

State of Florida



Public Service Commission

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TALLAHASSEE, FLORIDA 32399-0850

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

DATE: November 29, 2018

TO: Office of Commission Clerk (Stauffer)

FROM: Division of Accounting and Finance (Barrett) *McB*
Division of Economics (Draper, Guffey) *King*
Division of Engineering (Wooten) *King*
Office of the General Counsel (Brownless, Nieves) *King*
ALM
EAD
PD
JSH
JSC

RE: Docket No. 20180001-EI – Fuel and purchased power cost recovery clause with generating performance incentive factor.

AGENDA: 12/11/18 – Regular Agenda – Post-Hearing Decision – Participation is Limited to Commissioners and Staff

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Clark

CRITICAL DATES: Decision must be rendered by 12/11/18 in order to implement new fuel factors with the first billing cycle in 2019.

SPECIAL INSTRUCTIONS: None

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Case Background

As part of the continuing fuel and purchased power adjustment and generating performance incentive factor clause proceedings, an administrative hearing was held on November 5-6, 2018. At the hearing, all stipulated issues for Duke Energy Florida, LLC. (DEF), Florida Public Utilities Company (FPUC), Gulf Power Company (Gulf), and Tampa Electric Company (TECO) were approved by bench decisions. Although the Commission approved many stipulated issues for Florida Power & Light Company (FPL or Company) at the hearing, Florida Industrial Power Users Group (FIPUG) requested the opportunity to file briefs on Issues 2M, 2N, 2P, 2Q, 2R, and 2S, which are company-specific issues pertaining to solar generation base rate adjustment (SoBRA) considerations.

Issues 2M and 2N address the recovery of construction costs for solar generation facilities that were recently constructed, and are currently operating. Issues 2P, 2Q, 2R, and 2S pertain to FPL's Miami-Dade, Interstate, Pioneer Trail, and Sunshine Gateway solar generation facilities which are currently being constructed and scheduled to be operating on March 1, 2019 (2019 SoBRA projects). Collectively, all of the SoBRA-related issues resulting from FPL's 2016 rate case Stipulation and Settlement Agreement approved by Order No. PSC-2016-0560-AS-EI (the 2016 Agreement).¹ This post-hearing memorandum addresses those identified issues.

On November 16, 2018, FIPUG and FPL filed post-hearing statements and briefs for Issues 2M, 2N, 2P, 2Q, 2R, and 2S. On November 19, 2018, FIPUG filed a Notice Of Correction of Post-Hearing Position for two issues.

The Commission has jurisdiction over this subject matter pursuant to the provisions of Chapter 366, Florida Statutes (F.S.), including Sections 366.04, 366.05, and 366.06, F.S.

¹Order No. PSC-2016-0560-AS-EI, issued on December 15, 2016, in Docket No. 20160021-EI, *In re: Petition for rate increase by Florida Power & Light Company.*

Issue 2M: What is the appropriate revised SoBRA factor for the 2017 projects to reflect actual construction costs that are less than the projected costs used to develop the initial SoBRA factor?

Recommendation: This issue is not ripe for consideration during the hearing cycle for 2018, and should be addressed in Docket No. 20190001-EI. (Barrett, Brownless)

Position of the Parties

FPL: The total costs of the 2017 SoBRA Project are not yet final. FPL anticipates that final costs will be known by the third quarter of 2019, and that the issue will be ripe for consideration during the 2019 Fuel Docket cycle.

FIPUG: As the SoBRA projects are neither cost effective nor needed, no new rates should be recovered.

Staff Analysis: This issue addresses calculating the appropriate revised SoBRA factor based upon actual construction costs.

Parties' Arguments

FPL

As the result of discussions among and between the parties in advance of the hearing, an agreement was reached to excuse all of the FPL witnesses that addressed this issue. In its brief,² the Company asserted that final construction costs for the 2017 SoBRA Project are not yet known, and thus, cannot be resolved in this hearing cycle. The calculation and resulting factor, however, could be addressed in 2019. In its brief, FPL stated that although not final, the preliminary information indicates that final costs will be lower than the cost estimates that were used to develop the revenue requirements and cost recovery factors for these projects. (FPL BR 20) Citing paragraph 10(g) of the 2016 Agreement, FPL asserted that if *actual* capital expenditures are less than the projected costs used to develop the initial SoBRA factor, the lower figure will be the basis for the full revenue requirements, and a one-time credit will be made through the Capacity Cost Clause. (FPL BR 20, emphasis in original)

FIPUG

FIPUG did not sponsor a witness to address this issue nor specifically address this issue in its post-hearing brief. FIPUG's post-hearing brief, as modified by its Notice of Correction of Post-Hearing Position, addresses Issues 2M-2S, 24D and 24E. Issue 2O³ was approved as a Type 2 stipulation at final hearing when FIPUG failed to timely provide a final position.⁴ Although briefed, Issues 24D and 24E were also approved by bench vote at final hearing as Type 2 stipulations since FIPUG took no position on those issues.⁵

²See page 20, FPSC Document No. 07154-2018, filed on November 16, 2018, in Docket No. 2018-0001-EI.

