,000.	3. Costs for 2019-2021 are estimated to be \$12,500,000.

Initiative 1 – A Three-Year Vegetation Management Cycle for Distribution Circuits	
Current Plan	Updated Plan
1. Implement a three-year average trim cycle for feeders with targeted feeder trims based on prioritization.	1. No change
2. Implement an average five-year trim cycle for laterals.	2. No change
3. Costs for 2016-2018 were \$98,050,000.	3. Costs for 2019-2021 are estimated to be \$151,300,000.

Initiative 2 – Audit of Joint-Use Attachment Agreements	
Current Plan	Updated Plan
1. (a) Perform a Comprehensive Loading Analysis and annual partial system audits.	1. (a) No change
(b) Audit all DEF-owned and joint-use poles during eight-year wooden pole inspection cycle.	(b) No change
2. All required data collected on select poles and stored in electronic format.	2. No change
3. Verify attachments have been made pursuant to current joint-use agreements.	3. No change
4. Stress calculations performed on select poles during eight-year wooden pole inspection cycle.	4. No change
5. Cost for 2016-2018 were \$1,329,000.	5. Costs for 2019-2021 are estimated to be \$1,320,000.

Initiative 3 – Six-Year transmission Inspection Program	
Current Plan	Updated Plan
1. Inspection program is multi-pronged approach with inspection cycles of one, five, or eight years depending on the goals or requirements of the individual inspection activity.	1. No change
2. Annual substation inspections.	2. No change
3. Costs for 2016-2018 were \$22,372,000.	3. Costs for 2019 are estimated to be \$8,250,000. Estimates for 2020 and 2021 are not available.

Initiative 4 – Hardening of Existing Transmission Structures	
Current Plan	Updated Plan
1. Incremental upgrades during relocations, replacement of existing wooden transmission pole, and other maintenance.	1. No change
2. Plan completed in 10 or more years starting in 2007.	2. No change
3. Costs for 2016-2018 were \$405,916,000.	3. Costs for 2019 are estimated to be \$160,188,000. Estimates for 2020 and 2021 are not available.

Initiative 5 – Transmission and Distribution Geographic Information System	
Current Plan	Updated Plan
1. Plan includes forensic review.	1. No change
2. Plan includes underground system relative to overhead.	2. No change
3. Plan includes determination of appropriate maintenance.	3. No change
4. Plan includes evaluation of storm hardening options.	4. No change
5. Continue use of G-electric system	5. No change

Initiative 6 – Post-Storm Data Collection and Forensic Analysis	
Current Plan	Updated Plan
1. DEF has forensic teams in place and will collect and analyze samples.	1. No change
2. Plan continues to be implemented as severe weather events occur.	2. No change

Initiative 7 – Collection of Detailed Outage Data Differentiating between the Reliability Performance of Overhead and Underground Systems	
Current Plan	Updated Plan
1. DEF’s Storm Preparedness Plan has been initiated.	1. No change
2. Implement in 2007. Storm performance results are obtained from DEF’s GIS.	2. No change

Initiative 8 – Increased Coordination with Local Governments	
Current Plan	Updated Plan
1. DEF focuses on year-round communication with local governments. In addition, DEF implements meetings to discuss city and county projects.	1. No change

Initiative 9 – Collaborative Research	
Current Plan	Updated Plan
1. Collaborative research efforts, led by PURC, which began in 2007.	1. No change
2. Research vegetation management during storm and non-storm times, wind during storm and non-storm events, hurricane and damage modeling towards further understanding the costs and benefits of undergrounding.	2. No change
3. DEF will solicit participation from other utilities and organizations.	3. No change
4. Implementation is ongoing	4. DEF has entered into a Memorandum of Understanding with the University of Florida’s PURC, which extends research through December 31, 2018.

Initiative 10 – A Natural Disaster Preparedness and Recovery Program	
Current Plan	Updated Plan
Disaster Preparedness/Recovery Plan has been developed and filed.	Continue to refine.

Gulf Power Company

Eight-Year Wooden Pole Inspection Program	
Current Plan	Updated Plan
1. Implement an eight-year wooden pole inspection cycle for distribution poles.	1. No change
2. File the progress of this inspection in the Annual Reliability Report.	2. No change
3. Costs for 2016-2018 were \$6,841,000.	3. Costs for 2019-2021 are estimated to be \$8,379,000.

Initiative 1 – A Three-Year Vegetation Management Cycle for Distribution Circuits	
Current Plan	Updated Plan
1. Implement a three-year trim cycle on all main line feeders.	1. No change
2. Shorten the trim-cycle length on lateral lines to four years and reduce the emphasis on danger tree removal in residential areas.	2. No change
3. Costs for 2016-2018 were \$19,631,000.	3. Costs for 2019-2021 are estimated to be between \$15,000,000 - \$18,000,000.

Initiative 2 – Audit of Joint-Use Attachment Agreements	
Current Plan	Updated Plan
1. (a) Discontinue the pole strength assessment on 5% random sample.	1. (a) No change
(b) Audit all Gulf-owned poles and third-party poles per Joint-Use contract agreements on a five-year cycle.	(b) No change
2. All required data will be collected and stored during the five-year inspection cycle.	2. No change
3. Verify attachments have been made pursuant to current joint-use agreements through a five-year cycle.	3. No change
4. Discontinue the 5% random sample due to low failure rates over the three-year pilot project.	4. No change
5. Cost for 2016-2018 were \$496,000.	5. Costs for 2019-2021 are estimated to be \$500,000.

Initiative 3 – Six-Year transmission Inspection Program	
Current Plan	Updated Plan
1. Wooden pole inspection activities (PSC-06-0144-PAA-EI, Docket No. 060078-EI). All other portions of the system: Gulf does not hold itself to a rigid number of annual inspections. Period of 12 years will show that on average a six-year cycle is achieved.	1. No change
2. Substations inspected at least annually. Structures inside new substations built to withstand wind speed in excess of 150 MPH.	2. No change
3. Costs for 2016-2018 were \$769,000.	3. Costs for 2019-2021 are estimated to be \$900,000.

Initiative 4 – Hardening of Existing Transmission Structures	
Current Plan	Updated Plan
1. Install storm guy H-Frames. Replace wooden cross-arms with steel cross-arms and other activities.	1. Replace all wooden structures, not just wooden cross-arms.
2. Adhere to current design and construction standards using generally accepted engineering practices, in conjunction with the recommended six-year structure inspection program.	2. Adhere to FPL's construction standards and best practices.
3. Costs for 2016-2018 were \$6,862,000.	3. Costs for 2019-2021 are estimated to be between \$22,000,000 - \$55,000,000.

Initiative 5 – Transmission and Distribution Geographic Information System	
Current Plan	Updated Plan
1. Gulf's plan includes forensic reviews.	1. No change
2. Gulf's plan includes underground versus overhead.	2. No change
3. Plan includes determination of appropriate maintenance.	3. No change
4. Plan includes evaluation of storm hardening options.	4. No change
5. Data is currently being captured.	5. No change

Initiative 6 – Post-Storm Data Collection and Forensic Analysis	
Current Plan	Updated Plan
1. Distribution & Transmission: Concurrent with storm restoration, crews of contractors to survey a sample of lines affected by the storm. Inland and coastal areas to be surveyed.	1. No change
2. Costs for 2016-2018 were \$0.	2. Costs for 2019-2021 are estimated to be \$0.

Initiative 7 – Collection of Detailed Outage Data Differentiating between the Reliability Performance of Overhead and Underground Systems	
Current Plan	Updated Plan
1. Record number of overhead and underground customers and calculate SAIDI and SAIFI for each outage. As outages occur, collect data by type of buried cable and type of pole.	1. No change
2. Implementation is ongoing.	2. No change

Initiative 8 – Increased Coordination with Local Governments	
Current Plan	Updated Plan
1. Gulf plan builds on existing programs of years round activities like workshops with community leaders, pre-hurricane planning with participation in all local government hurricane preparedness drills, exercises, information fairs by line clearing specialists, and a standing Emergency Operations Center staffed 24 hours a day.	1. No change
2. Costs for 2016-2018 were \$0.	2. Costs for 2019-2021 were estimated to be \$0.

Initiative 9 – Collaborative Research	
Current Plan	Updated Plan
1. Collaborative research efforts, led by PURC, which began in 2007.	1. No change
2. Research vegetation management during storm and non-storm times, wind during storm and non-storm events hurricane and damage modeling towards further understanding the costs and benefits of undergrounding.	2. No change
3. Gulf will solicit participation from other utilities and organizations.	3. No change
4. Implementation is ongoing	4. Gulf has entered into a Memorandum of Understanding with the University of Florida’s PURC, which extends research through December 31, 2018.
5. Costs for 2016-2018 were \$60,000.	5. Costs for 2019-2021 are estimated to be \$60,000.

Initiative 10 – A Natural Disaster Preparedness and Recovery Program	
Current Plan	Updated Plan
Disaster Preparedness/Recovery Plan has been developed and filed.	Continue to refine.

Florida Public Utilities Company

Eight-Year Wooden Pole Inspection Program	
Current Plan	Updated Plan
1. Implement an eight-year wooden pole inspection cycle for distribution poles.	1. No change
2. File the progress of this inspection in the Annual Reliability Report.	2. No change
3. Costs for 2016-2018 were \$2,032,000.	3. Costs for 2019-2021 are estimated to be \$1,305,000.

Initiative 1 – A Three-Year Vegetation Management Cycle for Distribution Circuits	
Current Plan	Updated Plan
1. All feeders are on a three-year trim cycle.	1. No change
2. Laterals are on a six-year trim cycle.	2. No change
3. Costs for 2016-2018 were \$2,933,000.	3. Costs for 2019-2021 are estimated to be \$3,285,000.

Initiative 2 – Audit of Joint-Use Attachment Agreements	
Current Plan	Updated Plan
1. (a) Perform pole strength assessment during the eight-year wooden pole inspection cycle	1. (a) No change
(b) FPUC conducts a thorough joint-use audit once every five years in addition to the eight-year pole inspection.	(b) No change
2. All required data collected during inspections and stored in a database.	2. No change
3. Verify attachments have been made pursuant to current joint-use agreements during the eight-year wooden pole inspection cycle.	3. No change
4. Stress calculations performed on select poles during eight-year wooden pole inspection cycle.	4. No change
5. Costs for 2016-2018 were \$83,000.	5. Costs for 2019-2021 are estimated to be \$0.

Initiative 3 – Six-Year transmission Inspection Program	
Current Plan	Updated Plan
1. Develop procedures for climbing inspections of Company-owned 69 and 138 kV structures.	1. No change
2. Substations are fully inspected at least once a year.	2. No change
3. Costs for 2016-2018 were \$55,000.	3. Costs for 2019-2021 are estimated to be \$51,000.

Initiative 4 – Hardening of Existing Transmission Structures	
Current Plan	Updated Plan
1. Continue to replace wooden poles on 69 kV lines.	1. No change
2. Plan is ongoing with no completion date.	2. No change
3. Costs for 2016-2018 were \$2,573,000.	3. Costs for 2019-2021 are estimated to be \$1,900,000.

Initiative 5 – Transmission and Distribution Geographic Information System	
Current Plan	Updated Plan
1. FPUC's plan includes forensic reviews.	1. No change
2. FPUC's plan includes underground versus overhead.	2. No change
3. Plan includes determination of appropriate maintenance.	3. No change
4. Plan includes evaluation of storm hardening options.	4. No change
5. Currently being implemented.	5. No change
6. Costs for 2016-2018 were \$299,000.	6. Costs for 2016-2018 are estimated to be \$120,000.

Initiative 6 – Post-Storm Data Collection and Forensic Analysis	
Current Plan	Updated Plan
1. FPUC has procedures developed to track all specific hurricane outages, post-storm data collection, and forensic analysis.	1. No change
2. Data is dependent upon storm events in FPUC's service area.	2. No change

Initiative 7 – Collection of Detailed Outage Data Differentiating between the Reliability Performance of Overhead and Underground Systems	
Current Plan	Updated Plan
1. Collect outage data of overhead and underground facilities to evaluate reliability indices.	1. No change
2. Implementation is ongoing.	2. No change

Initiative 8 – Increased Coordination with Local Governments	
Current Plan	Updated Plan
1. Coordinate with local and county emergency service agencies within its service area. In addition, to provide personnel at county EOC's, during emergencies.	1. No change
2. Costs for 2016-2018 were \$0.	2. Costs for 2019-2021 are estimated to be \$0.

Initiative 9 – Collaborative Research	
Current Plan	Updated Plan
1. Collaborative research efforts, led by PURC, which began in 2007.	1. No change
2. Research vegetation management during storm and non-storm times, wind during storm and non-storm events, hurricane and damage modeling towards further understanding the costs and benefits of undergrounding.	2. No change
3. FPUC will solicit participation from other utilities and organizations.	3. No change
4. Implementation is ongoing	4. FPUC has entered into a Memorandum of Understanding with the University of Florida's PURC, which extends research through December 31, 2018.
5. Costs for 2016-2018 were \$3,000.	5. Costs for 2019-2021 are estimated to be \$3,000.

Initiative 10 – A Natural Disaster Preparedness and Recovery Program	
Current Plan	Updated Plan
Disaster Preparedness/Recovery Plan has been developed and filed.	Continue to refine.

Item 7

State of Florida



Public Service Commission

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

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

DATE: June 26, 2019

TO: Office of Commission Clerk (Teitzman)

FROM: Division of Engineering (Thompson, Doehling, Ellis) π JD POV
Office of the General Counsel (Murphy) TB TM

RE: Docket No. 20190079-EQ – Petition for approval of amended standard offer contract (Schedule COG-2) and amended interconnection agreement, by Duke Energy Florida, LLC.

AGENDA: 07/09/19 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Administrative

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

Case Background

Section 366.91(3), Florida Statutes (F.S.), requires that each investor-owned utility (IOU) continuously offer to purchase capacity and energy from renewable energy generators (RF) and small qualifying facilities (QF). Florida Public Service Commission (Commission) Rules 25-17.200 through 25-17.310, Florida Administrative Code (F.A.C.), implement the statute and require each IOU to file with the Commission by April 1 of each year, a standard offer contract based on the next avoidable fossil fueled generating unit of each technology type identified in the utility's current Ten-Year Site Plan.

On April 1, 2019, Duke Energy Florida, LLC (DEF) filed a petition for approval of its amended standard offer contract and associated rate schedule COG-2, based on its 2019 Ten-Year Site

Docket No. 20190079-EQ

Date: June 26, 2019

Plan, and amended interconnection agreement. On June 7, 2019, DEF refiled its standard offer contract to include supplemental revisions to Sheet 9.416 in response to staff's first data request.¹

The Commission has jurisdiction over this standard offer contract pursuant to Sections 366.04 through 366.055 and 366.91, F.S.

¹Document No. 04774-2019, filed June 7, 2017, in Docket No. 20190079-EQ.

Date: June 26, 2019

Discussion of Issues

Issue 1: Should the Commission approve the amended standard offer contract (Schedule COG-2) and amended interconnection agreement filed by Duke Energy Florida, LLC?

Recommendation: Yes. The provisions of DEF's amended standard offer contract and associated rate schedule COG-2, as revised on June 7, 2019, and amended interconnection agreement, as filed on April 1, 2019, conform to all requirements of Rules 25-17.200 through 25-17.310, F.A.C. The amended standard offer contract provides flexibility in the arrangements for payments so that a developer of renewable generation may select the payment stream best suited to its financial needs. (Doehling, Thompson)

Staff Analysis: Rule 25-17.250, F.A.C., requires that DEF, an IOU, continuously make available a standard offer contract for the purchase of firm capacity and energy from renewable RF/QFs with design capacities of 100 kilowatts (kW) or less. Pursuant to Rule 25-17.250(1) and (3), F.A.C., the standard offer contract must provide a term of at least 10 years, and the payment terms must be based on the Utility's next avoidable fossil-fueled generating unit identified in its most recent Ten-Year Site Plan or, if no avoided unit is identified, its next avoidable planned purchase. DEF has identified a 218 megawatt (MW) natural gas-fueled combustion turbine (CT) as the next planned generating unit in its 2019 Ten-Year Site Plan. The projected in-service date of the unit is June 1, 2027.

Under DEF's standard offer contract, the RF/QF operator commits to certain minimum performance requirements based on the identified avoided unit, such as being operational and delivering an agreed upon amount of capacity by the in-service date of the avoided unit, and thereby becomes eligible for capacity payments in addition to payments received for energy. The standard offer contract may also serve as a starting point for negotiation of contract terms by providing payment information to an RF/QF operator, in a situation where one or both parties desire particular contract terms other than those established in the standard offer.

In order to promote renewable generation, the Commission requires each IOU to offer multiple options for capacity payments, including the options to receive early or levelized payments. If the RF/QF operator elects to receive capacity payments under the normal or levelized contract options, it will receive as-available energy payments only until the in-service date of the avoided unit (in this case June 1, 2027), and thereafter begin receiving capacity payments in addition to the energy payments. If either the early or early levelized option is selected, then the operator will begin receiving capacity payments earlier than the in-service date of the avoided unit. However, payments made under the early capacity payments options tend to be lower in the later years of the contract term because the net present value (NPV) of the total payments must remain equal for all contract payment options.

Table 1 contains estimates of the annual payments for each payment option available under the amended standard offer contract to an operator with a 50 MW renewable facility operating at a capacity factor of 95 percent, which is the minimum capacity factor required under the contract to qualify for full capacity payments. Normal and levelized capacity payments begin in 2027, reflecting the projected in-service date of the avoided unit (June 1, 2027).

**Table 1 – Estimated Annual Payments to a 50 MW Renewable Facility
(95% Capacity Factor)**

Year	Energy Payment	Capacity Payment (By Type)			
		Normal	Levelized	Early	Early Levelized
	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2020	9,469	-	-	-	-
2021	8,638	-	-	-	-
2022	7,796	-	-	-	-
2023	7,172	-	-	-	-
2024	8,266	-	-	-	-
2025	9,878	-	-	2,173	2,333
2026	10,850	-	-	2,201	2,335
2027	12,413	1,674	1,788	2,230	2,337
2028	13,409	2,908	3,067	2,260	2,339
2029	13,833	2,946	3,070	2,289	2,341
2030	15,079	2,985	3,072	2,319	2,343
2031	15,656	3,024	3,075	2,350	2,346
2032	16,942	3,064	3,078	2,381	2,348
2033	17,411	3,104	3,081	2,412	2,350
2034	17,725	3,145	3,084	2,444	2,352
2035	16,807	3,187	3,087	2,476	2,355
2036	17,429	3,229	3,090	2,509	2,357
2037	18,218	3,271	3,093	2,542	2,360
2038	19,774	3,314	3,097	2,576	2,362
2039	20,956	3,358	3,100	2,610	2,365
Total	277,721	39,208	38,782	35,772	35,224
NPV (2019\$)	133,766	15,549	15,549	15,549	15,549

Source: DEF's response to staff's first data request.²

The changes made to DEF's tariff sheets are consistent with the updated avoided unit. Other revisions DEF made to its tariff sheets include: (1) financial and technical viability conditions; (2) completion/performance security requirements; (3) delivery voltage calculation methods; and (4) testing requirements.

²Document No. 03911-2019, filed April 24, 2019, in Docket No. 20190079-EQ.

Date: June 26, 2019

The additional conditions to verify the RF/QF is both financially and technically viable, found on Sheet Nos. 9.416, 9.419, and 9.420, and the completion/performance security requirements, found on Sheet No. 9.425, were added to provide additional protection to both DEF and its customers. The technical viability and security requirements are consistent with conditions approved in FPL's standard offer contract.³ The financial viability requirements on Sheet No. 9.416 were modified on June 7, 2019, to provide limited exemptions from these conditions. Staff believes the revised financial requirements are adequate to safeguard ratepayers and should not be overly burdensome to the RF/QF.

The revisions in the Delivery Voltage section, found on Sheet No. 9.458, were made so that the delivery voltage adjustment factor will be calculated based on the current delivery efficiencies in DEF's tariff as approved by FERC. This will allow for the delivery voltage adjustment factors to stay up to date should there be any changes in DEF's Open Access Tariff subsequent to the standard offer contract filing, and will be provided within 30 days of a written request by any interested person. Changes in testing requirements, found on Sheet No. 9.710, were made to reflect the current testing requirements of modern electrical relays. This is consistent with the manufacturer's current recommendations.

In addition to the above revisions, there are a number of unsubstantial changes including updates to calendar dates, position titles, and typographical corrections. The type-and-strike format versions of the amended standard offer contract and associated rate schedule COG-2, as revised on June 7, 2019, are included as Attachment A to this recommendation. The amended interconnection agreement, as filed on April 1, 2019, is included as Attachment B to this recommendation.

Conclusion

The provisions of DEF's amended standard offer contract and associated rate schedule COG-2, as revised on June 7, 2019, and amended interconnection agreement, as filed on April 1, 2019, conform to all requirements of Rules 25-17.200 through 25-17.310, F.A.C. The amended standard offer contract provides flexibility in the arrangements for payments so that a developer of renewable generation may select the payment stream best suited to its financial needs.

³Order No. PSC-2018-0316-PAA-EQ, issued June 20, 2018, in Docket No. 20180083-EQ, *In re: Petition for approval of renewable energy tariff and standard offer contract, by Florida Power & Light Company*.

Issue 2: Should this docket be closed?

Recommendation: Yes. This docket should be closed upon issuance of a consummating order, unless a person whose substantial interests are affected by the Commission's decision files a protest within 21 days of the issuance of the Commission's Proposed Agency Action Order. Potential signatories should be aware that, if a timely protest is filed, DEF's standard offer contract may subsequently be revised. (Murphy)

Staff Analysis: This docket should be closed upon the issuance of a consummating order, unless a person whose substantial interests are affected by the Commission's decision files a protest within 21 days of the issuance of the Commission's Proposed Agency Action Order. Potential signatories should be aware that, if a timely protest is filed, DEF's standard offer contract may subsequently be revised.



SECTION No. IX
SECOND REVISED SHEET NO. 9.400
CANCELS FIRST REVISED SHEET NO. 9.400

STANDARD OFFER CONTRACT FOR THE PURCHASE OF FIRM CAPACITY
AND ENERGY FROM A RENEWABLE ENERGY PRODUCER
OR QUALIFYING FACILITY LESS THAN 100 KW

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ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: April 29, 2013



SECTION NO. IX
SECOND REVISED SHEET NO. 9.401
CANCELS FIRST SHEET NO. 9.401

STANDARD OFFER CONTRACT FOR THE PURCHASE OF FIRM CAPACITY
AND ENERGY FROM A RENEWABLE ENERGY PRODUCER
OR QUALIFYING FACILITY LESS THAN 100 KW

between

and

DUKE ENERGY FLORIDA, LLC

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: June 5, 2018



SECTION NO. IX
~~SECOND-THIRD~~ REVISED SHEET NO.9.402
CANCELS ~~FIRST-SECOND~~ REVISED SHEET NO.
9.402

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ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: April 20, 2013



SECTION NO. IX
~~FOURTH-FIFTH~~ REVISED SHEET NO. 9.403
CANCELS ~~THIRD-FOURTH~~ REVISED SHEET NO.
9.403

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ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~July 10, 2014~~



SECTION NO. IX
FIFTH REVISED SHEET NO. 9.404
CANCELS FOURTH REVISED SHEET NO. 9.404

**STANDARD OFFER CONTRACT FOR THE PURCHASE OF FIRM CAPACITY
AND ENERGY FROM A RENEWABLE ENERGY PRODUCER
OR QUALIFYING FACILITY LESS THAN 100 KW**

THIS STANDARD OFFER CONTRACT FOR THE PURCHASE OF FIRM CAPACITY AND ENERGY (hereinafter referred to as the "Contract") is made and entered this ____ day of _____, ____ (hereinafter referred to as the "Execution Date"), by and between _____ (hereinafter the Renewable Energy Provider/Qualifying Facility ("RF/QF")), and Duke Energy Florida, LLC d/b/a Duke Energy (hereinafter "DEF"), a private utility corporation organized and existing under the laws of the State of Florida. The RF/QF and DEF shall be individually identified herein as the "Party" and collectively as the "Parties". This Contract contains six Appendices which are incorporated into and made part of this Contract: Appendix A: Monthly Capacity Payment Calculation; Appendix B: Termination Fee; Appendix C: Detailed Project Information; Appendix D: Rate Schedule COG-2; Appendix E: Agreed Upon Payment Schedules and Other Mutual Agreements; and Appendix F: Florida Public Service Commission ("FPSC") Rules 25-17.080 through 25-17.310, F.A.C.

WITNESSETH:

WHEREAS, the RF/QF desires to sell, and DEF desires to purchase electricity to be generated by the RF/QF consistent with Florida Statutes 366.91 (2006) and FPSC Rules 25-17.080 through 25-17.310 F.A.C.; and

WHEREAS, the RF/QF will acquire an interconnection/transmission service agreement with the utility in whose service territory the Facility is to be located, pursuant to which the RF/QF assumes contractual responsibility to make any and all transmission-related arrangements (including ancillary services) between the RF/QF and the Transmission Provider for delivery of the Facility's firm capacity and energy to DEF. The Parties recognize that the Transmission Provider may be DEF and that the transmission service will be provided under a separate agreement; and

WHEREAS, the FPSC has approved this Contract for the Purchase of Firm Capacity and Energy from a Renewable Energy Producer; and

WHEREAS, the RF/QF guarantees that the Facility is capable of delivering firm capacity and energy to DEF for the term of this Contract in a manner consistent with the provision of this Contract;

NOW, THEREFORE, for mutual consideration the Parties agree as follows:

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: June 5, 2018



SECTION NO. IX
~~THIRD SECOND~~ REVISED SHEET NO. 9.405
CANCELS ~~FIRST SECOND~~ REVISED SHEET NO.
9.405

1. Definitions

“AFR” means the Facility’s annual fuel requirement.

“AFTR” means the Facility’s annual fuel transportation requirement

“Annual Capacity Billing Factor” or “ACBF” means 12 month rolling average of the Monthly Availability Factor as further defined and explained in Appendix A.

“Appendices” shall mean the schedules, exhibits, and attachments which are appended hereto and are hereby incorporated by reference and made a part of this Contract. Such Appendices include:

“Appendix A” sets forth the Monthly Capacity Payment Calculation.

“Appendix B” sets forth the Termination Fee.

“Appendix C” sets forth the Detailed Project Information.

“Appendix D” sets forth Rate Schedule COG-2.

“Appendix E” sets forth the Agreed Upon Payment Schedules and Other Mutual Agreements

“Appendix F” sets forth Florida Public Service Commission ("FPSC") Rules 25-17.080 through 25-17.310, F.A.C.

“As-Available Energy Rate” means the rate calculated by DEF in accordance with FPSC Rule 25-17.0825, F.A.C., and DEF's Rate Schedule COG-1, as they may each be amended from time to time

“Auditor’s Standard Report” means a written opinion of an auditor regarding an entity’s financial statements. The report is written in a standard format, as mandated by generally accepted auditing standards (GAAS).

“Authorization to Construct” means authorization issued by any appropriate Government Agency to construct or reconstruct the Facility granted to RF/QF in accordance with the laws of the State of Florida and any relevant federal law.

“Avoided Unit” means the electrical generating unit described in Section 4 upon which this Contract is based.

“Avoided Unit Energy Cost” has the meaning assigned to it in Appendix D.

“Avoided Unit Fuel Cost” has the meaning assigned to it in Appendix D.

“Avoided Unit Heat Rate” means the average annual heat rate of the Avoided Unit as defined in Section 4.

“Avoided Unit In-Service Date” means the date upon which the Avoided Unit would have started commercial operation as specified in Section 4.

“Avoided Unit Life” means the economic life of the Avoided Unit.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: April 20, 2013



SECTION NO. IX
~~THIRD SECOND~~ REVISED SHEET NO. 9.405
CANCELS ~~FIRST SECOND~~ REVISED SHEET NO.
9.405

~~"Avoided Unit Variable O&M" means the Avoided Unit variable operation and maintenance expenses as defined in Section 4. The annual escalation will begin in the payment for January deliveries.~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~April 20, 2013~~



SECTION No. IX
~~FIFTH-SIXTH~~ REVISED SHEET NO. 9.406
CANCELS ~~FOURTH-FIFTH~~ REVISED SHEET NO.
9.406

"Avoided Unit Variable O&M" means the Avoided Unit variable operation and maintenance expenses as defined in Section 4. The annual escalation will begin in the payment for January deliveries.

"Base Capacity Payment" or "BCP" means capacity payment rates defined in Appendix D and further defined by the selection of Option A,B,C or D in Section 9.2 or in Appendix E if applicable.

"Base Year" means the year that this Contract was approved by the FPSC.

"Business Day" means any day except a day upon which banks licensed to operate in the State of Florida are authorized, directed or permitted to close, Saturday, Sunday or a weekday that is observed as a public holiday in the State of Florida.

"CAMD" means the Clean Air Markets Division of the Environmental Protection Agency or successor administrator (collectively with any local, state, regional, or federal entity given jurisdiction over a program involving transferability of Environmental Attributes).

"Capacity" means the minimum average hourly net capacity (generator output minus auxiliary load) measured over the Committed Capacity Test Period.

"Capacity Delivery Date" means the first calendar day immediately following the date of the Facility's successful completion of the first Committed Capacity Test subject to the requirements of Section 5(d) and Section 7.6.

"Capacity Payment" means the payment defined in Section 9.2 and Appendix A.

"Certified Public Accountant" or "CPA" means someone who has passed the American Institute of Certified Public Accountants (AICPA) Uniform CPA examination, met educational, and licensure requirements in the state of license and have been issued a license to practice public accounting by a state Accountancy board.

"Committed Capacity" or "CC" means the capacity in kW that the RF/QF commits to sell to DEF; the amount of which shall be determined in accordance with Section 7 and shall be greater than zero.

"Committed Capacity Test" means the testing of the capacity of the Facility performed in accordance with the procedures set forth in Section 8.

"Committed Capacity Test Period" means a test period of twenty-four (24) consecutive hours.

"Completed Permits Date" means the date by which the RF/QF must complete licensing and certification, and obtain all federal, state and local governmental, environmental, and licensing approvals required to initiate construction of the Facility including Qualifying Facility status. This date is specified in Section 4.

"Completion/Performance Security" means the security described in Section 11.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~July 13, 2017~~



SECTION No. IX
~~FIFTH-SIXTH~~ REVISED SHEET NO. 9.406
CANCELS ~~FOURTH-FIFTH~~ REVISED SHEET NO.
9.406

~~"Conditions Precedent" shall have the meaning assigned to it in Section 5.~~

~~"Contract" means this standard offer contract for the purchase of Firm Capacity and Energy from a Renewable Energy Producer or Qualifying Facility with a nameplate capacity of less than 100 MW.~~

~~"Credit Support Provider" means any Person that has provided an RF/QF Guarantee in connection with this Agreement.~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
~~FOURTH-FIFTH~~ REVISED SHEET NO. 9.407
CANCELS ~~THIRD-FOURTH~~ REVISED SHEET NO.
9.407

"Conditions Precedent" shall have the meaning assigned to it in Section 5.

"Contract" means this standard offer contract for the purchase of Firm Capacity and Energy from a Renewable Energy Producer or Qualifying Facility with a nameplate capacity of less than 100 kW.

"Credit Support Provider" means any Person that has provided an RF/QF Guarantee in connection with this Agreement.

"Creditworthy" with respect to a Party or its Credit Support Provider, as applicable, means a party is rated at least BBB by Standard & Poor's (S&P), or at least Baa3 by Moody's Investor Services (Moody's). Rating shall be the unsecured, senior long-term debt rating (not supported by third party credit enhancement) or the issuer rating will be used if not available. If a Party or its Credit Support Provider, as applicable, is rated by both S&P and Moody's, then the lower of the two ratings will apply.

"DEF" has the meaning assigned to it in the opening paragraph of this Contract.

"DEF Entities" has the meaning assigned to it in Section 16.

"Demonstration Period" means a sixty-hour period in which the Committed Capacity Test must be completed.

"Distribution System" means the distribution system consisting of electric lines, electric plant, transformers and switchgear used for conveying electricity to ultimate consumers, but not including any part of the Transmission System.

"Dispute" shall have the meaning assigned to it in Section 20.9.

"Drop Dead Date" means the date which is twelve (12) months following the Execution Date except for the condition defined in Section 5(a)(i). The Parties recognize that firm transmission service agreements can take up to 24 months to obtain so for Section 5(a)(i) only the Drop Dead Date means the date which is twenty four (24) months following the Execution Date.

"Eastern Prevailing Time" or "EPT" means the time in effect in the Eastern Time Zone of the United States of America, whether Eastern Standard Time or Eastern Daylight Savings Time.

"Effective Date" has the meaning assigned to it in Section 5.

"Electrical Interconnection Point" means the physical point at which the Facility is connected with the Transmission System or, if RF/QF interconnects with a Transmission System other than DEF's, DEF's interconnection with the Transmission Provider's Transmission System, or such other physical point on which RF/QF and DEF may agree.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~June 9, 2016~~



SECTION No. IX
~~FIFTH-SIXTH~~ REVISED SHEET NO. 9.408
CANCELS ~~FOURTH-FIFTH~~ REVISED SHEET NO.
9.408

"Eligible Collateral" means (i) a Letter of Credit from a Qualified Institution or (ii) cash deposit provided to DEF by RF/QF or a combination of (i), and/or (ii) as outlined in Section 11.

"Energy" means megawatt-hours generated by the Facility of the character commonly known as three-phase, sixty hertz electric energy that is delivered at a nominal voltage at the Electrical Interconnection Point.

"Environmental Attributes" or "EA" means all attributes of an environmental or other nature that are created or otherwise arise from the Facility's generation of electricity from a renewable energy source in contrast with the generation of electricity using nuclear or fossil fuels or other traditional resources. Forms of such attributes include, without limitation, any and all environmental air quality credits, green credits, renewable energy credits ("RECs"), carbon credits, emissions reduction credits, certificates, tags, offsets, allowances, or similar products or rights, howsoever entitled, (i) resulting from the avoidance of the emission of any gas, chemical, or other substance, including but not limited to, mercury, nitrogen oxide, sulfur dioxide, carbon dioxide, carbon monoxide, particulate matter or similar pollutants or contaminants of air, water or soil gas, chemical, or other substance, and (ii) attributable to the generation, purchase, sale or use of Energy from or by the Facility, or otherwise attributable to the Facility during the Term. Environmental Attributes include, without limitation, those currently existing or arising during the Term under local, state, regional, federal, or international legislation or regulation relevant to the avoidance of any emission described in this Contract under any governmental, regulatory or voluntary program, including, but not limited to, the United Nations Framework Convention on Climate Change and related Kyoto Protocol or other programs, laws or regulations involving or administered by the Clean Air Markets Division of the Environmental Protection Agency ("CAMD") or successor administrator (collectively with any local, state, regional, or federal entity given jurisdiction over a program involving transferability of Environmental Attributes.).

"Event of Default" has the meaning assigned to it in Section 14.

"Execution Date" has the meaning assigned to it in the opening paragraph of this Contract.

"Exemplary Early Capacity Payment Date" means the exemplary date used to calculate Capacity Payments for Option B and D. This date is specified in Section 4. The actual Capacity Payments for Option B and D will be calculated based upon the Required Capacity Delivery Date.

"Expected Nameplate Capacity Rating" means the total generating capacity of the Facility that is the sum of (a) the Committed Capacity, and (b) the capacity required for any station service use of generating unit equipment or auxiliaries, including, without limitation, cooling towers, heat exchanges, duct burners and other equipment that could be used for energy production or as required by law, and shall be in service during the Committed Capacity Test Period and (c) any other capacity reserved for on-site use or energy production.

"Expiration Date" means the final date upon which this Contract can be executed. This date is specified in Section 4.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
~~FIFTH-SIXTH~~ REVISED SHEET NO. 9.408
CANCELS ~~FOURTH-FIFTH~~ REVISED SHEET NO.
9.408

~~"Facility" means all equipment, as described in this Contract, used to produce electric energy and, and all equipment that is owned or controlled by the RE/QF required for parallel operation with the Transmission System. In the case of a cogenerator the Facility includes all equipment that is owned or controlled by the RE/QF to produce useful thermal energy through the sequential use of energy.~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~July 13, 2017~~



SECTION No. IX
~~SECOND-THIRD~~ REVISED SHEET NO. 9.409
CANCELS ~~FIRST-SECOND~~ REVISED SHEET NO.
9.409

"Facility" means all equipment, as described in this Contract, used to produce electric energy and, and all equipment that is owned or controlled by the RF/QF required for parallel operation with the Transmission System. In the case of a cogenerator the Facility includes all equipment that is owned or controlled by the RF/QF to produce useful thermal energy through the sequential use of energy.

"Financial Closing" means the fulfillment of each of the following conditions:

- (a) the execution and delivery of the Financing Documents; and
- (b) all Conditions Precedent to the initial availability for disbursement of funds under the Financing Documents (other than relating to the effectiveness of this Contract) are satisfied or waived.

"Financing Documents" shall mean documentation with respect to any private equity investment in RF/QF, any loan agreements (including agreements for any subordinated debt), notes, bonds, indentures, guarantees, security agreements and hedging agreements relating to the financing or refinancing of the design, development, construction, Testing, Commissioning, operation and maintenance of the Facility or any guarantee by any Financing Party of the repayment of all or any portion of such financing or refinancing.

"Financing Party" means the Persons (including any trustee or agent on behalf of such Persons) providing financing or refinancing to or on behalf of RF/QF for the design, development, construction, testing, commissioning, operation and maintenance of the Facility (whether limited recourse, or with or without recourse).

"Firm Capacity and Energy" has the meaning assigned to it in Appendix D.

"Firm Capacity Rate" has the meaning assigned to it in Appendix D.

"Firm Energy Rate" has the meaning assigned to it in Appendix D.

"Force Majeure" has the meaning given to it in Section 18.

"FPSC" means the Florida Public Service Commission or its successor.

"Government Agency" means the United States of America, or any state or any other political subdivision thereof, including without limitation, any municipality, township or county, and any domestic entity exercising executive, legislative, judicial, regulatory or administrative functions of or pertaining to government, including, without limitation, any corporation or other entity owned or controlled by any of the foregoing.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 10, 2014



SECTION No. IX
~~FOURTH-FIFTH~~ REVISED SHEET NO. 9.410
CANCELS ~~THIRD-FOURTH~~ REVISED SHEET NO.
9.410

“IEEE” means the Institute of Electrical and Electronics Engineers, Inc.

“Indemnified Party” has the meaning assigned to it in Section 16.

