

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: May 21, 2025

TO: Office of Commission Clerk (Teitzman)

FROM: Division of Engineering (Davis, Ellis, King, Ramos) *LVK*
Division of Accounting and Finance (Gatlin, Holloway) *ALM*
Division of Economics (Ward) *CP*
Office of the General Counsel (Bloom, Crawford) *JSC*

RE: Docket No. 20250034-EI – Petition for a limited proceeding to approve first solar base rate adjustment, by Duke Energy Florida, LLC.

AGENDA: 06/03/25 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Passidomo Smith

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

Case Background

By Order No. PSC-2024-0472-AS-EI, issued on November 12, 2024, the Florida Public Service Commission (Commission) approved Duke Energy Florida's (DEF or Company) 2024 Settlement Agreement (2024 Settlement).¹ Paragraph 16 of the 2024 Settlement allows for the inclusion, in base rates, of up to 900 megawatts (MW) of solar generation through a Solar Base Rate Adjustment (SoBRA). Pursuant to the 2024 Settlement, DEF will construct approximately 300 MW, per calendar year, of solar generation that must meet certain criteria for inclusion in base rates.

¹ Order No. PSC-2024-0472-AS-EI, issued November 12, 2024, in Docket No. 20240025-EI, *In re: Petition for rate increase by Duke Energy Florida, LLC.*

On February 21, 2025, DEF filed a limited proceeding with the Commission to seek approval of four solar projects, collectively referred to as the First SoBRA Tranche. The solar projects include: Sundance in Madison County, Rattler in Hernando County, Half Moon in Sumter County, and Bailey Mill in Jefferson County, with a total installed capacity of approximately 300 MW. As each of the solar facilities is below 75 MW, the Commission's decision is limited based on the 2024 Settlement regarding the reasonableness and cost-effectiveness of the solar generation projects.

The Commission has jurisdiction pursuant to Sections 366.06, 366.076, and 366.92, Florida Statutes (F.S.).

Discussion of Issues

Issue 1: Should the Commission approve DEF’s First SoBRA Tranche which includes the Sundance, Rattler, Half Moon, and Bailey Mill solar projects?

Recommendation: Yes. The First SoBRA Tranche is reasonable and cost-effective in accordance with the criteria of subparagraph 16(c) of the 2024 Settlement, and therefore should be approved for inclusion in base rates through the SoBRA mechanism. (Davis)

Staff Analysis: In its petition, DEF proposes the addition of four solar generating facilities, each rated at 74.9 MW. The following table provides the estimated in-service dates, estimated rate effective date and estimated installed cost for each project. The variation in installed costs is primarily due to network upgrades and solar supporting equipment (balance of system).

Table 1-1
First SoBRA Projects

| <u>Project Name</u> | <u>Sundance</u> | <u>Rattler</u> | <u>Half-Moon</u> | <u>Bailey Mill</u> |
|----------------------|-----------------|----------------|------------------|--------------------|
| In-Service Date | July 2025 | January 2026 | January 2026 | May 2026 |
| Installed Cost (\$M) | \$110.9 | \$137.6 | \$145.2 | \$127.7 |
| Rate Effective Date | August 2025 | February 2026 | February 2026 | June 2026 |

Source: Document No. 01084-2025.

Subparagraph 16(c) of the 2024 Settlement states that the reasonableness and cost-effectiveness of the SoBRA project(s) shall be evaluated based only on whether the projects in the SoBRA will (1) lower the projected system CPVRR as compared to a system CPVRR without the solar projects (also known as the ‘base case’); (2) whether CPVRR of the solar projects show positive benefits that exceed costs within ten years; (3) whether the solar projects meet a 1.15 to 1 benefit to cost ratio; and (4) whether the solar projects are 100 percent dedicated to serve DEF’s retail load.

The CPVRR compares the cost of the added generation, transmission, operations and maintenance (O&M) and other expenses of the proposed solar project(s) to the avoided traditional generation, transmission, fuel, and O&M expenses that would otherwise have been incurred if the facilities had not been constructed. As part of its analysis, DEF produced resource plans for both the SoBRA case and the Base Case, including additions of solar, batteries, natural gas, and small nuclear reactors (SMRs) as future units. The primary difference between the resource plans for the First SoBRA Tranche is the amount and timing of battery storage capacity starting in 2028, and in the base case only, the addition of a combustion turbine in 2035.

Exhibit No. BMHB-4 of DEF’s petition shows a net system benefit of \$253 million over the life of the First SoBRA Tranche. In response to staff’s data request, DEF provided the annual values for each category and staff determined that on a CPVRR basis the solar projects become cost-effective in 2035, or one year earlier than the ten-year requirement of the 2024 Settlement. In addition, Exhibit No. BMHB-4 of DEF’s petition shows \$742.4 million avoided costs (including fuel, emissions, O&M, gas transportation, and capital) and \$182.1 million of production tax credits due to the added solar projects for a total of \$924.4 million in benefits. The same exhibit

Date: May 21, 2025

shows the costs of the solar projects are \$671.4 million, including capital, transmission, and O&M costs, resulting in a benefit to cost ratio of 1.38, which exceeds the minimum criteria in the 2024 Settlement. Finally, based on DEF's response to staff's data requests the solar projects appear to be dedicated to serve DEF's retail load since all solar projects are listed in the resource plan required to meet a minimum reserve capacity of 20 percent.