³“Should the Commission approve revised tariffs for FPL reflecting the revised SoBRA factors for the 2017 and 2018 projects determined to be appropriate in this proceeding, effective January 1, 2019?”

⁴All parties were given until noon on October 24, 2018, to file final positions on each issue or have “No position at this time” be changed to “No position.” [Prehearing TR 9-10; TR 9-11]

⁵ *Id.*

Staff Analysis

With regard to the remaining issues addressed in FIPUG's brief, Issues 2M, 2N, 2Q, 2R and 2S, FIPUG has made several arguments. First, that the Commission is specifically required by statute to make findings that the 2018 and 2019 solar projects for which cost recovery is sought are both prudent and needed. (FIPUG BR 4-5) Second, that Commission approval of a negotiated settlement agreement executed by a limited number of parties cannot substitute for the required findings of prudence and need. (FIPUG BR 5-6) Third, that the use of projected carbon dioxide (CO₂) tax costs in FPL's cost effectiveness analysis is improper for two reasons: no carbon dioxide tax is currently imposed, nor likely to be imposed in the future, and the carbon dioxide tax amount is based on uncorroborated hearsay. (FIPUG BR 6) Fourth, that recovery of capital costs through the fuel cost recovery docket is improper. (FIPUG BR 6-7)

FIPUG's first and second arguments are essentially attempts to revive two issues previously raised by FIPUG and excluded by the Prehearing Officer at the Prehearing Conference.⁶ Nothing has changed since the Prehearing Conference and the determination that the terms of FPL's 2016 Agreement, approved by Order No. PSC-2016-0560-AS-EI,⁷ control and limit the issues regarding FPL's solar generation projects to the cost-effectiveness issues stated in Issues 2P, 2Q, 2R and 2S continues to be valid.⁸ One could also conclude that FIPUG's arguments are an attempt to collaterally attack Order No. PSC-2016-0560-AS-EI's approval of the SoBRA process outlined therein. (FPL BR 11-13) FIPUG, as a party to the 2016 rate case, had an opportunity to appeal Order No. PSC-2016-0560-AS-EI and failed to do so. FIPUG's right to contest the 2016 Agreement, and any of its terms and conditions, has passed. FIPUG's third argument will be addressed in Issue 2P.

FIPUG's fourth argument appears to be that use of the fuel cost recovery clause factors to recover FPL's proposed solar generation capital costs is improper. However, FPL is not seeking to recover its proposed solar generation capital costs through fuel charge factors. As the 2016 Agreement clearly states, the capital costs associated with the proposed solar generation projects are rate base adjustments which are made to FPL's books at the time the solar projects are placed into service.⁹ Staff agrees with FPL that the fuel cost recovery docket was simply used for administrative and procedural efficiency since it is an annual proceeding with a relatively fixed filing schedule. (FPL BR 15-16) Further, if the filing schedule for the fuel cost recovery docket is used, increases in base rates as a result of the approval of SoBRA projects can be coordinated with projected fuel costs which include those units.

This issue involves a mathematical calculation that depends on information that is not yet available. For that reason, staff believes this issue cannot be resolved in the current hearing cycle.

⁶Issue A: "Are FPL's proposed solar projects prudent?" and Issue B: "Are FPL's proposed solar projects needed?"

⁷Order No. PSC-16-0560-AS-EI, issued December 15, 2016, in Docket No. 20160021, *In re: Petition for rate increase by Florida Power & Light Company*.

⁸Order No. PSC-2018-0520-PHO-EI, issued November 1, 2018, in Docket No. 20180001-EI, *In re: Fuel and purchased power cost recovery clause with generating performance incentive factor*, at 65-66.

⁹2016 Agreement at ¶¶ 10(c), 10(e), 10(i).

Conclusion

Staff recommends that this issue is not ripe for consideration during the hearing cycle for 2018, and should be addressed in Docket No. 20190001-EI.

Issue 2N: What is the appropriate revised SoBRA factor for the 2018 projects to reflect actual construction costs that are less than the projected costs used to develop the initial SoBRA factor?

Recommendation: This issue is not ripe for consideration during the hearing cycle for 2018, and should be addressed in Docket No. 20190001-EI. (Barrett, Brownless)

Position of the Parties

FPL: The total costs of the 2018 SoBRA Project are not yet final. FPL anticipates that final costs will be known by the third quarter of 2019, and that the issue will be ripe for consideration during the 2019 Fuel Docket cycle.

FIPUG: As the SoBRA projects are neither cost effective nor needed, no new rates should be recovered.

Staff Analysis: This issue is substantially similar to Issue 2M, as it addresses calculating a revised SoBRA factor based upon actual construction costs. Issue 2M addresses the 2017 projects and Issue 2N addresses the 2018 projects.