“Indemnifying Party” has the meaning assigned to it in Section 16.

“Initial Reduction Value” has the meaning assigned to it in Appendix B.

“Insurance Services Office” has the meaning assigned to it in Section 17.

“KVA” means one or more kilovolts-amperes of electricity, as the context requires.

“kW” means one or more kilowatts of electricity, as the context requires.

“kWh” means one or more kilowatt-hours of electricity, as the context requires.

“Letter of Credit” means a stand-by letter of credit from a Qualified Institution that is acceptable to DEF whose approval may not be unreasonably withheld. The Letter of Credit must provide that DEF has the right to draw on the Letter of Credit in the event that less than twenty (20) Business Days remain until its expiration and RF/QF has failed to renew the Letter of Credit or provide replacement Eligible Collateral as required under this Agreement.

“Licensed Professional Engineer” means a person who is licensed to engage in the practice of engineering under Chapter 471 of the Florida Statutes.

“LOI” means a letter of intent for fuel supply.

“MCPC” means the Monthly Capacity Payment for Option A.

“Monthly Billing Period” means the period beginning on the first calendar day of each calendar month, except that the initial Monthly Billing Period shall consist of the period beginning 12:01 a.m., on the Capacity Delivery Date and ending with the last calendar day of such month.

“Monthly Availability Factor” or “MAF” means the total energy received during the Monthly Billing Period for which the calculation is made, divided by the product of Committed Capacity and the total hours during the Monthly Billing Period.

“Monthly Capacity Payment” or “MCP” means the payment for Capacity calculated in accordance with Appendix A.

“MW” means one or more megawatts of electricity, as the context requires.

“MWh” means one or more megawatt-hours of electricity, as the context requires.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: June 9, 2016



SECTION No. IX
SECOND REVISED SHEET NO. 9.411
CANCELS FIRST REVISED SHEET NO. 9.411

"Option A" means normal Capacity Payments as described in Appendix D.

"Option B" means early Capacity Payments as described in Appendix D.

"Option C" means levelized Capacity Payments as described in Appendix D.

"Option D" means early levelized Capacity Payments as described in Appendix D.

"Party" or "Parties" has the meaning assigned to it in the opening paragraph of this Contract.

"Person" means any individual, partnership, corporation, association, joint stock company trust, joint venture, unincorporated organization, or Governmental Agency (or any department, agency, or political subdivision thereof).

"Project Consents" mean the following Consents, each of which is necessary to RF/QF for the fulfillment of RF/QF's obligations hereunder:

- (a) the Authorization to Construct;
- (b) planning permission and consents in respect of the Facility, and any electricity substation located at the Facility site, including but not limited to, a prevention of significant deterioration permit, a noise, proximity and visual impact permit, and any required zoning permit; and
- (c) any integrated pollution control license.

"Project Contracts" means this Contract, and any other contract required to construct, operate and maintain the Facility. The Project Contracts may include, but are not limited to, the turnkey engineering, procurement and construction contract, the electrical interconnection and operating agreement, the fuel supply agreement, the facility site lease, and the operation and maintenance agreement.

"Prudent Utility Practices" means any of the practices, methods, standards and acts (including, but not limited to, the practices, methods and acts engaged in or approved by a significant portion of owners and operators of power plants of technology, complexity and size similar to the Facility in the United States) that, at a particular time, in the exercise of reasonable judgment in light of the facts known or that should reasonably have been known at the time a decision was made, could have been expected to accomplish the desired result and goals (including such goals as efficiency, reliability, economy and profitability) in a manner consistent with applicable facility design limits and equipment specifications and applicable laws and regulations. Prudent Utility Practice is not intended to be limited to the optimum practice, method or act to the exclusion of all others, but rather to be a spectrum of acceptable practices, methods or acts in each case taking into account the Facility as an independent power project.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 21, 2015



SECTION No. IX
FOURTH REVISED SHEET NO. 9.412
CANCELS THIRD REVISED SHEET NO. 9.412

“Qualifying Facility” or “QF” means a cogenerator, small power producer, or non-utility generator that has been certified or self-certified by the FERC as meeting certain ownership, operating and efficiency criteria established by the Federal Energy Regulatory Commission pursuant to the Public Utility Regulatory Policies Act of 1978 (“PURPA”), the criteria for which are currently set forth in 18 C.F.R. § 292, *et seq.* (2006), Section 210 of PURPA, 16 U.S.C. § 824a-3 (2005), 16 U.S.C. 796 *et seq.* (2006), and Section 1253 of EPAct 2005, Pub. L. No. 109-58, § 1253, 119 Stat. 594 (2005) or, alternatively, analogous provisions under the laws of the State of Florida.

“Qualified Institution” means the domestic office of a United States commercial bank or trust company or the United States branch of a foreign bank having total assets of at least ten billion dollars (\$10,000,000,000) (which is not an affiliate of either party) and a general long-term senior unsecured debt rating of A- or higher (as rated by Standard & Poor’s Ratings Group), or A3 or higher (as rated by Moody’s Investor Services).

“Rate Schedule COG-1” means DEF’s Agreement for Purchase of As-Available Energy and/or Parallel Operation with a Qualifying Facility as approved by the FPSC and as may be amended from time to time.

“REC” means renewable energy credits, green tags, green tickets, renewable certificates, tradable renewable energy credits (“T-REC”) or any tradable certificate that is produced by a renewable generator in addition to and in proportion to the production of electrical energy.

“Reduction Value” has the meaning assigned to it in Appendix B.

“Remedial Action Plan” has the meaning assigned to it in Section 20.3.

“Renewable Facility” or “RF/QF” means an electrical generating unit or group of units at a single site, interconnected for synchronous operation and delivery of electricity to an electric utility, where the primary energy in British Thermal Units used for the production of electricity is from one or more of the following sources: hydrogen produced from sources other than fossil fuels, biomass, solar energy, geothermal energy, wind energy, ocean energy, hydroelectric power or waste heat from a commercial or industrial manufacturing process.

“Required Capacity Deliver Date” means the date specified in Appendix E. In the event that no Required Capacity Delivery Date is specified in Appendix E then the RF/QF shall achieve the Capacity Delivery Date on or before the Avoided Unit In-Service Date

“RF/QF Entities” has the meaning assigned to it in Section 16.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
THIRD REVISED SHEET NO. 9.413
CANCELS SECOND REVISED SHEET NO. 9.413

"RF/QF Insurance" has the meaning assigned to it in Section 17.

"RF/QF Performance Security" has the meaning assigned in Section 11.

"Security Documentation" has the meaning assigned to it in Section 12.

"Term" has the meaning assigned to it in Section 3.

"Termination Date" means the date upon which this Contract terminates unless terminated earlier in accordance with the provisions hereof. This date is specified in Section 4.

"Termination Fee" means the fee described in Appendix B as it applies to any Capacity Payments made under Option B, C or D.

"Termination Security" has the meaning assigned to it in Section 12.

"Transmission Provider" means the operator(s) of the Transmission System(s) or any successor thereof or any other entity or entities authorized to transmit Energy on behalf of RF/QF from the Electrical Interconnection Point.

"Transmission System" means the system of electric lines comprised wholly or substantially of high voltage lines, associated system protection, system stabilization, voltage transformation, and capacitance, reactance and other electric plant used for conveying electricity from a generating station to a substation, from one generating station to another, from one substation to another, or to or from any Electrical Interconnection Point or to ultimate consumers and shall include any interconnection owned by the Transmission Provider or DEF, but shall in no event include any lines which the Transmission Provider has specified to be part of the Distribution System except for any distribution facilities required to accept capacity and energy from the Facility.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 21, 2015



SECTION No. IX
SECOND REVISED SHEET NO. 9.414
CANCELS FIRST REVISED SHEET NO. 9.414

2. Facility; Renewable Facility or Qualifying Facility Status

The Facility's location and generation capabilities are as described in Table 1 below.

TABLE 1

TECHNOLOGY AND GENERATOR CAPABILITIES	
Location: Specific legal description (e.g., metes and bounds or other legal description with street address required)	City: County:
Generator Type (Induction or Synchronous)	
Technology	
Fuel Type and Source	
Generator Rating (KVA)	
Maximum Capability (kW)	
Net Output (kW)	
Power Factor (%)	
Operating Voltage (kV)	
Peak Internal Load kW	

The RF/QF's failure to complete Table 1 in its entirety shall render this Contract null and void and of no further effect.

The RF/QF shall use the same fuel or energy source and maintain the status as a Renewable Facility or a Qualifying Facility throughout the term of this Contract. RF/QF shall at all times keep DEF informed of any material changes in its business which affects its Renewable Facility or Qualifying Facility status. DEF and RF/QF shall have the right, upon reasonable notice of not less than seven (7) Business Days, to inspect the Facility and to examine any books, records, or other documents reasonably deemed necessary to verify compliance with this Contract. In the event of an emergency at or in proximity to the RF/QF site that impacts DEF's system, DEF shall make reasonable efforts to contact the Facility and make arrangements for an emergency inspection. On or before March 31 of each year during the term of this Contract, the RF/QF shall provide to DEF a certificate signed by an officer of the RF/QF certifying that the RF/QF continuously maintained its status as a Renewable Facility or a Qualifying Facility during the prior calendar year.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: April 29, 2013



SECTION No. IX
~~THIRTEENTH TWELFTH~~ REVISED SHEET NO. 9.415
CANCELS ~~TWELFTH ELEVENTH~~ REVISED SHEET
NO. 9.415

3. Term of Contract

Except as otherwise provided herein, this Contract shall become effective immediately upon its execution by the Parties and shall end at 12:01 a.m. on the Termination Date, (the "Term") unless terminated earlier in accordance with the provisions hereof. Notwithstanding the foregoing, if the Capacity Delivery Date of the Facility is not accomplished by the RF/QF before the Required Capacity Delivery Date (or such later date as may be permitted by DEF pursuant to Section 7), this Contract shall be rendered null and void and DEF's shall have no obligations under this Contract.

4. Minimum Specifications and Milestones

As required by FPSC Rule 25-17.0832(4)(e), the minimum specifications pertaining to this Contract and milestone dates are as follows:

Avoided Unit	Undesignated Combustion Turbine
Avoided Unit Capacity	226 218 MW
Avoided Unit In-Service Date	June 1, 2027
Avoided Unit Heat Rate	40,905 12,005 BTU/kWh
Avoided Unit Variable O&M	0. 934 716¢ per kWh in mid-201 98 dollars escalating annually at 2.50%
Avoided Unit Life	35 years
Capacity Payments begin	Avoided Unit In-Service Date unless Option B, or D is selected or amended in Appendix E
Termination Date	May 31, 2037 (10 years) unless amended in Appendix E
Minimum Performance Standards – On Peak Availability Factor*	95%
Minimum Performance Standards – Off Peak Availability Factor	95%
Minimum Availability Factor Required to qualify for a Capacity payment	75%
Expiration Date	April 1, 20 2019
Completed Permits Date	June 1, 2025
Exemplary Early Capacity Payment Date	January 1, 2025

* RF/QF performance shall be as measured and/or described in Appendix A.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~June 5, 2018~~



SECTION No. IX
~~SEVENTH-EIGHTH~~ REVISED SHEET NO. 9.416
CANCELS ~~SIXTH-SEVENTH~~ REVISED SHEET NO.
9.416

5. Conditions Precedent

- (a) Unless otherwise waived in writing by DEF, on or before the Drop Dead Date, RF/QF shall satisfy the following Conditions Precedent:
- (i) RF/QF shall have obtained firm transmission service necessary to deliver Capacity and energy from the Facility to the Electrical Interconnection Point, in a form and substance satisfactory to RF/QF in its sole discretion;
 - (ii) RF/QF shall have obtained the Project Consents and any other Consents for which it is responsible under the terms hereof in a form and substance satisfactory to RF/QF in its sole discretion;
 - (iii) RF/QF shall have entered into Financing Documents relative to the construction of the entire Facility and have achieved Financial Closing in a form and substance satisfactory to RF/QF in its sole discretion; RF/QF shall have obtained an Auditor's Standard Report for the most recent financial year from a Certified Public Accountant (reasonably acceptable to DEF in all respects). If the RF/QF has a nameplate capacity of 5 MW or less, or the RF/QF is owned by a Government Agency or the RF/QF is a publicly traded company that is Creditworthy then an Auditor's Standard Report is not required. The RF/QF shall provide the Duke Energy Florida Director of Qualified Facility Contracts a copy of the Auditor's Standard Report and a copy of the signing partner's Certified Public Accountant license.
 - (iv) RF/QF shall have entered into the Project Contracts in a form and substance satisfactory to RF/QF in its sole discretion;
 - (v) RF/QF shall have obtained insurance policies or coverage in compliance with Section 17;
 - (vi) Each Party shall have delivered to the other Party (i) a copy of its constitutional documents (certified by its corporate secretary as true, complete and up-to-date) and (ii) a copy of a corporate resolution approving the terms of this Contract and the transactions contemplated hereby and authorizing one or more individuals to execute this Contract on its behalf (such copy to have been certified by its corporate representative as true, complete and up-to-date);
 - (vii) RF/QF shall have obtained Qualifying Facility status from either the FPSC or FERC. The RF/QF shall provide the Duke Energy Florida Director of Qualified Facility Contracts a copy of the certification of QF status filing and any re-filings required to reflect subsequent changes to the previously certified Facility.
 - (viii) RF/QF shall obtain a certificate addressed to DEF from a Licensed Professional Engineer (reasonably acceptable to DEF in all respects) stating the project is technically viable. The RF/QF shall provide the Duke Energy Florida Director of Qualified Facility Contracts this certificate and a copy of the Professional Engineer's license.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
~~SEVENTH-EIGHTH~~ REVISED SHEET NO. 9.416
CANCELS ~~SIXTH-SEVENTH~~ REVISED SHEET NO.
9.416

- ~~(b) Promptly upon satisfaction of the Conditions Precedent to be satisfied, the Party having satisfied the same shall deliver to the other Party a certificate evidencing such satisfaction. DEF may waive the satisfaction of a Condition Precedent at its sole discretion. Such waiver must be made in writing. Subject to there being no Event of Default which has occurred and/or is continuing as of the date upon which the last of such certificates is delivered, the date of such last certificate shall constitute the effective date of this Contract (the "Effective Date").~~
- ~~(c) Unless all Conditions Precedent are satisfied on or before the Drop Dead Date or such Conditions Precedent are waived in writing, this Contract shall terminate on such date and neither Party shall have any further liability to the other Party hereunder.~~
- ~~(d) RE/QF shall achieve the Capacity Delivery Date on or before the Required Capacity Delivery Date.~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
~~FOURTH-FIFTH~~ REVISED SHEET NO. 9.417
CANCELS ~~THIRD-FOURTH~~ REVISED SHEET NO.
9.417

- (b) Promptly upon satisfaction of the Conditions Precedent to be satisfied, the Party having satisfied the same shall deliver to the other Party a certificate evidencing such satisfaction. DEF may waive the satisfaction of a Condition Precedent at its sole discretion. Such waiver must be made in writing. Subject to there being no Event of Default which has occurred and/or is continuing as of the date upon which the last of such certificates is delivered, the date of such last certificate shall constitute the effective date of this Contract (the "Effective Date").
- (c) Unless all Conditions Precedent are satisfied on or before the Drop Dead Date or such Conditions Precedent are waived in writing, this Contract shall terminate on such date and neither Party shall have any further liability to the other Party hereunder.
- (d) RF/QF shall achieve the Capacity Delivery Date on or before the Required Capacity Delivery Date.
- (e) RF/QF shall ensure that before the initial Committed Capacity Test:
 - (a) the Facility shall have been constructed so that the Committed Capacity Test may be duly and properly undertaken in accordance with Section 7; and
 - (b) an operable physical connection from the Facility to the Transmission System shall have been effected in accordance with the electrical interconnection and operating agreement required by the Transmission Provider, provided, however, that such physical connection shall be made consistent with the terms hereof.

6. Sale of Electricity by the RF/QF

- 6.1** Consistent with the terms hereof, the RF/QF shall sell to DEF and DEF shall purchase from the RF/QF electric power generated by the Facility. The purchase and sale of electricity pursuant to this Contract shall be a () net billing arrangement or () simultaneous purchase and sale arrangement; provided, however, that no such arrangement shall cause the RF/QF to sell more than the Facility's net output. The billing methodology may be changed at the option of the RF/QF, subject to the provisions of Appendix D.
- 6.2** Ownership and Offering For Sale Of Renewable Energy Attributes

Subject to Section 6.3, the RF/QF shall retain any and all rights to own and to sell any and all Environmental Attributes associated with the electric generation of the Facility.
- 6.3** In the event that the RF/QF decides to sell any or all EAs that result from the electric generation of the RF/QF during the term of this Contract, the RF/QF shall provide notice to the Company of its intent to sell such EAs and provide the Company a reasonable opportunity to offer to purchase such EAs.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
~~FOURTH-FIFTH~~ REVISED SHEET NO. 9.417
CANCELS ~~THIRD-FOURTH~~ REVISED SHEET NO.
9.417

- ~~6.4 The RF/QF shall not rely on interruptible or curtailable standby service for the start-up requirements (initial or otherwise) of the Facility.~~
- ~~6.5 The RF/QF shall be responsible for the scheduling of required transmission and for all costs, expenses, taxes, fees and charges associated with the delivery of energy to DEF. The RF/QF shall enter into a transmission service agreement with the Transmission Provider in whose service territory the Facility is to be located and the RF/QF shall make any and all transmission related arrangements (including interconnection and ancillary services) between the RF/QF and the Transmission Provider for delivery of the Facility's firm Capacity and energy to DEF. The Capacity and energy amounts paid to the RF/QF hereunder do not include transmission losses. The RF/QF shall be responsible for transmission losses that occur prior to the point at which the RF/QF's energy is delivered to DEF. The Parties recognize that the Transmission Provider may be DEF and that if DEF is the Transmission Provider, the transmission service will be provided under a separate agreement.~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
~~SIXTH-SEVENTH~~ REVISED SHEET NO. 9.418
CANCELS ~~FIFTH-SIXTH~~ REVISED SHEET NO. 9.418

6.4 The RF/QF shall not rely on interruptible or curtailable standby service for the start up requirements (initial or otherwise) of the Facility.

6.5 The RF/QF shall be responsible for the scheduling of required transmission and for all costs, expenses, taxes, fees and charges associated with the delivery of energy to DEF. The RF/QF shall enter into a transmission service agreement with the Transmission Provider in whose service territory the Facility is to be located and the RF/QF shall make any and all transmission-related arrangements (including interconnection and ancillary services) between the RF/QF and the Transmission Provider for delivery of the Facility's firm Capacity and energy to DEF. The Capacity and energy amounts paid to the RF/QF hereunder do not include transmission losses. The RF/QF shall be responsible for transmission losses that occur prior to the point at which the RF/QF's energy is delivered to DEF. The Parties recognize that the Transmission Provider may be DEF and that if DEF is the Transmission Provider, the transmission service will be provided under a separate agreement.

7. Committed Capacity/Capacity Delivery Date

7.1 If the RF/QF commits to sell capacity to DEF, the amount of which shall be determined in accordance with this Section 7. Subject to Section 7.3, the Committed Capacity is set at _____ kW, with an expected Capacity Delivery Date on or before the Required Capacity Delivery Date.

7.2 Capacity testing of the Facility (each such test a Committed Capacity Test) shall be performed in accordance with the procedures set forth in Section 8. The Demonstration Period for the first Committed Capacity Test shall commence no earlier than ninety (90) days before the Required Capacity Delivery Date and testing must be completed before the Avoided Unit In-Service Date or an earlier date in Appendix E. The first Committed Capacity Test shall not be successfully completed unless the Facility demonstrates a Capacity of at least one hundred percent (100%) of the Committed Capacity set forth in Section 7.1. Subject to Section 8.1, the RF/QF may schedule and perform up to three (3) Committed Capacity Tests to satisfy the requirements of the Contract with respect to the first Committed Capacity Test.

7.3 In addition to the first Committed Capacity Test, DEF shall have the right to require the RF/QF, after notice of no less than ten (10) Business Days prior to such proposed event, to validate the Committed Capacity by means of a Committed Capacity Test at any time, up to two (2) times per year, the results of which shall be provided to DEF within seven (7) calendar days of the conclusion of such test. On and after the date of such requested Committed Capacity Test, and until the completion of a subsequent Committed Capacity Test, the Committed Capacity shall be set at the lower of the Capacity tested or the Committed Capacity as set forth in Section 7.1. Provided however, any such second test requested within a twelve (12) month period must be for cause.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
~~SEVENTH-EIGHTH~~ REVISED SHEET NO. 9.419
CANCELS ~~SIXTH-SEVENTH~~ REVISED SHEET NO.
9.419

- 7.4 Notwithstanding anything contrary to the terms hereof, the Committed Capacity may not exceed the amount set forth in Section 7.1 without the consent of DEF, which consent shall be granted in DEF's sole discretion.
- 7.5 Unless Option B or D as contained in Appendix D or Appendix E is chosen by RF/QF, DEF shall make no Capacity Payments to the RF/QF prior to the Avoided Unit In-Service Date.
- 7.6 The RF/QF shall be entitled to receive Capacity Payments beginning on the Capacity Delivery Date, provided the Capacity Delivery Date occurs before the Required Capacity Delivery Date (or such later date permitted by DEF) and the following Delivery Date Conditions (defined below) have been satisfied. If the Capacity Delivery Date does not occur before the Required Capacity Delivery Date, DEF shall immediately be entitled to draw down the Completion/Performance Security in full.

7.6.1 A certificate addressed to DEF from a Licensed Professional Engineer (reasonably acceptable to DEF in all respects) stating: (a) the nameplate capacity rating or capability of the Facility at the anticipated time of commercial operation and through the term of this Contract assuming the use of Prudent Utility Practices, must be between 95% and 105% of the "Expected Nameplate Capacity Rating;" (b) that the Facility is able to generate electric energy reliably in amounts expected by this Contract and in accordance with all other terms and conditions hereof; (c) that Start-Up Testing of the Facility has been completed; and (d) that, pursuant to Section 10.5, all system protection and control and Automatic Generation Control devices are installed and operational.

7.6.2 A certificate addressed to DEF from a Licensed Professional Engineer (reasonably acceptable to DEF in all respects) stating, in conformance with the requirements of the interconnection agreement, that: (a) all required interconnection facilities have been constructed; (b) all required interconnection tests have been completed; and (c) the Facility is physically interconnected with the Transmission System in conformance with the interconnection agreement and able to deliver energy consistent with the terms of this Contract.

7.6.3 A certificate addressed from a Licensed Professional Engineer (reasonably acceptable to DEF in all respects) stating that the RF/QF has obtained or entered into all permits and agreements including, but not limited to Project Contracts with respect to the Facility necessary for land control, construction, ownership, operation, and maintenance of the Facility (the "Project Contracts"). RF/QF must provide copies of any or all Project Contracts requested by DEF.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
~~SEVENTH-EIGHTH~~ REVISED SHEET NO. 9.419
CANCELS ~~SIXTH-SEVENTH~~ REVISED SHEET NO.
9.419

~~8. Testing Procedures~~

- ~~8.1 The Committed Capacity Test must be completed successfully within the Demonstration Period, which period, including the approximate start time of the Committed Capacity Test, shall be selected and scheduled by the RF/QF by means of a written notice to DEF delivered at least thirty (30) calendar days prior to the start of such period. The provisions of the foregoing sentence shall not apply to any Committed Capacity Test ordered by DEF under any of the provisions of this Contract. DEF shall have the right to be present onsite to monitor firsthand any Committed Capacity Test required or permitted under this Contract.~~
- ~~8.2 The Committed Capacity Test results shall be based on a test period of twenty-four (24) consecutive hours (the "Committed Capacity Test Period") at the highest sustained net kW rating at which the Facility can operate without exceeding the design operating conditions, temperature, pressures, and other parameters defined by the applicable manufacturer(s) for steady state operations at the Facility. The Committed Capacity Test Period shall commence at the time designated by the RF/QF pursuant to Section 8.1 or at such time requested by DEF pursuant to Section 7.3; provided, however, that the Committed Capacity Test Period may commence earlier than such time in the event that DEF is notified of, and consents to, such earlier time.~~
- ~~8.3 Normal station service use of unit auxiliaries, including, without limitation, cooling towers, heat exchangers, and other equipment required by law, shall be in service during the Committed Capacity Test Period.~~
- ~~8.4 The Capacity of the Facility shall be the minimum hourly net output in kW (generator output minus auxiliary) measured over the Committed Capacity Test Period.~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~July 13, 2017~~



SECTION No. IX
~~FIFTH-SIXTH~~ REVISED SHEET NO. 9.420
CANCELS ~~FOURTH-FIFTH~~ REVISED SHEET NO.
9.420

7.6.4 An opinion from a law firm or attorney, registered or licensed in the State of Florida (reasonably acceptable to DEF in all respects), stating, after all appropriate and reasonable inquiry, that: (a) the RF/QF has obtained or entered into all Project Contracts; (b) neither RF/QF nor the Facility is in violation of, or subject to any liability under any applicable law; and (c) RF/QF has duly filed and had recorded all of the agreements, documents, instruments, mortgages, deeds of trust, and other writings.

For each Licensed Professional Engineer utilized in 7.6.1 through 7.6.4, RF/QF should provide DEF with a copy of the Professional Engineer's license.

DEF shall have ten, (10) Business Days after receipt either to confirm to the RF/QF that all of the Delivery Date Conditions have been satisfied or have occurred, or to state with specificity what DEF reasonably believes has not been satisfied.

8. Testing Procedures

8.1 The Committed Capacity Test must be completed successfully within the Demonstration Period, which period, including the approximate start time of the Committed Capacity Test, shall be selected and scheduled by the RF/QF by means of a written notice to DEF delivered at least thirty (30) calendar days prior to the start of such period. The provisions of the foregoing sentence shall not apply to any Committed Capacity Test ordered by DEF under any of the provisions of this Contract. DEF shall have the right to be present onsite to monitor firsthand any Committed Capacity Test required or permitted under this Contract.

8.2 The Committed Capacity Test results shall be based on a test period of twenty-four (24) consecutive hours (the "Committed Capacity Test Period") at the highest sustained net kW rating at which the Facility can operate without exceeding the design operating conditions, temperature, pressures, and other parameters defined by the applicable manufacturer(s) for steady state operations at the Facility. The Committed Capacity Test Period shall commence at the time designated by the RF/QF pursuant to Section 8.1 or at such time requested by DEF pursuant to Section 7.3; provided, however, that the Committed Capacity Test Period may commence earlier than such time in the event that DEF is notified of, and consents to, such earlier time.

8.3 Normal station service use of unit auxiliaries, including, without limitation, cooling towers, heat exchangers, and other equipment required by law, shall be in service during the Committed Capacity Test Period.

8.4 The Capacity of the Facility shall be the minimum hourly net output in kW (generator output minus auxiliary) measured over the Committed Capacity Test Period.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
~~FIFTH-SIXTH~~ REVISED SHEET NO. 9.420
CANCELS ~~FOURTH-FIFTH~~ REVISED SHEET NO.
9.420

~~8.5 The Committed Capacity Test shall be performed according to standard industry testing procedures for the appropriate technology of the RF/QF.~~

~~8.6 The results of any Committed Capacity Test, including all data related to Facility operation and performance during testing, shall be submitted to DEF by the RF/QF within seven (7) calendar days of the conclusion of the Committed Capacity Test. The RF/QF shall certify that all such data is accurate and complete.~~

~~9. Payment for Electricity Produced by the Facility:~~

~~9.1 Energy~~

~~9.1.1 DEF agrees to pay the RF/QF for energy produced by the Facility and delivered to DEF in accordance with the rates and procedures contained in Appendix D, as it may be amended from time to time. The Parties agree that this Contract shall be subject to all of the provisions contained in Rate Schedule COG 1 or Appendix D whichever applies as approved and on file with the FPSC.~~

~~9.1.2 DEF may, at its option, limit deliveries under this Contract to 110% of the Committed Capacity as set forth in Section 7. In the event that DEF chooses to limit deliveries, any energy in excess of 110% of the Committed Capacity will be paid for at the rates defined in Rate Schedule COG 1 and shall not be included in the calculations in Appendix A hereto.~~

~~9.2 Capacity~~

~~DEF agrees to pay the RF/QF for the Capacity described in Section 7 in accordance with the rates and procedures contained in Appendix D, as it may be amended and approved from time to time by the FPSC, and pursuant to the election of Option _____ of Appendix D or an alternative rate schedule in Appendix E. The RF/QF understands and agrees that Capacity Payments will only be made if the Capacity Delivery Date occurs before the Required Capacity Delivery Date and the Facility is delivering firm Capacity and Energy to DEF. Once so selected, this Option, the Firm Capacity Rate and/or the Firm Energy Rate cannot be changed for the term of this Contract.~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
~~FOURTH-FIFTH~~ REVISED SHEET NO. 9.421
CANCELS ~~THIRD-FOURTH~~ REVISED SHEET NO.
9.421

8.5 The Committed Capacity Test shall be performed according to standard industry testing procedures for the appropriate technology of the RF/QF.

8.6 The results of any Committed Capacity Test, including all data related to Facility operation and performance during testing, shall be submitted to DEF by the RF/QF within seven (7) calendar days of the conclusion of the Committed Capacity Test. The RF/QF shall certify that all such data is accurate and complete.

9. Payment for Electricity Produced by the Facility

9.1 Energy

9.1.1 DEF agrees to pay the RF/QF for energy produced by the Facility and delivered to DEF in accordance with the rates and procedures contained in Appendix D, as it may be amended from time to time. The Parties agree that this Contract shall be subject to all of the provisions contained in Rate Schedule COG-1 or Appendix D whichever applies as approved and on file with the FPSC.

9.1.2 DEF may, at its option, limit deliveries under this Contract to 110% of the Committed Capacity as set forth in Section 7. In the event that DEF chooses to limit deliveries, any energy in excess of 110% of the Committed Capacity will be paid for at the rates defined in Rate Schedule COG-1 and shall not be included in the calculations in Appendix A hereto.

9.2 Capacity

DEF agrees to pay the RF/QF for the Capacity described in Section 7 in accordance with the rates and procedures contained in Appendix D, as it may be amended and approved from time to time by the FPSC, and pursuant to the election of Option _____ of Appendix D or an alternative rate schedule in Appendix E. The RF/QF understands and agrees that Capacity Payments will only be made if the Capacity Delivery Date occurs before the Required Capacity Delivery Date and the Facility is delivering firm Capacity and Energy to DEF. Once so selected, this Option, the Firm Capacity Rate and/or the Firm Energy Rate cannot be changed for the term of this Contract.

9.3 Payments for Energy and Capacity

9.3.1 Payments due the RF/QF will be made monthly, and normally by the twentieth Business Day following the end of the billing period. The kilowatt-hours sold by the RF/QF and the applicable avoided energy rate at which payments are being made shall accompany the payment to the RF/QF.

~~9.3.2 Payments to be made under this Contract shall, for a period of not longer than two (2) years, remain subject to adjustment based on billing~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 10, 2014



SECTION No. IX
~~FOURTH-FIFTH~~ REVISED SHEET NO. 9.421
CANCELS ~~THIRD-FOURTH~~ REVISED SHEET NO.
9.421

~~adjustments due to error or omission by either Party, provided that such adjustments have been agreed to between the Parties.~~

~~10. Electricity Production and Plant Maintenance Schedule~~

~~10.1 No later than sixty (60) calendar days prior to the Required Capacity Delivery Date, and prior to October 1 of each calendar year thereafter during the term of this Contract, the RF/QF shall submit to DEF in writing a good faith estimate of the amount of electricity to be generated by the Facility and delivered to DEF for each month of the following calendar year, including the time, duration and magnitude of any scheduled maintenance period(s) or reductions in Capacity. The RF/QF agrees to provide updates to its planned maintenance periods as they become known. The Parties agree to discuss coordinating scheduled maintenance schedules.~~

~~10.2 By October 31 of each calendar year, DEF shall notify the RF/QF in writing whether the requested scheduled maintenance periods in the detailed plan are acceptable. If DEF does not accept any of the requested scheduled maintenance periods, DEF shall advise the RF/QF of the time period closest to the requested period(s) when the outage(s) can be scheduled. The RF/QF shall only schedule outages during periods approved by DEF, and such approval shall not be unreasonably withheld. Once the schedule for the detailed plan has been established and approved, either Party requesting a subsequent change in such schedule, except when such change is due to Force Majeure, must obtain approval for such change from the other Party. Such approval shall not be unreasonably withheld or delayed. Scheduled maintenance outage days shall be limited to twenty four days per calendar year. In no event shall maintenance periods be scheduled during the following periods: June 1 through September 15 and December 1 through and including the last day of February.~~

~~10.3 The RF/QF shall comply with reasonable requests by DEF regarding day to day and hour by hour communication between the Parties relative to electricity production and maintenance scheduling.~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 10, 2014



SECTION No. IX
~~FIFTH-SIXTH~~ REVISED SHEET No. 9.422
CANCELS ~~FOURTH-FIFTH~~ REVISED SHEET NO.
9.422

9.3.2 Payments to be made under this Contract shall, for a period of not longer than two (2) years, remain subject to adjustment based on billing adjustments due to error or omission by either Party, provided that such adjustments have been agreed to between the Parties.

10. Electricity Production and Plant Maintenance Schedule

10.1 No later than sixty (60) calendar days prior to the Required Capacity Delivery Date, and prior to October 1 of each calendar year thereafter during the term of this Contract, the RF/QF shall submit to DEF in writing a good-faith estimate of the amount of electricity to be generated by the Facility and delivered to DEF for each month of the following calendar year, including the time, duration and magnitude of any scheduled maintenance period(s) or reductions in Capacity. The RF/QF agrees to provide updates to its planned maintenance periods as they become known. The Parties agree to discuss coordinating scheduled maintenance schedules.

10.2 By October 31 of each calendar year, DEF shall notify the RF/QF in writing whether the requested scheduled maintenance periods in the detailed plan are acceptable. If DEF does not accept any of the requested scheduled maintenance periods, DEF shall advise the RF/QF of the time period closest to the requested period(s) when the outage(s) can be scheduled. The RF/QF shall only schedule outages during periods approved by DEF, and such approval shall not be unreasonably withheld. Once the schedule for the detailed plan has been established and approved, either Party requesting a subsequent change in such schedule, except when such change is due to Force Majeure, must obtain approval for such change from the other Party. Such approval shall not be unreasonably withheld or delayed. Scheduled maintenance outage days shall be limited to twenty four days per calendar year. In no event shall maintenance periods be scheduled during the following periods: June 1 through September 15 and December 1 through and including the last day of February.

10.3 The RF/QF shall comply with reasonable requests by DEF regarding day-to-day and hour-by-hour communication between the Parties relative to electricity production and maintenance scheduling.

~~10.4 The Parties recognize that the intent of the availability factor in Section 4 of this Contract includes an allowance for scheduled outages, forced outages and forced reductions in the output of the Facility. Therefore, the RF/QF shall provide DEF with notification of any forced outage or reduction in output which shall include the time and date at which the forced outage or reduction occurred, a brief description of the cause of the outage or reduction and the time and date when the forced outage or reduction ceased and the Facility was able to return to normal operation. This notice shall be provided to DEF within seventy two (72) hours of the end of the forced outage or reduction.~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 24, 2015



SECTION No. IX
~~FIFTH-SIXTH~~ REVISED SHEET No. 9.422
CANCELS ~~FOURTH-FIFTH~~ REVISED SHEET NO.
9.422

~~The RF/QF is required to provide the total electrical output to DEF except (i) during a period that was scheduled in Section 10.2, (ii) during a period in which notification of a forced outage or reduction was provided, (iii) during an event of Force Majeure or (iv) during a curtailment period as described in Section 10.5.5. In no event shall the RF/QF deliver any portion of their electrical output to a third party.~~

~~10.5 Dispatch and Control~~

~~10.5.1 Power supplied by the RF/QF hereunder shall be in the form of three-phase 60 hertz alternating current, at a nominal operating voltage of _____ volts (_____ kV) and power factor dispatchable and controllable in the range of 90% lagging to 90% leading as measured at the interconnection point to maintain system operating parameters, including power factor, as specified from time to time by DEF.~~

~~10.5.2 The RF/QF shall operate the Facility with all system protective equipment in service whenever the Facility is connected to, or is operated in parallel with, DEF's system, except for normal testing and repair in accordance with good engineering and operating practices as agreed by the Parties. The RF/QF shall provide adequate system protection and control devices to ensure safe and protected operation of all energized equipment during normal testing and repair. All RF/QF facilities shall meet IEEE and utility standards. The RF/QF shall have independent, third party qualified personnel test, calibrate and certify in writing all protective equipment at least once every twelve (12) months in accordance with good engineering and operating practices. A unit functional trip test shall be performed after each overhaul of the Facility's turbine, generator or boilers and results provided to DEF in writing prior to returning the equipment to service. The specifics of the unit functional trip test will be consistent with Prudent Utility Practices.~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 24, 2015



SECTION No. IX
~~SEVENTH-EIGHTH~~ REVISED SHEET NO. 9.423
CANCELS ~~SIXTH~~ ~~SEVENTH~~ REVISED SHEET NO.
9.423

10.4 The Parties recognize that the intent of the availability factor in Section 4 of this Contract includes an allowance for scheduled outages, forced outages and forced reductions in the output of the Facility. Therefore, the RF/QF shall provide DEF with notification of any forced outage or reduction in output which shall include the time and date at which the forced outage or reduction occurred, a brief description of the cause of the outage or reduction and the time and date when the forced outage or reduction ceased and the Facility was able to return to normal operation. This notice shall be provided to DEF within seventy-two (72) hours of the end of the forced outage or reduction.

The RF/QF is required to provide the total electrical output to DEF except (i) during a period that was scheduled in Section 10.2, (ii) during a period in which notification of a forced outage or reduction was provided, (iii) during an event of Force Majeure or (iv) during a curtailment period as described in Section 10.5.5. In no event shall the RF/QF deliver any portion of their electrical output to a third party.

10.5 Dispatch and Control

10.5.1 Power supplied by the RF/QF hereunder shall be in the form of three-phase 60 hertz alternating current, at a nominal operating voltage of volts (kV) and power factor dispatchable and controllable in the range of 90% lagging to 90% leading as measured at the interconnection point to maintain system operating parameters, including power factor, as specified from time to time by DEF.