Conclusion

The First SoBRA Tranche will lower DEF's system CPVRR by approximately \$253 million with benefits beginning in 2035, and has a total benefit to cost ratio of 1.38. The First SoBRA Tranche will also be 100 percent dedicated to serve retail load. Therefore, the First SoBRA Tranche is reasonable and cost-effective in accordance with the criteria of subparagraph 16(c) of the 2024 Settlement, and should be approved for inclusion in base rates through the SoBRA mechanism.

Date: May 21, 2025

Issue 2: What is the estimated annual revenue requirement associated with DEF's First SoBRA Tranche which includes the Sundance, Rattler, Half Moon, and Bailey Mill solar projects?

Recommendation: The estimated annual revenue requirement associated with DEF's First SoBRA Tranche is \$73.3 million. (Gatlin)

Staff Analysis: Pursuant to the 2024 Settlement, DEF was authorized to establish a SoBRA mechanism to recover the costs associated with constructing 300 MW of solar generation annually, from 2025 through 2027. The SoBRA mechanism allows DEF to file a petition for approval of groups of solar generation projects in separate dockets, filed closer to their respective in-service dates, in order to ensure more accurate and current cost projections.

The Company requested the Commission approve an annual revenue requirement based on the projected installed cost of four projects, Bailey Mill Solar Center, Rattler Solar Center, Half Moon Solar Center, and Sundance Solar Center, in its first solar base rate adjustment. The estimated in-service date for the facilities is July 2025 (Sundance), January 2026 (Rattler and Half Moon), and May 2026 (Bailey Mill). The projected annual revenue requirement includes the Clean Energy Connection expansion revenues of \$7.5 million, pursuant to Paragraph 16a of the 2024 Settlement.

The revenue requirement for DEF's SoBRA is based on a projected plant cost to determine rate base and the required net operating income. The net operating income includes operation and maintenance expenses, depreciation expenses, financing costs, insurance costs, and taxes, as well as a debit of \$7.5 million per project, for the Clean Energy Connection, which results in a net increase in the revenue requirement of each project. The proposed annual revenue requirement associated with DEF's First SoBRA is \$73.3 million, based on a total rate base of \$498.4 million and a net operating income of \$54.6 million. Table 2-1 reflects the calculated revenue requirement for each individual project.

Table 2-1
DEF First SoBRA Annual Revenue Requirement (\$000)

| | Sundance | Rattler | Half Moon | Bailey Mill |
|-----------------------|-----------------|-----------------|-----------------|-----------------|
| Rate Base | \$108,541 | \$130,000 | \$135,401 | \$124,535 |
| Rate of Return | 6.700% | 6.740% | 6.740% | 6.740% |
| NOI Required | <u>7,272</u> | <u>8,762</u> | <u>9,126</u> | <u>8,394</u> |
| NOI Achieved | (4,910) | (5,419) | (5,579) | (5,068) |
| NOI Deficiency/Excess | <u>12,182</u> | <u>14,181</u> | <u>14,705</u> | <u>13,462</u> |
| NOI Multiplier | 1.343 | 1.344 | 1.344 | 1.344 |
| Revenue Requirement | <u>\$16,364</u> | <u>\$19,054</u> | <u>\$19,758</u> | <u>\$18,093</u> |

Source: Prepared Direct Testimony and Exhibit of DEF witness Olivier, Exhibit MJO-1.

Conclusion

The estimated annual revenue requirement associated with DEF's First SoBRA Tranche is \$73.3 million.

Date: May 21, 2025

Issue 3: Should the Commission give staff administrative authority to approve tariffs and associated charges for DEF's First SoBRA Tranche which includes the Sundance, Rattler, Half Moon, and Bailey Mill solar projects?

Recommendation: Yes. DEF should file tariffs and supporting calculations two months prior to the effective date of each solar base rate adjustment. DEF should also submit a letter to the Commission declaring the commercial operation date of each solar facility prior to any base rate changes going into effect. (Ward)

Staff Analysis: Witness Olivier stated in her testimony that DEF will file the rate adjustments and tariff sheets for Commission confirmation approximately two months prior to the effective date of each of the rate adjustments. The expected rate adjustment effective dates for the solar projects are August 2025 (Sundance), February 2026 (Rattler and Half Moon), and June 2026 (Bailey Mill).

In response to staff's second data request, DEF provided preliminary approximate base rate impacts on the 1,000 kWh residential bill for the four solar projects as follows: Sundance (\$0.47), Rattler (\$0.56), Half Moon (\$0.56), and Bailey Mill (\$0.51).² DEF stated that all of these solar projects will provide fuel savings. Based on the cost per kWh of natural gas in DEF's 2025 fuel projection filing, DEF estimates a fuel savings of approximately \$0.17 per solar plant.³

Conclusion

The Commission should grant staff administrative authority to approve the tariffs and associated charges as they are submitted by DEF. DEF should file tariffs and supporting calculations two months prior to the effective date of each solar rate base adjustment. DEF should also submit a letter to the Commission declaring the commercial operation date of each solar facility prior to any base rate changes going into effect.

² Response to Staff's Second Data Request, Response No. 1.

³ Response to Staff's Second Data Request, Response No. 1.

Issue 4: Should this docket be closed?

Recommendation: No. This docket shall remain open pending DEF's letters confirming commercial operation. Once these letters have been received, this docket shall be closed administratively. (Bloom, Crawford)

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 should be issued. This docket shall remain open pending DEF's letters confirming commercial operation. Once these letters have been received, this docket shall be closed administratively.