Parties' Arguments

As the result of discussions among and between the parties in advance of the hearing, an agreement was reached to excuse all of the FPL witnesses that addressed this issue. In its brief,¹⁰ the Company asserted that final construction costs for the 2018 SoBRA Project are not yet known, and thus, cannot be resolved in this hearing cycle. The calculation and resulting factor, however, could be addressed in 2019. In its brief, FPL stated that although not final, the preliminary information indicates that final costs will be lower than the cost estimates that were used to develop the revenue requirements and cost recovery factors for these projects. (FPL BR 20) Citing paragraph 10(g) of the 2016 Agreement, FPL asserted that if *actual* capital expenditures are less than the projected costs used to develop the initial SoBRA factor, the lower figure will be the basis for the full revenue requirements, and a one-time credit will be made through the Capacity Cost Recovery Clause. (FPL BR 20, emphasis in original)

FIPUG did not sponsor a witness to address this issue nor specifically address this issue in its post-hearing brief. The legal arguments raised by FIPUG relative to this issue are discussed in Issue 2M above.

Analysis

This issue involves a mathematical calculation that depends on information that is not yet available. For that reason, staff believes this issue cannot be resolved in the current hearing cycle.

Conclusion

Staff recommends that this issue is not ripe for consideration during the hearing cycle for 2018, and should be addressed in Docket No. 20190001-EI.

¹⁰See page 20, FPSC Document No. 07154-2018, filed on November 16, 2018, in Docket No. 20180001-EI.

Issue 2P: Are the 2019 SoBRA projects (Miami-Dade, Interstate, Pioneer Trail, and Sunshine Gateway) proposed by FPL cost effective?

Recommendation: Yes. Based on the evidence contained in the record, FPL's proposed 2019 solar generation projects are projected to produce savings under multiple scenarios and therefore are cost effective. The 2019 solar generation projects have also met the terms of the 2016 Agreement in regards to keeping construction cost under the \$1,750 per kilowatt alternating current (kW_{ac}) cost cap. (Wooten, Brownless)

Position of the Parties

FPL: Yes. FPL undertook a comprehensive solicitation process to ensure that the cost of the 2019 Project is reasonable and well below \$1,750 per kW. In addition, the 2019 Project is cost-effective and is estimated to result in \$40 million (CPVRR) of customer savings.

FIPUG: No.

Staff Analysis:

Parties' Arguments

FPL

Pursuant to the 2016 Agreement, FPL proposed to construct and operate 298 MW of solar generation by 2019. FPL stated that an economic analysis was performed to determine the technology with the greatest value for customers. (FPL BR 4) FPL asserted that the 2019 SoBRA projects are projected to result in \$40 million Cumulative Present Value Revenue Requirement (CPVRR) of customer savings and that the costs for the 2019 projects are reasonable and fall below the \$1,750 per kW_{ac} cost cap. (FPL BR 2) FPL asserted that the 2016 Agreement provides that the 2019 projects are cost effective if they lower the system CPVRR without them, which FPL claims the 2019 projects do. (FPL BR 8)

FPL stated that the Commission is not required to determine need or separately evaluate prudence, which would cast aside the terms of 2016 Agreement. (FPL BR 12) FPL claimed that, similar to the previous SoBRA proceedings, the Commission is not basing its decision on carbon cost forecasting, but the expert testimony of witness Enjamio. (FPL BR 13)

FIPUG

FIPUG did not sponsor a witness to address this issue. The FIPUG brief presented broad arguments about its objections to FPL's SoBRA projects, which staff addressed in Issue 2M above. (FIPUG BR 1-2) Additionally, FIPUG raised the argument that the carbon dioxide tax projections prepared by ICF and used by FPL in its CPVRR analysis are based on uncorroborated hearsay.

Analysis

2016 Settlement Agreement

The 2019 solar generation projects for which FPL is seeking approval for cost recovery are specifically provided for in the 2016 Agreement approved by Order No. PSC-16-0560-AS-EI.¹¹ The 2016 Agreement allows FPL to construct up to 300 MW per calendar year of solar capacity during the period 2017-2021 and to recover through base rates the incremental annualized base revenue requirement for those facilities for the first 12 months of operation commencing when the facilities are placed into service.¹² There are several conditions that must be met for recovery in this case. First, FPL must request recovery for these projects during the term of the 2016 Agreement, or prior to December 31, 2020. Second, the cost of the components, engineering, and construction for any solar project is capped at \$1,750 kW_{ac}. Third, for projects less than 75 MW (as are all of the projects proposed in this case): 1) the request for base rate recovery must be filed in the Fuel Clause docket as part of its final true-up filing; and 2) the issues are “limited to the cost effectiveness of each such project (i.e., will the project lower the projected system CPVRR as compared to each CPVRR without the solar project) and the amount of revenue requirements and appropriate percentage in base rates needed to collect the estimated revenue requirements.”¹³ If the project meets these requirements, the terms of the 2016 Agreement have been met.