10.5.2 The RF/QF shall operate the Facility with all system protective equipment in service whenever the Facility is connected to, or is operated in parallel with, DEF's system, except for normal testing and repair in accordance with good engineering and operating practices as agreed by the Parties. The RF/QF shall provide adequate system protection and control devices to ensure safe and protected operation of all energized equipment during normal testing and repair. All RF/QF facilities shall meet IEEE and utility standards. The RF/QF shall have independent, third party qualified personnel test, calibrate and certify in writing all protective equipment at least once every twelve (12) months in accordance with good engineering and operating practices. A unit functional trip test shall be performed after each overhaul of the Facility's turbine, generator or boilers and results provided to DEF in writing prior to returning the equipment to service. The specifics of the unit functional trip test will be consistent with Prudent Utility Practices.

10.5.3 If the Facility is separated from the DEF system for any reason, under no circumstances shall the RF/QF reconnect the Facility to DEF's system without first obtaining DEF'S specific approval.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 10, 2014



SECTION No. IX
~~SEVENTH-EIGHTH~~ REVISED SHEET NO. 9.423
CANCELS ~~SIXTH~~ ~~SEVENTH~~ REVISED SHEET NO.
9.423

~~10.5.4 During the term of this Contract, the RF/QF shall employ qualified personnel for managing, operating and maintaining the Facility and for coordinating such with DEF. The RF/QF shall ensure that operating personnel are on duty at all times, twenty four (24) hours a calendar day and seven (7) calendar days a week. Additionally, during the term of this Contract, the RF/QF shall operate and maintain the Facility in such a manner as to ensure compliance with its obligations hereunder and in accordance with applicable law and Prudent Utility Practices.~~

~~10.5.5 DEF shall not be obligated to purchase, and may require curtailed or reduced deliveries of energy to the extent allowed under FPSC Rule 25-17.086 and under any curtailment plan which DEF may have on file with the FPSC from time to time.~~

~~10.5.6 During the term of this Contract, the RF/QF shall maintain sufficient fuel on the site of the Facility to deliver the capacity and energy associated with the Committed Capacity for an uninterrupted seventy two (72) hour period. At DEF's request, the RF/QF shall demonstrate this capability to DEF's reasonable satisfaction. During the term of this Contract, the RF/QF's output shall remain within a band of plus or minus ten percent (10%) of the daily output level or levels specified by the plant operator, in ninety percent (90%) of all operating hours under normal operating conditions. This calculation will be adjusted to exclude forced outage periods and periods during which the RF/QF's output is affected by a Force Majeure event.~~

~~11. Completion/Performance Security~~

~~11.1 Simultaneous with the execution of this Contract RF/QF shall deliver to DEF Eligible Collateral in an amount equal to \$30.00/kw of Committed Capacity as Completion/Performance Security.~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 10, 2014



SECTION No. IX
~~EIGHTH-NINTH~~ REVISED SHEET NO. 9.424
CANCELS ~~SEVENTH-EIGHTH~~ REVISED SHEET NO.
9.424

10.5.4 During the term of this Contract, the RF/QF shall employ qualified personnel for managing, operating and maintaining the Facility and for coordinating such with DEF. The RF/QF shall ensure that operating personnel are on duty at all times, twenty-four (24) hours a calendar day and seven (7) calendar days a week. Additionally, during the term of this Contract, the RF/QF shall operate and maintain the Facility in such a manner as to ensure compliance with its obligations hereunder and in accordance with applicable law and Prudent Utility Practices.

10.5.5 DEF shall not be obligated to purchase, and may require curtailed or reduced deliveries of energy to the extent allowed under FPSC Rule 25-17.086 and under any curtailment plan which DEF may have on file with the FPSC from time to time.

10.5.6 During the term of this Contract, the RF/QF shall maintain sufficient fuel on the site of the Facility to deliver the capacity and energy associated with the Committed Capacity for an uninterrupted seventy-two-(72) hour period. At DEF's request, the RF/QF shall demonstrate this capability to DEF's reasonable satisfaction. During the term of this Contract, the RF/QF's output shall remain within a band of plus or minus ten percent (10%) of the daily output level or levels specified by the plant operator, in ninety percent (90%) of all operating hours under normal operating conditions. This calculation will be adjusted to exclude forced outage periods and periods during which the RF/QF's output is affected by a Force Majeure event.

11. Completion/Performance Security

11.1 Simultaneous with the execution of this Contract RF/QF shall deliver to DEF Eligible Collateral in an amount equal to \$30.00/kw of Committed Capacity as Completion/Performance Security.

11.2 The choice of the type of Eligible Collateral by the RF/QF may be selected from time to time by the RF/QF and upon receipt of substitute Eligible Collateral, DEF shall promptly release the Eligible Collateral that has been replaced by the substitute Eligible Collateral. Following any termination of this Contract, the Parties shall mutually agree to a final settlement of all obligations under this Contract which such period shall not exceed 90 days from such termination date unless extended by mutual agreement between the Parties. After such settlement, any remaining Eligible Collateral posted by the RF/QF that has not been drawn upon by DEF pursuant to its rights under this Contract shall be returned to the RF/QF. Any dispute between the Parties regarding such final settlement shall be resolved according to applicable procedures set forth in Section 20.9.

~~11.3 Draws, Replenishment DEF may draw upon Eligible Collateral provided by the RF/QF following the occurrence of an Event of Default or pursuant to the other~~

ISSUED BY: Javier Portuondo, ~~Managing~~ Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~July 13, 2017~~



SECTION No. IX
~~EIGHTH/NINTH~~ REVISED SHEET NO. 9.424
CANCELS ~~SEVENTH/EIGHTH~~ REVISED SHEET NO.
9.424

~~provisions of this Contract in order to recover any damages to which DEF is entitled to under this Contract. In the event of such a draw then, except in the circumstance when this Contract otherwise terminates, the RF/QF shall within five (5) Business Days replenish the Eligible Collateral to the full amounts required.~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~July 13, 2017~~



SECTION No. IX
~~SIXTH-SEVENTH~~ REVISED SHEET NO. 9.425
CANCELS ~~FIFTH-SIXTH~~ REVISED SHEET NO. 9.425

11.3 Draws, Replenishment - DEF may draw upon Eligible Collateral provided by the RF/QF following the occurrence of an Event of Default or pursuant to the other provisions of this Contract in order to recover any damages to which DEF is entitled to under this Contract. In the event of such a draw then, except in the circumstance when this Contract otherwise terminates, the RF/QF shall within five (5) Business Days replenish the Eligible Collateral to the full amounts required.

11.4 In the event that the (a) Capacity Delivery Date occurs before the Required Capacity Delivery Date and (b) the ACBF is equal to or greater than 95% for the first twelve (12) months following the Capacity Delivery Date then DEF will return the Completion/Performance Security to the RF/QF within ninety (90) days of the first anniversary of the Capacity Delivery Date. In the event that the Capacity Delivery Date does not occur before the Required Capacity Delivery Date, consistent with Section 7.6 herein, then DEF shall immediately be entitled to ~~draw down~~retain the Completion/Performance Security in full. In the event the Capacity Delivery Date occurs before the Required Capacity Delivery Date, and, that the ACBF is less than 95% for any of the first twelve (12) months following the Capacity Delivery Date then DEF shall be entitled to draw upon ~~draw upon~~retain the Completion/Performance Security until the ACBF is equal to or greater than 95% for 12 consecutive months. Upon the completion of twelve (12) consecutive months with the ACBF is greater than or equal to 95%, then DEF will return the Completion/Performance Security within ninety (90) days. In the event that DEF requires the RF/QF to perform one or more Committed Capacity Test(s) at any time on or before the first anniversary of the Capacity Delivery Date pursuant to Section 7.3 and, in connection with any such Committed Capacity Test(s), the RF/QF fails to demonstrate a Capacity of at least one-hundred percent (100%) of the Committed Capacity set forth in Section 7.1, DEF shall be entitled immediately to receive, draw upon, or retain, in its sole discretion as the case may be, one-hundred percent (100%) of the Completion/Performance Security as its sole remedy from the RF/QF's failure to perform, free from any claim or right of any nature whatsoever of the RF/QF, including any equity or right of redemption by the RF/QF. Upon the completion of twelve (12) consecutive months with the ACBF greater than or equal to 95% then DEF will return the Completion/Performance Security within ninety (90) days. Following any draws on the Completion/Performance Security, the RF/QF shall make payment to DEF to replenish the Completion/Performance Security to the amounts required pursuant to Section 11.1 within five (5) business days.

11.5 Reporting - RF/QF shall promptly notify DEF of any circumstance that results in RF/QF's failure to be in compliance with the RF/QF Performance Security Requirements of this Section 11. From time to time, at DEF's written request, RF/QF shall provide DEF with such evidence as DEF may reasonably request,

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
~~SIXTH-SEVENTH~~ REVISED SHEET NO. 9.425
CANCELS ~~FIFTH-SIXTH~~ REVISED SHEET NO. 9.425

that RF/QF Letter of Credit or Security Account is in full compliance with this Contract.

~~12. Termination Fee and Security~~

~~12.1 In the event that the RF/QF receives Capacity Payments pursuant to Option B, Option C, or Option D of Appendix D or any Capacity Payment schedule in Appendix E that differs from a Normal Capacity Payment Rate as calculated in FPSC Rule 25 17.0822(6)(a), then upon the termination of this Contract, the RF/QF shall owe and be liable to DEF for the Termination Fee. The RF/QF's obligation to pay the Termination Fee shall survive the termination of this Contract. DEF shall provide the RF/QF, on a monthly basis, a calculation of the Termination Fee.~~

~~12.1.1 The Termination Fee shall be secured by the RF/QF by: (i) an unconditional, irrevocable, standby letter(s) of credit issued by a Qualified Institution in form and substance acceptable to DEF (including provisions (a) permitting partial and full draws and (b) permitting DEF to draw upon such Letter of Credit, in full, if such Letter of Credit is not renewed or replaced at least twenty (20) Business Days prior to its expiration date); (ii) a bond issued to DEF by a financially sound company in form and substance acceptable to DEF in its sole discretion; or (iii) a cash deposit with DEF (any of (i), (ii), or (iii), the "Termination Security").~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
~~THIRD-FOURTH~~ REVISED SHEET NO. 9.426
CANCELS ~~SECOND-THIRD~~ REVISED SHEET NO.
9.426

12. Termination Fee and Security

12.1 In the event that the RF/QF receives Capacity Payments pursuant to Option B, Option C, or Option D of Appendix D or any Capacity Payment schedule in Appendix E that differs from a Normal Capacity Payment Rate as calculated in FPSC Rule 25-17.0832(6)(a), then upon the termination of this Contract, the RF/QF shall owe and be liable to DEF for the Termination Fee. The RF/QF's obligation to pay the Termination Fee shall survive the termination of this Contract. DEF shall provide the RF/QF, on a monthly basis, a calculation of the Termination Fee.

12.1.1 The Termination Fee shall be secured by the RF/QF by: (i) an unconditional, irrevocable, standby letter(s) of credit issued by a Qualified Institution in form and substance acceptable to DEF (including provisions (a) permitting partial and full draws and (b) permitting DEF to draw upon such Letter of Credit, in full, if such Letter of Credit is not renewed or replaced at least twenty (20) Business Days prior to its expiration date); (ii) a bond issued to DEF by a financially sound company in form and substance acceptable to DEF in its sole discretion; or (iii) a cash deposit with DEF (any of (i), (ii), or (iii), the "Termination Security").

12.1.2 DEF shall have the right and the RF/QF shall be required to monitor the financial condition of (i) the issuer(s) in the case of any Letter of Credit and (ii) the insurer(s), in the case of any bond. In the event the senior debt rating of any issuer(s) or insurer(s) has deteriorated to the extent that they fail to meet the requirements of a Qualified Institution, DEF may require the RF/QF to replace the letter(s) of credit or the bond, as applicable. In the event that DEF notifies the RF/QF that it requires such a replacement, the replacement letter(s) of credit or bond, as applicable, must be issued by a Qualified Institution, and meet the requirements of Section 12.1.1 within thirty (30) calendar days following such notification. Failure by the RF/QF to comply with the requirements of this Section 12.1.2 shall be grounds for DEF to draw in full on any existing Letter of Credit or bond and to exercise any other remedies it may have hereunder.

~~12.1.3 After the close of each calendar quarter (March 31, June 30, September 30, and December 31) occurring subsequent to the Capacity Delivery Date, upon DEF's issuance of the Termination Fee calculation as described in Section 12.1, the RF/QF must provide DEF, within ten calendar (10) days, written assurance and documentation (the "Security Documentation"), in form and substance acceptable to DEF, that the amount of the Termination Security is sufficient to cover the balance of the Termination Fee through the end of the following quarter. In addition to the foregoing, at any time during the term of this Contract, DEF shall have the right to request and the RF/QF shall be obligated to deliver within five (5) calendar days of such request, such Security Documentation. Failure by the RF/QF to comply with the requirements of this Section 12.1.3 shall be grounds for DEF to draw in full on any~~

ISSUED BY: Javier Portuondo, ~~Managing~~ Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~July 24, 2015~~



SECTION No. IX
~~THIRD-FOURTH~~ REVISED SHEET NO. 9.426
CANCELS ~~SECOND-THIRD~~ REVISED SHEET NO.
9.426

~~existing Letter of Credit or bond or to retain any cash deposit, and to exercise any other remedies it may have hereunder.~~

~~12.1.4 Upon any termination of this Contract following the Required Capacity Delivery Date, DEF shall be entitled to receive (and in the case of the Letter(s) of Credit or bond, draw upon such Letter(s) of Credit or bond) and retain one hundred percent (100%) of the Termination Security.~~

~~13. Performance Factor~~

~~DEF desires to provide an incentive to the RF/QF to operate the Facility during on peak and off peak periods in a manner that approximates the projected performance of the Avoided Unit. A formula to achieve this objective is attached as Appendix A.~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 21, 2015



SECTION No. IX
~~SIXTH-SEVENTH~~ REVISED SHEET NO. 9.427
CANCELS ~~FIFTH-SIXTH~~ REVISED SHEET NO. 9.427

12.1.3 After the close of each calendar quarter (March 31, June 30, September 30, and December 31) occurring subsequent to the Capacity Delivery Date, upon DEF's issuance of the Termination Fee calculation as described in Section 12.1, the RF/QF must provide DEF, within ten calendar (10) days, written assurance and documentation (the "Security Documentation"), in form and substance acceptable to DEF, that the amount of the Termination Security is sufficient to cover the balance of the Termination Fee through the end of the following quarter. In addition to the foregoing, at any time during the term of this Contract, DEF shall have the right to request and the RF/QF shall be obligated to deliver within five (5) calendar days of such request, such Security Documentation. Failure by the RF/QF to comply with the requirements of this Section 12.1.3 shall be grounds for DEF to draw in full on any existing Letter of Credit or bond or to retain any cash deposit, and to exercise any other remedies it may have hereunder.

12.1.4 Upon any termination of this Contract following the Required Capacity Delivery Date, DEF shall be entitled to receive (and in the case of the Letter(s) of Credit or bond, draw upon such Letter(s) of Credit or bond) and retain one hundred percent (100%) of the Termination Security.

13. Performance Factor

DEF desires to provide an incentive to the RF/QF to operate the Facility during on-peak and off-peak periods in a manner that approximates the projected performance of the Avoided Unit. A formula to achieve this objective is attached as Appendix A.

14. Default

Notwithstanding the occurrence of any Force Majeure as described in Section 18, each of the following shall constitute an Event of Default:

- (a) the RF/QF changes or modifies the Facility from that provided in Section 2 with respect to its type, location, technology or fuel source, without the prior written approval of DEF;
- (b) after the Capacity Delivery Date, the Facility fails for twelve (12) consecutive months to maintain an Annual Capacity Billing Factor, as described in Appendix A, of at least seventy five percent (75%);
- (c) the RF/QF fails to satisfy its obligations to maintain sufficient fuel on the site of the Facility to deliver the capacity and energy associated with the Committed Capacity for an uninterrupted seventy-two-(72) hour period under Section 10.5.6 hereof;
- (d) the failure to make when due, any payment required pursuant to this Contract if such failure is not remedied within three (3) Business Days after written notice;

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~June 9, 2016~~



SECTION No. IX
~~SIXTH-SEVENTH~~ REVISED SHEET NO. 9.427
CANCELS ~~FIFTH-SIXTH~~ REVISED SHEET NO. 9.427

- ~~(e) either Party, or the entity which owns or controls either Party, ceases the conduct of active business; or if proceedings under the federal bankruptcy law or insolvency laws shall be instituted by or for or against either Party or the entity which owns or controls either Party; or if a receiver shall be appointed for either Party or any of its assets or properties, or for the entity which owns or controls either Party; or if any part of either Party's assets shall be attached, levied upon, encumbered, pledged, seized or taken under any judicial process, and such proceedings shall not be vacated or fully stayed within thirty (30) calendar days thereof; or if either Party shall make an assignment for the benefit of creditors, or admit in writing its inability to pay its debts as they become due;~~
- ~~(f) the RE/QF fails to give proper assurance of adequate performance as specified under this Contract within thirty (30) calendar days after DEF, with reasonable grounds for insecurity, has requested in writing such assurance;~~
- ~~(g) the RE/QF fails to achieve licensing, certification, and all federal, state and local governmental, environmental, and licensing approvals required to initiate construction of the Facility by no later than the Completed Permits Date;~~
- ~~(h) the RE/QF fails to comply with the provisions of Section 11 hereof;~~
- ~~(i) any of the representations or warranties, including the certification of the completion of the Conditions Precedent, made by either Party in this Contract is false or misleading in any material respect as of the time made;~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: June 0, 2016



SECTION No. IX
~~FIFTH-SIXTH~~ REVISED SHEET NO. 9.428
CANCELS ~~FOURTH-FIFTH~~ REVISED SHEET NO.
9.428

- (e) either Party, or the entity which owns or controls either Party, ceases the conduct of active business; or if proceedings under the federal bankruptcy law or insolvency laws shall be instituted by or for or against either Party or the entity which owns or controls either Party; or if a receiver shall be appointed for either Party or any of its assets or properties, or for the entity which owns or controls either Party; or if any part of either Party's assets shall be attached, levied upon, encumbered, pledged, seized or taken under any judicial process, and such proceedings shall not be vacated or fully stayed within thirty (30) calendar days thereof; or if either Party shall make an assignment for the benefit of creditors, or admit in writing its inability to pay its debts as they become due;
- (f) the RF/QF fails to give proper assurance of adequate performance as specified under this Contract within thirty (30) calendar days after DEF, with reasonable grounds for insecurity, has requested in writing such assurance;
- (g) the RF/QF fails to achieve licensing, certification, and all federal, state and local governmental, environmental, and licensing approvals required to initiate construction of the Facility by no later than the Completed Permits Date;
- (h) the RF/QF fails to comply with the provisions of Section 11 hereof;
- (i) any of the representations or warranties, including the certification of the completion of the Conditions Precedent, made by either Party in this Contract is false or misleading in any material respect as of the time made;
- (j) if, at any time after the Capacity Delivery Date, the RF/QF reduces the Committed Capacity due to an event of Force Majeure and fails to repair the Facility and reset the Committed Capacity to the level set forth in Section 7.1 (as such level may be reduced by Section 7.3) within twelve (12) months following the occurrence of such event of Force Majeure; or
- (k) either Party breaches any material provision of this Contract not specifically mentioned in this Section 14;
- (l) the RF/QF fails to maintain its status as a Qualifying Facility.
- (m) the RF/QF sells any energy or firm capacity to an entity other than DEF.

15. Rights in the Event of Default

15.1 Upon the occurrence of any of the Events of Default in Section 14, the DEF may, at its option:

- 15.1.1** immediately terminate this Contract, without penalty or further obligation, except as set forth in Section 15.2, by written notice to the RF/QF, and offset against any payment(s) due from DEF to the RF/QF, any monies otherwise due from the RF/QF to DEF;

ISSUED BY: Javier Portuondo, ~~Managing~~ Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~July 13, 2017~~



SECTION No. IX
~~FIFTH-SIXTH~~ REVISED SHEET NO. 9.428
CANCELS ~~FOURTH-FIFTH~~ REVISED SHEET NO.
9.428

~~15.1.2 enforce the provisions of the Completion/Performance Security pursuant to Section 11 and/or the Termination Security requirement pursuant to Section 12 hereof, as applicable; and~~

~~15.1.3 exercise any other remedy(ies) which may be available to DEF at law or in equity;~~

~~15.2 Termination shall not affect the liability of either Party for obligations arising prior to such termination or for damages, if any, resulting from any breach of this Contract.~~

~~16. Indemnification~~

~~16.1 DEF and the RF/QF shall each be responsible for its own facilities. DEF and the RF/QF shall each be responsible for ensuring adequate safeguards for other DEF customers, DEF's and the RF/QF's personnel and equipment, and for the protection of its own generating system. Each Party (the "Indemnifying Party") agrees, to the extent permitted by applicable law, to indemnify, pay, defend, and hold harmless the other Party (the "Indemnified Party") and its officers, directors, employees, agents and contractors (hereinafter called respectively, "DEF Entities" and "RF/QF Entities") from and against any and all claims, demands, costs or expenses for loss, damage, or injury to persons or property of the Indemnified Party (or to third parties) directly caused by, arising out of, or resulting from:~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
~~THIRD-FOURTH~~ REVISED SHEET NO. 9.429
CANCELS ~~SECOND-THIRD~~ REVISED SHEET NO.
9.429

15.1.2 enforce the provisions of the Completion/Performance Security pursuant to Section 11 and/or the Termination Security requirement pursuant to Section 12 hereof, as applicable; and

15.1.3 exercise any other remedy(ies) which may be available to DEF at law or in equity.

15.2 Termination shall not affect the liability of either Party for obligations arising prior to such termination or for damages, if any, resulting from any breach of this Contract.

16. Indemnification

16.1 DEF and the RF/QF shall each be responsible for its own facilities. DEF and the RF/QF shall each be responsible for ensuring adequate safeguards for other DEF customers, DEF's and the RF/QF's personnel and equipment, and for the protection of its own generating system. Each Party (the "Indemnifying Party") agrees, to the extent permitted by applicable law, to indemnify, pay, defend, and hold harmless the other Party (the "Indemnified Party") and its officers, directors, employees, agents and contractors (hereinafter called respectively, "DEF Entities" and "RF/QF Entities") from and against any and all claims, demands, costs or expenses for loss, damage, or injury to persons or property of the Indemnified Party (or to third parties) directly caused by, arising out of, or resulting from:

- (a) a breach by the Indemnifying Party of its covenants, representations, and warranties or obligations hereunder;
- (b) any act or omission by the Indemnifying Party or its contractors, agents, servants or employees in connection with the installation or operation of its generation system or the operation thereof in connection with the other Party's system;
- (c) any defect in, failure of, or fault related to, the Indemnifying Party's generation system;
- (d) the negligence or willful misconduct of the Indemnifying Party or its contractors, agents, servants or employees; or
- (e) any other event or act that is the result of, or proximately caused by, the Indemnifying Party or its contractors, agents, servants or employees related to the Contract or the Parties' performance thereunder.

~~16.2 Payment by an Indemnified Party to a third party shall not be a condition precedent to the obligations of the Indemnifying Party under Section 16. No Indemnified Party under Section 16 shall settle any claim for which it claims indemnification hereunder without first allowing the Indemnifying Party the right to defend such a claim. The Indemnifying Party shall have no obligations under~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~June 5, 2018~~



SECTION No. IX
~~THIRD-FOURTH~~ REVISED SHEET NO. 9.429
CANCELS ~~SECOND-THIRD~~ REVISED SHEET NO.
9.429

~~Section 16 in the event of a breach of the foregoing sentence by the Indemnified Party. Section 16 shall survive termination of this Contract.~~

~~17. Insurance~~

~~17.1 The RE/QF shall procure or cause to be procured and shall maintain throughout the entire Term of this Contract, a policy or policies of liability insurance issued by an insurer acceptable in the state of Florida on a standard "Insurance Services Office" commercial general liability and/or excess liability form or equivalent and Workers' Compensation in accordance with the statutory requirements of the state of Florida (such policy or policies, collectively, the "RE/QF Insurance"). A certificate of insurance shall be delivered to DEF at least fifteen (15) calendar days prior to the start of any interconnection work. At a minimum, the RE/QF Insurance shall contain (a) an endorsement providing coverage, including products liability/completed operations coverage for the term of this Contract, and (b) premises and operations liability, (c) a broad form contractual liability endorsement covering liabilities (i) which might arise under, or in the performance or nonperformance of, this Contract or (ii) caused by operation of the Facility or any of the RE/QF's equipment. Without limiting the foregoing, the RE/QF Insurance must be reasonably acceptable to DEF. Any premium assessment or deductible shall be for the account of the RE/QF and not DEF.~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~June 5, 2018~~



SECTION No. IX
~~FOURTH-FIFTH~~ REVISED SHEET NO. 9.430
CANCELS ~~THIRD-FOURTH~~ REVISED SHEET NO.
9.430

16.2 Payment by an Indemnified Party to a third party shall not be a condition precedent to the obligations of the Indemnifying Party under Section 16. No Indemnified Party under Section 16 shall settle any claim for which it claims indemnification hereunder without first allowing the Indemnifying Party the right to defend such a claim. The Indemnifying Party shall have no obligations under Section 16 in the event of a breach of the foregoing sentence by the Indemnified Party. Section 16 shall survive termination of this Contract.

17. Insurance

17.1 The RF/QF shall procure or cause to be procured and shall maintain throughout the entire Term of this Contract, a policy or policies of liability insurance issued by an insurer acceptable in the state of Florida on a standard "Insurance Services Office" commercial general liability and/or excess liability form or equivalent and Workers' Compensation in accordance with the statutory requirements of the state of Florida (such policy or policies, collectively, the "RF/QF Insurance"). A certificate of insurance shall be delivered to DEF at least fifteen (15) calendar days prior to the start of any interconnection work. At a minimum, the RF/QF Insurance shall contain (a) an endorsement providing coverage, including products liability/completed operations coverage for the term of this Contract, and (b) premises and operations liability, (c) a broad form contractual liability endorsement covering liabilities (i) which might arise under, or in the performance or nonperformance of, this Contract or (ii) caused by operation of the Facility or any of the RF/QF's equipment. Without limiting the foregoing, the RF/QF Insurance must be reasonably acceptable to DEF. Any premium assessment or deductible shall be for the account of the RF/QF and not DEF.

17.2 The RF/QF Insurance for liability shall have a minimum limit of five million dollars (\$5,000,000.00) per occurrence for bodily injury (including death) or property damage. This liability limit can be met by any combination of commercial general and excess liability insurance policies.

17.3 To the extent that the RF/QF Insurance is on a "claims made" basis, the retroactive date of the policy(ies) shall be the Effective Date of this Contract or an earlier date. Furthermore, to the extent the RF/QF Insurance is on a "claims made" basis, the RF/QF's duty to provide insurance coverage shall survive the termination of this Contract until the expiration of the maximum statutory period of limitations in the State of Florida for actions based in contract or in tort. To the extent the RF/QF Insurance is on an "occurrence" basis, such insurance shall be maintained in effect at all times by the RF/QF during the term of this Contract.

17.4 The RF/QF shall provide DEF with a copy of any material communication or notice related to the RF/QF Insurance within ten (10) Business Days of the RF/QF's receipt or issuance thereof.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
~~FOURTH-FIFTH~~ REVISED SHEET NO. 9.430
CANCELS ~~THIRD-FOURTH~~ REVISED SHEET NO.
9.430

~~17.5 DEF shall be designated as an additional named insured under the RF/QF Insurance (except Workers' Compensation). The RF/QF Insurance shall be primary to any coverage maintained by DEF and provide, where permitted by law, waiver of any rights of subrogation against DEF. Any deductibles or retentions shall be the sole responsibility of RF/QF. RF/QF's compliance with these provisions and the limits of insurance specified herein shall not constitute a limitation of RF/QF's liability or otherwise affect RF/QF's indemnification obligations pursuant to this Contract. Any failure to comply with all of these provisions shall not be deemed a waiver of any rights of DEF under this Contract with respect to any insurance coverage required hereunder. DEF may request the RF/QF to provide a copy of any or all of its required insurance policies, including endorsements in which DEF is included as an additional insured for any claims filed relative to this Contract.~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
~~FOURTH-FIFTH~~ REVISED SHEET NO. 9.431
CANCELS ~~THIRD-FOURTH~~ REVISED SHEET NO.
9.431

17.5 DEF shall be designated as an additional named insured under the RF/QF Insurance (except Workers' Compensation). The RF/QF Insurance shall be primary to any coverage maintained by DEF and provide, where permitted by law, waiver of any rights of subrogation against DEF. Any deductibles or retentions shall be the sole responsibility of RF/QF. RF/QF's compliance with these provisions and the limits of insurance specified herein shall not constitute a limitation of RF/QF's liability or otherwise affect RF/QF's indemnification obligations pursuant to this Contract. Any failure to comply with all of these provisions shall not be deemed a waiver of any rights of DEF under this Contractor with respect to any insurance coverage required hereunder. DEF may request the RF/QF to provide a copy of any or all of its required insurance policies, including endorsements in which DEF is included as an additional insured for any claims filed relative to this Contract.

18. Force Majeure

18.1 "Force Majeure" is defined as an event or circumstance that is not reasonably foreseeable, is beyond the reasonable control of and is not caused by the negligence or lack of due diligence of the Party claiming Force Majeure or its contractors or suppliers and adversely affects the performance by that Party of its obligations under or pursuant to this Contract. Such events or circumstances may include, but are not limited to, actions or inactions of civil or military authority (including courts and governmental or administrative agencies), acts of God, war, riot or insurrection, blockades, embargoes, sabotage, epidemics, explosions and fires not originating in the Facility or caused by its operation, hurricanes, floods, strikes, lockouts or other labor disputes or difficulties (not caused by the failure of the affected party to comply with the terms of a collective bargaining agreement). Force Majeure shall not be based on (i) the loss of DEF's markets; (ii) DEF's economic inability to use or resell the Capacity and Energy purchased hereunder; or (iii) RF/QF's ability to sell the Capacity or Energy at a price greater than the price herein. Equipment breakdown or inability to use equipment caused by its design, construction, operation, maintenance or inability to meet regulatory standards, or otherwise caused by an event originating in the control of a Party, or a Party's failure to obtain on a timely basis and maintain a necessary permit or other regulatory approval, shall not be considered an event of Force Majeure, unless such Party can reasonably demonstrate, to the reasonable satisfaction of the non-claiming Party, that the event was not reasonably foreseeable, was beyond the Party's reasonable control and was not caused by the negligence or lack of due diligence of the Party claiming Force Majeure or its agents, contractors or suppliers and adversely affects the performance by that Party of its obligations under or pursuant to this Contract.

18.2 Except as otherwise provided in this Contract, each Party shall be excused from performance when its nonperformance was caused, directly or indirectly by an event of Force Majeure.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~June 5, 2018~~



SECTION No. IX
~~FOURTH-FIFTH~~ REVISED SHEET NO. 9.431
CANCELS ~~THIRD-FOURTH~~ REVISED SHEET NO.
9.431

~~18.3 In the event of any delay or nonperformance resulting from an event of Force Majeure, the Party claiming Force Majeure shall notify the other Party in writing within five (5) Business Days of the occurrence of the event of Force Majeure, of the nature, cause, date of commencement thereof and the anticipated extent of such delay, and shall indicate whether any deadlines or date(s), imposed hereunder may be affected thereby. The suspension of performance shall be of no greater scope and of no greater duration than the cure for the Force Majeure requires. A Party claiming Force Majeure shall not be entitled to any relief therefore unless and until conforming notice is provided. The Party claiming Force Majeure shall notify the other Party of the cessation of the event of Force Majeure or of the conclusion of the affected Party's cure for the event of Force Majeure in either case within two (2) Business Days thereof.~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~June 5, 2018~~



SECTION No. IX
~~THIRD-FOURTH~~ REVISED SHEET NO. 9.432
CANCELS ~~SECOND-THIRD~~ REVISED SHEET NO.
9.432

18.3 In the event of any delay or nonperformance resulting from an event of Force Majeure, the Party claiming Force Majeure shall notify the other Party in writing within five (5) Business Days of the occurrence of the event of Force Majeure, of the nature, cause, date of commencement thereof and the anticipated extent of such delay, and shall indicate whether any deadlines or date(s), imposed hereunder may be affected thereby. The suspension of performance shall be of no greater scope and of no greater duration than the cure for the Force Majeure requires. A Party claiming Force Majeure shall not be entitled to any relief therefore unless and until conforming notice is provided. The Party claiming Force Majeure shall notify the other Party of the cessation of the event of Force Majeure or of the conclusion of the affected Party's cure for the event of Force Majeure in either case within two (2) Business Days thereof.

18.4 The Party claiming Force Majeure shall use its best efforts to cure the cause(s) preventing its performance of this Contract; provided, however, the settlement of strikes, lockouts and other labor disputes shall be entirely within the discretion of the affected Party and such Party shall not be required to settle such strikes, lockouts or other labor disputes by acceding to demands which such Party deems to be unfavorable.

18.5 If the RF/QF suffers an occurrence of an event of Force Majeure that reduces the generating capability of the Facility below the Committed Capacity, the RF/QF may, upon notice to DEF temporarily adjust the Committed Capacity as provided in Sections 18.6 and 18.7. Such adjustment shall be effective the first calendar day immediately following DEF's receipt of the notice or such later date as may be specified by the RF/QF. Furthermore, such adjustment shall be the minimum amount necessitated by the event of Force Majeure.

18.6 If the Facility is rendered completely inoperative as a result of Force Majeure, the RF/QF shall temporarily set the Committed Capacity equal to 0 kW until such time as the Facility can partially or fully operate at the Committed Capacity that existed prior to the Force Majeure. If the Committed Capacity is 0 kW, DEF shall have no obligation to make Capacity Payments hereunder.

18.7 If, at any time during the occurrence of an event of Force Majeure or during its cure, the Facility can partially or fully operate, then the RF/QF shall temporarily set the Committed Capacity at the maximum capability that the Facility can reasonably be expected to operate.

18.8 Upon the cessation of the event of Force Majeure or the conclusion of the cure for the event of Force Majeure, the Committed Capacity shall be restored to the Committed Capacity that existed immediately prior to the Force Majeure. Notwithstanding any other provisions of this Contract, upon such cessation or cure, DEF shall have right to require a Committed Capacity Test to demonstrate the Facility's compliance with the requirements of this Section 18.8. Any such Committed Capacity Test required by DEF shall be additional to any Committed Capacity Test under Section 7.3.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
~~THIRD-FOURTH~~ REVISED SHEET NO. 9.432
CANCELS ~~SECOND-THIRD~~ REVISED SHEET NO.
9.432

~~18.9 During the occurrence of an event of Force Majeure and a reduction in Committed Capacity under Section 18.5 all Monthly Capacity Payments shall reflect, pro rata, the reduction in Committed Capacity, and the Monthly Capacity Payments will continue to be calculated in accordance with the pay for performance provisions in Appendix A.~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~July 13, 2017~~



SECTION No. IX
~~SECOND-THIRD~~ REVISED SHEET NO. 9.433
CANCELS ~~FIRST-SECOND~~ REVISED SHEET NO.
9.433

18.9 During the occurrence of an event of Force Majeure and a reduction in Committed Capacity under Section 18.5 all Monthly Capacity Payments shall reflect, pro rata, the reduction in Committed Capacity, and the Monthly Capacity Payments will continue to be calculated in accordance with the pay-for-performance provisions in Appendix A.

18.10 The RF/QF agrees to be responsible for and pay the costs necessary to reactivate the Facility and/or the interconnection with DEF's system if the same is (are) rendered inoperable due to actions of the RF/QF, its agents, or Force Majeure events affecting the RF/QF, the Facility or the interconnection with DEF. DEF agrees to reactivate, at its own cost, the interconnection with the Facility in circumstances where any interruptions to such interconnections are caused by DEF or its agents.

19. Representations, Warranties, and Covenants of RF/QF

Each Party hereto represents and warrants that as of the Effective Date:

19.1 Organization, Standing and Qualification

DEF is a corporation duly organized and validly existing in good standing under the laws of Florida and has all necessary power and authority to carry on its business as presently conducted to own or hold under lease its properties and to enter into and perform its obligations under this Contract and all other related documents and agreements to which it is or shall be a Party. The RF/QF is a _____ (corporation, partnership, or other, as applicable) duly organized and validly existing in good standing under the laws of _____ and has all necessary power and authority to carry on its business as presently conducted to own or hold under lease its properties and to enter into and perform its obligations under this Contract and all other related documents and agreements to which it is or shall be a Party. Each Party is duly qualified or licensed to do business in the State of Florida and in all other jurisdictions wherein the nature of its business and operations or the character of the properties owned or leased by it makes such qualification or licensing necessary and where the failure to be so qualified or licensed would impair its ability to perform its obligations under this Contract or would result in a material liability to or would have a material adverse effect on the other Party.

~~19.2 Due Authorization, No Approvals, No Defaults~~

~~Each of the execution, delivery and performance by each Party of this Contract has been duly authorized by all necessary action on the part of such Party, does not require any approval, except as has been heretofore obtained, of the shareholders DEF or of the _____ (shareholders, partners, or others, as applicable) of the RF/QF or any consent of or approval from any trustee, lessor or holder of any indebtedness or other obligation of such Party, except for such as have been duly obtained, and does not contravene or constitute a default under any law, the articles of incorporation of DEF or the _____ (articles of~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~April 20, 2013~~



SECTION No. IX
~~SECOND-THIRD~~ REVISED SHEET NO. 9.433
CANCELS ~~FIRST-SECOND~~ REVISED SHEET NO.
9.433

~~incorporation, bylaws, or other as applicable) of such Party, or any agreement,
judgment, injunction, order, decree or other instrument binding upon such Party,
or subject the Facility or any component part thereof to any lien other than as
contemplated or permitted by this Contract.~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: April 20, 2013



SECTION No. IX
~~SECOND-THIRD~~ REVISED SHEET NO. 9.434
CANCELS ~~FIRST-SECOND~~ REVISED SHEET NO.
9.434

19.2 Due Authorization, No Approvals, No Defaults

Each of the execution, delivery and performance by each Party of this Contract has been duly authorized by all necessary action on the part of such Party, does not require any approval, except as has been heretofore obtained, of the shareholders DEF or of the (shareholders, partners, or others, as applicable) of the RF/QF or any consent of or approval from any trustee, lessor or holder of any indebtedness or other obligation of such Party, except for such as have been duly obtained, and does not contravene or constitute a default under any law, the articles of incorporation of DEF or the (articles of incorporation, bylaws, or other as applicable) of such Party, or any agreement, judgment, injunction, order, decree or other instrument binding upon such Party, or subject the Facility or any component part thereof to any lien other than as contemplated or permitted by this Contract.