Project Descriptions

FPL witnesses Brannen and Enjamio provided testimony and exhibits concerning FPL’s proposed 2019 SoBRA projects, including cost effectiveness and the ability to meet the \$1,750 per kW_{ac} cost cap. As described in the testimony of witness Enjamio, FPL is proposing to construct and operate four solar generation centers with a total nameplate capacity of 298 MW_{ac} (each project is 74.5 MW_{ac}) with an in-service date of March 1, 2019. (TR 175) Construction of the 2019 SoBRA projects began on September 29, 2017. (EXH 32) The proposed 2019 SoBRA projects are fixed-tilt systems with an average projected first year net capacity factor of 26.5 percent. (EXH 30, TR 177) There are no upgrades to existing transmission infrastructure required as part of the construction of the 2019 SoBRA projects. (TR 167)

The four proposed construction sites for the 2019 SoBRA projects are Miami-Dade in Miami-Dade County, Interstate in St. Lucie County, Pioneer Trail in Volusia County and Sunshine Gateway in Columbia County. (TR 164) All parcels are new purchases, and the land costs are included in the cost of the 2019 SoBRA projects. (TR 167, EXH 76) Staff recognized that not all land for the four newly purchased sites was being used for the 2019 solar generation projects. In response to a staff interrogatory, it was disclosed that unused areas could include both usable and unusable areas for future solar development. (EXH 76) To develop a better understanding of the ratio of land that could be used for future development, staff requested a more detailed breakdown of each site. This breakdown included four categories: total acreage, acreage used by the projects (Site Acreage), non-usable land, and usable land. Usable land consists of property that could possibly be used for future solar developments on the site, and for sites with adequate

¹¹Order 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*.

¹²2016 Agreement at ¶ 10(a).

¹³2016 Agreement at ¶ 10(c).

amounts of usable land, FPL will consider leasing land to third parties. Any revenue from the usable land leased to third parties will be credited to FPL ratepayers via an offset to the revenue requirement associated with the 2019 solar generation projects. (EXH 76) The land usage of each site is illustrated in Table 2P-1:

**Table 2P-1
 Land Usage**

Site Name	Total Acreage (acres)	Site Acreage (acres)	Non-Usable Land (acres)	Usable Land (acres)
Miami-Dade	465.1	425.1	0	40.0
Interstate	539.0	522.8	16.2	0
Pioneer Trail	1,189.6	438.6	398.0	353.0
Sunshine	954.4	547.2	407.2	0

Source: EXH 76, 77

**2019 Solar Generation Projects Evaluation
 Economic Assumptions**

The resource planning document filed with FPL’s petition included FPL’s three reliability criteria: 20 percent total reserve margin, 10 percent generation-only reserve margin (GRM) and loss of load probability. (EXH 77) Because FPL’s GRM criterion has not been relied upon by the Commission in previous proceedings, staff requested a revised resource planning document that did not incorporate the GRM criterion in the 2019 SoBRA project resource planning. (EXH 77) FPL’s revised resource planning document includes two resource plans that form the basis of the cost effectiveness analysis that the Company performed. These two resource plans are called the No Solar Plan and 2019 Solar Plan. The No Solar Plan includes the 2017 and 2018 SoBRA projects and assumes that further resource needs will be met by combined cycle (CC) units and short term purchase power agreements (PPAs) through the year 2031. The 2019 Solar Plan includes the 2017 and 2018 SoBRA projects and takes into account the four 2019 SoBRA projects, which initially defer the 2028 CC unit and reduces the size of the CC unit projected for 2031. (TR 177) This resource plan is shown in Table 2P-2:

**Table 2P-2
 Resource Plan (w/o GRM)**

Year	No Solar Resource Plan	2019 Solar Resource Plan
2018	2017/2018 596 MW SoBRA	2017/2018 596 MW SoBRA
2019	Okeechobee Energy Center; 1-year 476 MW PPA	2019 298 MW SoBRA; Okeechobee Energy Center; 1- year 311 MW PPA
2020	1- year 470 MW PPA	1- year 305 MW PPA
2021	1- year 717 MW PPA	1- year 553 MW PPA
2022	Dania Beach Energy Center	Dania Beach Energy Center
2023	1- year 215 MW PPA	1- year 52 MW PPA
2024	1 Greenfield 3x1 CC Unit	1 Greenfield 3x1 CC Unit
2025		
2026		
2027	1- year 75 MW PPA	
2028	1 Greenfield 3x1 CC Unit	1- year 337 MW PPA
2029		1 Greenfield 3x1 CC Unit
2030		
2031	Equalizing 578 MW CC Unit	Equalizing 419 MW CC Unit

Source: EXH 77

In completing the analysis, FPL considered multiple components to determine cost effectiveness: solar revenue requirements, avoided generation costs, and avoided system costs. For the proposed solar facilities, the revenue requirements included fixed operation and maintenance (O&M), equipment, installation, land cost, and transmission interconnection cost. The avoided generation cost component considered avoided generation capital, avoided fixed O&M, avoided transmission interconnection, avoided capital replacement, incremental gas transport, and short-term purchases. The avoided system cost component considers the factors of fuel savings, avoided variable O&M, and emission cost savings. (EXH 77)

FPL witness Enjamio stated that the emission cost savings consideration did not incorporate CO₂ pricing until 2028. (TR 176) FPL witness Enjamio identified ICF International’s (ICF) CO₂ emissions cost forecast as a major assumption in FPL’s economic analysis of its proposed 2019 solar generation projects. (TR 176) The CO₂ cost projections used in FPL’s cost-effectiveness analyses are based on ICF’s CO₂ emission cost forecast dated January 31, 2018. (TR 176) ICF is a consulting firm with extensive experience in forecasting the cost of air emissions and is recognized as one of the industry leaders in this field. (TR 176) No intervenor offered testimony rebutting FPL’s CO₂ emission cost forecast or provided any alternative emission cost forecast. Staff believes that the CO₂ cost projections FPL used in this docket are appropriate.

Hearsay

Staff does not find FIPUG’s argument, that carbon dioxide tax projections prepared by ICF and used by FPL in its CPVRR analysis is based on uncorroborated hearsay, to be persuasive. (FIPUG BR 6) Section 120.57(1)(c), F.S., states that “[h]earsay evidence may be used for the purpose of supplementing or explaining other evidence, but it shall not be sufficient in itself to support a finding unless it would be admissible over objection in civil actions.” Section 90.704,

F.S., allows the use by an expert of “facts or data [that] are of a type reasonably relied upon by experts in the subject to support the opinion expressed” even if the facts or data are not admissible in evidence. Smith v. State, 7 So. 3d 473, 501 (Fla. 2009); Geralds v. State, 674 So. 2d 96, 100 (Fla. 1996)(expert allowed to base opinion on cause of death on materials prepared by another doctor).

FPL identified witness Enjamio as an expert in the field of resource planning and the cost-effectiveness of FPL’s 2019 Solar Project.¹⁴ FIPUG objected to any witness being considered an expert witness unless the witness states the subject matter areas in which he or she claims expertise, and voir dire, if requested, is permitted. However, FIPUG failed to comply with the requirements of Section VI.A(8) of Order No. PSC-2018-0079-PCO-EI, that a party identify each witness the party wishes to voir dire and specify the portions of the witness’ testimony to which it objects. For that reason, FIPUG was prevented from challenging the expertise of any witness at the final hearing.¹⁵

Witness Enjamio’s testimony is that ICF is recognized as an industry leader in the field of forecasting the cost of air emissions and that its cost projections have been used for many years in FPL’s resource plans and economic analyses, i.e., FPL’s 2018 Ten Year Site Plan. (TR 176) It is important to note that it is witness Enjamio’s expert opinion that ICF’s projection of carbon dioxide costs should be included in FPL’s cost effectiveness analysis for the 2019 SoBRA projects. FIPUG did not present any evidence to support the exclusion of these costs or to refute ICF’s expertise in projecting air emission costs. Based on this record, ICF’s carbon dioxide tax costs do not constitute uncorroborated hearsay and can be used in FPL’s cost effectiveness calculation.

CPVRR Analysis

FPL’s CPVRR analysis assumed that each project had an actual life of 33 years, with the analysis ending in 2050. (EXH 77) Staff reviewed FPL’s CPVRR for the 2019 SoBRA projects that produced a savings of \$40 million for the base fuel and environmental forecasts. (EXH 36) This calculation included the previously mentioned CO₂ pricing in 2028. FPL’s CPVRR analysis in support of its 2019 Solar Plan included assumptions related to future fuel prices. The Company employed its standard fuel forecasting methodology to produce its long-term fuel price forecast. (TR 176, EXH 34) Staff believes the forecasted fuel prices used in the Company’s CPVRR analysis associated with its current proposal are reasonable. (EXH 36)

FPL’s provided CPVRR for the 2019 SoBRA projects includes the FPL GRM criteria, which has not been relied upon by the Commission in previous proceedings. In response to a staff interrogatory, FPL provided a CPVRR analysis that excludes this GRM criterion and economically evaluates the solar projects based upon FPL’s remaining reliability criteria. (EXH 77) The resulting CPVRR produced a savings of \$39.9 million for the base fuel and environmental forecasts, a slight decrease from the \$40 million savings that included the GRM criterion. (EXH 77) As noted above, FPL’s GRM criterion was not relied upon by the

¹⁴DN 06651-2018.