19.3 Compliance with Laws

Each party has knowledge of all laws and business practices that must be followed in performing its obligations under this Contract. Each party also is in compliance with all laws, except to the extent that failure to comply therewith would not, in the aggregate, have a material adverse effect on the other Party.

19.4 Governmental Approvals

Except as expressly contemplated herein, neither the execution and delivery by each Party of this Contract, nor the consummation by each Party of any of the transaction contemplated thereby, requires the consent or approval of, the giving of notice to, the registration with, the recording or filing of any document with, or the taking of any other action with respect to governmental authority, except with respect to permits (a) which have already been obtained and are in full force and effect or (b) are not yet required (and with respect to which the RF/QF has no reason to believe that the same will not be readily obtainable in the ordinary course of business upon due application therefore).

19.5 No Suits, Proceedings

There are no actions, suits, proceedings or investigations pending or, to the knowledge of each Party, threatened against it at law or in equity before any court or tribunal of the United States or any other jurisdiction which individually or in the aggregate could result in any materially adverse effect on each Party's business, properties, or assets or its condition, financial or otherwise, or in any impairment of its ability to perform its obligations under this Contract. Each Party has no knowledge of a violation or default with respect to any law which could result in any such materially adverse effect or impairment.

19.6 Environmental Matters

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: April 20, 2013



SECTION No. IX
~~SECOND-THIRD~~ REVISED SHEET NO. 9.434
CANCELS ~~FIRST-SECOND~~ REVISED SHEET NO.
9.434

~~To the best of its knowledge after diligent inquiry, each Party knows of no (a) existing violations of any environmental laws at the Facility, including those governing hazardous materials or (b) pending, ongoing, or unresolved administrative or enforcement investigations, compliance orders, claims, demands, actions, or other litigation brought by governmental authorities or other third parties alleging violations of any environmental law or permit which would materially and adversely affect the operation of the Facility as contemplated by this Contract.~~

ISSUED BY: Javier Portuondo, ~~Managing~~ Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~April 20, 2013~~



SECTION No. IX
~~FOURTH-FIFTH~~ REVISED SHEET NO. 9.435
CANCELS ~~THIRD-FOURTH~~ REVISED SHEET NO.
9.435

19.6 Environmental Matters

To the best of its knowledge after diligent inquiry, each Party knows of no (a) existing violations of any environmental laws at the Facility, including those governing hazardous materials or (b) pending, ongoing, or unresolved administrative or enforcement investigations, compliance orders, claims, demands, actions, or other litigation brought by governmental authorities or other third parties alleging violations of any environmental law or permit which would materially and adversely affect the operation of the Facility as contemplated by this Contract.

20. General Provisions

20.1 Project Viability

To assist DEF in assessing the RF/QF's financial and technical viability, the RF/QF shall provide the information and documents requested in Appendix C or substantially similar documents, to the extent the documents apply to the type of Facility covered by this Contract and to the extent the documents are available. All documents to be considered by DEF must be submitted at the time this Contract is presented to DEF. Failure to provide the following such documents may result in a determination of non-viability by DEF.

20.2 Permits

The RF/QF hereby agrees to obtain and maintain any and all permits, certifications, licenses, consents or approvals of any governmental authority which the RF/QF is required to obtain as a prerequisite to engaging in the activities specified in this Contract.

20.3 Project Management

If requested by DEF, the RF/QF shall submit to DEF its integrated project schedule for DEF's review within sixty (60) calendar days from the execution of this Contract, and a start-up and test schedule for the Facility at least sixty (60) calendar days prior to start-up and testing of the Facility. These schedules shall identify key licensing, permitting, construction and operating milestone dates and activities. The RF/QF shall submit monthly progress reports in a form satisfactory to DEF within fifteen (15) calendar days after the close of each month from the first month following the Effective Date until the Capacity Delivery Date. The RF/QF shall notify DEF of any changes in such schedules within ten (10) calendar days after such changes are determined. If for any reason, DEF has reason to believe that RF/QF may fail to achieve the Capacity Delivery Date, then, upon DEF's request, RF/QF shall submit to DEF, within ten (10) business days of such request, a remedial action plan ("Remedial Action Plan") that sets forth a detailed description of RF/QF's proposed course of action to promptly achieve the Capacity Delivery Date. Delivery of a Remedial Action Plan does not

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
~~FOURTH-FIFTH~~ REVISED SHEET NO. 9.435
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9.435

~~relieve RE/QF of its obligation to the Capacity Delivery Date. DEF shall have the right to monitor the construction, start up and testing of the Facility, either on site or off site. DEF's technical review and inspections of the Facility and resulting requests, if any, shall not be construed as endorsing the design thereof or as any warranty as to the safety, durability or reliability of the Facility.~~

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~July 13, 2017~~



SECTION No. IX
~~FOURTH-FIFTH~~ REVISED SHEET NO. 9.436
CANCELS ~~THIRD-FOURTH~~ REVISED SHEET NO.
9.436

relieve RF/QF of its obligation to the Capacity Delivery Date. DEF shall have the right to monitor the construction, start-up and testing of the Facility, either on-site or off-site. DEF's technical review and inspections of the Facility and resulting requests, if any, shall not be construed as endorsing the design thereof or as any warranty as to the safety, durability or reliability of the Facility.

The RF/QF shall provide DEF with the final designer's/manufacture's generator capability curves, protective relay types, proposed protective relay settings, main one-line diagrams, protective relay functional diagrams, and alternating current and direct elementary diagrams for review and inspection at DEF no later than one hundred eighty (180) calendar days prior to the initial synchronization date.

20.4 Assignment

Either Party may not assign this Contract, without the other Party's prior written approval, which approval may not be unreasonably withheld or delayed.

The RF/QF shall be responsible for DEF's reasonable costs and expenses associated with the review, negotiation, execution and delivery of any such documents or information pursuant to such collateral assignment, including reasonable attorney's fees.

20.5 Disclaimer

In executing this Contract, DEF does not, nor should it be construed, to extend its credit or financial support for benefit of any third parties lending money to or having other transactions with the RF/QF or any assigns of this Contract.

20.6 Notification

All formal notices relating to this Contract shall be deemed duly given when delivered in person, or sent by registered or certified mail, trackable private delivery service, or sent by fax if followed immediately with a copy sent by registered or certified mail or trackable private delivery service, to the individuals designated below. The Parties designate the following individuals to be notified or to whom payment shall be sent until such time as either Party furnishes the other Party written instructions to contact another individual:

For the RF/QF:

For DEF:

Duke Energy Florida, LLC
Director of QF Contracts DEF 155
299 First Avenue North
St. Petersburg, FL 33701

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~June 5, 2018~~



SECTION No. IX
THIRD REVISED SHEET NO. 9.437
CANCELS SECOND REVISED SHEET NO. 9.437

Contracts and related documents may be mailed to the address below or delivered during normal business hours (8:00 a.m. to 4:45 p.m.) to the visitors' entrance at the address below:

Duke Energy Florida, LLC
d/b/a Duke Energy
299 First Avenue North
St. Petersburg, FL 33701

Attention: Director of QF Contracts DEF 155

20.7 Applicable Law

This Contract shall be construed in accordance with and governed by the laws of the State of Florida, and the rights of the parties shall be construed in accordance with the laws of the State of Florida.

20.8 Taxation

The RF/QF shall hold DEF and its general body of ratepayers harmless from the effects of any additional taxes, assessments or other impositions that arise as a result of the purchase of energy and capacity from the RF/QF in lieu of other energy and capacity. Any savings in regards to taxes or assessments shall be included in the avoided cost payments made to the RF/QF to the extent permitted by law. In the event DEF becomes liable for additional taxes, assessments or impositions arising out of its transactions with the RF/QF under this tariff schedule or any related interconnection agreement or due to changes in laws affecting DEF's purchases of energy and capacity from the RF/QF occurring after the execution of an agreement under this tariff schedule and for which DEF would not have been liable if it had produced the energy and/or constructed facilities sufficient to provide the capacity contemplated under such agreement itself, DEF may bill the RF/QF monthly for such additional expenses or may offset them against amounts due to the RF/QF from DEF. Any savings in taxes, assessments or impositions that accrue to DEF as a result of its purchase of energy and capacity under this tariff schedule that are not already reflected in the avoided energy or avoided capacity payments made to the RF/QF hereunder, shall be passed on to the RF/QF to the extent permitted by law without consequential penalty or loss of such benefit to DEF.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: June 5, 2018



SECTION No. IX
THIRD REVISED SHEET NO. 9.438
CANCELS SECOND REVISED SHEET NO. 9.438

20.9 Resolution of Disputes

20.9.1 Notice of Dispute

In the event that any dispute, controversy or claim arising out of or relating to this Contract or the breach, termination or validity thereof should arise between the Parties (a "Dispute"), the Party may declare a Dispute by delivering to the other Party a written notice identifying the disputed issue.

20.9.2 Resolution by Parties

Upon receipt of a written notice claiming a Dispute, executives of both Parties shall meet at a mutually agreeable time and place within ten (10) business days after delivery of such notice and thereafter as often as they reasonably deem necessary, to exchange relevant information and to attempt to resolve the Dispute. In such meetings and exchanges, a Party shall have the right to designate as confidential any information that such Party offers. No confidential information exchanged in such meetings for the purpose of resolving a Dispute may be used by a Party in litigation against the other Party. If the matter has not been resolved within thirty (30) calendar days of the disputing Party's notice having been issued, or if the Parties fail to meet within ten (10) business days as required above, either Party may initiate binding arbitration in St. Petersburg, Florida, conducted in accordance with the then current American Arbitration Association's ("AAA") Large, Complex Commercial Rules or other mutually agreed upon procedures.

20.10 Limitation of Liability

IN NO EVENT SHALL DEF, ITS PARENT CORPORATION, OFFICERS, DIRECTORS, EMPLOYEES, AND AGENTS BE LIABLE FOR ANY INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL, EXEMPLARY, PUNITIVE, OR MULTIPLE DAMAGES RESULTING FROM ANY CLAIM OR CAUSE OF ACTION, WHETHER BROUGHT IN CONTRACT, TORT (INCLUDING, BUT NOT LIMITED TO, NEGLIGENCE OR STRICT LIABILITY), OR ANY OTHER LEGAL THEORY.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
THIRD REVISED SHEET NO. 9.439
CANCELS SECOND REVISED SHEET NO. 9.439

20.11 Severability

If any part of this Contract, for any reason, is declared invalid or unenforceable by a public authority of appropriate jurisdiction, then such decision shall not affect the validity of the remainder of the Contract, which remainder shall remain in force and effect as if this Contract had been executed without the invalid or unenforceable portion.

20.12 Complete Agreement and Amendments

All previous communications or agreements between the Parties, whether verbal or written, with reference to the subject matter of this Contract are hereby abrogated. No amendment or modification to this Contract shall be binding unless it shall be set forth in writing and duly executed by both Parties. This Contract constitutes the entire agreement between the Parties.

20.13 Survival of Contract

Subject to the requirements of Section 20.4, this Contract, as it may be amended from time to time, shall be binding upon, and inure to the benefit of, the Parties' respective successors-in-interest and legal representatives.

20.14 Record Retention

Each Party shall maintain for a period of five (5) years from the date of termination hereof all records relating to the performance of its obligations hereunder.

20.15 No Waiver

No waiver of any of the terms and conditions of this Contract shall be effective unless in writing and signed by the Party against whom such waiver is sought to be enforced. Any waiver of the terms hereof shall be effective only in the specific instance and for the specific purpose given. The failure of a Party to insist, in any instance, on the strict performance of any of the terms and conditions hereof shall not be construed as a waiver of such Party's right in the future to insist on such strict performance.

20.16 Set-Off

DEF may at any time, but shall be under no obligation to, set off or recoup any and all sums due from the RF/QF against sums due to the RF/QF hereunder without undergoing any legal process.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
FIFTH REVISED SHEET NO. 9.440
CANCELS FOURTH REVISED SHEET NO. 9.440

20.17 Change in Environmental Law or Other Regulatory Requirements

- (a) As used herein, "Change(s) in Environmental Law or Other Regulatory Requirements" means the enactment, adoption, promulgation, implementation, or issuance of, or a new or changed interpretation of, any statute, rule, regulation, permit, license, judgment, order or approval by a governmental entity that specifically addresses environmental or regulatory issues and that takes effect after the Effective Date.
- (b) The Parties acknowledge that Change(s) in Environmental Law or Other Regulatory Requirements could significantly affect the cost of the Avoided Unit ("Avoided Unit Cost Changes") and agree that, if any such change(s) should affect the cost of the Avoided Unit more than the Threshold defined in Section 20.17(c) below, the Party affected by such change(s) may avail itself of the remedy set forth in Section 20.17(d) below as its sole and exclusive remedy.
- (c) The Parties recognize and agree that certain Change(s) in Environmental Law or Other Regulatory Requirements may occur that do not rise to a level that the Parties desire to impact this Contract. Accordingly, the Parties agree that for the purposes of this Contract, such change(s) will not be deemed to have occurred unless the change in Avoided Cost resulting from such change(s) exceed a mutually agreed upon amount. This mutually agreed upon amount is attached to this Contract in Appendix E.
- (d) If an Avoided Unit Cost Change meets the threshold set forth in Section 20.17(c) above, the affected Party may request the avoided cost payments under this Contract be recalculated and that the avoided cost payments for the remaining term of the Contract be adjusted based on the recalculation, subject to the approval of the FPSC. Any dispute regarding the application of this Section 20.17 shall be resolved in accordance with Section 20.9.

20.18 Provision of Information.

Within a reasonable period of time after receiving a written request therefore from the requesting Party, the other Party hereto shall provide the requesting Party with information that is reasonable and related to the non-requesting Party and/or the facilities or operations of the non-requesting Party that the requesting Party reasonably requires in order to comply with a Requirement of Law or any requirement of Generally Accepted Accounting Principles promulgated by the Financial Accounting Standards Board (or any successor thereto), (including, but not limited to, FIN 46-R) applicable to the requesting Party. In the event that a party requires information or reports that are not within its possession to meet financial reporting requirements, the parties will work in good faith to enable the requesting party to meet its financial reporting requirements.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
THIRD REVISED SHEET NO. 9.441
CANCELS SECOND REVISED SHEET NO. 9.441

IN WITNESS WHEREOF, the RF/QF has executed this Contract on the date set forth below.

RF/QF

Signature

Print Name

Title

Date

IN WITNESS WHEREOF, DEF has acknowledged receipt of this executed Contract.

DUKE ENERGY FLORIDA, LLC.

Signature

Print Name

Title

Date

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
EIGHTH REVISED SHEET NO. 9.442
CANCELS SEVENTH REVISED SHEET NO. 9.442

APPENDIX A

**TO
DUKE ENERGY FLORIDA, LLC
RENEWABLE OR QUALIFYING FACILITY LESS THAN 100 KW
STANDARD OFFER CONTRACT**

MONTHLY CAPACITY PAYMENT CALCULATION

Capitalized terms not otherwise defined herein have the meaning ascribed to them in the Standard Offer Contract for the Purchase of Firm Capacity and Energy from a Renewable Energy Producer or a Qualifying Facility less than 100 kW.

- A. In the event that the ACBF is less than or equal to 75%, then no Monthly Capacity Payment shall be due. That is:

$$MCP = 0$$

- B. In the event that the ACBF is greater than 75% but less than 95%, then the Monthly Capacity Payment shall be calculated by using the following formula:

$$MCP = BCP \times [1 - [5 \times (.95 - ACBF)] \times CC$$

- C. In the event that the ACBF is equal to or greater than 95%, then the Monthly Capacity Payment shall be calculated by using the following formula:

$$MCP = BCP \times CC$$

Where:

MCP = Monthly Capacity Payment in dollars.

BCP = Base Capacity Payment in \$/kW/Month as specified in Appendix D or E.

CC = Committed Capacity in kW.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: June 5, 2018



SECTION No. IX
SECOND REVISED SHEET NO. 9.443
CANCELS FIRST REVISED SHEET NO. 9.443

- ACBF = Annual Capacity Billing Factor. The ACBF shall be the electric energy actually received by DEF for the 12 consecutive months preceding the date of calculation excluding any energy received during an event of Force Majeure in which the Committed Capacity is temporarily set equal to 0 kW, divided by the product of the Committed Capacity and the number of hours in the 12 consecutive months preceding the date of calculation excluding the hours during an event of Force Majeure in which the Committed Capacity is temporarily set equal to 0 kW. If an event of Force Majeure occurs during the 12 consecutive months preceding the date of calculation in which the Committed Capacity is temporarily set to a value greater than 0 kW then the 12 month rolling average will be pro-rated accordingly. During the first 12 consecutive Monthly Billing Periods commencing with the first Monthly Billing Period in which Capacity Payments are to be made, the calculation of 12-month rolling average ACBF shall be performed as follows (a) during the first Monthly Billing Period, the ACBF shall be equal to the Monthly Availability Factor; (b) thereafter, the calculation of the ACBF shall be computed by summing the electric energy actually received by DEF for the number of full consecutive months preceding the date of calculation excluding any energy received during an event of Force Majeure in which the Committed Capacity is temporarily set equal to 0 kW, divided by the product of the Committed Capacity and the number of hours in the number of full consecutive months preceding the date of calculation excluding the hours during an event of Force Majeure in which the Committed Capacity is temporarily set equal to 0 kW. If an event of Force Majeure occurs during the months preceding the date of calculation in which the Committed Capacity is temporarily set to a value greater than 0 kW then the 12 month rolling average will be pro-rated accordingly. This calculation shall be performed at the end of each Monthly Billing Period until enough Monthly Billing Periods have elapsed to calculate a true 12-month rolling average ACBF.
- MAF = Monthly Availability Factor. The total energy received during the Monthly Billing Period for which the calculation is made, divided by the product of Committed Capacity times the total hours during the Monthly Billing Period.
- Monthly Billing Period = The period beginning on the first calendar day of each calendar month, except that the initial Monthly Billing Period shall consist of the period beginning 12:01 a.m., on the Capacity Delivery Date and ending with the last calendar day of such month.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: April 29, 2013



SECTION No. IX
FOURTH REVISED SHEET 9.444
CANCELS THIRD REVISED SHEET NO. 9.444

**APPENDIX B
TO
DUKE ENERGY FLORIDA, LLC
RENEWABLE OR QUALIFYING FACILITY LESS THAN 100 KW
STANDARD OFFER CONTRACT**

TERMINATION FEE

Capitalized terms not otherwise defined herein have the meaning ascribed to them in the Standard Offer Contract for the Purchase of Firm Capacity and Energy from a Renewable Energy Producer or a Qualifying Facility less than 100 kW.

The “Termination Fee” shall be the sum of the values for each month beginning with the month in which the Capacity Delivery Date occurs through the month of the Termination Date (or month of calculation, as the case may be) computed according to the following formula:

$$\sum_{i=1}^n (MCP_i - MCPC_i) \cdot (1+r)^{(n-i)}$$

with: MCPC = 0 for all periods prior to the in-service date of the Avoided Unit:

where

- i = number of Monthly Billing Periods commencing with the Capacity Delivery Date (i.e., the month in which Capacity Delivery Date occurs = 1; the month following this month in which Capacity Delivery Date occurs = 2 etc.)
- n = the number of Monthly Billing Periods which have elapsed from the month in which the Capacity Delivery Date occurs through the month of termination (or month of calculation, as the case may be)
- r = DEF's incremental after-tax avoided cost of capital (defined as r in Appendix D).
- MCP_i = Monthly Capacity Payment paid to RF/QFQF corresponding to the Monthly Billing Period i , calculated in accordance with Appendix A.
- $MCPC_i$ = Monthly Capacity Payment for Option A corresponding to the Monthly Billing Period i , calculated in accordance with this Contract.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: June 5, 2018



SECTION No. IX
SIXTH REVISED SHEET NO. 9.445
CANCELS FIFTH REVISED SHEET NO. 9.445

In the event that for any Monthly Billing Period, the computation of the value of the Termination Fee for such Monthly Billing Period (as set forth above) yields a value less than zero, the amount of the Termination Fee shall be decreased by the amount of such value expressed as a positive number (the "Initial Reduction Value"); provided, however, that such Initial Reduction Value shall be subject to the following adjustments (the Initial Reduction Value, as adjusted, the "Reduction Value"):

- a. In the event that in the applicable Monthly Billing Period the Annual Capacity Billing Factor, as defined in Appendix A is less than or equal to 75%, then the Initial Reduction Value shall be adjusted to equal zero (Reduction Value = 0), and the Termination Fee shall not be reduced for the applicable Monthly Billing Period.
- b. In the event that in the applicable Monthly Billing Period the Annual Capacity Billing Factor, as defined in Appendix A, is greater than 75% but less than 95%, then the Reduction Value shall be determined as follows:

$$\text{Reduction Value} = \text{Initial Reduction Value} \times [5 \times (\text{ACBF} - .95)]$$

For the applicable Monthly Billing period, the Termination Fee shall be reduced by the amount of such Reduction Value.

- c. In the event that in the applicable Monthly Billing Period the Annual Capacity Billing Factor, as defined in Appendix A, is equal to or greater than 95%, then the Initial Reduction Value shall not be adjusted (Reduction Value = Initial Reduction Value), and the Termination Fee shall be reduced for the applicable Monthly Billing period by the amount of the Initial Reduction Value.

In no event shall DEF be liable to the RF/QF at any time for any amount by which the Termination Fee, adjusted in accordance with the foregoing, is less than zero (0).

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: June 9, 2016



SECTION No. IX
SECOND REVISED SHEET NO. 9.446
CANCELS FIRST SHEET NO. 9.446

**APPENDIX C
TO
DUKE ENERGY FLORIDA, LLC
RENEWABLE OR QUALIFYING FACILITY LESS THAN 100 KW
STANDARD OFFER CONTRACT**

DETAILED PROJECT INFORMATION

Capitalized terms not otherwise defined herein have the meaning ascribed to them in the Standard Offer Contract for the Purchase of Firm Capacity and Energy from a Renewable Energy Producer or a Qualifying Facility less than 100 kW.

Each eligible Contract received by DEF will be evaluated to determine if the underlying RF/QF project is financially and technically viable. The RF/QF shall, to the extent available, provide DEF with a detailed project proposal which addresses the information requested below:

I. FACILITY DESCRIPTION

- Project Name
- Project Location
- * Street Address
- * Size Plot Plan
- * Legal Description of Site
- Generating Technology
- Primary Fuel
- Alternate Fuel (if applicable)
- Committed Capacity
- Expected In-Service Date
- Contact Person
- * Individual's Name and Title
- * Company Name
- * Address
- * Telephone Number
- * Fax Number

II. PROJECT PARTICIPANTS

- Indicate the entities responsible for the following project management activities and provide a detailed description of the experience and capabilities of the entities:

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: June 5, 2018



SECTION No. IX
FIRST REVISED SHEET NO. 9.447
CANCELS ORIGINAL SHEET NO. 9.447

- * Project Development
 - * Siting and Licensing the Facility
 - * Designing the Facility
 - * Constructing the Facility
 - * Securing the Fuel Supply
 - * Operating the Facility
- Provide details on all electrical facilities which are currently under construction or operational which were developed by the RF/QF.
 - Describe the financing structure for the projects identified above, including the type of financing used, the permanent financing term, the major lenders and the percentage of equity invested at Financial Closing.

III. FUEL SUPPLY

- Describe all fuels to be used to generate electricity at the Facility. Indicate the specific physical and chemical characteristics of each fuel type (*e.g.* Btu content, sulfur content, ash content, etc.). Identify special considerations regarding fuel supply origin, source and handling, storage and processing requirements.
- Provide AFR necessary to support planned levels of generation and list the assumptions used to determine these quantities.
- Provide a summary of the status of the fuel supply arrangements in place to meet the AFR, in each year of the proposed operating life of the Facility. Use the categories below to describe the current arrangement for securing the AFR.

<u>Category</u>	<u>Description of Fuel Supply Arrangement</u>
owned =	fuel is from a fully developed source owned by one or more of the project participants
contract =	fully executed firm fuel contract exists between the developer(s) and fuel supplier(s)
LOI =	a letter of intent for fuel supply exists between developer(s) and fuel supplier(s)
SPP =	small power production facility will burn biomass, waste, or another renewable resource
spot =	fuel supply will be purchased on the spot market
none =	no firm fuel supply arrangement currently in place
other =	fuel supply arrangement which does not fit any of the above categories (please describe)

- Indicate the percentage of the Facility's AFR which is covered by the above fuel supply arrangement(s) for each proposed operating year. The percent of AFR covered for each operating year must total 100%. For fuel supply arrangements identified as owned, contract, or LOI, provide documentation to support this category and explain the fuel price mechanism of the arrangement. In addition, indicate whether or not the fuel price includes delivery and, if so, to what location.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: April 29, 2013



SECTION No. IX
FIRST REVISED SHEET NO. 9.448
CANCELS ORIGINAL SHEET NO. 9.448

- Describe fuel transportation networks available for delivering all primary and secondary fuel to the Facility site. Indicate the mode, route and distance of each segment of the journey, from fuel source to the Facility site. Discuss the current status and pertinent factors impacting future availability of the transportation network.
- Provide AFTR necessary to support planned levels of generation and list the assumptions used to determine these quantities.
- Provide a summary of the status of the fuel transportation arrangements in place to meet the AFTR in each year of the proposed operating life of the Facility. Use the categories below to describe the current arrangement for securing the AFTR.
 - owned = fuel transport via a fully developed system owned by one or more of the project participants
 - contract = fully executed firm transportation contract exists between the developer(s) and fuel transporter(s)
 - LOI = a letter of intent for fuel transport exists between developer(s) and fuel transporter(s)
 - spot = fuel transportation will be purchased on the spot market
 - none = no firm fuel transportation arrangement currently in place
 - other = fuel transportation arrangement which does not fit any of the above categories (please describe)
- Provide the maximum, minimum and average fuel inventory levels to be maintained for primary and secondary fuels at the Facility site. List the assumptions used in determining the inventory levels.
- Provide information regarding RF/QF's plans to maintain sufficient on site fuel to deliver capacity and energy for an uninterrupted seventy-two (72) hour period.

IV. PLANT DISPATCHABILITY/CONTROLLABILITY

- Provide the following operating characteristics and a detailed explanation supporting the performance capabilities indicated:
 - * Ramp Rate (MW/minute)
 - * Peak Capability (% above Committed Capacity)
 - * Minimum power level (% of Committed Capacity)
 - * Facility Turnaround Time, Hot to Hot (hours)
 - * Start-up Time from Cold Shutdown (hours)
 - * Unit Cycling (# cycles/yr.)
 - * MW and MVAR Control (ACC, Manual, Other (please explain))

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: April 29, 2013



SECTION No. IX
FIRST REVISED SHEET NO. 9.449
CANCELS ORIGINAL SHEET NO. 9.449

V. SITING AND LICENSING

- Provide a licensing/permitting milestone schedule, which lists all permits, licenses and variances, required to site the Facility. The milestone schedule shall also identify key milestone dates for baseline monitoring, application preparation, agency review, certification and licensing/siting board approval, and agency permit issuance.
- Provide a licensing/permitting plan that addresses the issues of air emission, water use, wastewater discharge, wetlands, endangered species, protected properties, surrounding land use, zoning for the Facility, associated linear facilities and support of and opposition to the Facility.
- List the emission/effluent discharge limits the Facility will meet and describe in detail the pollution control equipment to be used to meet these limits.

VI. FACILITY DEVELOPMENT AND PERFORMANCE

- Submit a detailed engineering, procurement, construction, startup and commercial operation schedule. The schedule shall include milestones for site acquisition, engineering phases, selection of the major equipment vendors, architect engineer, and Facility operator, steam host integration and delivery of major equipment. A discussion of the current status of each milestone should also be included where applicable.
- Attach a diagram of the power block arrangement. Provide a list of the major equipment vendors and the name and model number of the major equipment to be installed.
- Provide a detailed description of the proposed environmental control technology for the Facility and describe the capabilities of the proposed technology.
- Attach preliminary flow diagrams for the steam system, water system, and fuel system, and a main electrical one line diagram for the Facility.
- State the expected heat rate (HHV) at 75 degrees Fahrenheit for loads of 100%, 75% and 50%. In addition, attach a preliminary heat balance for the Facility.

VII. FINANCIAL

- Provide DEF with assurances that the proposed RF/QF project is financially viable in accordance with FPSC Rule 25-17.0832(4)(c) by attaching a detailed pro-forma cash flow analysis. The pro-forma must include, at a minimum, the following assumptions for each year of the project.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: April 29, 2013



SECTION No. IX
FIRST REVISED SHEET NO. 9.450
CANCELS ORIGINAL SHEET NO. 9.450

- Annual Project Revenues

- * Capacity Payments (\$ and \$/kW/Mo.)
- * Variable O&M (\$ and \$/MWh)
- * Energy (\$ and \$/MWh)
- * Tipping Fees (\$ and \$/ton)
- * Interest Income
- * Other Revenues
- * Variable O&M Escalation (%/yr.)
- * Energy Escalation (%/yr.)
- * Tipping Fee Escalation (%/yr.)

- Annual Project Expense

- * Fixed O&M (\$ and \$/kW/Mo.)
- * Variable O&M (\$ and \$/MWh)
- * Energy (\$ and \$/MWh)
- * Property Taxes (\$)
- * Insurance (\$)
- * Emission Compliance (\$ and \$/MWh)
- * Depreciation (\$ and %/yr.)
- * Other Expenses (\$)
- * Fixed O&M Escalation (%/yr.)
- * Variable O&M Escalation (%/yr.)
- * Energy Escalation (%/yr.)

- Other Project Information

- * Installed Cost of the Facility (\$ and \$/kW)
- * Committed Capacity (kW)
- * Average Heat Rate - HHV (MBTU/kWh)
- * Federal Income Tax Rate (%)
- * Facility Capacity Factor (%)
- * Energy Sold to DEF (MWh)

- Permanent Financing

- * Permanent Financing Term (yr.)
- * Project Capital Structure (percentage of long-term debt, subordinated debt, tax exempt debt and equity)
- * Financing Costs (cost of long-term debt, subordinated debt, tax exempt debt and equity)
- * Annual Interest Expense
- * Annual Debt Service (\$)
- * Amortization Schedule (beginning balance, interest expense, principal reduction, ending balance)

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: April 29, 2013



SECTION No. IX
FIRST REVISED SHEET NO. 9.451
CANCELS ORIGINAL SHEET NO. 9.451

- Provide details of the financing plan for the project and indicate whether the project will be non-recourse project financed. If it will not be project financed please explain the alternative financing arrangement.
- Submit financial statements for the last two years on the principals of the project, and provide an illustration of the project ownership structure.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: April 29, 2013



SECTION No. IX
SECOND REVISED SHEET NO. 9.452
CANCELS FIRST SHEET NO. 9.452

APPENDIX D

TO DUKE ENERGY FLORIDA, LLC RENEWABLE OR QUALIFYING FACILITY LESS THAN 100 KW STANDARD OFFER CONTRACT

RATE SCHEDULE COG-2

Capitalized terms not otherwise defined herein have the meaning ascribed to them in the Standard Offer Contract for the Purchase of Firm Capacity and Energy from a Renewable Energy Producer or a Qualifying Facility less than 100 kW.

SCHEDULE

COG-2, Firm Capacity and Energy from a Renewable Facility ("RF/QF") or a Qualifying Facility less than 100 kW ("QF")

AVAILABLE

DEF will, under the provisions of this schedule and the Contract to which this Appendix is attached and incorporated into by reference, purchase firm capacity and energy offered by a RF/QF as defined in the contract. DEF's obligation to contract to purchase firm capacity from such RF/QF by means of this schedule and the Contract will continue no later than the Expiration Date.

APPLICABLE

To RF/QFs as defined in the Contract producing capacity and energy for sale to DEF on a firm basis pursuant to the terms and conditions of this schedule and the Contract. "Firm Capacity and Energy" are described by FPSC Rule 25-17.0832, F.A.C., and are capacity and energy produced and sold by a RF/QF pursuant to the Contract provisions addressing (among other things) quantity, time and reliability of delivery.

CHARACTER OF SERVICE

Purchases within the territory served by DEF shall be, at the option of DEF, single or three phase, 60-hertz alternating current at any available standard DEF voltage. Purchases from outside the territory served by DEF shall be three phase, 60-hertz alternating current at the voltage level available at the interchange point between DEF and the entry delivering the Firm Capacity and Energy from the RF/QF.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: June 5, 2018



SECTION No. IX
FIRST REVISED SHEET NO. 9.453
CANCELS ORIGINAL SHEET NO, 9.453

LIMITATION

Purchases under this schedule are subject to FPSC Rules 25-17.080 through 25-17.310, F.A.C., and are limited to those RF/QFs which:

- A. Are defined in the Contract;
- B. Execute a Contract;

RATES FOR PURCHASES BY DEF

Firm Capacity and Energy are purchased at unit cost, in dollars per kilowatt per month and cents per kilowatt-hour, respectively, based on the value of deferring additional capacity required by DEF. For the purpose of this schedule, an Avoided Unit has been designated by DEF. DEF's next Avoided Unit has been identified in Section 4 of the Contract. Schedule 1 to this Appendix describes the methodology used to calculate payment schedules, general terms, and conditions applicable to the Contract filed and approved pursuant to FPSC Rules 25-17.080 through 25-17.310, F.A.C.

A. Firm Capacity Rates

Four options, A through D, as set forth below, are available for payments of firm capacity that is produced by a RF/QF and delivered to DEF. Once selected, an option shall remain in effect for the term of the Contract. Exemplary payment schedules, shown below, contain the monthly rate per kilowatt of firm Capacity which the RF/QF has contractually committed to deliver to DEF and are based on a contract term which extends through the Termination Date in Section 4 of the Contract. Payment schedules for other contract terms will be made available to any RF/QF upon request and may be calculated based on the methodologies described in Schedule 1. The currently approved parameters used to calculate the following schedule of payments are found in Schedule 2 to this Appendix.

Option A - Fixed Value of Deferral Payments - Normal Capacity

Payment schedules under this option are based on the value of a year-by-year deferral of DEF's Avoided Unit with an in-service date as of the Avoided Unit In-Service Date in Section 4 of the Contract, calculated in accordance with FPSC Rule 25-17.0832, F.A.C., as described in Schedule 1. Once this option is selected, the current schedule of payments shall remain fixed and in effect throughout the term of the Contract. The payment schedule for this option follows in Table 3.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: April 29, 2013



SECTION No. IX
FIRST REVISED SHEET NO. 9.454
CANCELS ORIGINAL SHEET NO. 9.454

Option B - Fixed Value of Deferral Payments - Early Capacity

Payment schedules under this option are based upon the early capital cost component of the value of a year-by-year deferral of the Avoided Unit. The term "early" with respect to Option B means that these payments can start prior to the anticipated in-service date of the Avoided Unit; provided, however, that under no circumstances may payments begin before this RF/QF is delivering Firm Capacity and Energy to DEF pursuant to the terms of the Contract. When this option is selected, the Capacity Payments shall be made monthly commencing no earlier than the Capacity Delivery Date of the RF/QF and calculated as shown on Schedule 1. Capacity Payments under Option B do not result in a prepayment or create a future benefit.

The RF/QF shall select the month and year in which the deliveries of firm capacity and energy to DEF are to commence and Capacity Payments are to start. DEF will provide the RF/QF with a schedule of capacity payment rates based on the month and year in which the deliveries of firm capacity and energy are to commence and the term of the Contract. The exemplary payment schedule in Table 3 is based on a contract term that begins on the Exemplary Early Capacity Payment Date in Section 4 of the Contract.

Option C - Fixed Value of Deferral Payment - Levelized Capacity

Payment schedules under this option are based upon the levelized capital cost component of the value of a year-by-year deferral of the Avoided Unit. The capital portion of Capacity Payments under this option shall consist of equal monthly payments over the term of the Contract, calculated as shown on Schedule 1. The fixed operation and maintenance portion of Capacity Payments shall be equal to the value of the year-by-year deferral of fixed operation and maintenance expense associated with the Avoided Unit. These calculations are shown in Schedule 1. The payment schedule for this option is contained in Table 3. Capacity Payments under Option C do not result in a prepayment or create a future benefit.

Option D - Fixed Value of Deferral Payment - Early Levelized Capacity

Payment schedules under this option are based upon the early levelized capital cost component of the value of a year-by-year deferral of the Avoided Unit. The capital portion of Capacity Payments under this option shall consist of equal monthly payments over the term of the Contract, calculated as shown on Schedule 1. The fixed operation and maintenance expense shall be calculated as shown in Schedule 1.

The RF/QF shall select the month and year in which the deliveries of firm capacity and energy to DEF are to commence and Capacity Payments are to start. DEF will provide the RF/QF with a schedule of capacity payment rates based on the month and year in which the deliveries of firm capacity and energy are to commence and the term of the Contract. The exemplary payment schedule in Table 3 is based on a contract term that begins on the Exemplary Early Capacity Payment Date in Section 4 of the Contract.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: April 29, 2013



SECTION No. IX
~~THIRTEENTH~~ TWELFTH-REVISED SHEET NO. 9.455
CANCELS ~~TWELFTH~~ ELEVENTH-REVISED SHEET
NO. 9.455

TABLE 3
EXAMPLE MONTHLY CAPACITY PAYMENT IN \$/kW/MONTH
DEF'S June 1, 2027 Undesignated CT
Renewable or Qualifying Facility Standard Offer Contract Avoided Capacity Payments
(\$/kW/MONTH)

Contract Year	<u>Option A</u>	<u>Option B</u>	<u>Option C</u>	<u>Option D</u>
	Normal Capacity Payment Starting on the Avoided Unit In-Service Date	Early Capacity Payment Starting on the Exemplary Capacity Payment Date	Levelized Capacity Payment Starting on the Avoided Unit In-Service Date	Early Levelized Capacity Payment Starting on the Exemplary Capacity Payment Date
2024				
2025		3.712		3.944.19
2026		3.7584		3.954.20
2027	4.7884	3.8094	5.0537	3.954.21
2028	4.8596	3.854.00	5.0538	3.954.21
2029	4.915.09	3.904.10	5.0538	3.964.22
2030	4.975.22	3.964.21	5.0639	3.964.23
2031	5.0435	4.0134	5.0640	3.974.23
2032	5.1148	4.0642	5.0741	3.974.24
2033	5.1762	4.1153	5.0742	3.974.25
2034	5.2476	4.1764	5.0843	3.984.26
2035	5.3190	4.2276	5.0844	3.984.26
2036	5.386.05	4.2888	5.0945	3.994.27
2037	5.456.20	4.345.00	5.0946	3.994.28

- The Capacity Payment schedules contained in this Contract assume a term of ten years from the Avoided Unit In-Service Date. In the event the RF/QF requests a term greater than ten years but less than the Avoided Unit Life then DEF shall prepare a schedule of Capacity Payments for the requested term. Such Capacity Payment rates shall be calculated utilizing the value-of-deferral methodology described in FPSC Rule 25-17.0832(6).