¹⁵Order No. PSC-2018-0520-PHO-EI, issued November 1, 2018, in Docket No. 20180001-EI, *In re: Fuel and purchased power cost recovery clause with generating performance incentive factor*.

Commission in previous proceedings; therefore, staff believes that this criterion is not a critical component to the overall cost-effectiveness of the 2019 SoBRA projects.

In response to a staff interrogatory, FPL provided a CPVRR analysis with both fuel and environmental compliance sensitivities. (EXH 77) In FPL’s analysis, a Low, Medium, and High Fuel Forecast and ENV I, ENV II, and ENV III compliance costs were considered. ENV I assumes an annual \$0/ton cost for CO₂ pricing and low environmental compliance costs, ENV II assumes a most likely cost, and ENV III assumes high environmental compliance costs. (EXH 77) While this analysis includes FPL’s GRM criterion, it is assumed there would be a similar negligible effect on the other sensitivities as it did on FPL’s base case forecast. The range of savings is illustrated in Table 2P-3:

**Table 2P-3
 CPVRR Analysis including GRM**

	Environmental Compliance Cost Forecast			
		ENV I	ENV II	ENV III
Fuel Cost Forecast	High	(\$62)	(\$81)	(\$130)
	Medium	(\$19)	(\$40)	(\$89)
	Low	\$24	\$4	(\$46)

Source: EXH 77

Table 2P-3 shows that in seven of the nine scenarios, the 2019 SoBRA projects are cost effective. Notably the base fuel case (medium), ENV I scenario contains no cost for CO₂, but is also cost effective. While examining the forecasted scenarios, staff observed that in all scenarios avoided fuel costs was the major driving force in producing overall savings for the projects. This fact manifested in even the “worst” case scenario of Low Fuel Cost, ENV I, where there are projected fuel savings in every forecasted year. These cost forecast scenarios are identical to the ones present in the 2017 and 2018 solar generation projects in previous proceedings. When investigating the overall cost effectiveness of the projects, staff observed that the first cumulative benefit occurred in 2028 in all scenarios. This benefit seems to be driven by the avoided capital that would be required for the Greenfield 3x1 CC Unit. Staff has reviewed the CPVRR assumptions discussed and believes them to be reasonable.

2016 Agreement Threshold

As stated previously, the 2016 Agreement requires the FPL 2019 SoBRA projects to meet a \$1,750 per kW_{ac} cost cap. The estimated total cost to build all of the 2019 solar generation projects is \$1,386 per kW_{ac}, falling below the cost cap. (TR 161) Each of the 2019 solar generation projects also fall under this threshold when considered individually. The cost per kW_{ac} for the 2019 solar generation projects is illustrated in Table 2P-4:

**Table 2P-4
 \$/kW_{ac} Cost Cap**

2019 Solar Generation Projects Cost per \$/kW _{ac}				
Site Name	Miami Dade	Interstate	Pioneer Trail	Sunshine Gateway
Cost (\$/kW _{ac})	\$1,460	\$1,289	\$1,422	\$1,374

Source: EXH 76

Conclusion

Based on the evidence contained in the record, FPL's proposed 2019 SoBRA projects are projected to produce savings under multiple scenarios and therefore are cost effective. The 2019 SoBRA projects have also met the terms of 2016 Agreement in regards to keeping construction cost under the \$1,750 per kW_{ac} cost cap.

Issue 2Q: What are the revenue requirements associated with the 2019 SoBRA projects?

Recommendation: The jurisdictional annualized revenue requirements associated with the 2019 SoBRA projects are \$51,685,454. (Barrett)

Position of the Parties

FPL: The revenue requirement for the 2019 Project is \$51,685,454.

FIPUG: As the SoBRA projects are neither cost effective nor needed, no new rates should be recovered.

Staff Analysis:

Parties' Arguments

FPL

According to FPL witness Castaneda, FPL is authorized to seek recovery of the 2019 SoBRA projects pursuant to the order in FPL's most recent rate case proceeding. (TR 154) In its brief, FPL asserted the 2016 Agreement authorized the construction of up to 300 MWs of new solar generation each year between 2017 and 2020, if three requirements are satisfied:

1. The total costs of the solar projects do not exceed \$1,750/kW_{ac};
2. The construction, engineering, and component costs are reasonable; and
3. The solar projects are cost-effective additions to FPL's system.

(FPL BR 2, citing the 2016 Agreement approved in Order No. PSC-2016-0560-AS-EI)¹⁶

The witness testified that the annualized jurisdictional revenue requirements for the first 12 months of operations related to the 2019 SoBRA projects are \$51,685,454. (TR 154-155; EXH 39, p. 1; FPL BR 17, 21) Witness Castaneda further stated that the revenue requirement value was calculated by following the methodologies approved by the Commission for FPL's 2017 and 2018 solar base rate projects, which is the same methodology used for the generation base rate adjustments (GBRA) for Turkey Point Unit 5 and West County Energy Center Units 1 and 2 in Order No. PSC-2005-0902-S-EI,¹⁷ West County Energy Center Unit 3 in Order No. PSC-2011-0089-S-EI,¹⁸ and the modernization projects at Canaveral, Riviera Beach, and Port Everglades in Order No. PSC-2013-0023-S-EI.¹⁹ (TR 155)

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

¹⁷Order No. PSC-2005-0902-S-EI, issued September 14, 2005, in Docket No. 20050045-EI, *In re: Petition for rate increase by Florida Power & Light Company*, and in Docket No. 20050188-EI, *In re: 2005 comprehensive depreciation study by Florida Power & Light Company*.

¹⁸Order No. PSC-2011-0089-S-EI, issued February 1, 2011, in Docket No. 20080677-EI, *In re: Petition for increase in rates by Florida Power & Light Company*, and in Docket No. 20090130-EI, *In re: 2009 depreciation and dismantlement study by Florida Power & Light Company*.

¹⁹Order No. PSC-2013-0023-S-EI, issued January 14, 2013, in Docket No. 20120015-EI, *In re: Petition for increase in rates by Florida Power & Light Company*.

The jurisdictional annualized revenue requirement calculation for the 2019 SoBRA projects used several inputs, including the most current estimated capital expenditures presented by FPL witness Brannen. (Castaneda, TR 154-157; EXH 39, pp.1-5; Brannen, TR 168-171)

FIPUG

FIPUG did not sponsor a witness to address this issue or specifically address this issue in its post-hearing brief. The FIPUG brief presented broad arguments about its objections to FPL's SoBRA projects, which staff summarized in Issue 2M. (FIPUG BR 1-2)

Analysis

This issue addresses the revenue requirements associated with the 2019 SoBRA projects. Staff believes FPL is authorized to seek recovery of the 2019 SoBRA projects pursuant to the 2016 Agreement.

Staff reviewed the testimony, exhibits, and calculations used by FPL witness Castaneda for determining the amount of revenue requirements associated with the 2019 SoBRA projects and found them to be reasonable. Staff believes the jurisdictional annualized revenue requirements associated with the 2019 SoBRA projects are \$51,685,454.

Conclusion

Staff recommends that the jurisdictional annualized revenue requirements associated with the 2019 SoBRA projects are \$51,685,454.

Issue 2R: What is the appropriate base rate percentage increase for the 2019 SoBRA projects to be effective when all 2019 projects are in service, currently projected to be March 1, 2019?

Recommendation: The appropriate base rate percentage increase (SoBRA Factor) for the 2019 SoBRA projects is 0.795 percent. (Barrett)

Position of the Parties

FPL: The appropriate base rate percentage increase for the 2019 SoBRA Project is 0.795%. The increase is to be effective when the 2019 Project is in service, currently projected to be March 1, 2019.

FIPUG: As the SoBRA projects are neither cost effective nor needed, no new rates should be recovered.

Staff Analysis:

Parties' Arguments

FPL

According to FPL witness Cohen, the SoBRA factors are incremental cost recovery factors that will be applied to base rate charges in order for the Company to collect the revenue necessary to recover the costs associated with building and operating the 2019 SoBRA projects. (TR 182) Witness Cohen testified that the SoBRA factor is equal to the ratio of (1) the Company's jurisdictional revenue requirements for the Project and (2) the forecasted retail base revenue from electricity sales for the first twelve months of operations, expected to begin March 1, 2019. (Cohen, TR 182; FPL BR 18-19) Witness Cohen also presented an exhibit to demonstrate the inputs and calculations performed to determine the resulting incremental cost recovery factor of 0.795 percent for the 2019 SoBRA projects. (EXH 40)

FIPUG

FIPUG did not sponsor a witness to address this issue or specifically address this issue in its post-hearing brief. The FIPUG brief presented broad arguments about its objections to FPL's SoBRA projects, which staff summarized in Issue 2M. (FIPUG BR 1-2)

Analysis

This issue addresses the proposed base rate percentage increase associated with the 2019 SoBRA projects. Staff believes that FPL is authorized to seek recovery of the 2019 SoBRA projects pursuant to the 2016 Agreement, and apply the appropriate base rate percentage increase (SoBRA Factor) when the plants enter commercial service.

Conclusion

Staff reviewed the testimony, exhibits, and calculations used by FPL witness Cohen for determining the appropriate incremental cost recovery factor associated with the 2019 SoBRA projects. Based on this review, staff recommends that the appropriate base rate percentage increase (SoBRA Factor) for the 2019 SoBRA projects is 0.795 percent.

Issue 2S: Should the Commission approve revised tariffs for FPL reflecting the base rate percentage increase for the 2019 SoBRA projects determined to be appropriate in this proceeding?

Recommendation: Yes. The Commission should give staff administrative authority to approve the revised tariff sheets for FPL reflecting the base rate percentage increases for the 2019 SoBRA projects determined to be appropriate in this proceeding. (Guffey, Barrett)

Position of the Parties

FPL: Yes.