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: June 5, 2018



SECTION No. IX
SECOND REVISED SHEET NO. 9.456
CANCELS FIRST REVISED SHEET NO. 9.456

2. The RF/QF may also request an alternative Capacity Payment rate stream from DEF as authorized by Rule 25-17.250(4). Regardless of the Capacity Payment rate stream requested by the RF/QF, the cumulative present value of the capital cost payments made to the RF/QF over the term of the Contract shall not exceed the cumulative present value of the capital cost payments had such payments been made pursuant to FPSC Rule 25-17.0832(4)(g)(i). Fixed operation and maintenance expense shall be calculated to conform with FPSC Rule 25-17.0832(6)(b). Such an alternative Capacity Payment rate shall be subject to the Termination Fee in Appendix B.

In the event that alternative Capacity Payment rates are agreed upon, such Capacity Payment rate schedule shall be attached to the Contract in Appendix E.

B. Energy Rates

Payments Prior to the Avoided Unit In-Service Date

1. The energy rate, in cents per kilowatt-hour (¢/kWh), shall be based on DEF's actual hourly avoided energy costs which are calculated by DEF in accordance with FPSC Rule 25-17.0825, F.A.C.

The calculation of payments to the RF/QF shall be based on the sum over all hours of the billing period, of the product of each hour's avoided energy cost times the amount of energy (kWh) delivered to DEF from the Facility for that hour. All purchases shall be adjusted for losses from the point of metering to the point of interconnection.

2. Upon request of the RF/QF, DEF shall provide the RF/QF the option of receiving energy payments based on DEF's year-by-year projection of system incremental costs prior to hourly economy energy sales to other utilities, based on normal weather and fuel conditions plus a mutually agreed upon market volatility risk premium.

Payments Starting on Avoided Unit In-Service Date

The calculation of payments to the RF/QF for energy delivered to DEF on and after the Avoided Unit In-Service Date shall be the sum, over all hours of the Monthly Billing Period, of the product of (a) each hour's Firm Energy Rate (¢/kWh); and (b) the amount of energy (kWh) delivered to DEF from the Facility during that hour.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
ELEVENTH REVISED SHEET NO. 9.457
CANCELS TENTH REVISED SHEET NO. 9.457

For any period during which energy is delivered by the RF/QF to DEF, the Firm Energy Rate in cents per kilowatt hour (¢/kWh) shall be the following on an hour-by-hour basis: the lesser of (a) the As-Available Energy Rate and (b) the Avoided Unit Energy Cost. The Avoided Unit Energy Cost, in cents per kilowatt - hour (¢/kWh) shall be defined as the product of (a) the Avoided Unit Fuel Cost and (b) the Avoided Unit Heat Rate; plus (c) the Avoided Unit Variable O&M.

For the purposes of this agreement, the Avoided Unit Fuel Cost shall be determined from gas price published in Platts Inside FERC, Gas Market Report, first of the month posting for Florida Gas Transmission ("FGT") Zone 3, plus other charges, surcharges and percentages that are in effect from time to time.

The Parties may mutually agree to fix a minority portion of the base firm energy payments associated with the Avoided Unit and amortize that fixed portion, on a present value basis, over the term of the Contract. Such fixed firm energy payments may, at the option of the RF/QF, start as early as the Avoided Unit In-Service Date. For purposes of this paragraph, "base firm energy payments associated with the Avoided Unit" means the energy costs of the Avoided Unit to the extent that the Avoided Unit would have been operated. If this option is mutually agreed upon, it will be attached to this Contract in Appendix E.

ESTIMATED AS-AVAILABLE ENERGY COST

As required in Section 25-17.0825, F.A.C., information relating to as-available energy cost projections will be provided within 30 days of a written request for such projections by any interested person.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
~~FOURTEENTH THIRTEENTH~~ REVISED SHEET NO.
9.458
CANCELS ~~TWELFTH THIRTEENTH~~ REVISED SHEET
NO. 9.458

ESTIMATED UNIT FUEL COST

As required in Section 25-17.0832, F.A.C., the estimated fuel costs associated with DEF's Avoided Unit are based on current estimates of the price of natural gas and will be provided within 30 days of a written request for such projections by any interested person.

DELIVERY VOLTAGE ADJUSTMENT

DEF's average system line losses are analyzed annually for the prior calendar year, and delivery efficiencies are developed for the transmission, distribution primary, and distribution secondary voltage levels. This analysis is provided in the DEF's Procedures For Changing The Real Power Loss Factor (currently Attachment Q) -in its Open Access Transmission Tariff and DEF's fuel cost recovery filing with the FPSC. An adjustment factor, calculated as the reciprocal of the appropriate delivery efficiency factor, is applicable to the above determined energy costs if the RF/QF is within DEF's service territory to reflect the delivery voltage level at which RF/QF energy is received by the DEF.

~~The current delivery voltage adjustment factors are:~~

<u>Delivery Voltage</u>	<u>Adjustment Factor</u>
Transmission Voltage Delivery	1.0149
Primary Voltage Delivery	1.0253
Secondary Voltage Delivery	1.0627

~~The Delivery Voltage Adjustment will be calculated based on the current delivery efficiencies in conjunction with DEF's Open Access Transmission Tariff as approved by the FERC. The current Delivery Voltage Adjustment will be provided within 30 days of a written request by any interested person.~~

PERFORMANCE CRITERIA

Payments for firm Capacity are conditioned on the RF/QF's ability to maintain the following performance criteria:

A. Capacity Delivery Date

The Capacity Delivery Date shall be no later than the Required Capacity Delivery Date.

B. Availability and Capacity Factor

The Facility's availability and capacity factor are used in the determination of firm Capacity Payments through a performance based calculation as detailed in Appendix A to the Contract.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~March 5, 2019~~



SECTION No. IX
THIRD REVISED SHEET NO. 9.459
CANCELS SECOND REVISED SHEET NO. 9.459

METERING REQUIREMENTS

The RF/QFs within the territory served by DEF shall be required to purchase from DEF hourly recording meters to measure their energy deliveries to DEF. Energy purchases from the RF/QFs outside the territory of DEF shall be measured as the quantities scheduled for interchange to DEF by the entity delivering Firm Capacity and Energy to DEF.

BILLING OPTIONS

A RF/QF, upon entering into this Contract for the sale of firm capacity and energy or prior to delivery of as-available energy, may elect to make either simultaneous purchases from and sales to DEF, or net sales to DEF; provided, however, that no such arrangement shall cause the RF/QF to sell more than the Facility's net output. A decision on billing methods may only be changed: 1) when a RF/QF selling as-available energy enters into this Contract for the sale of firm capacity and energy; 2) when a Contract expires or is lawfully terminated by either the RF/QF or DEF; 3) when the RF/QF is selling as-available energy and has not changed billing methods within the last twelve months; 4) when the election to change billing methods will not contravene the provisions of FPSC Rule 25-17.0832 or a contract between the RF/QF and DEF.

If a RF/QF elects to change billing methods, such changes shall be subject to the following: 1) upon at least thirty days advance written note to DEF; 2) the installation by DEF of any additional metering equipment reasonably required to effect the change in billing and upon payment by the RF/QF for such metering equipment and its installation; and 3) upon completion and approval by DEF of any alteration(s) to the interconnection reasonably required to effect the change in billing and upon payment by the RF/QF for such alteration(s).

Payments due a RF/QF will be made monthly and normally by the twentieth business day following the end of the billing period. The kilowatt-hours sold by the RF/QF and the applicable avoided energy rates at which payment are being made shall accompany the payment to the RF/QF.

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EFFECTIVE: July 13, 2017



SECTION No. IX
FOURTH REVISED SHEET NO. 9.460
CANCELS THIRD REVISED SHEET NO. 9.460

CHARGES TO RENEWABLE ENERGY PROVIDER

The RF/QF shall be responsible for all applicable charges as currently approved or as they may be approved by the Florida Public Service Commission, including, but not limited to:

A. Retail Service Charges

The RF/QF shall be responsible for all FPSC approved charges for any retail service that may be provided by DEF. The RF/QF shall be billed at the customer charge rate stated in DEF's applicable standby tariff monthly for the costs of meter reading, billing, and other administrative costs.

B. Interconnection Charges

Applicable Interconnection Charges are included in the transmission arrangements entered into with the Transmission Provider. Notwithstanding the above, Interconnection Charges must be in accordance with the provisions of FPSC Rule 25-17.087.

C. Transmission Charges

Applicable Transmission Charges are included in the transmission arrangements entered into with the Transmission Provider. Notwithstanding the above, Transmission Charges must be in accordance with the provisions of FPSC Rule 25-17.087.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: April 29, 2013



SECTION No. IX
FIRST REVISED SHEET NO. 9.461
CANCELS ORIGINAL SHEET NO. 9.461

TERMS OF SERVICE

- A. It shall be the RF/QF's responsibility to inform DEF of any change in its electric generation capability.
- B. Any electric service delivered by DEF to a RF/QF located in DEF's service area shall be subject to the following terms and conditions:
 - (1) A RF/QF shall be metered separately and billed under the applicable retail rate schedule(s), whose terms and conditions shall pertain.
 - (2) A security deposit will be required in accordance with FPSC Rules 25-17.082(5) and 25-6.097, F.A.C., and the following:
 - (i) In the first year of operation, the security deposit should be based upon the singular month in which the RF/QF's projected purchases from DEF exceed, by the greatest amount, DEF's estimated purchases from the RF/QF. The security deposit should be equal to twice the amount of the difference estimated for that month. The deposit is required upon interconnection.
 - (ii) For each year thereafter, a review of the actual sales and purchases between the RF/QF and DEF will be conducted to determine the actual month of maximum difference. The security deposit should be adjusted to equal twice the greatest amount by which the actual monthly purchases by the RF/QF exceed the actual sales in DEF in that month.
 - (3) DEF shall specify the point of interconnection and voltage level.
 - (4) The RF/QF must enter into an interconnection to DEF's system. Specific features of the RF/QF and its interconnection to DEF's facilities will be considered by DEF in preparing the interconnection agreement. Notwithstanding the above, interconnection with, and delivery into, the Company's system must be accomplished in accordance with the provisions of FPSC Rule 25-17.087.
- C. Service under this rate schedule is subject to the rules and regulations of the FPSC.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: April 29, 2013



SECTION No. IX
FIRST REVISED SHEET NO. 9.462
CANCELS ORIGINAL SHEET NO. 9.462

**SCHEDULE 1
TO RATE SCHEDULE COG-2**

CALCULATION OF VALUE OF DEFERRAL PAYMENTS

APPLICABILITY

This Schedule 1 provides a detailed description of the methodology used by DEF to calculate the monthly values of deferring or avoiding the Avoided Unit identified in the Contract. When used in conjunction with the current FPSC-approved cost parameters associated with the Avoided Unit contained in Schedule 2, a RF/QF may determine the applicable value of deferral capacity payment rate associated with the timing and operation of its particular facility should the RF/QF enter into a Contract with DEF.

Also contained in this Schedule 1 is the discussion of the types and forms of surety bond requirements or equivalent assurance for payment of the Termination Fee acceptable to DEF in the event of contractual default by a RF/QF.

CALCULATION OF VALUE OF DEFERRAL OPTION A

FPSC Rule 25-17.0832(5) specifies that avoided capacity costs, in dollars per kilowatt per month, associated with capacity sold to a utility by a RF/QF pursuant to Contract shall be defined as the year-by-year value of deferral of the Avoided Unit. The year-by-year value of deferral shall be the difference in revenue requirements associated with deferring the Avoided Unit one year, and shall be calculated as follows:

$$VAC_m = 1/12 [KI_n (1 - R) / (1 - R^L) + O_n]$$

Where, for a one year deferral:

VAC_m	=	utility's monthly value of avoided capacity, in dollars per kilowatt per month, for each month of year n;
K	=	present value of carrying charges for one dollar of investment over L years with carrying charges computed using average annual rate base and assumed to be paid at the middle of each year and present valued to the middle of the first year;
R	=	$(1 + i_p) / (1 + r)$;
I_n	=	total direct and indirect cost, in mid-year dollars per kilowatt including AFUDC but excluding CWIP, of the Avoided Unit with an in-service date of year n, including all identifiable and quantifiable costs relating to the construction for the Avoided Unit which would have been paid had the Avoided Unit been constructed;

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FIRST REVISED SHEET NO. 9.463
CANCELS ORIGINAL SHEET NO, 9.463

- O_n = total fixed operation and maintenance expense for the year n , in mid-year dollars per kilowatt per year, of the Avoided Unit;
- i_p = annual escalation rate associated with the plant cost of the Avoided Unit;
- i_o = annual escalation rate associated with the operation and maintenance expense of the Avoided Unit;
- r = annual discount rate, defined as the utility's incremental after-tax cost of capital;
- L = expected life of the Avoided Unit; and
- n = year for which the Avoided Unit is deferred starting with the Avoided Unit In-Service Date and ending with the Termination Date.

CALCULATION OF FIXED VALUE OF DEFERRAL PAYMENTS - EARLY CAPACITY-OPTION B

Under the fixed value of deferral Option A, payments for firm capacity shall not commence until the in-service date of the Avoided unit(s). At the option of the RF/QF, however, DEF may begin making payments for capacity consisting of the capital cost component of the value of a year-by-year deferral of the Avoided Unit prior to the anticipated in-service date of the Avoided Unit. When such payments for capacity are elected, the avoided capital cost component of Capacity Payments shall be paid monthly commencing no earlier than the Capacity Delivery Date of the RF/QF, and shall be calculated as follows:

$$A_M = [A_c (1 + i_p)^{(m-1)} + A_o (1 + i_o)^{(m-1)}] / 12 \quad \text{for } m = 1 \text{ to } t$$

Where:

- A_M = monthly payments to be made to the RF/QF for each month of the contract year n , in dollars per kilowatt per month in which RF/QF delivers capacity pursuant to the early capacity option;
- i_p = annual escalation rate associated with the plant cost of the Avoided Unit;
- i_o = annual escalation rate associated with the operation and maintenance expense of the Avoided Unit;

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CANCELS ORIGINAL SHEET NO. 9.464

m = year for which the fixed value of deferral payments under the early capacity option are made to a RF/QF, starting in year one and ending in the year t ;

t = the Term, in years, of the Contract:

A_c = $F [(1 - R) / (1 - R^t)]$

Where:

F = the cumulative present value, in the year that the contractual payments will begin, of the avoided capital cost component of Capacity Payments which would have been made had Capacity Payments commenced with the Avoided Unit In-Service Date;

R = $(1 + i_p) / (1 + r)$

r = annual discount rate, defined as DEF's incremental after-tax cost of capital; and

A_o = $G [(1 - R) / (1 - R^t)]$

Where:

G = The cumulative present value, in the year that the contractual payments will begin, of the avoided fixed operation and maintenance expense component of Capacity Payments which would have been made had Capacity Payments commenced with the Avoided Unit In-Service Date.

R = $(1 + i_o) / (1 + r)$

The currently approved parameters applicable to the formulas above are found in Schedule 2.

**CALCULATION OF FIXED VALUE OF DEFERRAL PAYMENTS -
LEVELIZED AND EARLY LEVELIZED CAPACITY - OPTION C & OPTION D,
RESPECTIVELY**

Monthly fixed value of deferral payments for levelized and early levelized capacity shall be calculated as follows:

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$$P_L = (F / 12) \cdot [r / 1 - (1 + r)^{-t}] + O$$

Where:

- P_L = the monthly levelized capacity payment, starting on or prior to the in-service date of DEF's Avoided Unit(s);
- F = the cumulative present value, in the year that the contractual payments will begin, of the avoided capital cost component of the Capacity Payments which would have been made had the Capacity Payments not been levelized;
- r = the annual discount rate, defined as DEF's incremental after-tax cost of capital;
- t = the Term, in years of the Contract
- O = the monthly fixed operation and maintenance component of the Capacity Payments, calculated in accordance with calculation of the fixed value of deferral payments for the levelized capacity or the early levelized capacity options.

RISK-RELATED GUARANTEES

With the exception of governmental solid waste facilities covered by FPSC Rule 25-17.091, FPSC Rule 25-17.0832 (4)(e)10 requires that, when fixed value of deferral payments - early capacity, levelized capacity, or early levelized capacity are elected, the RF/QF must provide a surety bond or equivalent assurance of securing the payment of a Termination Fee in the event the RF/QF is unable to meet the terms and conditions of its Contract. Depending on the nature of the RF/QF's operation, financial health and solvency, and its ability to meet the terms and conditions of the Contract, one of the following may constitute an equivalent assurance of payment:

- (1) Bond;
- (2) Cash deposit(s) with DEF;
- (3) Unconditional, irrevocable, direct pay Letter of Credit;
- (4) Unsecured promise by a municipal, county or state government to repay payments for early or levelized capacity in the event of default, in conjunction with a legally binding commitment from such government allowing the utility to levy a surcharge on either the electric bills of the government's electricity consuming facilities or the constituent electric customers of such government to assure that payments for early or levelized capacity are repaid;
- (5) Unsecured promise by a privately-owned RF/QF to repay payments for early or levelized capacity in the event of default, in conjunction with a legally binding commitment from the owner(s) of the RF/QF, parent company, and/or subsidiary companies located in Florida to assure that payments for early, levelized or early levelized capacity are repaid; or
- (6) Other guarantees acceptable to DEF.

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SECTION No. IX
FIRST REVISED SHEET NO. 9.466
CANCELS ORIGINAL SHEET NO. 6.466

DEF will cooperate with each RF/QF applying for fixed value of deferral payments under the early, levelized or early levelized capacity options to determine the exact form of an "equivalent assurance" for payment of the Termination Fee to be required based on the particular aspects of the RF/QF. DEF will endeavor to accommodate an equivalent assurance of repayment which is in the best interests of both the RF/QF and DEF's ratepayers.

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EFFECTIVE: April 29, 2013



SECTION No. IX
~~THIRTEENTH~~ ~~TWELFTH~~ REVISED SHEET NO.
9.467
CANCELS ~~TWELFTH~~ ~~ELEVENTH~~ REVISED SHEET
NO. 9.467

SCHEDULE 2
TO RATE SCHEDULE COG-2 CAPACITY OPTION PARAMETERS

**FIXED VALUE OF DEFERRAL PAYMENTS -
NORMAL CAPACITY OPTION PARAMETERS**

Where, for one year deferral:

		<u>Value</u>
VAC _m	= DEF's value of avoided capacity and O&M, in dollars per kilowatt per month, during month m;	4. 78 84
K	= present value of carrying charges for one dollar of investment over L years with carrying charges computed using average annual rate base and assumed to be paid at the middle of each year and present valued to the middle of the first year;	1.28 6 4
I _n	= total direct and indirect cost, in mid-year dollars per kilowatt including AFUDC but excluding CWIP, of the Avoided Unit with an in-service date of year n;	767.95 675.4 6
O _n	= total fixed operation and maintenance expense, for the year n, in mid-year dollars per kilowatt per year, of the Avoided Unit;	3.85 2.06
i _p	= annual escalation rate associated with the plant cost of the Avoided Unit;	2.50 1.27%
i _o	= annual escalation rate associated with the operation and maintenance expense of the Avoided Unit;	2.50%
r	= annual discount rate, defined as DEF's incremental after-tax cost of capital;	7.15%
L	= expected life of the Avoided Unit;	35
n	= year for which the Avoided Unit is deferred starting with the Avoided Unit In-Service Date and ending with the Termination Date.	2027

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~June 5, 2018~~



SECTION No. IX
~~TWELFTH-THIRTEENTH~~ REVISED SHEET NO.
9.468
CANCELS ~~TWELFTH-ELEVENTH~~ REVISED SHEET
NO. 9.468

**FIXED VALUE OF DEFERRAL PAYMENTS -
EARLY CAPACITY OPTION PARAMETERS**

A_m	=	monthly avoided capital cost component of Capacity Payments to be made to the RF/QF starting as early as two years prior to the Avoided Unit In-Service Date, in dollars per kilowatt per month;	3.4757
i_p	=	annual escalation rate associated with the plant cost of the Avoided Unit;	2.501.27%
n	=	year for which early Capacity Payments to a RF/QF are to begin;	2025
F	=	the cumulative present value of the avoided capital cost component of Capacity Payments which would have been made had Capacity Payments commenced with the anticipated in-service date of the Avoided Unit and continued for a period of 10 years;	259.42268. 44
r	=	annual discount rate, defined as DEF's incremental after-tax cost of capital;	7.15%
t	=	the Term, in years, of the Contract for the purchase of firm capacity commencing prior to the in-service date of the Avoided Unit;	13
G	=	the cumulative present value of the avoided fixed operation and maintenance expense component of Capacity Payments which would have been made had Capacity Payments commenced with the anticipated in-service date of the Avoided Unit and continued until the Termination Date.	18.4010.55

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EFFECTIVE: June 5, 2018



SECTION No. IX
SECOND REVISED SHEET NO. 9.470
CANCELS FIRST SHEET NO. 9.470

APPENDIX E

TO

DUKE ENERGY FLORIDA, LLC

RENEWABLE OR QUALIFYING FACILITY LESS THAN 100 KW

STANDARD OFFER CONTRACT

AGREED UPON PAYMENT SCHEDULES

AND OTHER MUTUAL AGREEMENTS

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL
EFFECTIVE: June 5, 2018



SECTION No. IX
FIRST REVISED SHEET NO. 9.475
CANCELS ORIGINAL SHEET NO. 9.475

**APPENDIX F
FPSC RULES 25-17.080 THROUGH 25-17.310
ARE PROVIDED IN SECTION VIII
ON THIS TARIFF BOOK**

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: April 29, 2013



SECTION No. IX
SECOND REVISED SHEET No. 9.700
CANCELS FIRST REVISED SHEET No. 9.700

INTERCONNECTION AGREEMENT

INTERCONNECTION ARRANGEMENTS AND COST RESPONSIBILITY

1.0 Purpose

- 1.1. This Interconnection Agreement ("Agreement") sets forth the terms and conditions pursuant to which _____ ("QF") has agreed to comply with and pay Duke Energy Florida, LLC ("Company") to interconnect with Company's electrical system. This Agreement provides the procedures for the scheduling of construction for the Company's Interconnection Facilities as well as the cost responsibility of a QF Facility for the payment of Interconnection Costs. This Agreement also provides for operating, testing, and inspection procedures for the safe parallel operation of the Facility with the Company's electrical system. This Agreement applies to QF's directly interconnected with the Company's system and providing all net electrical output for sale to the Company. All requirements contained herein shall apply in addition to and not in lieu of the provisions of the Power Purchase Agreement.

2.0 Definitions

- 2.1. "Agreement" means this Interconnection Agreement.
- 2.2. "Company" means Duke Energy Florida, LLC.
- 2.3. "Company's Interconnection Facilities" means all equipment located on the Company's side of the Point of Delivery, including without limitation, equipment for connection, switching, transmission, distribution, protective relaying and safety provisions which in the Company's sole discretion are required to be installed for the delivery into the Company's system, measurement of electric energy injected into the Company's system, and upgrades to the Company's electrical system required for the Company to receive, use, and deliver the energy to Company's load, including all metering and telemetering equipment installed for the measurement of such energy delivered by the Facility, regardless of the Facility's location in relation to the Point of Delivery.
- 2.4. "Default" means the failure of a breaching Party to cure its breach under this Agreement.

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SECTION No. IX
SECOND REVISED SHEET No. 9.701
CANCELS FIRST REVISED SHEET No. 9.701

- 2.5. “Emergency Condition” means (a) any urgent, abnormal, operationally unstable, dangerous, and/or public safety condition that is existing on the Company’s system; (b) any urgent, abnormal, operationally unstable, dangerous, and/or public safety condition that is likely to result in any of the following: (i) loss or damage to the Facility and/or the Company’s system, (ii) disruption of generation by the Facility, (iii) disruption of service or stability on the Company’s system, and/or (iv) endangerment to human life or public safety; and/or, (c) any circumstance that requires action by the Company’s System Operator to comply with standing NERC regulations or standards, including without limitation actions to respond to, prevent, limit, or manage loss or damage to the Facility, loss or damage to the Company’s system, disruption of generation by the Facility, disruption of service on the Company’s system, an abnormal condition on the Company’s system, and/or endangerment to human life or safety. An Emergency Condition will be an excuse to QF’s performance only if such condition is not due to QF’s negligence, willful misconduct, and/or failure to perform as required under this Agreement.
- 2.6. “Execution Date” means the date on which the Parties execute this Agreement.
- 2.7. “Facility” means all equipment used to produce electrical output and, for a cogeneration facility, used to produce useful thermal energy through the sequential use of energy.
- 2.8. “Facilities Study” means a written cost estimate of all the required materials and labor to complete the interconnection of the Facility with the Company’s electrical system, and an estimate of the date by which construction of the interconnection will be completed.
- 2.9. “Feasibility Study” means a review of the alternatives and operational requirements reasonably available to interconnect the Facility to the Company’s electric system and identification of a feasible interconnection alternative.
- 2.10. “Indemnified Party” has the meaning assigned to it in Section 12.1.
- 2.11. “Indemnifying Party” has the meaning assigned to it in Section 12.2.
- 2.12. “Interconnection Costs” means the actual costs incurred by the Company under this Agreement and for the Company’s Interconnection Facilities, including, without limitation, the cost of equipment, engineering, communication, labor, and operations, maintenance, and administrative activities.

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EFFECTIVE: July 13, 2017



SECTION No. IX
SECOND REVISED SHEET No. 9.702
CANCELS FIRST REVISED SHEET No. 9.702

- 2.13. "Interconnection Costs Offset" means the estimated costs included in the Interconnection Costs that the Company would have incurred if it were not purchasing electric energy from the Facility but instead would have provided electrical service to the Facility as if it were a non-generating customers.
- 2.14. "Interconnection Request Application" means a form used to provide the Company with the information required to study an interconnection request.
- 2.15. "Part(y)(ies)" means the Company or/and the QF.
- 2.16. "Point of Delivery" means the point(s) on the Company's side of the electrical system where electric energy generated exclusively by the Facility is delivered into the Company system pursuant to this Agreement.
- 2.17. "Point of Metering" means the point(s) where electric energy made available for delivery to the Company, subject to adjustment for losses to the Point of Delivery that are the sole responsibility of the QF, is measured.
- 2.18. "Power Purchase Agreement" means either the (i) Agreement for Purchase of As-Available Energy, (ii) the Standard Offer Contract for the Purchase of Firm Capacity and Energy from a Renewable Energy Producer or a Qualifying Facility less than 100 kW or (iii) a negotiated contract based upon (i) or (ii).
- 2.19. "Qualifying Facility" or "QF" means a facility that meets the requirements defined in FPSC Rule 25-17.080. For the purposes of this Agreement only, a Distributed Resource as defined in the Institute of Electrical and Electronics Engineers ("IEEE") Standard 1547 for Interconnecting Distributed Resources with Electric Power Systems, as they may be amended from time to time, will be deemed to be a QF, consistent with the Stipulation approved by the Florida Public Service Commission in Order No. PSC-06-0707-PAA-EI, issued August 18, 2006 in Docket No. 060410-EI.
- 2.20. "QF Insurance" has the meaning assigned to it in Section 13.1.
- 2.21. "System Impact Study" means a preliminary written cost estimate of all the Company's Interconnection Facilities, including without limitation, required materials and labor to complete the interconnection and a preliminary estimate of the date by which construction of the interconnection will be completed.

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EFFECTIVE: July 13, 2017



SECTION No. IX
THIRD REVISED SHEET No. 9.703
CANCELS SECOND REVISED SHEET No. 9.703

3.0 Submission of Plans and Development of Interconnection Schedules and Cost Estimates

- 3.1. No later than sixty (60) days after the Execution Date, the QF shall specify the date it desires the Company's Interconnection Facilities to be available for receipt of the electric energy and shall complete and submit, along with a deposit to cover Company's costs to perform interconnection studies, an Interconnection Request Application, to the Company. At such time, the QF shall deliver to the Company the Facility's preliminary design, engineering, and operational specifications for purposes of interconnecting with Company's system. Based upon the information provided, the Company shall consider the reasonable alternatives available to interconnect the QF in a Feasibility Study within sixty (60) days after all information requested by the Company is provided by the QF.
- 3.2. The QF shall, within thirty (30) days from receipt of the Feasibility Study, send written notification to the Company as to whether or not it will continue the Facility to the next study phase. The Company will consider no response as QF's withdrawal of the Facility from further consideration. No more than thirty (30) days following receipt of such notice, the Company and the QF shall meet and discuss interconnection alternatives and the QF's reasonable preference for interconnecting the Facility to the Company's electrical system. Once the QF has communicated a reasonable interconnection preference, the Company shall develop in a System Impact Study preliminary written Interconnection Costs and scheduling estimates for the Company's Interconnection Facilities within sixty (60) days after all information requested by the Company is provided by the QF. The schedule developed hereunder will indicate when the QF's final electrical plans must be submitted to the Company pursuant to Section 3.3 hereof.
- 3.3. The QF shall, within thirty (30) days from receipt of the System Impact Study, send written notification to the Company as to whether or not it will continue the Facility to the next study phase. The Company will consider no response as QF's withdrawal of the Facility from further consideration. Along with such notification, the QF shall submit the Facility's final design, engineering, and operational specifications and all revisions to the information previously submitted under Section 3.1 hereof to the Company no later than the date specified pursuant to Section 3.1 hereof, unless such date is modified in the Company's sole discretion. Based upon the information provided and within sixty (60) days after the information is provided, the Company shall update its written Interconnection Costs and schedule estimates, provide the estimated time period required for construction of the Company's Interconnection Facilities, and specify the date by which the Company must receive notice from the QF to initiate construction, which date shall, to the extent practical, be consistent with the QF's schedule for delivery of energy into the Company's system in a Facilities Study.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
THIRD REVISED SHEET No. 9.704
CANCELS SECOND REVISED SHEET No. 9.704

The QF shall, within one hundred eighty (180) days from receipt of the Facilities Study, send written notification to the Company as to whether or not it will initiate construction of the Facility. The Company will consider no response as QF's withdrawal of the Facility from further consideration. The final electrical plans shall include the following information, unless all or a portion of such information is waived by the Company in its discretion:

- a. Physical layout drawings, including dimensions;
- b. All associated equipment specifications and characteristics including technical parameters, ratings, basic impulse levels, electrical main one-line diagrams, schematic diagrams, system protections, frequency, voltage, current and interconnection distance;
- c. Functional and logic diagrams, control and meter diagrams, conductor sizes and length, and any other relevant data which might be necessary to understand the Facility's proposed system and to be able to make a coordinated system;
- d. Power requirements in watts and vars;
- e. Expected radio-noise, harmonic generation and telephone interference factor;
- f. Synchronizing methods;
- g. Facility operating/instruction manuals; and
- h. The maximum amount of energy anticipated to be delivered to the Company.

The final design specification documents delivered by the QF shall be labeled as "FINAL", and shall be signed, sealed, and dated by a licensed Florida Professional Engineer for purposes of establishing the final design submitted by the QF based on which Company will determine impacts to its system and construct interconnection facilities for the QF to interconnect with the system.

- 3.4. Any subsequent change in the final electrical plans shall be submitted to the Company and the QF understands and agrees that any such changes could affect the Company's schedules and Interconnection Costs as previously estimated. The QF understands that any changes in system design after the "FINAL" design is submitted shall be deemed as material or significant design changes by the QF and may result in Company terminating this Agreement and re-starting the interconnection process, as may be determined by the Company in its sole discretion. The QF shall be responsible for all costs incurred by Company as a result of any modifications to the "FINAL" design.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
THIRD REVISED SHEET No. 9.705
CANCELS SECOND REVISED SHEET No. 9.705

- 3.5. Without limiting the QF's responsibility to pay for all costs under this Agreement, the QF understands and agrees that the QF shall pay the actual costs incurred by the Company to develop all estimates pursuant to Sections 3.1 through 3.3 hereof and to evaluate any changes proposed by the QF as a result of the final design specifications. The Company will issue an adjusted bill reflecting actual costs following completion of the cost estimates.
- 3.6. The Parties agree that any cost or scheduling estimates provided by the Company hereunder shall be prepared in good faith but shall not be binding. The Company may modify such schedules as necessary to accommodate contingencies that affect the Company's ability to initiate or complete the Company's Interconnection Facilities and actual costs will be used as the basis for all final charges hereunder.
- 3.7. All studies required for interconnection and the construction of any interconnection facilities required shall be placed in the queue in a non-discriminatory and non-preferential manner relative to any other interconnection requests so that Company can process all interconnection requests to the Company's system in accordance with the Company's current practices and operational procedures.
- 3.8. The Company reserves the right to perform static and dynamic tests, incorporating the Facility in the Company's models, that may limit/reduce the amount of physical capacity that QF can interconnect at Facility. In such case, the Company will report the limitation to the QF who may then decide to adjust its capacity level for the next level of study.
- 3.9. The Company will consider failure by the QF to meet any of the schedule deadlines herein as a withdrawal of the Facility from further consideration.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
THIRD REVISED SHEET No. 9.706
CANCELS SECOND REVISED SHEET No. 9.706

4.0 Payment Obligations for Interconnection Costs

- 4.1. The Company shall have no obligation to initiate construction of the Company's Interconnection Facilities prior to a written notice from the QF agreeing to the Company's interconnection design requirements and notifying the Company to initiate its activities to construct the Company's Interconnection Facilities; provided, however, that such notice shall be received not later than the date specified by the Company under Section 3 hereof. The QF shall be liable for and agrees to pay all Interconnection Costs incurred by the Company.
- 4.2. The QF agrees to pay all of the Company's actual Interconnection Costs as such costs are incurred and billed in accordance with the Power Purchase Agreement, if applicable. Such amounts shall be billed pursuant to Section 4.2.1 if the QF elects the payment option permitted by FPSC Rule 25-17.087(3). Otherwise the QF shall be billed pursuant to Section 4.2.2. If the QF does not have a Power Purchase Agreement for the Facility, then the QF agrees to pay the amounts billed by Company within thirty (30) days after Company notifies the QF that such interconnection work has been completed.
 - 4.2.1. Upon a showing of credit worthiness, the QF shall have the option of making monthly installment payments for Interconnection Costs over a period no longer than thirty-six (36) months. The period selected is _____ months. Principal payments will be based on the estimated Interconnection Costs less the Interconnection Costs Offset, divided by the repayment period in months to determine the monthly principal payment. Payments will be invoiced in the first month following first incurrence of Interconnection Costs by the Company. Invoices to the QF will include principal payments plus interest on the unpaid balance, if any, calculated at a rate equal to the thirty (30) day highest grade commercial paper rate as published in the Wall Street Journal on the first business day of each month. The final payment or payments will be adjusted to cause the sum of principal payments to equal the actual Interconnection Costs.
 - 4.2.2. When Interconnection Costs are incurred by the Company, such costs will be billed to the QF to the extent that they exceed the Interconnection Costs Offset. The QF agrees to provide, at least fifteen (15) calendar days before the initiation of interconnection field work, cash or a letter of credit as adequate assurances, in a form acceptable to Company in its sole discretion, to cover the estimated Interconnection Costs.
- 4.3. If the QF notifies the Company in writing to interrupt or cease interconnection work at any time and for any reason, the QF shall nonetheless be obligated to pay the Company for all costs incurred in connection with the Company's Interconnection Facilities through the date of such notification and for all additional costs for which the Company is responsible pursuant to binding contracts with third parties.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
THIRD REVISED SHEET No. 9.707
CANCELS SECOND REVISED SHEET No. 9.707

5.0 Payment Obligation for Operation, Maintenance and Repair of the Company's Interconnection Facilities

- 5.1. The QF shall be billed monthly for the costs associated with the operation, maintenance, and repair of the interconnection. These include (a) the Company's inspections of the interconnection and (b) maintenance of any equipment beyond that which would be required to provide normal electric service to the Qualifying Facility if no sales to the Company were involved.
- 5.2. The QF shall pay a monthly charge equal to 0.50% of the Interconnection Costs less the Interconnection Costs Offset.

6.0 Schematic Diagram

- 6.1. Exhibit B-1, attached hereto and made a part hereof, is a schematic diagram showing the major circuit components connecting the Facility with the Company's electrical system and showing the Point of Delivery and the Point of Metering and/or Point of Ownership, if different. All switch number designations initially left blank on Exhibit B-1 will be inserted by the Company on or before the date on which the Facility first operates in parallel with the Company's system.