FIPUG: No.

Staff Analysis:

Parties' Arguments

FPL

FPL witness Cohen sponsored exhibits that summarize the tariff changes for the 2019 SoBRA projects, which are scheduled to enter into commercial service on March 1, 2019. (TR 181; EXH 42) Witness Cohen testified that the Company will formally notify the Commission by letter of the specific in-service dates for each set of projects, and the base rate changes will become effective on or after that date. (TR 183)

Bill Impact

Based on the approval of stipulations in other issues in this proceeding, new cost recovery factors will be implemented in the first billing cycle of January 2019. Witness Deaton provided testimony and schedules that reflect the three billing changes that customers can anticipate in 2019. Billing changes summarized below are for a residential customer using 1,000 kWh of electricity per month:

1. For the January and February 2019 billing cycles, changes to various cost recovery factors will increase customer bills by a total of \$1.81 per month. (TR 91; EXH 17 (f/k/a, Exhibit RBD-5 (Appendix II – 2019 FCR Projection for January-February), Page 87 of 91).
2. The changes attributable to the 2019 SoBRA projects begin in the March 2019 billing cycle will increase customer bills by a total of \$0.31 per month. (TR 92; EXH 18 (f/k/a, Exhibit RBD-6 (Appendix III – 2019 FCR Projection for March-May), Page 7 of 7).
3. A third change is anticipated for bills in the June 2019 billing cycle, when the proposed Okeechobee Clean Energy Center enters into commercial service.²⁰ This change will increase customer bills by a total of \$0.44 per month. (TR 92; EXH 19 (f/k/a, Exhibit RBD-7 (Appendix IV – 2019 FCR Projection for June-December), Page 7 of 7).

²⁰Paragraph 9 of the 2016 Agreement describes the Okeechobee Unit and the Limited Scope Adjustment for FPL's generating station now known as the Okeechobee Clean Energy Center.

All of these billing change impacts are shown in Table 2S-1 below:

**Table 2S-1
 FPL's Residential Bill Impact for the period January-December, 2019**

Bill Components	Present (2018)	Proposed in Projection filing (Jan and Feb, 2018)	Change from 2018	Proposed in Projection filing (March-May, 2019), incl. 2019 SoBRAs	Proposed in Projection filing (June-Dec, 2019), incl. SoBRAs and new power plant
Base Rate Charges	\$66.88	\$66.88	\$0.00	\$67.41	\$69.46
Fuel Cost Recovery	\$22.93	\$24.12	\$1.19	\$23.89	\$22.27
Capacity Cost recovery	\$2.34	\$2.58	\$0.24	\$2.58	\$2.58
Energy Conservation	\$1.53	\$1.50	-\$0.03	\$1.50	\$1.50
Environmental	\$1.22	\$1.59	\$0.37	\$1.59	\$1.59
Storm Restoration	<u>\$1.24</u>	<u>\$1.24</u>	<u>\$0.00</u>	<u>\$1.24</u>	<u>\$1.24</u>
Sub-Total	\$96.14	\$97.91	\$1.77	\$98.21	\$98.64
Gross Receipts Tax	\$2.47	\$2.51	\$0.04	\$2.52	\$2.53
TOTAL	<u>\$98.61</u>	<u>\$100.42</u>	\$1.81	<u>\$100.73</u>	<u>\$101.17</u>

Source: EXH 19 (f/k/a, Exhibit RBD-7 (Appendix IV – 2019 FCR Projections), Page 7 of 7)

FIPUG

FIPUG did not sponsor a witness to address this issue or specifically address this issue in its post-hearing brief. The FIPUG brief presented broad arguments about its objections to FPL's SoBRA projects, which staff summarized in Issue 2M. (FIPUG BR 1-2)

Analysis

This issue addresses approving the tariff filings for the 2019 SoBRA projects. As set forth in the preceding issues, staff observes that FPL's 2016 Agreement states that the issues for determination are limited to three principle considerations:

1. The cost effectiveness of the 2019 Projects, as discussed in Issues 2P.
2. The amount of revenue requirements for the 2019 Projects, as discussed in Issues 2Q.
3. The appropriate percentage increase in base rates needed to recover the revenue requirement amounts identified above. These percentage increases are reflected as recovery factors, as discussed in Issues 2R.

Conclusion

Based on the staff's recommendations in Issues 2P, 2Q, and 2R, staff believes the Commission should give staff administrative authority to approve the revised tariff sheets for FPL reflecting the base rate percentage increases for the 2019 SoBRA projects determined to be appropriate in this proceeding.

Issue 36: Should this docket be closed?

Recommendation: No. While a separate docket number is assigned each year for administrative convenience, this is a continuing docket and should remain open. (Brownless)

Staff Analysis: While a separate docket number is assigned each year for administrative convenience, this is a continuing docket and should remain open.