7.0 Operating Standards

- 7.1. The QF and the Company will independently provide for the safe operation of their respective facilities, including periods during which the other Party's facilities are unexpectedly energized or de-energized.
- 7.2. The QF shall reduce, curtail, or interrupt electrical generation or take other appropriate action for so long as it is reasonably necessary, which in the judgment of the QF or the Company may be necessary to operate and maintain a part of either Party's system, to address, if applicable, an Emergency Condition on either Party's system. The QF shall also reduce, curtail, or interrupt electrical generation during the situations defined in Rule 25-17.086, F.A.C.
- 7.3. The operation and net energy deliveries to the Company from the QF shall not exceed the amount studied and approved by the Company's pursuant to the studies performed under this Agreement.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
THIRD REVISED SHEET No. 9.708
CANCELS SECOND REVISED SHEET No. 9.708

- 7.4. The QF shall not operate the Facility's electric generation equipment in parallel with the Company's system without prior written consent of the Company. Such consent shall not be given until the QF has satisfied all criteria under the Power Purchase Agreement, if applicable and has:
- (i) submitted to and received consent from the Company of its as-built electrical specifications;
 - (ii) demonstrated to the Company's satisfaction that the Facility is in compliance with the insurance requirements of the Power Purchase Agreement, if applicable; and
 - (iii) demonstrated to the Company's satisfaction that the Facility is in compliance with all regulations, rules, orders, or decisions of any governmental or regulatory authority having jurisdiction over the Facility's generating equipment or the operation of such equipment.
- 7.5. Any proposed modifications to the electrical equipment of the Facility will be submitted to the Company for approval. It is further understood that the scope of some modifications may require new interconnection studies that will result in additional interconnections costs along with other costs detailed in Section 5 of the Agreement, and such costs shall be the sole responsibility of the QF. After any approved Facility modifications are completed, the QF shall not resume parallel operation with the Company's system until the QF has demonstrated that it is in compliance with all the requirements of Section 8.2 hereof.
- 7.6. The QF shall be responsible for coordination and synchronization of the Facility's equipment with the Company's electrical system, and assumes all responsibility for damage that may occur from improper coordination or synchronization of the generator with the utility's system.
- 7.7. The Company shall have the right to open and lock, with a Company padlock, manual disconnect switch numbers(s) _____ and isolate the Facility's generation system without prior notice to the QF. To the extent practicable, however, prior notice shall be given. Any of the following conditions shall be cause for disconnection:
- 1. Emergency Conditions and/or maintenance repair and construction requirements;
 - 2. hazardous conditions existing on the Facility's generating or protective equipment as determined by the Company;
 - 3. adverse effects of the Facility's generation to the Company's other electric consumers and/or system as determined by the Company;
 - 4. failure of the QF to maintain any required insurance; or

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
THIRD REVISED SHEET No. 9.709
CANCELS SECOND REVISED SHEET No. 9.709

5. failure of the QF to comply with any existing or future regulations, rules, orders or decisions of any governmental or regulatory authority having jurisdiction over the Facility's electric generating equipment or the operation of such equipment.
- 7.8. The Facility's electric generation equipment shall not be operated in parallel with the Company's system when auxiliary power is being provided from a source other than the Facility's electric generation equipment.
- 7.9. Neither Party shall operate switching devices owned by the other Party, except that the Company may open the manual disconnect switch number(s) _____ owned by the QF pursuant to Section 7.7 hereof.
- 7.10. Should one Party desire to change the operating position of a switching device owned by the other Party, the following procedures shall be followed:
 - (i) The Party requesting the switching change shall orally agree with an authorized representative of the other Party regarding which switch or switches are to be operated, the requested position of each switching device, and when each switch is to be operated.
 - (ii) The Party performing the requested switching shall notify the requesting Party when the requested switching change has been completed.
 - (iii) Neither Party shall rely solely on the other party's switching device to provide electrical isolation necessary for personnel safety. Each Party will perform work on its side of the Point of Ownership as if its facilities are energized or test for voltage and install grounds prior to beginning work.
 - (iv) Each Party shall be responsible for returning its facilities to approved operating conditions, including removal of grounds, prior to the Company authorizing the restoration of parallel operation.
 - (v) The Company shall install one or more red tags on all open switches. Only Company personnel on the Company's switching and tagging list shall remove and/or close any switch bearing a Company red tag under any circumstances.
- 7.11. Should any essential protective equipment fail or be removed from service for maintenance or construction requirements, the Facility's electric generation equipment shall be disconnected from the Company's system. To accomplish this disconnection, the QF shall either (i) open the generator breaker number(s) _____; or (ii) open the manual disconnect switch number(s) _____.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
~~THIRD-FOURTH~~ REVISED SHEET No. 9.710
CANCELS ~~SECOND-THIRD~~ REVISED SHEET

7.11.1. If the QF elects option (i), the breaker assembly shall be opened and drawn out by QF personnel. As promptly as practicable, Company personnel shall install a Company padlock and a red tag on the breaker enclosure door.

7.11.2. If the QF elects option (ii), the switch shall be opened by QF personnel or by Company personnel and, as promptly as practicable, Company personnel will install a Company padlock and a red tag.

8.0 Inspection and Testing

8.1. The inspection and testing of all electrical relays governing the operation of the generator's circuit breaker shall be performed in accordance with manufacturer's recommendations, ~~but in no case less than once every 12 months~~. This inspection and testing shall include, but not be limited to, the following:

- (i) electrical checks on all relays and verification of settings electrically;
- (ii) cleaning of all contacts;
- (iii) complete testing of tripping mechanisms for correct operating sequence and proper time intervals; and
- (iv) visual inspection of the general condition of the relays.

8.2. In the event that any essential relay or protective equipment is found to be inoperative or in need of repair, the QF shall notify the Company of the problem and cease parallel operation of the generator until repairs or replacements have been made. The QF shall be responsible for maintaining records of all inspections and repairs and shall make said records available to the Company upon request.

8.3. The Company shall have the right to operate and test any of the Facility's protective equipment to assure accuracy and proper operation. This testing shall not relieve the QF of the responsibility to assure proper operation of its equipment and to perform routine maintenance and testing.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: ~~July 13, 2017~~



SECTION No. IX
SECOND REVISED SHEET No. 9.711
CANCELS FIRST REVISED SHEET No. 9.711

9.0 Notification

- 9.1. Communications made for emergency or operational reasons may be made to the following persons and shall thereafter be confirmed promptly in writing:

To The Company: System Dispatcher on Duty
Title: System Dispatcher
Telephone: (727) 384-7211
Facsimile: (727) 384-7865

To The QF: _____
Title: _____
Telephone: _____
Facsimile: _____

- 9.2. Each Party shall provide as much notification as practicable to the other Party regarding planned outages of equipment that may affect the other Party's operation.

- 9.3. Communication for contract administrative purposes may be made to the following persons:

To The Company:
Title: Wholesale/Renewable Manager
Address: 299 First Avenue North
Mail Code FL-155
St Petersburg, FL 33701
Telephone: (727) 820-4597
Facsimile: (727) 820-4598

To The QF:
Title: _____
Address: _____
Telephone: _____
Facsimile: _____

ISSUED BY: **Javier Portuondo, Director, Rates & Regulatory Strategy - FL**
EFFECTIVE: **July 13, 2017**



SECTION No. IX
SECOND REVISED SHEET No. 9.712
CANCELS FIRST REVISED SHEET No. 9.712

10.0 Standards

10.1. Interconnection with, and delivery into, the Company's system must be accomplished in accordance with the provisions of FPSC Rule 25-17.087. Additionally, as provided in FPSC Order No. PSC-06-0707-PAA-EI, issued August 18, 2006, in Docket No. 060410-EI, for a QF that is a Distributed Resource, the QF's interconnection with the Company's system must be accomplished in accordance with the provisions of the IEEE Standard 1547 for Interconnecting Distributed Resources with Electric Power Systems that is in effect at the time of construction.

10.2. The following minimum guidelines shall also be met:

- a. The governor control on the prime mover shall be capable of maintaining the generator output frequency within limits for loads from no-load up to rated output. The limits for frequency shall be 60 hertz (cycles per second), plus or minus an instantaneous variation of less than 1%.
- b. The regulator control shall be capable of maintaining the generator output voltage within limits from no-load up to rated output. The limits for voltage shall be the nominal operating voltage, plus or minus 5%.
- c. The output sine wave distortion shall be deemed acceptable when it does not have a higher content (root mean squared) of harmonics than the Company's normal harmonic content at the interconnection point.
- d. The QF's generating equipment shall be designed, operated, and controlled to provide reactive power requirements from 0.95 lagging to 0.95 leading power factor at the point of interconnection with the Company. Induction generators shall have static capacitors that provide at least 95% of the magnetizing current requirements of the induction generator field. Capacitors shall not be so large as to permit self-excitation of the QF's generator field.
- e. Direct current (DC) generators may be operated in parallel with the Company's system through a synchronous inverter. The inverter must meet all the criteria in this Agreement.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
FIRST REVISED SHEET No. 9.713
CANCELS ORIGINAL SHEET No. 9.713

11.0 QF Standing and Qualification

11.1. The QF is a _____ (corporation, partnership, or other, as applicable) duly organized and validly existing in good standing under the laws of _____ and has all necessary power and authority to carry on its business as presently conducted to own or hold under lease its properties and to enter into and perform its obligations under this Agreement and all other related documents and agreements to which it is or shall be a Party. QF is duly qualified or licensed to do business in the State of Florida and in all other jurisdictions wherein the nature of its business and operations or the character of the properties owned or leased by it makes such qualification or licensing necessary and where the failure to be so qualified or licensed would impair its ability to perform its obligations under this Agreement or would result in a liability to Company or would have any adverse effect on Company.

12.0 Insurance

12.1. The QF shall procure or cause to be procured and shall maintain throughout the entire Term of this Agreement, a policy or policies of liability insurance issued by an insurer acceptable in the state of Florida on a standard "Insurance Services Office" commercial general liability and/or excess liability form or equivalent and Workers' Compensation in accordance with the statutory requirements of the state of Florida (such policy or policies, collectively, the "QF Insurance"). A certificate of insurance shall be delivered to the Company at least fifteen (15) calendar days prior to the start of any interconnection work. At a minimum, the QF Insurance shall contain (a) an endorsement providing coverage, including products liability/completed operations coverage for the term of this Agreement, and (b) premises and operations liability, (c) a broad form contractual liability endorsement covering liabilities (i) which might arise under, or in the performance or nonperformance of, this Agreement or (ii) caused by operation of the Facility or any of the QF's equipment Without limiting the foregoing, the QF Insurance must be reasonably acceptable to the Company. Any premium assessment or deductible shall be for the account of the QF and not the Company.

12.2. The QF Insurance for liability shall have a minimum limit of one million dollars (\$1,000,000.00) per occurrence for bodily injury (including death) or property damage. This liability limit can be met by any combination of commercial general and excess liability insurance policies.

12.3. To the extent that the QF Insurance is on a "claims made" basis, the retroactive date of the policy(ies) shall be the Effective Date of this Agreement or an earlier date. Furthermore, to the extent the QF Insurance is on a "claims made" basis, the QF's duty to provide insurance coverage shall survive the termination of this Agreement until the expiration of the maximum statutory period of limitations in the State of Florida for actions based in contract or in tort. To the extent the QF Insurance is on an "occurrence" basis, such insurance shall be maintained in effect at all times by the QF during the term of this Agreement.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
FIRST REVISED SHEET No.9.714
CANCELS ORIGINAL SHEET No. 9.714

12.4. The QF shall provide the Company with a copy of any material communication or notice related to the QF Insurance within ten (10) Business Days of the QF's receipt or issuance thereof.

12.5. The Company shall be designated as an additional named insured under the QF Insurance (except Workers' Compensation). The QF Insurance shall be primary to any coverage maintained by the Company and provide, where permitted by law, waiver of any rights of subrogation against the Company. Any deductibles or retentions shall be the sole responsibility of QF. QF's compliance with these provisions and the limits of insurance specified herein shall not constitute a limitation of QF's liability or otherwise affect QF's indemnification obligations pursuant to this Agreement. Any failure to comply with all of these provisions shall not be deemed a waiver of any rights of the Company under this Agreement with respect to any insurance coverage required hereunder. The Company may request the QF to provide a copy of any or all of its required insurance policies, including endorsements in which the Company is included as an additional insured for any claims filed relative to this Agreement.

13.0 Event of Default

13.1. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in Section 13.2, the defaulting Party shall have five (5) Business Days from receipt of the Default notice within which to cure such Default.

13.2. If a Default is not cured as provided in this Section, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this Section will survive termination of this Agreement.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
FIRST REVISED SHEET NO. 9.715
CANCELS ORIGINAL SHEET No. 9.715

14.0 Termination

14.1. This Agreement shall terminate upon any of the following events:

- (a) at the time when the nature of the QF's service changes in such a way as to alter the manner in which the QF delivers power to the Company; or
- (b) pursuant to the procedure set forth in Section 13.2; or
- (c) as set forth in Section 3.3; or
- (d) termination of the Power Purchase Agreement; or
- (e) upon 30 days' notice by the QF to the Company.

15.0 Assignment

15.1. Any assignment by QF of this Agreement and the rights and obligations hereunder shall be made only with the written consent of the Company, which consent shall not be unreasonably withheld and shall be subject to credit, payment, tax, and performance assurances.

16.0 Governing Law and Jurisdiction

16.1. This Agreement and the rights and duties hereunder shall be governed by and construed, enforced and performed in accordance with the Laws of the State of Florida, without regard to principles of conflicts of law.

17.0 Mutual Representations

17.1. QF and Company each hereby represents and warrants to the other the following: (i) each has the capacity, authority, and power to execute, deliver, and perform under this Agreement; (ii) this Agreement constitutes legal, valid, and binding obligations enforceable against it; (iii) each person who executes this Agreement on behalf of each party has full and complete authority to execute and bind such party to this Agreement as an authorized representative of such party; (iv) each is acting on its own behalf and has made its own independent decision to bind itself under this Agreement; and, (v) each has completely read, fully understands, and voluntarily accepts every provision of this Agreement.

18.0 Entire Agreement

18.1. This Agreement constitutes the entire agreement and arrangement between the QF and Company relating to the subject matter herein. This Agreement shall not be binding and effective unless duly executed by an authorized officer of QF and delivered by QF to Company, and upon receipt of such duly executed document is executed by Company and delivered by Company to QF.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
FIRST REVISED SHEET No. 9.716
CANCELS ORIGINAL SHEET No. 9.716

EXHIBIT B-1

Exhibit B-1 will be unique for each Facility
and must be complete prior to parallel
operation with the Company

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017



SECTION No. IX
FIRST REVISED SHEET No. 9.717
CANCELS ORIGINAL SHEET No. 9.717

IN WITNESS WHEREOF, the QF has executed this Agreement on the date set forth below.

QF

Signature

Print Name

Title

Date

IN WITNESS WHEREOF, the Company has acknowledged receipt of this executed Agreement.

DUKE ENERGY FLORIDA, LLC.

Signature

Print Name

Title

Date

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL
EFFECTIVE: July 13, 2017

Item 8

State of Florida



Public Service Commission

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

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

DATE: June 26, 2019

TO: Office of Commission Clerk (Teitzman)

FROM: Division of Engineering (Wright, Ellis) *POE SW TBS MC ALM*
Division of Accounting and Finance (T. Brown) *[Signature]*
Division of Economics (Ramos) *MR SGT EAD JPH*
Office of the General Counsel (Murphy) *TH*

RE: Docket No. 20160165-SU – Application for staff-assisted rate case in Gulf County by ESAD Enterprises, Inc. d/b/a Beaches Sewer Systems, Inc.

AGENDA: 07/09/19 – Proposed Agency Action – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Polmann

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

Case Background

ESAD Enterprises, Inc. d/b/a Beaches Sewer Systems, Inc. (Beaches or Utility) is a Class C wastewater-only utility providing service to approximately 255 customers in Gulf County. Additionally, the Utility bills 43 customers the standby charge and 36 property owners the guaranteed revenue charge. Water service is provided by the City of Port St. Joe.

Beaches filed its application for a staff-assisted rate case on July 12, 2016. By Order No. PSC-2017-0383-PAA-SU (PAA Order) issued October 4, 2017, the Florida Public Service Commission (Commission) approved a Phase I revenue requirement and rates.¹ The PAA Order further provided that consideration of Phase II rates is conditioned upon Beaches completing

¹Order No. PSC-2017-0383-PAA-SU, issued October 4, 2017, in Docket No. 20160165-SU, *In re: Application for staff-assisted rate case in Gulf County by ESAD Enterprises, Inc. d/b/a Beaches Sewer Systems, Inc.*

certain pro forma operation and maintenance (O&M) expense and plant items within 12 months of the issuance of a consummating order in this docket and submitting a copy of the final invoices and cancelled checks for all of these projects within 60 days after this period. Order No. PSC-2017-0417-CO-SU (Consummating Order) was issued on October 27, 2017.² Therefore, the pro forma O&M expense and plant items were to be completed by October 27, 2018, with their associated documentation to be submitted by December 27, 2018.

The PAA Order provided that if Beaches encountered any unforeseen events that would impede the completion of the pro forma O&M expense and plant items, it should immediately notify the Commission in writing. On October 31, 2018, Beaches notified staff that it would not be able to meet the deadline for completing the Phase II pro forma O&M expense and plant items due to impacts from Hurricane Michael. The Utility requested that it be granted an extension until December 26, 2018, to complete the projects, and that it be granted an extension until January 26, 2019, to submit the associated documentation. By Order No. PSC-2018-0584-FOF-SU (Extensions Order) issued December 17, 2018, the Commission granted Beaches' request for deadline extensions.³ On February 6, 2019, Beaches provided documentation for consideration in determining Phase II rates.

Beaches, through the Florida Rural Water Association (FRWA), has recently received disaster assistance for Hurricane Michael repairs from the Florida Department of Environmental Protection (DEP). Staff has identified several of Beaches' pro forma plant items whose costs were mitigated by disaster assistance grant funding. Accordingly, staff has made adjustments to pro forma costs to prevent double recovery.

This recommendation addresses the appropriate Phase II revenue requirements and rates. The Commission has jurisdiction pursuant to Sections 367.081, 367.0814, and 367.121, Florida Statutes.

²Order No. PSC-2017-0417-CO-SU, issued October 27, 2017, in Docket No. 20160165-SU, *In re: Application for staff-assisted rate case in Gulf County by ESAD Enterprises, Inc. d/b/a Beaches Sewer Systems, Inc.*

³Order No. PSC-2018-0584-FOF-SU, issued December 17, 2018, in Docket No. 20160165-SU, *In re: Application for staff-assisted rate case in Gulf County by ESAD Enterprises, Inc. d/b/a Beaches Sewer Systems, Inc.*

Discussion of Issues

Issue 1: What is the appropriate Phase II revenue requirement for Beaches?

Recommendation: The appropriate Phase II revenue requirement is \$185,819. This represents an increase of \$33,095, which equates to an increase of 21.67 percent. The increase includes staff's recommended pro forma plant and O&M expense additions, as well as the billing determinant change and corresponding adjustment to test year revenues discussed in Issues 2 and 3. Phase II rate base is shown on Schedule No. 1-A. The related adjustments are shown on Schedule No. 1-B. The operating income for Phase II is shown on Schedule No. 2-A. The related adjustments are shown on Schedule No. 2-B. (Wright, T. Brown)

Staff Analysis: In the PAA Order, the Commission identified several pro forma O&M expense and plant items to be included in the consideration of Beaches' Phase II revenue requirement and rates. Due to concerns with the age of some project bids, a final decision on the amount of the Phase II revenue requirement and rates was conditioned on completion of the pro forma items and evaluation of their actual costs. On February 6, 2019, Beaches provided actual cost documentation for those pro forma items completed on or before the project completion deadline, December 26, 2018.⁴ Staff recommends that the documentation provided by Beaches should be considered for establishing Phase II rates.

With the assistance of the FRWA, the Utility recently received disaster assistance for Hurricane Michael repairs from the DEP. Staff has identified several of Beaches' pro forma plant items whose costs were mitigated by disaster assistance grant funding. Staff recommends the grant funding received by the Utility should be used to reduce costs associated with their respective pro forma plant items. Table 1-1 lists the pro forma O&M expense and plant items identified in the PAA Order, their estimated costs, their actual costs, and staff's recommended costs as modified by DEP grant funding.

⁴Document No. 00644-2019 (Redacted).

Table 1-1
Phase II Pro Forma Costs

Pro Forma O&M	Estimated	Actual*	Less: DEP Grant*	Staff Rec.*	Notes
Landscaping	\$0	\$0	\$0	\$0	No invoice(s) provided.
Clear Ponds of Vegetation	4,152	3,792	0	3,792	
Sand and Grit Removal	19,010	23,500	0	23,500	
Total Pro Forma O&M	<u>\$23,162</u>	<u>\$27,292</u>	<u>\$0</u>	<u>\$27,292</u>	
Pro Forma Plant					
Purchase of Portable Generator	\$23,756	\$1,477	\$1,477	\$0	Purchased smaller generators.
Install Electrical Hookup for Generator	4,000	0	0	0	No invoice(s) provided.
Replace Lift Station Pumps (Hwy 98)	12,200	17,846	0	17,846	
Replace Lift Station Pumps (Americus)	14,000	15,090	14,425	665	
Replace Control Panel (Americus)	2,581	0	0	0	Included with lift station pump.
Replace Rail System (Americus)	0	0	0	0	Included with lift station pump.
Purchase Second Blower	2,617	2,733	0	2,733	
Replace Piping at WWTP/Ponds	0	3,045	0	3,045	Only pond piping replaced.
Repair Fencing at WWTP	7,864	10,911	10,037	875	
Repair Clarifier at WWTP	0	0	0	0	No invoice(s) provided.
Total Pro Forma Plant	<u>\$67,018</u>	<u>\$51,103</u>	<u>\$25,939</u>	<u>\$25,164</u>	
Total Pro Forma	<u>\$90,180</u>	<u>\$78,395</u>	<u>\$25,939</u>	<u>\$52,456</u>	

*Values may differ slightly due to rounding.

Source: PAA Order and Document No. 00644-2019.

Phase II Pro Forma O&M

Beaches requested three pro forma O&M items, with estimated costs totaling \$23,162. Based on documentation provided by Beaches, actual project costs totaled \$27,292. DEP grant funding does not offset any of the actual pro forma O&M project costs. Accordingly, staff recommends pro forma O&M costs totaling \$27,292.

Landscaping

Due to a lack of bids describing the nature of the work, or a cost breakdown of materials and labor to justify the expense, Beaches' request to install landscaping at the wastewater treatment plant (WWTP) and lift stations was not assigned an estimated cost in the PAA Order.⁵ No additional information related to this project has been provided by the Utility to date.

⁵PAA Order, p. 26.

Accordingly, staff does not recommend inclusion of this project in the Phase II revenue requirement.

Clear Ponds of Vegetation

Beaches' DEP permit requires it to rotate the use of its retention ponds weekly. According to the Utility, that had become increasingly difficult due to the growth of vegetation in and around its retention ponds. To address this, Beaches requested for inclusion a project to clear its retention ponds of vegetation, add sand, and apply a growth inhibitor to prevent unwanted vegetation in the future. This project was estimated to cost \$4,152 in the PAA Order.⁶

A review of the invoices associated with this project shows an actual cost of \$3,792. Beaches contracted with various firms for the completion of this project, with labor rates having varied from \$25 per hour to \$42 per hour. With one exception, the invoices appear to describe work within the scope of the project and at costs reasonable for the work performed. The Utility identified a line item in one of the invoices that was outside the scope of the project, and staff has modified project costs accordingly. Staff recommends that this project be included in the Phase II revenue requirement. Staff believes it is appropriate to amortize this expense over five years, or \$758 per year (\$3,792/5), as discussed in the PAA Order.⁷ The adjustment is reflected on Schedule No. 2-B.

Sand and Grit Removal

Beaches requested for inclusion a project to remove sand and grit that had been clogging the air lines of its WWTP. Such maintenance had not been performed since the current owner took over approximately 19 years ago. Based on a project proposal that included onsite disposal of removed sand and grit, dated February 20, 2015, this project was estimated to cost \$19,010 in the PAA Order.⁸

A review of an updated project proposal, provided to the Utility by U.S. Submergent Technologies on May 24, 2018, and the associated invoice shows an actual cost of \$23,500, or \$4,490 over the estimated cost. According to Beaches, the actual work performed deviated from the work outlined in the updated project proposal. The proposal provided for offsite disposal of removed sand and grit and, according to Beaches, contemplated a project duration of two days. Beaches has reported that the removed sand and grit was, in fact, disposed of onsite and the project required a full week to complete. Actual work on the project also incurred additional expenses from the purchase of water from the City of Port St. Joe. Despite changes in the scope and costs of the project, Beaches and U.S. Submergent Technologies agreed to a final cost of \$23,500. Staff believes that the scope of this project and its cost are appropriate as Phase II pro forma and, as such, recommends that this project be included in the Phase II revenue requirement. Staff believes it is appropriate to amortize this expense over five years, or \$4,700 per year (\$23,500/5), as discussed in the PAA Order.⁹ The adjustment is reflected on Schedule No. 2-B.

⁶PAA Order, p. 26.

⁷PAA Order, p. 28.

⁸PAA Order, p. 26.

⁹PAA Order, p. 28.

Additional Part-Time Employee

As part of the discussion of Phase I O&M expenses at the September 7, 2017 Commission Conference, the Commission asked about the potential of adding an “as-needed” contractor or maintenance person as part of Phase II pro forma O&M. Prior to the Commission Conference, the Utility had not expressed a desire or need to add an additional part-time contractor, nor had any support documentation been provided to staff. Before filing this recommendation, staff contacted the Utility to determine whether the Utility had added an additional employee as a result of the discussion at the Commission Conference, or whether it had plans to add a part-time employee in the near future. Based on staff’s discussion with the Utility, the president, the vice president, and the contract operator remain Beaches’ only employees. An additional employee has not been added, nor is planned, and no cost support has been provided by the Utility. As such, staff did not include an additional part-time employee in its Phase II pro forma O&M calculations.

Phase II Pro Forma Plant

Beaches requested 10 pro forma plant items, with estimated costs totaling \$67,018. Based on documentation provided by Beaches, actual project costs total \$51,103. DEP grant funding offsets actual project costs by \$25,939. Accordingly, staff recommends pro forma plant costs totaling \$25,164 (\$51,103 - \$25,939).

Purchase of Portable Generator

Beaches requested for inclusion the purchase of generators to provide power to its WWTP or lift station pumps in the event of a power outage. Based on the lowest bid provided by the Utility at the time, the purchase of a single generator was estimated to cost \$23,756 in the PAA Order.¹⁰

A review of the invoices associated with this project shows an actual cost of \$1,477. According to Beaches, instead of purchasing the 28 kilowatt (kW) generator associated with the \$23,756 bid, the Utility decided to purchase two, identical 5.5 kW generators, priced at \$738 each. The Utility has reported that it uses these generators to power its Highway 98 and Americus lift station pumps during power outages. Staff believes that the purchase of these generators and the invoiced cost are appropriate as Phase II pro forma. Beaches received \$1,477 of DEP grant funding to offset the cost of this pro forma plant item. Accordingly, staff recommends a pro forma plant cost of \$0 (\$1,477 - \$1,477) for this project.

Install Electrical Hookup for Generator

Beaches requested for inclusion a project to upgrade the electrical equipment at its WWTP to accommodate the installation of a portable generator. This project was estimated to cost \$4,000 in the PAA Order.¹¹

Beaches has not provided documentation identifying whether the project has been completed nor, if completed, at what cost. Accordingly, staff recommends that this project not be included in the Phase II revenue requirement.

¹⁰PAA Order, p. 26.

¹¹PAA Order, p. 27.

Replace Lift Station Pumps (Highway 98)

According to Beaches, the pumps at its Highway 98 lift station were in need of replacement due to their excessive age and poor condition. To address this, Beaches requested for inclusion a project to replace the lift station's pumps, which was estimated to cost \$12,200 in the PAA Order.¹² The bid on which the estimated cost was based was provided to the Utility on October 15, 2014, and included the supply and installation of one pump, its rail system, and supporting electrical equipment.

A review of the invoices associated with this project shows an actual cost of \$17,846, or \$5,646 over the estimated cost. While a portion of the additional cost can be attributed to the age of the bid used as a basis for this project, the actual work performed also differs from what was outlined in the original bid. The invoices show that both pumps at the Highway 98 lift station were replaced, and ancillary electrical and piping hardware was installed. Beaches has also confirmed that the rail systems for both pumps at the lift station were replaced. Unskilled labor for this project, provided by Gulf Coast Property Services, varied in cost from \$25 per hour to \$33 per hour, while skilled labor, provided by Roto-Rooter Plumbers, varied from \$88 per hour to \$125 per hour. Staff believes that the scope of this project and its invoiced cost are appropriate as Phase II pro forma. Beaches did not receive DEP grant funding to offset the cost of this pro forma plant item. Accordingly, staff recommends a pro forma plant cost of \$17,846 for this project.

Replace Lift Station Pumps, Control Panel, and Rail System (Americus)

Beaches reported that the pumps and control panel at its Americus lift station were in need of replacement due to their excessive age and poor condition. Additionally, the rail system used for servicing the pumps had completely rusted away, rendering it non-functional. To address these issues, Beaches requested for inclusion projects to replace the lift station's pumps, control panel, and rail system. Based on bids provided by the Utility, the PAA Order estimated costs for two projects: (1) a project which combined the replacement of the lift station's pumps and its rail system was estimated to cost \$14,000; and (2) a project to replace the lift station's control panel was estimated to cost \$2,581, for a combined estimated cost of \$16,581.¹³

A review of the invoices associated with these projects shows combined actual costs totaling \$15,090. Beaches primarily engaged M&L Plumbing Inc. under a flat-rate contract for the replacement of the Americus lift station's pumps, control panel, and rail system. Through a separate contract, M&L Plumbing Inc. provided pump truck service at a combined rent and labor rate of \$250 per hour. Ancillary support was provided by Gulf Coast Property Services at a labor rate of \$35 per hour. Staff believes that the scope of these projects and their invoiced costs are appropriate as Phase II pro forma. Beaches received \$14,425 of DEP grant funding to offset the costs of these pro forma plant items. Accordingly, staff recommends a combined pro forma plant cost of \$665 (\$15,090 - \$14,425) for these projects.

Purchase Second Blower

DEP regulations require Beaches to acquire a backup blower for its WWTP in case of failure of its primary blower. Beaches, however, only had a single blower at its WWTP. To remedy this,

¹²PAA Order, p. 26.

¹³Id.

Beaches requested for inclusion the purchase of a second blower. This project was estimated to cost \$2,617 in the PAA Order.¹⁴

A review of the invoice associated with this project shows an actual cost of \$2,733. Beaches contracted with AAG Electric Motors & Pumps, Inc. for the completion of this project, with a labor rate of \$45 per hour. Staff believes that the scope of this project and its invoiced cost are appropriate as Phase II pro forma. Beaches did not receive DEP grant funding to offset the cost of this pro forma plant item. Accordingly, staff recommends a pro forma plant cost of \$2,733 for this project.

Replace Piping at WWTP/Ponds

Beaches requested for inclusion a project to replace and/or repair piping at its WWTP and in its retention ponds in order to meet DEP requirements for weekly rotation of the use of its retention ponds. However, due to a lack of bids describing the nature of the work to be performed or a cost breakdown of materials and labor to justify the expense, Beaches' request was not assigned an estimated cost in the PAA Order.¹⁵

While Beaches has not provided documentation identifying whether or at what cost piping at its WWTP was replaced and/or repaired, the Utility did provide, in its February 6, 2019, filing, invoices associated with the replacement and/or repair of piping in its retention ponds. A review of the invoices shows an actual cost of \$3,045. Gulf Coast Property Services provided labor at costs varying from \$25 per hour to \$33 per hour. The invoices appear to describe work within the scope of the project and at costs reasonable for the work performed. Given the necessity of this project in meeting DEP requirements, staff recommends that it be included in the Phase II revenue requirement. Beaches did not receive DEP grant funding to offset the cost of this pro forma plant item. Accordingly, staff recommends a pro forma plant cost of \$3,045 for this project.

Repair Fencing at WWTP

Beaches requested for inclusion a project to replace and/or repair a 300-foot section of fencing surrounding its WWTP. This project was estimated to cost \$7,864 in the PAA Order.¹⁶

In October 2018, Beaches' WWTP suffered damages due to Hurricane Michael, including the complete destruction of its perimeter fencing. In response, Beaches underwent a project to demolish its existing fencing and construct a new 1,540-foot fence surrounding its WWTP. A review of the invoices associated with this project shows an actual cost of \$10,911. Beaches contracted with Breakaway Demo for the demolition portion of this project with labor rates varying from \$38 per hour to \$57 per hour. For the construction portion, Beaches contracted with Gulf Coast Property Services at a labor rate of approximately \$11 per hour. To minimize costs of the project, Beaches installed chain-link fencing only on the section facing the road and field fencing for the remainder of the fence's perimeter. Beaches has informed staff that the DEP does not have any concerns over this fencing strategy. Staff believes that the scope of this project and its invoiced cost are appropriate as Phase II pro forma. Beaches received \$10,037 of DEP grant

¹⁴PAA Order, p. 26

¹⁵Id.

¹⁶Id.

funding to offset the cost of this pro forma plant item. Accordingly, staff recommends a pro forma plant cost of \$875 (\$10,911 - \$10,037) for this project.

Repair Clarifier at WWTP

Due to a lack of bids describing the nature of the work, or a cost breakdown of materials and labor to justify the expense, Beaches' request to repair the clarifier at its WWTP was not assigned an estimated cost in the PAA Order.¹⁷ No additional information related to this project has been provided by the Utility to date. Accordingly, staff does not recommend inclusion of this project in the Phase II revenue requirement.

Phase II Pro Forma Adjustments

Staff's recommended pro forma plant additions are shown in Table 1-2, as are staff's adjustments to UPIS, accumulated depreciation, and depreciation expense. There is also a corresponding increase to property taxes of \$117 associated with staff's recommended pro forma plant. Adjustments to UPIS and accumulated depreciation are reflected in Schedule No. 1-B, while adjustments to depreciation expense and property taxes are reflected on Schedule No. 2-B.

Table 1-2
Pro Forma Adjustments

Description	UPIS¹⁸	Accum. Depr.	Depr. Exp.
Replace Lift Station Pumps (Hwy 98)	\$17,846	(\$446)	\$446
Retirement	(13,385)	13,385	(335)
Replace Lift Station Pumps (Americus)	665	(17)	17
Retirement	(499)	499	(12)
Purchase Second Blower	2,733	(182)	182
Retirement	0	0	0
Replace Piping at WWTP/Ponds	3,045	(203)	203
Retirement	(2,284)	2,284	(152)
Repair Fencing at WWTP	875	(32)	32
Retirement	(656)	656	(24)
Total	<u>\$8,341</u>	<u>(\$15,943)</u>	<u>\$357</u>

Source: Utility responses to staff data requests, staff calculations.

In the PAA Order, the Commission found that the Utility's wastewater treatment plant should be considered 64.3 percent used and useful (U&U). Beaches' wastewater collection systems were determined to be 90.5 percent U&U.¹⁹ As such, the Commission made an adjustment for non-U&U plant in Phase I. Staff believes that a similar adjustment is necessary in Phase II.

¹⁷PAA Order, p. 27.

¹⁸It is Commission practice to use 75 percent of the cost of the replacement as the retirement value when the original cost is not known.

¹⁹PAA Order, pp. 4-5, 7.

Application of the U&U percentages to plant balances and associated accumulated depreciation balances results in a net increase of \$304 for wastewater non-U&U components. Corresponding adjustments should also be made to remove the non-U&U portion from depreciation expense and property taxes. Accordingly, staff decreased depreciation expense by \$95 and property taxes by \$24 to reflect the non-U&U portion of each expense.

Additional O&M Adjustments

In Phase I, the Commission approved O&M expense of \$138,009. As discussed earlier in this issue, staff recommended pro forma O&M of \$27,292 amortized over five years, or \$5,458 per year, be included in Phase II O&M expense. In addition, staff also believes that adjustments to several O&M expense accounts should be made to reflect the 20.31 percent reduction in customers the Utility has experienced since Hurricane Michael.²⁰ Staff believes that the reduction in customers will likely impact Sludge Removal (Acct. No. 711), Purchased Power (Acct. No. 715), and Chemicals (Acct. No. 718). These expenses are variable in nature, and staff expects that the lower number of customers would represent reduced wastewater flows being sent through the Utility's lift stations and plant. As a result, less power would be used, fewer chemicals would be needed for treatment, and sludge removal intervals might be prolonged. Staff's recommended adjustments to these O&M expense accounts are reflected in Table 1-3.

Table 1-3
Additional O&M Adjustments

Expense Account	Approved – Phase I	20.31% Reduction	Recommended – Phase II
Sludge Removal (711)	\$2,600	(\$528)	\$2,072
Purchased Power (715)	\$8,595	(\$1,746)	\$6,849
Chemicals (718)	\$2,752	(\$559)	\$2,193

Source: PAA Order and staff calculations.

Staff recommends a decrease of \$2,833 (\$528 + \$1,746 + \$559) in Phase II to reflect adjustments related to the loss of customers. This results in a net addition to O&M in Phase II of \$2,625 (\$5,458 - \$2,833). Staff's adjustments are reflected on Schedule No. 2-B. With the additional adjustments, staff recommends Phase II O&M expense of \$140,634 (\$138,009 + \$2,625).

Operating Ratio Methodology

In the PAA Order, the Commission approved an operating margin of 7.25 percent for Beaches. Using a 10 percent margin in Phase I produced an operating margin of \$13,801, which was above the suggested cap of \$10,000. The Commission found that a 7.25 percent margin was appropriate in Phase I because it resulted in a \$10,000 operating margin. As noted above, staff is recommending Phase II O&M expense of \$140,634.

²⁰Staff notes that the reduced number of customers is also addressed in Issues 2 and 3, where impacts to billing determinants and adjusted test year revenues are discussed.

Since the PAA Order in this docket, the operating ratio methodology has transitioned from “Commission practice” to a formalized rule, which now includes a 12 percent margin and a \$15,000 cap.²¹ This rule went into effect on March 28, 2019. As outlined in the rule, staff verified that the Utility’s rate base is not greater than 125 percent of O&M expenses, and that the use of the operating ratio methodology does not change the Utility’s qualification for a staff-assisted rate case. Accordingly, staff applied the methodology established in the rule to calculate the Utility’s Phase II revenue requirement. A margin of 12 percent of the Utility’s O&M expenses is \$16,876 ($\$140,634 \times 12$ percent), which is above the \$15,000 cap. As such, staff recommends that a 10.67 percent margin is appropriate in Phase II because it results in a \$15,000 operating margin.

Conclusion

Based on staff’s review of documentation provided by Beaches, the appropriate Phase II revenue requirement is \$185,819. This represents an increase of \$33,095, which equates to an increase of 21.67 percent. The increase includes staff’s recommended pro forma plant and O&M expense additions discussed above, as well as the billing determinant change and corresponding adjustment to test year revenues discussed in Issues 2 and 3. Phase II rate base is shown on Schedule No. 1-A. The related adjustments are shown on Schedule No. 1-B. The operating income for Phase II is shown on Schedule No. 2-A. The related adjustments are shown on Schedule No. 2-B.

²¹Rule 25-30.4575, F.A.C.

Issue 2: What are the appropriate test year revenues for Phase II?

Recommendation: The appropriate test year revenues for Beaches' Phase II rates are \$152,724. (Ramos)

Staff Analysis: In Phase I of the instant docket, the Commission approved a Phase I revenue requirement of \$176,348.²² The Utility's Phase I test year revenues and Phase I rates were calculated based on the Utility's billing determinants at the time: 320 wastewater customers and 45 prepaid connections. However, as discussed in Issue 3, the Utility is currently under earning due to the impact of Hurricane Michael on Beaches' service territory, which significantly reduced the Utility's customer base.

As discussed in Issue 3, staff is recommending the rates be redesigned due to the significant reduction in the Utility's customer base. In order to reflect the appropriate percentage increase as a result of the Phase II increase and the impact from redesigning rates, staff believes it is appropriate to adjust test year revenues by utilizing the Utility's 2018/2019 index rates²³ and the Utility's current customer count. This results in test year revenues of \$152,724. Therefore, test year revenues should be decreased by \$23,624 ($\$176,348 - \$152,724 = \$23,624$). Based on the above, the appropriate test year revenues for Beaches' Phase II rates are \$152,724, which consists of \$148,877 of service revenues and \$3,847 of miscellaneous revenues.

²²Order No. PSC-2017-0383-PAA-SU, in Docket No. 20160165-SU, dated October 4, 2017, *In re: Application for staff-assisted rate case in Gulf County by ESAD Enterprises, Inc. d/b/a Beaches Sewer Systems, Inc.*

²³Beaches' applied for a 2018 and 2019 price index increase on May 6, 2019, and the resulting rates have an anticipated effective date of July 5, 2019.

Issue 3: What are the appropriate rates for Phase II?

Recommendation: The recommended rates and charges are shown on Schedule No. 3. The Utility should file revised tariff sheets and a proposed customer notice to reflect the Commission-approved rates and charges. The approved rates and charges should be effective for service rendered on or after the stamped approval date on the tariff sheets pursuant to Rule 25-30.475(1), Florida Administrative Code (F.A.C.). In addition, the approved rates and charges should not be implemented until staff has approved the proposed customer notice and the notice has been received by the customers. The Utility should provide proof of the date notice was given within 10 days of the date of the notice. (Ramos)

Staff Analysis: Pursuant to Order No. PSC-2017-0383-PAA-SU, issued October 4, 2017, in the instant docket, Beaches was granted a Phase I rate increase. The PAA order also indicated that the Commission would consider a Phase II rate increase once the Phase II projects were completed and project costs were evaluated. As discussed in Issue 1, the Utility completed the Phase II projects. Typically, the Phase II rate increase would be an incremental increase to the Phase I revenue requirement, resulting in an across-the-board increase to the Phase I rates. However, subsequent to the implementation of Phase I rates, Beaches was substantially impacted by Hurricane Michael in October 2018, resulting in a significant decrease to the Utility's customer base. In order to maintain a stable revenue stream and sustain the system at a safe and reliable level, the Commission approved the Utility's requested standby charge, which is a monthly reoccurring charge intended specifically for customers unable to receive wastewater service due to extensive storm damage.²⁴ The standby charge is similar to the Utility's guaranteed revenue charge²⁵ because both charges represent an approximation of the fixed costs the Utility incurs to have service ready and available upon demand.

When the Utility's Phase I rates were designed, Beaches was serving approximately 320 wastewater customers and billing 45 property owners its monthly guaranteed revenue charge. However, due to the impacts of Hurricane Michael, the Utility currently serves 255 wastewater customers. In addition, the Utility bills 43 customers the standby charge and 36 property owners the guaranteed revenue charge. Although the standby charge was approved after Phase I rates were set, the existing Phase I rates, standby charge, and guaranteed revenue charge along with the post Hurricane Michael billing determinants would generate approximately \$30,000 less than the Utility's Commission-approved Phase I revenue requirement of \$176,348. Due to the significant reduction to Beaches' customer base and in order to prevent the Utility from significantly under earning, staff believes it is appropriate to restructure the Utility's rates, standby charge and guaranteed revenue charge based on the existing billing determinants in order for the Utility to achieve its authorized revenues from Phase I, incremental Phase II, and the index adjustments. In the past, the Commission has approved the restructuring of rates to

²⁴Order No. PSC-2018-0595-TRF-SU, issued December 20, 2018, in Docket No. 20180219-SU, *In re: Request for approval of amendment to tariff to charge a standby charge to customers significantly impacted by Hurricane Michael in Gulf County, by ESAD Enterprises, Inc. d/b/a Beaches Sewer System.*

²⁵The guaranteed revenue charge is designed to allow a utility to recover costs from the time capacity is reserved until a customer begins to pay the Utility's rates.

recover a previously authorized revenue requirement and index increases due to a significant decrease in billing determinants.²⁶

To determine the appropriate revenues for designing Phase II rates and charges, miscellaneous revenues of \$3,847 should be removed from the Phase II revenue requirement of \$185,819 resulting in \$181,972 for designing Phase II rates and charges. The Phase II rates and charges are shown on Schedule No. 3.

Staff notes that the Commission ordered staff to reevaluate the continuance of the Utility's standby charge in January 2020, at which time staff intends to analyze the Utility's customer base and the corresponding revenues. As customers that are currently billed the standby charge rebuild and re-establish service with the Utility, the customers would transition from paying the standby charge to the flat rate for service, which could potentially increase the Utility's earnings. In January 2020, staff will review the continuance of the standby charge; the Utility's revenues will also be reviewed to ensure the Utility is within range of its overall rate of return. At which time, staff will determine if the Utility's rates need further restructuring.

Staff's recommended rates and charges are shown on Schedule No. 3. The Utility should file revised tariff sheets and a proposed customer notice to reflect the Commission-approved rates and charges. The approved rates and charges should be effective for service rendered on or after the stamped approval date on the tariff sheets pursuant to Rule 25-30.475(1), F.A.C. In addition, the approved rates and charges should not be implemented until staff has approved the proposed customer notice and the notice has been received by the customers. The Utility should provide proof of the date notice was given within 10 days of the date of the notice.

²⁶Order No. PSC-13-0647-PAA-WU, issued December 5, 2013, in Docket No. 20130155-WU, *In re: Application for limited proceeding increase in rates in Escambia County by Peoples Water Service Company of Florida, Inc.*

Issue 4: Should this docket be closed?

Recommendation: No. If no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the order, a consummating order will be issued. The docket should remain open for staff's verification that the revised tariff sheets and the customer notice have been filed by the Utility and approved by staff. When the tariff and notice actions are complete, this docket may be closed administratively. (Murphy)

Staff Analysis: If no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the order, a consummating order will be issued. The docket should remain open for staff's verification that the revised tariff sheets and the customer notice have been filed by the Utility and approved by staff. When the tariff and notice actions are complete, this docket may be closed administratively.

ESAD ENTERPRISES, INC. d/b/a BEACHES SEWER SYSTEMS, INC. SCHEDULE NO. 1-A TEST YEAR ENDED 06/30/16 DOCKET NO. 20160165-SU WASTEWATER RATE BASE (PHASE II)			
DESCRIPTION	PHASE I	STAFF ADJUSTMENTS TO UTIL. BAL.	BALANCE PER STAFF
UTILITY PLANT IN SERVICE	\$365,162	\$8,341	\$373,503
LAND & LAND RIGHTS	21,864	0	21,864
NON-USED AND USEFUL COMPONENTS	(2,021)	304	(1,717)
CIAC	(281,050)	0	(281,050)
ACCUMULATED DEPRECIATION	(307,348)	15,943	(291,405)
AMORTIZATION OF CIAC	281,050	0	281,050
WORKING CAPITAL ALLOWANCE	<u>17,186</u>	<u>328</u>	<u>17,514</u>
WASTEWATER RATE BASE	<u>\$94,842</u>	<u>\$24,916</u>	<u>\$119,758</u>

ESAD ENTERPRISES, INC. d/b/a BEACHES SEWER SYSTEMS, INC. SCHEDULE NO. 1-B	
TEST YEAR ENDED 06/30/16 DOCKET NO. 20160165-SU	
ADJUSTMENTS TO RATE BASE (PHASE II)	
	<u>WASTEWATER</u>
<u>UTILITY PLANT IN SERVICE</u>	
1. To reflect appropriate pro forma plant additions.	\$25,164
2. To reflect appropriate pro forma plant retirements.	<u>(16,823)</u>
Total	<u>\$8,341</u>
<u>NON-USED AND USEFUL PLANT</u>	
1. To reflect non-used and useful UPIS.	(\$1,708)
2. To reflect non-used and useful accumulated depreciation.	<u>2,012</u>
Total	<u>\$304</u>
<u>ACCUMULATED DEPRECIATION</u>	
1. To reflect appropriate pro forma plant additions.	(\$880)
2. To reflect appropriate pro forma plant retirements.	<u>16,823</u>
Total	<u>\$15,943</u>
<u>WORKING CAPITAL ALLOWANCE</u>	
To reflect 1/8 of test year O & M expenses.	<u>\$328</u>

ESAD ENTERPRISES, INC. d/b/a BEACHES SEWER SYSTEMS, INC.				SCHEDULE NO. 2-A	
TEST YEAR ENDED 06/30/16				DOCKET NO. 20160165-SU	
WASTEWATER OPERATING INCOME (PHASE II)					
	PHASE I	STAFF ADJUSTMENTS	STAFF ADJUSTED TEST YEAR	ADJUST. FOR INCREASE	REVENUE REQUIREMENT
1. OPERATING REVENUES	<u>\$176,348</u>	<u>(\$23,624)</u>	<u>\$152,724</u>	<u>\$33,095</u> 21.67%	<u>\$185,819</u>
OPERATING EXPENSES:					
2. OPERATION & MAINTENANCE	\$138,009	\$2,625	\$140,634	\$0	\$140,634
3. DEPRECIATION (NET)	10,616	262	10,878	0	10,878
4. AMORTIZATION	0	0	0	0	0
5. TAXES OTHER THAN INCOME	17,724	93	17,817	1,489	19,306
6. INCOME TAXES	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
7. TOTAL OPERATING EXPENSES	<u>\$166,348</u>	<u>\$2,981</u>	<u>\$169,329</u>	<u>\$1,489</u>	<u>\$170,819</u>
8. OPERATING INCOME/(LOSS)	<u>\$10,000</u>		<u>(\$16,605)</u>		<u>\$15,000</u>
9. WASTEWATER O&M EXPENSE	<u>\$138,009</u>		<u>\$140,634</u>		<u>\$140,634</u>
10. OPERATING RATIO	<u>7.25%</u>				<u>10.67%</u>

ESAD ENTERPRISES, INC. d/b/a BEACHES SEWER SYSTEMS, INC.

SCHEDULE NO. 2-B

TEST YEAR ENDED 06/30/16

DOCKET NO. 20160165-SU

ADJUSTMENTS TO OPERATING INCOME (PHASE II)

WASTEWATER

OPERATING REVENUES

To reflect appropriate test year revenues. (\$23,624)

OPERATION AND MAINTENANCE EXPENSES

Sludge Removal Expense (711)

To reflect reduced post-hurricane customer count. (\$528)

Purchased Power (715)

To reflect reduced post-hurricane customer count. (\$1,746)

Chemicals (718)

To reflect reduced post-hurricane customer count. (\$559)

Miscellaneous Expense (775)

a. To reflect 5-year amortization of pro forma for sand and grit removal expense. \$4,700

b. To reflect 5-year amortization of pro forma pond maintenance expense. 758

Total \$5,458

TOTAL OPERATION & MAINTENANCE ADJUSTMENTS

\$2,625

DEPRECIATION EXPENSE

1. To reflect pro forma depreciation expense. \$357

2. To reflect non-used & useful pro forma depreciation expense. (95)

Total \$262

TAXES OTHER THAN INCOME

1. To reflect pro forma property taxes. \$117

2. To reflect non-used & useful pro forma property tax. (24)

Total \$93

ESAD ENTERPRISES, INC. d/b/a BEACHES SEWER SYSTEMS, INC.			SCHEDULE NO. 3
TEST YEAR ENDED 06/30/16			DOCKET NO. 20160165-SU
MONTHLY WASTEWATER RATES (PHASE II)			
	UTILITY CURRENT RATES	UTILITY INDEXED RATES ²⁷	STAFF RECOMMENDED PHASE II RATES
<u>Residential and General Service</u>			
Flat Rate	\$43.03	\$45.00	\$54.82
Standby Charge	\$11.79	\$11.79	\$15.02
Guaranteed Revenue Charge	\$11.79	\$11.79	\$15.02
<u>Residential and General Service Bill Comparison</u>			
3,000 Gallons	\$43.03	\$45.00	\$54.82
6,000 Gallons	\$43.03	\$45.00	\$54.82
8,000 Gallons	\$43.03	\$45.00	\$54.82

²⁷The Utility applied for a 2018 and 2019 price index increase on May 6, 2019, and the resulting indexed rates have an anticipated effective date of July 5, 2019.

Item 9

State of Florida



Public Service Commission

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

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

DATE: June 26, 2019

TO: Office of Commission Clerk (Teitzman)

FROM: Division of Engineering (Lewis, Knoblauch, Graves) *CKL EK*
Division of Accounting and Finance (Sewards, Bennett, Norris) *MB*
Division of Economics (Bruce, Hudson) *SH*
Office of the General Counsel (Crawford) *ED*

TRB ALM B2

RE: Docket No. 20180174-WU – Application to transfer facilities and Certificate No. 627-W in Polk County from Sunrise Utilities, LLC to Sunrise Water, LLC.

AGENDA: 07/09/19 – Regular Agenda – Proposed Agency Action for Issue 2 - Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Brown

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: Place before 20180175-WU (Alturas Utilities L.L.C.) on the Agenda.

Case Background

On September 14, 2018, an application was filed to transfer the operations of Sunrise Utilities, LLC (Sunrise Utilities or Utility) to Sunrise Water, LLC (Buyer).¹ Sunrise Utilities is a Class C utility providing water service to approximately 251 residential customers and 1 general service customer in Polk County.² The service territory is located in the Southwest Florida Water Management District.

¹A single purchase agreement affected the purchase of two separately certificated utilities, both located in Polk County. The transfer of Alturas Utilities, L.L.C., is addressed in Docket No. 20180175-WU.

²2018 Annual Report on file with the Commission, p. 18.

The Commission granted a grandfather certificate to the Utility in 1997 originally in the name of Sunrise Water Company.³ Sunrise Water Company was transferred to Keen Sales, Rentals and Utilities, Inc., in 1992, which was approved in 2000.⁴ Sunrise Utilities acquired a portion of Keen's service territory in 2005 when the Commission granted the transfer.⁵ According to the Utility's 2018 Annual Report, its total gross revenues were \$69,535, total operating expenses were \$89,414, and interest expenses were \$1,636, resulting in a net loss of \$21,513.

By Order No. PSC-16-0126-PAA-WU, issued March 28, 2016, in Docket No. 20140220-WU, the Commission established rates and charges for Sunrise Utilities. The Commission additionally ordered Sunrise Utilities to complete customer deposit refunds following the issuance of that Order. By letter dated May 29, 2019, the Buyer provided evidence that the appropriate amount of customer deposits were refunded.

This recommendation addresses the application to transfer facilities and Certificate No. 627-W filed on September 14, 2018, the appropriate net book value for transfer purposes, and whether an acquisition adjustment is appropriate. The Commission has jurisdiction in this case pursuant to Section 367.0814, Florida Statutes, (F.S.).

³Order No. PSC-97-0832-FOF-WU, issued July 11, 1997, in Docket No. 19961249-WU, *In re: Application for grandfather certificate to provide water service in Polk County by Sunrise Water Company, Inc.*

⁴Order No. PSC-00-1388-PAA-WU, issued July 31, 2000, in Docket No. 19990731-WU, *In re: Application for transfer of water facilities from Sunrise Water Company, Inc., holder of Certificate No. 584-W, to Keen Sales, Rentals and Utilities, Inc., holder of Certificate No. 582-W, in Polk County, for cancellation of Certificate No. 584-W, and for amendment of Certificate No. 582-W to include additional territory.*

⁵Order No. PSC-05-0308-PAA-WU, issued March 21, 2005, in Docket No. 20040159-WU, *In re: Application for transfer of portion of Certificate No. 582 -W by Keen Sales, Rentals and Utilities, Inc., to Sunrise Utilities, LLC, in Polk County.*

Discussion of Issues

Issue 1: Should the application for transfer of Certificate No. 627-W in Polk County from Sunrise Utilities, LLC to Sunrise Water, LLC be approved?

Recommendation: Yes. The transfer of the water system and Certificate No. 627-W is in the public interest and should be approved effective the date of the Commission's vote. The resultant order should serve as the Buyer's certificate and should be retained by the Buyer. The existing rates and charges should remain in effect until a change is authorized by the Commission in a subsequent proceeding. The tariffs reflecting the transfer should be effective for services rendered or connections made on or after the stamped approval date on the tariffs, pursuant to Rule 25-30.475, Florida Administrative Code (F.A.C.). The Buyer will be responsible for paying Regulatory Assessment Fees (RAFs) for 2019 and all subsequent years. The Buyer has filed the 2018 Annual Report, and will be responsible for filing all future annual reports. (Lewis, Knoblauch, Bennett)

Staff Analysis: On September 14, 2018, the Buyer filed an application for the transfer of Certificate No. 627-W from Sunrise Utilities, LLC to Sunrise Water, LLC in Polk County. The application is in compliance with Section 367.071, F.S., and Commission rules concerning applications for transfer of certificates. The sale to Sunrise Water, LLC occurred on June 15, 2018, contingent upon Commission approval, pursuant to Section 367.071(1), F.S.

Noticing, Territory, and Land Ownership

The Buyer provided notice of the application pursuant to Section 367.071, F.S., and Rule 25-30.030, F.A.C. No objections to the transfer were filed, and the time for doing so has expired. The application contains a description of the water service territory which is appended to this recommendation as Attachment A. The application contains a copy of a warranty deed agreement that was executed on June 15, 2018, as evidence that the Buyer owns or has rights to long-term use of the land upon which the water treatment facilities are located pursuant to Rule 25-30.037(2)(s), F.A.C.

Purchase Agreement and Financing

Pursuant to Rule 25-30.037(2)(i), and (j), F.A.C., the application contains a statement regarding financing and a copy of the Purchase Agreement, which includes the purchase price, terms of payment, and a list of the assets purchased. The Buyer stated in the application that he assumes responsibility for all customer deposits. There are no guaranteed revenue contracts, developer agreements, leases, or debt of the Utility that must be disposed of with regard to the transfer. The Purchase Agreement was prepared for the sale of Alturas Utilities, L.L.C. and Sunrise Utilities, LLC for a total purchase price of \$89,900. Based upon Equivalent Residential Connections, the allocated portion of the purchase price for Sunrise Utilities is \$71,111. According to the Buyer, the sale took place on June 15, 2018, subject to Commission approval, pursuant to Section 367.071(1), F.S.

Facility Description and Compliance

The water treatment system consists of two wells with two hydropneumatic tanks rated at 3,000 and 6,000 gallons, and utilizes a chlorination process for disinfection. The distribution system consists of varying sizes of 2- to 6-inch polyvinyl chloride (PVC) and galvanized iron pipes.

The last sanitary survey of the facility was conducted on July 31, 2018, by the Florida Department of Environmental Protection (DEP), which identified a variety of deficiencies. Additionally, Sunrise Utilities has several open consent orders with the Polk County Department of Health (PCDH). Pursuant to Rule 25-30.037(2)(q), F.A.C., the Buyer provided a description of the required repairs and improvements, as well as an approximate cost, but stated that the Utility is still in the process of seeking bids. Additionally, the Buyer has provided documentation which demonstrates that he is working with the PCDH and the DEP to address the issues outlined in the open consent orders.

Technical and Financial Ability

Pursuant to Rule 25-30.037(2), F.A.C., the application contains statements and documentation describing the technical and financial ability of the Buyer to provide service to the proposed service area. The Buyer was appointed to the Citrus County Water and Wastewater Authority, the local regulatory body for Citrus County, where he served for seven years. The Buyer also served as the “Class C” representative for the Legislative Study Committee for Investor-Owned Water and Wastewater Utility Systems in 2013. He attends yearly training classes through the Florida Rural Water Association and completed the National Association of Regulatory Utility Commissioners Utility Rate School in 2001. The Buyer is the owner and manager of several Class C water and wastewater facilities that are regulated by the Commission. Staff reviewed the personal financial statements of the Buyer, as well as the financial statements of the Buyer’s company, Florida Utility Services 1, LLC. Based on the above, the Buyer has demonstrated the technical and financial ability to provide service to the existing service territory.

Rates and Charges

The Utility’s rates were last approved in a staff-assisted rate case.⁶ The Utility’s late payment charge was approved administratively in 2010.⁷ The Utility’s miscellaneous service charges and service availability charges were approved in 2005.⁸ The Utility’s existing rates and charges are shown on Schedule No. 2. Rule 25-9.044(1), F.A.C., provides that, in the case of a change of ownership or control of a utility, the rates, classifications, and regulations of the former owner must continue unless authorized to change by this Commission. Therefore, staff recommends that the Utility’s existing rates and charges remain in effect until a change is authorized by the Commission in a subsequent proceeding.

Regulatory Assessment Fees and Annual Reports

Staff has verified that the Utility is current with respect to annual reports and RAFs through December 31, 2018. The Buyer will be responsible for filing annual reports and paying RAFs for 2019 and all future years.

⁶Order No. PSC-16-0126-PAA-WU, issued March 28, 2016, in Docket No. 20140220-WU, *In re: Application for staff-assisted rate case in Polk County by Sunrise Utilities, L.L.C.*

⁷WS-10-0099.

⁸Order No. PSC-05-0308-PAA-WU, issued March 21, 2005, in Docket No. 20040159-WU, *In re: Application for transfer of portion of Certificate No. 582-W by Keen Sales, Rentals and Utilities, Inc. to Sunrise Utilities, LLC, in Polk County.*

Date: June 26, 2019

Conclusion

Based on the foregoing, staff recommends that the transfer of the water system and Certificate No. 627-W is in the public interest and should be approved effective the date of the Commission vote. The resultant order should serve as the Buyer's certificate and should be retained by the Buyer. The existing rates and charges should remain in effect until a change is authorized by the Commission in a subsequent proceeding. The tariffs reflecting the transfer should be effective for services rendered or connections made on or after the stamped approval date on the tariffs, pursuant to Rule 25-30.475, F.A.C. The Buyer will be responsible for paying all future RAFs and filing all future annual reports.

Issue 2: What is the appropriate net book value (NBV) for the Sunrise Utilities water system for transfer purposes and should an acquisition adjustment be approved?

Recommendation: The NBV of the water system for transfer purposes is \$24,258 as of June 15, 2018. An acquisition adjustment should not be included in rate base. Within 90 days of the date of the final order, Sunrise Water, LLC should be required to notify the Commission in writing, that it has adjusted its books in accordance with the Commission's decision. The adjustments should be reflected in the 2019 Annual Report. (Bennett, Sowards)

Staff Analysis: Rate base was last established as of December 31, 2014. The purpose of establishing NBV for transfers is to determine whether an acquisition adjustment should be approved. The NBV does not include normal ratemaking adjustments for non-used and useful plant and working capital. The NBV has been updated to reflect balances as of June 15, 2018. Staff's recommended NBV, as described below, is shown on Schedule No. 1.

Utility Plant in Service (UPIS)

The Utility's general ledger reflected UPIS balance of \$109,300 as of December 31, 2014. There were no adjustments to UPIS. Therefore, staff recommends that the Utility's UPIS balance be \$109,300 as of June 15, 2018.

Land

In Order No. PSC-16-0126-PAA-WU, issued March 28, 2016, in Docket No. 20140220-WU, the Commission established the value of the land to be \$553. The Utility's general ledger reflected a land balance of \$553. There have been no additions to land purchased since that order was issued. Therefore, staff recommends a land balance of \$553, as of June 15, 2018.

Accumulated Depreciation

The Utility's general ledger reflected an accumulated depreciation balance of \$86,449 as of June 15, 2018. Staff calculated the appropriate accumulated depreciation balance to be \$85,597. As a result, accumulated depreciation should be decreased by \$852 to reflect an accumulated depreciation balance of \$85,597 as of June 15, 2018.

Contributions-in-Aid-of-Construction (CIAC) and Accumulated Amortization of CIAC

As of June 15, 2018, the Utility's general ledger reflected a fully amortized CIAC balance of \$12,393. Staff reviewed CIAC balances and has no adjustments; however, staff notes that no CIAC activity was recorded in the Utility's annual reports. Therefore, staff recommends a CIAC balance of \$12,393, and an accumulated amortization CIAC balance of \$12,393 as of June 15, 2018. Additionally, staff recommends that the balances of CIAC and accumulated amortization of CIAC, should be reflected in the 2019 Annual Report and all future years.

Net Book Value

The Utility's general ledger reflected a NBV of \$23,404. Based on the adjustments described above, staff recommends that NBV for the Utility's system be \$24,258 as of June 15, 2018. Staff's recommended NBV and the National Association of Regulatory Utility Commissioners, Uniform System of Accounts balances for UPIS and accumulated depreciation are shown on Schedule No. 1, as of June 15, 2018.

Acquisition Adjustment

An acquisition adjustment results when the purchase price differs from the NBV of the assets at the time of the acquisition. The Utility and its assets were purchased for \$71,111. As stated above, staff recommends the appropriate NBV total to be \$24,258. Pursuant to Rule 25-30.0371, F.A.C., a positive acquisition adjustment may be appropriate when the purchase price is greater than the NBV, and a negative acquisition adjustment may be appropriate when the purchase price is less than NBV. However, pursuant to Rule 25-30.0371(2), F.A.C., a positive acquisition adjustment shall not be included in rate base unless there is proof of extraordinary circumstances. The Buyer did not request a positive acquisition adjustment. As such, staff recommends that no positive acquisition adjustment be approved.

Conclusion

Based on the above, staff recommends that the NBV of Sunrise Utilities for transfer purposes is \$24,258, as of June 15, 2018. No acquisition adjustment should be included in rate base. Within 90 days of the date of the final order, the Buyer should be required to notify the Commission in writing that it has adjusted its book in accordance with the Commission's decision. The adjustments should be reflected in the Sunrise Water, LLC 2019 Annual Report.

Issue 3: Should this docket be closed?

Recommendation: If no protest to the proposed agency action is filed by a substantially affected person within 21 days of the date of the issuance of the order, a consummating order should be issued and the docket should be closed administratively upon Commission staff's verification that the revised tariff sheets have been filed and the Buyer has notified the Commission in writing that it has adjusted its books in accordance with the Commission's decision. (Crawford)

Staff Analysis: If no protest to the proposed agency action is filed by a substantially affected person within 21 days of the date of the issuance of the order, a consummating order should be issued and the docket should be closed administratively upon Commission staff's verification that the revised tariff sheets have been filed and the Buyer has notified the Commission in writing that it has adjusted its books in accordance with the Commission's decision.

TERRITORY DESCRIPTION
Sunrise Water, LLC
Polk County
Water Service

Township 28 South, Range 25 East, Section 21

Serving an area generally known as Sunrise Acres Subdivision, an unrecorded subdivision known as Pinewood, and an unrecorded mobile home village. More particularly described as:

From the Northwest corner of Section 21, also the Point of Beginning, run due East (along the South line of Section 16 and the North line of Section 21) for a distance of 2618.23 feet, more or less; thence, due South a distance of 1313 feet, more or less; thence due West a distance of 1455.20 feet, more or less; thence due South a distance of 235 feet, more or less; thence due West a distance of 405 feet, more or less; thence due South a distance of 1063 feet, more or less; thence due West a distance of 420.71 feet, more or less; thence due North a distance of 695 feet, more or less; thence due West a distance of 340 feet, more or less, to the West line of Section 21; thence due North a distance of 1922.35 feet, more or less, to the Point of Beginning.

FLORIDA PUBLIC SERVICE COMMISSION
authorizes
Sunrise Water, LLC
pursuant to
Certificate Number 627-W

to provide water service in Polk County in accordance with the provisions of Chapter 367, Florida Statutes, and the Rules, Regulations, and Orders of this Commission in the territory described by the Orders of this Commission. This authorization shall remain in force and effect until superseded, suspended, cancelled or revoked by Order of this Commission.

<u>Order Number</u>	<u>Date Issued</u>	<u>Docket Number</u>	<u>Filing Type</u>
PSC-97-0832-FOF-WU	07/11/1997	19961249-WU	Grandfather
PSC-00-1388-PAA-WU	07/31/2000	19990731-WU	Transfer
PSC-05-0308-PAA-WU	03/21/2005	20040159-WU	Partial Transfer and Issuance of Certificate 627-W
*	*	20180174-WU	Transfer

***Order Number and date to be provided at time of issuance**

Sunrise Water, LLC
Schedule of Net Book Value as of June 15, 2018

<u>Description</u>	<u>Balance Per</u>		<u>Staff</u>
	<u>Utility</u>	<u>Adjustments</u>	<u>Recommendation</u>
Utility Plant in Service	\$109,300	\$0	\$109,300
Land & Land Rights	553	0	553
Accumulated Depreciation	(86,449)	852	(85,597)
CIAC	0	(12,393)	(12,393)
Amortization of CIAC	<u>0</u>	<u>12,393</u>	<u>12,393</u>
Total	<u>\$23,404</u>	<u>\$852</u>	<u>\$24,258</u>

**Explanation of Staff's Recommended
Adjustments to Net Book Value as of June 15, 2018**

Explanation

Accumulated Depreciation

To reflect appropriate amount of accumulated depreciation. \$852

Contributions-In-Aid-of-Construction (CIAC)

To reflect appropriate amount of CIAC. (\$12,393)

Accumulated Amortization of CIAC

To reflect appropriate amount of accumulated amortization of CIAC. \$12,393

Total Adjustments to Net Book Value as of June 15, 2018 \$852

Sunrise Water, LLC
Schedule of Staff Recommended Account Balances as of June 15, 2018

<u>Account</u>			<u>UPIS</u>	<u>Accumulated</u>
<u>No.</u>	<u>Description</u>			<u>Depreciation</u>
301	Organization		\$750	(\$350)
304	Structures & Improvements		5,412	(4,100)
307	Wells & Springs		16,972	(16,845)
309	Supply Mains		649	202
310	Power Generation Equipment		15,070	(10,165)
311	Pumping Equipment		17,376	(7,871)
320	Water Treatment Equipment		4,055	(4,055)
330	Distribution Reservoirs		21,484	(18,152)
331	Transmission & Distribution Mains		12,393	(9,379)
334	Meters & Meter Install		12,257	(12,257)
340	Office Furniture and Equipment		494	(237)
348	Other Tangible Plant		<u>2,388</u>	<u>(2,388)</u>
Total			<u>\$109,300</u>	<u>(\$85,597)</u>

**Sunrise Utilities, LLC
Monthly Water Rates**

Residential and General Service

Base Facility Charge by Meter Size

5/8" x 3/4"	\$10.01
3/4"	\$15.02
1"	\$25.03
1 1/2"	\$50.05
2"	\$80.08
3"	\$160.16
4"	\$250.25
6"	\$500.50

Charge Per 1,000 gallons - Residential

0-5,000 gallons	\$3.19
5,001-10,000 gallons	\$3.51
Over 10,000 gallons	\$7.01

Charge Per 1,000 gallons - General

\$3.63

Initial Customer Deposits

Residential Service and General Service

5/8" x 3/4" – Residential and General	\$52.00
Over 5/8" x 3/4" – General	2 times average estimated bill

Miscellaneous Service Charges

Business Hours

Initial Connection Charge	\$15.00
Normal Reconnection Charge	\$15.00
Violation Reconnection Charge	\$15.00
Premises Visit Charge (in lieu of disconnection)	\$10.00
Late Payment Charge	\$7.00

Service Availability Charges

System Capacity Charge	
Residential – per ERC	\$450.00

Item 10

State of Florida



Public Service Commission

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

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

DATE: June 26, 2019

TO: Office of Commission Clerk (Teitzman)

FROM: Division of Engineering (Lewis, Knoblauch, Graves) *CKL EK*
Division of Accounting and Finance (Sewards, Bennett, Norris) *TS ALM*
Division of Economics (Bruce, Hudson) *WJ DM BF*
Office of the General Counsel (Crawford) *ESD JSH*

RE: Docket No. 20180175-WU – Application to transfer facilities and Certificate No. 628-W in Polk County from Alturas Utilities, L.L.C. to Alturas Water, LLC.

AGENDA: 07/09/19 – Regular Agenda – Proposed Agency Action for Issue 2 - Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Brown

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: Place after 20180174-WU (Sunrise Utilities, LLC) on the Agenda.

Case Background

On September 14, 2018, an application was filed to transfer the operations of Alturas Utilities, L.L.C. (Alturas Utilities or Utility) to Alturas Water, LLC (Buyer).¹ Alturas Utilities is a Class C utility providing water service to approximately 48 residential customers and 7 general service customers in Polk County.² The service territory is located in the Southwest Florida Water Management District.

¹A single purchase agreement effected the purchase of two separately certificated utilities, both located in Polk County. The transfer of Sunrise Utilities, LLC, is addressed in Docket No. 20180174-WU.

²2018 Annual Report on file with the Commission, p. 18.

The Commission granted a grandfather certificate to the Utility in 1997 originally in the name of Alturas Waterworks.³ In 1998, Alturas Waterworks was transferred to Keen Sales, Rentals and Utilities, Inc. (Keen).⁴ Alturas Utilities acquired a portion of Keen's service territory in 2005 when the Commission granted the transfer.⁵ According to the Utility's 2018 Annual Report, its total gross revenues were \$24,789 and total operating expenses were \$35,372, resulting in a net loss of \$12,124.

By Order No. PSC-16-0128-PAA-WU, issued March 29, 2016, in Docket No. 20140219-WU, the Commission established rates and charges for Alturas Utilities. The Commission additionally ordered the Utility to refund customer deposits as well as over collected rate case expense from its 2009 rate case. By letter dated May 29, 2019, the Buyer provided evidence that the appropriate amount of customer deposits and rate case expense were refunded.

This recommendation addresses the application to transfer facilities and Certificate No. 628-W filed on September 14, 2018, the appropriate net book value for transfer purposes, and whether an acquisition adjustment is appropriate. The Commission has jurisdiction in this case pursuant to Section 367.0814, Florida Statutes (F.S.).

³Order No. PSC-97-0513-FOF-WU, issued May 5, 1997, in Docket No. 19961109-WU, *In re: Application for grandfather certificate to operate a water utility in Polk County by Alturas Water Works.*

⁴Order No. PSC-98-1752-FOF-WU, issued December 22, 1998, in Docket No. 19980536-WU, *In re: Application for transfer of water facilities from Alturas Water Works to Keen Sales, Rentals and Utilities, Inc. in Polk County, cancellation of Alturas' Certificate No. 591-W, and amendment of Keen's Certificate No. 582-W to include additional territory.*

⁵Order No. PSC-05-0309-PAA-WU, issued March 21, 2005, in Docket No. 20040160-WU, *In re: Application for transfer of portion of Certificate No. 582-W by Keen Sales, Rentals and Utilities, Inc. to Alturas Utilities, L.L.C., in Polk County.*

Discussion of Issues

Issue 1: Should the application for transfer of Certificate No. 628-W in Polk County, from Alturas Utilities, L.L.C. to Alturas Water, LLC be approved?

Recommendation: Yes. The transfer of the water system and Certificate No. 628-W is in the public interest and should be approved effective the date of the Commission's vote. The resultant order should serve as the Buyer's certificate and should be retained by the Buyer. The existing rates and charges should remain in effect until a change is authorized by the Commission in a subsequent proceeding. The tariffs reflecting the transfer should be effective for services rendered or connections made on or after the stamped approval date on the tariffs, pursuant to Rule 25-30.475, Florida Administrative Code (F.A.C). The Buyer will be responsible for paying Regulatory Assessment Fees (RAFs) for 2019 and all subsequent years. The Buyer has filed the 2018 Annual Report, and will be responsible for filing all future annual reports. (Lewis, Knoblauch, Sowards)

Staff Analysis: On September 14, 2018, the Buyer filed an application for the transfer of Certificate No. 628-W from Alturas Utilities, L.L.C. to Alturas Water, LLC in Polk County. The application is in compliance with Section 367.071, F.S., and Commission rules concerning applications for transfer of certificates. The sale to Alturas Water, LLC occurred on June 15, 2018, contingent upon Commission approval, pursuant to Section 367.071(1), F.S.

Noticing, Territory, and Land Ownership

The Buyer provided notice of the application pursuant to Section 367.071, F.S., and Rule 25-30.030, F.A.C. No objections to the transfer were filed, and the time for doing so has expired. The application contains a description of the water service territory which is appended to this recommendation as Attachment A. The application contains a copy of a warranty deed agreement that was executed on June 15, 2018, as evidence that the Buyer owns or has rights to long-term use of the land upon which the water treatment facilities are located pursuant to Rule 25-30.037(2)(s), F.A.C.

Purchase Agreement and Financing

Pursuant to Rule 25-30.037(2)(i), and (j), F.A.C., the application contains a statement regarding financing and a copy of the Purchase Agreement, which includes the purchase price, terms of payment, and a list of the assets purchased. The Buyer stated in the application that he assumes responsibility for all customer deposits. There are no guaranteed revenue contracts, developer agreements, customer advances, leases, or debt of the Utility that must be disposed of with regard to the transfer. The Purchase Agreement was prepared for the sale of Alturas Utilities, L.L.C. and Sunrise Utilities, LLC for a total purchase price of \$89,900. Based upon Equivalent Residential Connections, the allocated portion of the purchase price for Alturas Utilities is \$18,789. According to the Buyer, the sale took place on June 15, 2018, subject to Commission approval, pursuant to Section 367.071(1), F.S.

Facility Description and Compliance

The water treatment system consists of one well with a hydropneumatic tank rated at 3,000 gallons, and utilizes a chlorination process for disinfection. The distribution system consists of varying sizes of 1- to 4-inch polyvinyl chloride (PVC), concrete, and galvanized iron pipes.

The last sanitary survey of the facility was conducted on July 31, 2018, by the Florida Department of Environmental Protection (DEP), which identified a variety of deficiencies. Additionally, Alturas Utilities has several open consent orders with the Polk County Department of Health (PCDH). Pursuant to Rule 25-30.037(2)(q), F.A.C., the Buyer provided a description of the required repairs and improvements as well as an approximate cost to complete the repairs and improvements. Additionally, the Buyer has provided documentation which demonstrates that he is working with the PCDH and the DEP to address the issues outlined in the open consent orders.

Technical and Financial Ability

Pursuant to Rule 25-30.037(2), F.A.C., the application contains statements and documentation describing the technical and financial ability of the Buyer to provide service to the proposed service area. The Buyer was appointed to the Citrus County Water and Wastewater Authority, the local regulatory body for Citrus County, where he served for seven years. The Buyer also served as the "Class C" representative for the Legislative Study Committee for Investor-Owned Water and Wastewater Utility Systems in 2013. He attends yearly training classes through the Florida Rural Water Association and completed the National Association of Regulatory Utility Commissioners Utility Rate School in 2001. The Buyer is the owner and manager of several Class C water and wastewater facilities that are regulated by the Commission. Staff reviewed the personal financial statements of the Buyer, as well as the financial statements of the Buyer's company, Florida Utility Services 1, LLC.⁶ Based on the above, the Buyer has demonstrated the technical and financial ability to provide service to the existing service territory.

Rates and Charges

The Utility's rates were last approved in a staff-assisted rate case.⁷ The Utility's late payment charge was approved administratively in 2010.⁸ The Utility's miscellaneous service charges were approved in 1997.⁹ The Utility's existing rates and charges are shown on Schedule No. 2. Rule 25-9.044(1), F.A.C., provides that, in the case of a change of ownership or control of a utility, the rates, classifications, and regulations of the former owner must continue unless authorized to change by this Commission. Therefore, staff recommends that the Utility's existing rates and charges remain in effect until a change is authorized by the Commission in a subsequent proceeding.

⁶Document No. 06855-2018.

⁷Order No. PSC-16-0128-PAA-WU, issued March 29, 2016, in Docket No. 20140219-WU, *In re: Application for staff-assisted rate case in Polk County by Alturas Utilities, L.L.C.*

⁸WS-10-0098.

⁹Order No. PSC-97-0513-FOF-WU, issued May 5, 1997, in Docket No. 19961109-WU, *In re: Application for Grandfather Certificate to operate a water utility in Polk County by Alturas Water Works.*

Regulatory Assessment Fees and Annual Reports

Staff has verified that the Utility is current with respect to annual reports and RAFs through December 31, 2018. The Buyer will be responsible for filing annual reports and paying RAFs for 2019 and all subsequent years.

Conclusion

Based on the foregoing, staff recommends that the transfer of the water system and Certificate No. 628-W is in the public interest and should be approved effective the date of the Commission vote. The resultant order should serve as the Buyer's certificate and should be retained by the Buyer. The existing rates and charges should remain in effect until a change is authorized by the Commission in a subsequent proceeding. The tariffs reflecting the transfer should be effective for services rendered or connections made on or after the stamped approval date on the tariffs, pursuant to Rule 25-30.475, F.A.C. The Buyer will be responsible for paying all future RAFs and filing all future annual reports.

Issue 2: What is the appropriate net book value for the Alturas Utilities water system for transfer purposes and should an acquisition adjustment be approved?

Recommendation: The net book value (NBV) of the water system for transfer purposes is \$22,035, as of June 15, 2018. An acquisition adjustment should not be included in rate base. Within 90 days of the date of the final order, Alturas Water, LLC should be required to notify the Commission in writing that it has adjusted its books in accordance with the Commission's decision. The adjustments should be reflected in the 2019 Annual Report. (Sewards, Bennett)

Staff Analysis: Rate base was last established as of December 31, 2014.¹⁰ The purpose of establishing NBV for the water system for transfers is to determine whether an acquisition adjustment should be approved. The NBV does not include normal ratemaking adjustments for non-used and useful plant and working capital. The NBV has been updated to reflect balances as of June 15, 2018. Staff's recommended NBV, as described below, is shown on Schedule No. 1.

Utility Plant in Service (UPIS)

The Utility's general ledger reflected a UPIS balance of \$64,927, as of June 15, 2018. Staff reviewed the UPIS balance and has no adjustments. Therefore, staff recommends a UPIS balance of \$64,927.

Land

In Order No. PSC-16-0128-PAA-WU,¹¹ the Commission established the value of the land to be \$500. The Utility's general ledger reflected a land balance of \$500. There have been no additions to land purchased since that order was issued. Therefore, staff recommends a land balance of \$500, as of June 15, 2018.

Accumulated Depreciation

The Utility's general ledger reflected an accumulated depreciation balance of \$43,329, as of June 15, 2018. Audit staff reviewed additional depreciation since the last rate case proceeding and calculated an accumulated depreciation balance of \$43,392. As a result, accumulated depreciation should be increased by \$63 to reflect an accumulated depreciation balance of \$43,392, as of June 15, 2018.

Contributions-in-Aid-of-Construction (CIAC) and Accumulated Amortization of CIAC

As of June 15, 2018, the Utility's general ledger reflected a fully amortized CIAC balance of \$18,637. Staff reviewed the CIAC balances and has no adjustments. Therefore, staff recommends a CIAC balance of \$18,637 and accumulated amortization of CIAC balance of \$18,637, as of June 15, 2018.

Net Book Value

The Utility's general ledger reflected NBV of \$22,098. Based on the adjustments described above, staff recommends that the NBV for the Utility's system is \$22,035, as of June 15, 2018.

¹⁰Order No. PSC-16-0128-PAA-WU, issued March 29, 2016, in Docket No. 20140219-WU, *In re: Application for staff-assisted rate case in Polk County by Alturas Utilities, L.L.C.*

¹¹*Id.*

Date: June 26, 2019

Staff's recommended NBV and the National Association of Regulatory Utility Commissioners, Uniform System of Accounts balances for UPIS and accumulated depreciation are shown on Schedule No. 1.

Acquisition Adjustment

An acquisition adjustment results when the purchase price differs from the NBV of the assets at the time of the acquisition. The Utility and its assets were purchased for \$18,789. As stated above, staff recommends the appropriate NBV total to be \$22,035. Pursuant to Rule 25-30.0371, F.A.C., a positive acquisition adjustment may be appropriate when the purchase price is greater than the NBV, and a negative acquisition adjustment may be appropriate when the purchase price is less than NBV. However, pursuant to Rule 25-30.0371(3), F.A.C., if the purchase price is greater than 80 percent of NBV, a negative acquisition adjustment will not be included in rate base. The purchase price of \$18,789 is greater than 80 percent of Alturas Utilities' net book value. Thus, staff recommends that no negative acquisition adjustment be included in accordance with Rule 25-30.0371(3), F.A.C.

Conclusion

Based on the above, staff recommends that the NBV of the Alturas Utilities system for transfer purposes is \$22,035, as of June 15, 2018. No acquisition adjustment should be included in rate base. Within 90 days of the date of the final order, the Buyer should be required to notify the Commission in writing that it has adjusted its books in accordance with the Commission's decision. The adjustments should be reflected in the Alturas Water, LLC 2019 Annual Report.

Issue 3: Should this docket be closed?

Recommendation: If no protest to the proposed agency action is filed by a substantially affected person within 21 days of the date of the issuance of the order, a consummating order should be issued and the docket should be closed administratively upon Commission staff's verification that the revised tariff sheets have been filed and the Buyer has notified the Commission in writing that it has adjusted its books in accordance with the Commission's decision. (Crawford)

Staff Analysis: If no protest to the proposed agency action is filed by a substantially affected person within 21 days of the date of the issuance of the order, a consummating order should be issued and the docket should be closed administratively upon Commission staff's verification that the revised tariff sheets have been filed and the Buyer has notified the Commission in writing that it has adjusted its books in accordance with the Commission's decision.

TERRITORY DESCRIPTION

Alturas Water, LLC

Polk County

Water Service

**Township 30 South, Range 26 East
In Section 16**

The Northeast 1/4 less the Northwest 1/4 of the Northeast 1/4 and less the Northwest 1/4 of the Northeast 1/4 of the Northeast 1/4 and less Star Lake.

The Southeast 1/4 of the Southeast 1/4 of the Northwest 1/4.

The North 480 feet of the Southeast 1/4.

The East 672 feet of the Southeast 1/4 less the South 672 feet.

FLORIDA PUBLIC SERVICE COMMISSION

authorizes

Alturas Water, LLC

pursuant to

Certificate Number 628-W

to provide water service in Polk County in accordance with the provisions of Chapter 367, Florida Statutes, and the Rules, Regulations, and Orders of this Commission in the territory described by the Orders of this Commission. This authorization shall remain in force and effect until superseded, suspended, cancelled or revoked by Order of this Commission.

<u>Order Number</u>	<u>Date Issued</u>	<u>Docket Number</u>	<u>Filing Type</u>
PSC-97-0513-FOF –WU	05/5/1997	19961109-WU	Grandfather
PSC-98-1752-FOF-WU	12/22/1998	19980536-WU	Transfer
PSC-05-0309-PAA-WU	03/21/2005	20040160-WU	Partial Transfer and Issuance of Certificate 628-W
*	*	20180175-WU	Transfer

***Order Number and date to be provided at time of issuance**

Alturas Water LLC.
Net Book Value as of June 15, 2018

Description	Balance Per Utility	Adjustments	Staff Recommendation
Utility Plant in Service	\$64,927	\$0	\$64,927
Land & Land Rights	500	0	500
Accumulated Depreciation	(43,329)	(63)	(43,392)
CIAC	(18,637)	0	(18,637)
Amortization of CIAC	<u>18,637</u>	<u>0</u>	<u>18,637</u>
Total	<u>\$22,098</u>	<u>(\$63)</u>	<u>\$22,035</u>

**Explanation of Staff's Recommended
Adjustments to Net Book Value as of June 15, 2018**

Explanation	Amount
Accumulated Depreciation To reflect appropriate amount of accumulated depreciation.	<u>(\$63)</u>

Alturas Water LLC.
Schedule of Staff Recommended Account Balances as of June 15, 2018

Account			Accumulated
No.	Description	UPIS	Depreciation
304	Structures & Improvements	\$519	(\$133)
307	Wells & Springs	6,987	(6,987)
309	Supply Mains	237	(59)
311	Pumping Equipment	9,108	(5,827)
320	Water Treatment Equipment	220	(220)
330	Distribution Reservoirs	22,822	(9,685)
331	Transmission & Distribution Mains	18,787	(18,787)
334	Meters & Meter Installations	<u>6,247</u>	<u>(1,694)</u>
	Total	<u>\$64,927</u>	<u>(\$43,392)</u>

**Alturas Utilities, LLC
Monthly Water Rates**

Residential and General Service

Base Facility Charge by Meter Size

5/8" x 3/4"	\$12.47
3/4"	\$18.71
1"	\$31.18
1 1/2"	\$62.35
2"	\$99.76
3"	\$199.52
4"	\$311.75
6"	\$623.50

Charge Per 1,000 gallons	\$5.63
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Initial Customer Deposits

	Residential Service	General Service
5/8" x 3/4"	\$86.00	2 times average estimated bill
Over 5/8" x 3/4"	2 times average estimated bill	2 times average estimated bill

Miscellaneous Service Charges

	<u>Business Hours</u>
Initial Connection Charge	\$15.00
Normal Reconnection Charge	\$15.00
Violation Reconnection Charge	\$15.00
Premises Visit Charge (in lieu of disconnection)	\$10.00
Late Payment Charge	\$5.50

Item 11

State of Florida



Public Service Commission

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

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

DATE: June 26, 2019

TO: Office of Commission Clerk (Teitzman)

FROM: Division of Economics (Ramos) MR SH ELD 9/3H TB
Division of Accounting and Finance (D. Buys, Smith II) ALM
Division of Engineering (Knoblauch, Salvador) LS PR
Office of the General Counsel (Simmons, J. Crawford) JSC

RE: Docket No. 20190031-WU – Application for increase in water rates in Highlands County by Placid Lakes Utilities, Inc.

AGENDA: 07/09/2019 – Regular Agenda – Decision on Suspension of Rates and Interim Rates – Participation is at the Discretion of the Commission

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Clark

CRITICAL DATES: 07/12/19 (60-Day Suspension and Decision on Interim Rates)

SPECIAL INSTRUCTIONS: None

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COMMISSION CLERK

Case Background

Placid Lakes Utilities, Inc. (Placid Lakes or utility) is a Class B utility serving water to approximately 1,973 residential customers and 34 general service customers. The utility's last rate case was in 2013.¹ According to the utility's 2018 annual report, the utility had total operating revenues of \$672,308 and operating expenses of \$540,289. On May 13, 2019, Placid Lakes filed its application for the rate increase at issue in the instant docket.

¹Order No. PSC-13-0646-PAA-WU, in Docket No. 20130025-WU, dated December 5, 2013, *In re: Application for increase in water rates in Highlands County by Placid Lake Utilities, Inc.*

On June 12, 2019, staff sent the utility a letter indicating deficiencies in the filing of its minimum filing requirements (MFRs). The utility corrected the deficiencies within its MFRs on June 21, 2019, which is therefore, the official filing date. The utility requested that the application be processed using the Proposed Agency Action (PAA) procedure and requested interim rates. The test year established for interim and final rates is based on a 13 month average for the period ended December 31, 2018. Placid Lakes requested an interim revenue increase of \$47,908 (7.16 percent). The utility requested a final revenue increase of \$97,116 (14.52 percent).

The 60-day statutory deadline for the Commission to suspend the utility's requested final rates and approve interim rates is July 12, 2019. This recommendation addresses the suspension of Placid Lakes' requested final rates and its requested interim rates. The Commission has jurisdiction pursuant to Sections 367.081 and 367.082, Florida Statutes (F.S.).

Discussion of Issues

Issue 1: Should the utility's proposed final water rates be suspended?

Recommendation: Yes. Placid Lakes' proposed final water rates should be suspended. (Ramos)

Staff Analysis: Section 367.081(6), F.S., provides that the Commission may, for good cause, withhold consent to the implementation of requested rates within 60 days after the date the rate request is filed. Further, Section 367.081(10), F.S., permits the proposed rates to go into effect (secured and subject to refund) at the expiration of five months from the official date of filing if: (1) the Commission has not acted upon the requested rate increase; or (2) the Commission's action is protested by a party other than the utility.

Staff reviewed the filing and considered the information filed in support of the rate application and the proposed final rates. Staff believes that further investigation of this information, including on-site inspections, is needed. Staff initiated an audit of Placid Lakes' books and records. The audit is tentatively due on August 13, 2019. In addition, staff sent its first data request to the utility on June 21, 2019. The utility's response to the data request is due on July 22, 2019. Based on the foregoing, staff recommends Placid Lakes' proposed final water rates be suspended.

Issue 2: Should any interim revenue increase be approved?

Recommendation: Yes, Placid Lakes should be authorized to collect annual water revenues as indicated below:

	Adjusted Test Year Revenues	\$ Increase	Revenue Requirement	% Increase
Water	\$685,384	\$30,646	\$716,030	4.47%

(Smith, Salvador, Ramos)

Staff Analysis: On May 13, 2019, Placid Lakes filed its rate base, cost of capital, and operating statements to support its requested interim increase in water rates. Pursuant to Section 367.082(1), F.S., in order to establish a prima facie entitlement for interim relief, the utility shall demonstrate that it is earning outside the range of reasonableness on its rate of return. Pursuant to Section 367.082(2)(a), F.S., in a proceeding for an interim increase in rates, the Commission shall authorize, within 60 days of the filing for such relief, the collection of rates sufficient to earn the minimum of the range of rate of return. Based on the utility's filing, staff believes that the utility has demonstrated a prima facie entitlement in accordance with Section 367.082(1), F.S.

Pursuant to Section 367.082(5)(b)1, F.S., the achieved rate of return for interim purposes must be calculated by applying adjustments consistent with adjustments made in the utility's most recent rate proceeding and annualizing any rate changes. Staff has reviewed Placid Lakes' interim request, as well as Order No. PSC-13-0646-PAA-WU (Order), in which the Commission last established rate base, and determined that an adjustment of \$16,845 should be made to test year revenues.

Staff attached accounting schedules to illustrate the recommended interim rate base, capital structure, and test year operating income amounts. The rate base schedule is labeled as Schedule No. 1, capital structure is labeled as Schedule No. 2, the operating income schedule is labeled as Schedule No. 3-A, and adjustments to operating income schedule is labeled as Schedule No. 3-B.

Rate Base

Pursuant to Section 367.082(5)(b)1, F.S., the achieved rate of return for interim purposes must be calculated by applying adjustments consistent with adjustments made in the utility's most recent rate proceeding. Also, pursuant to Section 367.082, F.S., the method used to calculate Used and Useful (U&U) in Placid Lakes' last rate case must be used for interim purposes. In the Order, the Commission found that Placid Lakes' water treatment plant and storage are 100 percent U&U and the water distribution system is 79.09 percent U&U. Based on review of the prior Order and the utility's filing in this case, staff recommends that the water treatment plant and storage be considered 100 percent U&U and the water distribution system be considered 79.09 percent U&U. Based on staff's review, no adjustments are necessary to the utility's rate base as filed. Therefore, staff recommends the Placid Lakes' interim rate base should be \$520,365.

Cost of Capital

Based on an analysis of the MFRs and staff's review of the Order, staff believes that no adjustments are necessary to the utility's capital structure as filed. In its interim request, Placid Lakes used the minimum of the range of its last authorized return on equity of 9.33 percent. The appropriate interim weighted cost of capital for Placid Lakes is 6.57 percent.

Net Operating Income

In its MFRs, the utility made an adjustment of \$16,485 to test year revenues to account for adjusted customer bills as a result of complaints. However, staff believes that no adjustments other than rate changes should be made to annualize test year data to calculate the interim revenue requirement because any adjustment aside from rate changes are not relevant to the determination of the achieved rate of return. As a result, staff increased the interim test year operating revenues by \$16,485. Therefore, staff recommends that the appropriate test year operating income, before any revenue increase, should be \$12,337.

Revenue Requirement

Based on the above analysis, staff recommends an interim revenue requirement of \$716,030. This represents an interim increase in annual revenues of \$30,646 (or 4.47 percent). This increase will allow the utility the opportunity to recover its operating expenses and earn a 6.57 percent return on its rate base.

Issue 3: What are the appropriate interim water rates?

Recommendation: Staff recommends an interim rate increase of 4.52 percent should be applied as an across-the-board increase to the existing service rates. The rates, as shown on Schedule No. 4, should be effective for service rendered on or after the stamped approval date on the tariff sheets pursuant to Rule 25-30.475(1), Florida Administrative Code (F.A.C.). The utility should file revised tariff sheets and a proposed customer notice to reflect the Commission-approved rates. In addition, the approved rates should not be implemented until the required security has been filed, staff has approved the proposed customer notice, and the notice has been received by the customers. The utility should provide proof of the date notice was given within 10 days of the date of the notice. (Ramos)

Staff Analysis: Staff recommends that interim service rates for Placid Lakes be designed to allow the utility the opportunity to generate annual operating revenues of \$716,030. Before removal of miscellaneous revenues, this would result in an increase of \$30,646 (4.47 percent), as discussed in Issue 2. To determine the appropriate increase to apply to the service rates, miscellaneous revenues should be removed from the test year revenues. Staff's calculation of the appropriate percent increase to Placid Lakes' existing rates is shown in Table 3-1.

Table 3-1
Percentage Service Rate Increase

1. Total Adjusted Test Year Revenues	\$685,384
2. Less: Miscellaneous Revenues	\$7,817
3. Test Year Revenues from Service Rates	\$677,567
4. Revenue Increase	\$30,646
5. Percentage Service Rate Increase (Line 4/Line 3)	4.52%

Source: Staff's Recommended Revenue Requirement and utility's MFRs

Based on the above, staff recommends an interim rate increase of 4.52 percent should be applied as an across-the-board increase to the existing service rates. The rates, as shown on Schedule No. 4, should be effective for service rendered on or after the stamped approval date on the tariff sheets pursuant to Rule 25-30.475(1), F.A.C. The utility should file revised tariff sheets and a proposed customer notice to reflect the Commission-approved rates. In addition, the approved rates should not be implemented until the required security has been filed, staff has approved the proposed customer notice, and the notice has been received by the customers. The utility should provide proof of the date notice was given within 10 days of the date of the notice.

Issue 4: What is the appropriate security to guarantee the interim increase?

Recommendation: A corporate undertaking of \$20,594 is acceptable, contingent upon receipt of the written guarantee of the parent company, Lake Placid Holding Company, (LPHC or Company). LPHC should be required to file a corporate undertaking on behalf of Placid Lakes Utilities, Inc. to guarantee any potential refund of revenues collected under interim conditions. Pursuant to Rule 25-30.360(6), F.A.C., the utility should provide a report by the 20th of each month indicating the monthly and total revenue collected subject to refund. Should a refund be required, the refund should be with interest and in accordance with Rule 25-30.360, F.A.C. (Smith)

Staff Analysis: Pursuant to Section 367.082, F.S., revenues collected under interim rates shall be placed under bond, escrow, letter of credit, or corporate undertaking subject to refund with interest at a rate ordered by the Commission. As recommended in Issue 2, the total annual interim increase should be \$30,646. In accordance with Rule 25-30.360, F.A.C., staff calculated the potential refund of revenues and interest collected under interim conditions to be \$20,594. This amount is based on an estimated eight months of revenue being collected from staff's recommended interim rates over the utility's current authorized rates shown on Schedule No. 4.

The criteria for a corporate undertaking include sufficient liquidity, ownership equity, profitability, and interest coverage to guarantee any potential refund. Staff reviewed LPHC's 2016, 2017, and 2018 financial statements to determine if the Company can support a corporate undertaking on behalf of its subsidiary. LPHC reported insufficient net income in 2016, 2017, and 2018, as well as insufficient return on equity in 2018. However, LPHC reported a sufficient working capital amount, current ratio, and Interest Coverage Ratio in 2016, 2017, and 2018. LPHC also reported adequate ownership equity and equity ratios over the three-year review period.

Based on staff's review of the financial reports submitted by LPHC, staff believes LPHC has adequate resources to support a corporate undertaking in the amount requested. Therefore, staff recommends that a corporate undertaking of \$20,594 is acceptable, contingent upon receipt of the written guarantee of LPHC.

The brief financial analysis above is only appropriate for deciding if LPHC can support a corporate undertaking in the amount proposed and should not be considered a finding regarding staff's position on other issues in this proceeding.

Pursuant to Rule 25-30.360(6), F.A.C., the utility should provide a report by the 20th day of each month indicating the monthly and total revenue collected subject to refund. Should a refund be required, the refund should be with interest and undertaken in accordance with Rule 25-30.360, F.A.C.

In no instance should maintenance and administrative costs associated with any refund be borne by the customers. The costs are the responsibility of, and should be borne by, the utility.

Issue 5: Should this docket be closed?

Recommendation: The docket should remain open pending the Commission's PAA decision on the utility's requested rate increase. (Simmons)

Staff Analysis: The docket should remain open pending the Commission's PAA decision on the utility's requested rate increase.

Placid Lakes Utilities, Inc. Schedule of Water Rate Base Test Year Ended 12/31/18			Schedule No. 1 Docket No. 20190031-WU		
Description	Test Year Per Utility	Utility Adjust- ments	Adjusted Test Year Per Utility	Staff Adjust- ments	Staff Adjusted Test Year
1 Plant in Service	\$3,048,184	(\$23,010)	\$3,025,174	\$0	\$3,025,174
2 Land and Land Rights	4,355	0	4,355	0	4,355
3 Non-used and Useful Components	0	(51,586)	(51,586)	0	(51,586)
4 CWIP	4,325	(4,325)	0	0	0
5 Accumulated Depreciation	(1,848,667)	16,699	(1,831,968)	0	(1,831,968)
6 CIAC	(1,897,731)	9,458	(1,888,273)	0	(1,888,273)
7 Amortization of CIAC	1,243,797	(26,324)	1,217,473	0	1,217,473
10 Advances for Construction	(18,783)	(3,351)	(22,134)	0	(22,134)
11 Working Capital Allowance	<u>0</u>	<u>67,324</u>	<u>67,324</u>	<u>0</u>	<u>67,324</u>
12 Rate Base	<u>\$535,480</u>	<u>(\$15,115)</u>	<u>\$520,365</u>	<u>\$0</u>	<u>\$520,365</u>

Placid Lakes Utilities, Inc. Capital Structure-13-Month Average Test Year Ended 12/31/18						Schedule No. 2 Docket No. 20190031-WU		
Description	Total Capital	Specific Adjust- ments	Subtotal Adjusted Capital	Prorata Adjust- ments	Capital Reconciled to Rate Base	Ratio	Cost Rate	Weighted Cost
Per Utility								
1 Long-term Debt	\$466,426	(\$248,558)	\$217,868	(\$65,732)	\$152,136	29.24%	3.45%	1.01%
2 Short-term Debt	0	0	0	0	0	0.00%	0.00%	0.00%
3 Preferred Stock	0	0	0	0	0	0.00%	0.00%	0.00%
4 Common Equity	261,465	171,115	432,580	(130,511)	302,069	58.05%	9.33%	5.42%
5 Customer Deposits	40,820	(3,370)	37,450	0	37,450	7.20%	2.00%	0.14%
6 Tax Credits-Zero Cost	0	0	0	0	0	0.00%	0.00%	0.00%
7 Deferred Income Taxes	<u>31,656</u>	<u>(2,945)</u>	<u>28,711</u>	<u>0</u>	<u>28,711</u>	<u>5.52%</u>	0.00%	<u>0.00%</u>
8 Total Capital	<u>\$800,367</u>	<u>(\$83,758)</u>	<u>\$716,609</u>	<u>(\$196,243)</u>	<u>\$520,366</u>	<u>100.00%</u>		<u>6.57%</u>
Per Staff								
11 Long-term Debt	\$466,426	(\$248,558)	\$217,868	(\$65,732)	\$152,136	29.24%	3.45%	1.01%
12 Short-term Debt	0	\$0	0	0	0	0.00%	0.00%	0.00%
13 Preferred Stock	0	\$0	0	0	0	0.00%	0.00%	0.00%
14 Common Equity	261,465	\$171,115	432,580	(130,511)	302,069	58.05%	9.33%	5.42%
15 Customer Deposits	40,820	(\$3,370)	37,450	0	37,450	7.20%	2.00%	0.14%
16 Tax Credits-Zero Cost	0	\$0	0	0	0	0.00%	0.00%	0.00%
17 Deferred Income Taxes	<u>31,656</u>	<u>(\$2,945)</u>	<u>28,711</u>	<u>0</u>	<u>28,711</u>	<u>5.52%</u>	0.00%	<u>0.00%</u>
18 Total Capital	<u>\$800,367</u>	<u>(\$83,758)</u>	<u>\$716,609</u>	<u>(\$196,243)</u>	<u>\$520,366</u>	<u>100.00%</u>		<u>6.57%</u>
						LOW	HIGH	
RETURN ON EQUITY						<u>8.33%</u>	<u>10.33%</u>	
OVERALL RATE OF RETURN						<u>5.99%</u>	<u>7.15%</u>	

Placid Lakes Utilities, Inc. Statement of Water Operations Test Year Ended 12/31/18						Schedule No. 3-A Docket No. 20190031-WU	
Description	Test Year Per Utility	Utility Adjust- ments	Adjusted Test Year Per Utility	Staff Adjust- ments	Staff Adjusted Test Year	Revenue Increase	Revenue Requirement
1 Operating Revenues:	<u>\$668,899</u>	<u>\$0</u>	<u>\$668,899</u>	<u>\$16,485</u>	<u>\$685,384</u>	<u>\$30,646</u> 4.47%	<u>\$716,030</u>
Operating Expenses							
2 Operation & Maintenance	\$540,289	(\$1,696)	\$538,593	\$0	\$538,593		\$538,593
3 Depreciation	54,649	(226)	54,423	0	54,423		54,423
4 Amortization	0	0	0	0	0		0
5 Taxes Other Than Income	80,091	(4,096)	75,995	0	75,995	1,379	77,374
6 Income Taxes	<u>5,890</u>	<u>4,266</u>	<u>10,156</u>	<u>(6,120)</u>	<u>4,036</u>	<u>7,418</u>	<u>11,453</u>
7 Operating Expenses	<u>680,919</u>	<u>(1,752)</u>	<u>679,167</u>	<u>(6,120)</u>	<u>673,047</u>	<u>8,797</u>	<u>681,843</u>
8 Operating Income	<u>(\$12,020)</u>	<u>\$1,752</u>	<u>(\$10,268)</u>	<u>\$22,605</u>	<u>\$12,337</u>	<u>\$21,849</u>	<u>\$34,187</u>
9 Rate Base	<u>\$535,480</u>		<u>\$520,365</u>		<u>\$520,365</u>		<u>\$520,365</u>
10 Rate of Return	<u>-2.24%</u>		<u>-1.97%</u>		<u>2.37%</u>		<u>6.57%</u>

Placid Lakes Utilities, Inc.		Schedule No. 3-B
Adjustments to Operating Income		Docket No. 20190031-WU
Test Year Ended 12/31/18		
Explanation	Water	
Operating Revenues		
To reflect the appropriate amount of annualized revenues.	\$16,485	

Placid Lakes Utilities, Inc. Test Year Ended 12/31/18 Monthly Water Rates		Schedule No. 4 Docket No. 20190031-WU
	Rates At Time of Filing	Staff Recommended Interim Rates
<u>Residential and General Service</u>		
Base Facility Charge by Meter Size		
5/8" x 3/4"	\$11.59	\$12.11
1"	\$28.98	\$30.28
1-1/2"	\$57.95	\$60.55
2"	\$92.72	\$96.88
3"	\$185.44	\$193.76
4"	\$289.75	\$302.75
6"	\$579.50	\$605.50
Charge per 1,000 Gallons- Residential Service		
0-10,000 gallons	\$4.34	\$4.54
10,001-20,000	\$6.52	\$6.81
Over 20,000 gallons	\$8.68	\$9.07
Charge per 1,000 gallons – General Service	\$4.64	\$4.85
<u>Typical Residential 5/8" x 3/4" Meter Bill Comparison</u>		
3,000 Gallons	\$24.61	\$25.73
6,000 Gallons	\$37.63	\$39.35
10,000 Gallons	\$54.99	\$57.51

Item 12

State of Florida



Public Service Commission

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

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

DATE: June 26, 2019

TO: Office of Commission Clerk (Teitzman)

FROM: Division of Economics (Bruce, Hudson) *SH*
Division of Accounting and Finance (Wilson, Golden, Hightower) *ALM*
Division of Engineering (Knoblauch, Lewis) *EK CKL*
Office of the General Counsel (DuVal) *MD TW*

RE: Docket No. 20190114-WU – Application for staff-assisted rate case in Alachua County, and request for interim rate increase by Gator Waterworks, Inc.

AGENDA: 07/09/19 – Regular Agenda – Decision on Interim Rates – Participation is at the Discretion of the Commission

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Clark

CRITICAL DATES: 07/12/19 (60-Day Decision on Interim Rates)

SPECIAL INSTRUCTIONS: None

COMMISSION
CLERK

2019 JUN 26 AM 8:42

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Case Background

Gator Waterworks, Inc. (Gator Waterworks or utility) is a Class C utility serving 354 residential water customers in Alachua County. The utility's rates and charges were last approved in a grandfather certificate proceeding in 1993.¹ However, the utility's rates have been amended through three price index increases. The utility has never had a staff-assisted rate case before the Commission. According to Gator Waterworks' 2018 annual report, total gross revenue was \$47,041 and total operating expense was \$80,178.

On May 13, 2019, Gator Waterworks filed its application for a staff-assisted rate case. In its application, the utility requested a test year ended March 31, 2019, for interim and final rate purposes.

This recommendation addresses the utility's interim rates. The Commission has jurisdiction pursuant to Sections 367.082 and 367.0814(4), Florida Statutes (F.S).

¹Order No. PSC-93-1027-FOF-WU, issued July 13, 1993, in Docket No. 19921195-WU, *In re: Application for certificate to provide water service in Alachua County under grandfather rights by Kincaid Hills Water Company.*

Discussion of Issues

Issue 1: Should an interim revenue increase be approved?

Recommendation: Yes, Gator Waterworks should be authorized to collect interim revenues as indicated below:

	Test Year Revenues	\$ Increase	Revenue Requirement	% Increase
Water	\$56,351	\$21,089	\$77,440	37.42%

(Wilson, Golden)

Staff Analysis: On May 13, 2019, Gator Waterworks filed an application requesting an interim revenue increase in its water rates. Section 367.0814(4), F.S., details interim rate increases for staff-assisted rate cases.

Section 367.0814(4), F.S., states:

The commission may, upon its own motion, or upon petition from the regulated utility, authorize the collection of interim rates until the effective date of the final order. Such interim rates may be based upon a test period different from the test period used in the request for permanent rate relief. To establish interim relief, there must be a demonstration that the operation and maintenance expenses exceed the revenues of the regulated utility, and interim rates shall not exceed the level necessary to cover operation and maintenance expenses as defined by the Uniform System of Accounts for Class C Water and Wastewater Utilities (1996) of the National Association of Regulatory Utility Commissioners.

Staff has reviewed the utility's filed operation and maintenance (O&M) expenses in relation to its revenues. Based on the utility's filing, staff recommends that Gator Waterworks has demonstrated a *prima facie* entitlement to an interim rate increase in accordance with Section 367.0814(4), F.S.

Revenue Increase

In order to establish interim rate relief as prescribed by Section 367.0814(4), F.S., staff used the utility's revenues reflected in its filing for the test year ended March 31, 2019. The test year revenues are \$56,351, which includes \$51,833 from water service rates and \$4,518 from miscellaneous service revenues. The test year O&M expenses are \$76,491. The difference between the utility's test year revenues and O&M expenses is \$20,140.

In addition, the interim water increase should be grossed up to include regulatory assessment fees (RAFs). The Commission has previously determined that it would be inappropriate to approve an increase in a utility's rates to cover its operating expenses and deny that same utility

Date: June 26, 2019

the funds to pay RAFs.² Furthermore, by approving an interim rate increase that allows for the payment of RAFs, the utility should be able to fully cover its O&M expenses. The RAFs associated with the interim increase equal \$949.

In total, Gator Waterworks should be allowed an interim water revenue increase of \$21,089 (\$20,140 + \$949) to produce revenues sufficient to cover O&M expenses and additional RAFs. Thus, staff recommends the appropriate interim revenue requirement should be \$77,440. This is a 37.42 percent increase above the utility's test year revenues. Table 1-1 illustrates staff's interim increase calculation.

Table 1-1
Determination of Interim Increase

	Water
1. Utility Test Year O&M Expenses	\$76,491
2. Less: Utility Test Year Revenues	<u>\$56,351</u>
3. Revenues to Cover O&M Expenses	\$20,140
4. Interim Revenue Increase	\$20,140
5. RAFs on Interim Rate Increase	\$949
6. Total Interim Revenue Increase (\$)	<u>\$21,089</u>
7. Total Interim Revenue Increase (%)	<u>37.42%</u>

Source: The utility's application and staff's calculations

²Order No. PSC-01-1654-FOF-WS, issued August 13, 2001, in Docket No. 20010396-WS, *In re: Application for staff-assisted rate case in Brevard County by Burkim Enterprises, Inc.*

Issue 2: What are the appropriate interim water rates?

Recommendation: The interim rate increase of 40.69 percent should be applied as an across-the-board increase to the existing service rates. The rates, as shown on Schedule No. 1, should be effective for service rendered on or after the stamped approval date on the tariff sheets pursuant to Rule 25-30.475(1), Florida Administrative Code (F.A.C.). The utility should file revised tariff sheets and a proposed customer notice to reflect the Commission-approved rates. In addition, the approved rates should not be implemented until the required security has been filed, staff has approved the proposed customer notice, and the notice has been received by the customers. The utility should provide proof of the date notice was given within 10 days of the date of the notice. (Bruce)

Staff Analysis: Staff recommends that interim service rates for Gator Waterworks are designed to allow the utility the opportunity to generate annual operating revenues of \$77,440. Before removal of miscellaneous revenues, this would result in an increase of \$21,089 (37.42 percent). To determine the appropriate increase to apply to the service rates, miscellaneous revenues should be removed from the test year revenues. The calculation is as follows:

Table 2-1
Percentage Increase Less Miscellaneous Revenues

	<u>Water</u>
1. Total Test Year Revenues	\$56,351
2. Less: Miscellaneous Revenues	<u>\$4,518</u>
3. Test Year Revenues from Service Rates	\$51,833
4. Revenue Increase	<u>\$21,089</u>
5. % Service Rate Increase (Line 4/Line 3)	<u>40.69%</u>

Source: Staff's recommended revenue requirement and the utility's application

Staff recommends that the interim rate increase of 40.69 percent should be applied as an across-the-board increase to the existing service rates. The rates, as shown on Schedule No. 1, should be effective for service rendered on or after the stamped approval date on the tariff sheets pursuant to Rule 25-30.475(1), F.A.C. The utility should file revised tariff sheets and a proposed customer notice to reflect the Commission-approved rates. In addition, the approved rates should not be implemented until the required security has been filed, staff has approved the proposed customer notice, and the notice has been received by the customers. The utility should provide proof of the date notice was given within 10 days of the date of the notice.

Issue 3: What is the appropriate security to guarantee the interim increase?

Recommendation: The appropriate security to guarantee the funds collected subject to refund is a corporate undertaking. (Hightower, Wilson, Golden)

Staff Analysis: Pursuant to Section 367.082, F.S., revenues collected under interim rates shall be placed under bond, escrow, letter of credit, or corporate undertaking subject to refund with interest at a rate ordered by the Commission. As recommended in Issue 1, the total annual interim revenue increase is \$21,089. In accordance with Rule 25-30.360, F.A.C., staff calculated the potential refund of revenues and interest collected under interim conditions to be \$14,286. This amount is based on an estimated eight months of revenue being collected from staff's recommended interim rates over the utility's current authorized rates shown on Schedule No. 1.

The owner/president provided the most recent three years of his personal financial net worth. Staff reviewed the confidential personal financial information provided by the owner/president.³ Staff believes that in this circumstance the owner/president has demonstrated the financial ability and wherewithal to guarantee the interim refund in this rate increase, if necessary. Further, the owner/president provided a personal guarantee in the amount of \$14,286, in this docket.⁴

Pursuant to Rule 25-30.360(6), F.A.C., the utility should provide a report by the 20th day of each month indicating the monthly and total revenue collected subject to refund. Should a refund be required, the refund should be with interest and undertaken in accordance with Rule 25-30.360, F.A.C. In no instance should maintenance and administrative costs associated with any refund be borne by the customers. Such costs are the responsibility of, and should be borne by, the utility.

Accordingly, the appropriate security to guarantee the funds collected subject to refund is a corporate undertaking.

³Document No. 04598-2019 (Confidential), in Docket No. 20190114-WU.

⁴Document No. 05084-2019, in Docket No. 20190114-WU.

Issue 4: Should this docket be closed?

Recommendation: No. The docket should remain open pending the Commission's final action on the utility's requested rate increase. (DuVal)

Staff Analysis: The docket should remain open pending the Commission's final action on the utility's requested rate increase.

GATOR WATERWORKS, INC. TEST YEAR ENDED MARCH 31, 2019 MONTHLY WATER RATES		SCHEDULE NO. 1 DOCKET NO. 20190114-WU
	CURRENT RATES	STAFF RECOMMENDED INTERIM
<u>Residential and General Service</u>		
Base Facility Charge		
All Meter Sizes	\$6.94	\$9.76
Charge per 1,000 gallons	\$0.92	\$1.29
<u>Typical Residential 5/8" x 3/4" Meter Bill Comparisons</u>		
3,000 Gallons	\$9.70	\$13.63
6,000 Gallons	\$12.46	\$17.50
10,000 Gallons	\$16.14	\$22.66