

January 31, 2024

VIA ELECTRONIC FILING

The Honorable Mike La Rosa Chairman Florida Public Service Commission 2450 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

Re: Test Year Notification Pursuant to Rule 25-6.140, F.A.C.

Dear Chairman La Rosa:

Duke Energy Florida, LLC's ("DEF's" or "the Company's") customers benefit from the investments DEF has made over the last several decades and receive more reliable, resilient, and cleaner power than ever before. DEF remains committed to providing customers electric service in the most cost-efficient manner possible by continuing to: (1) add solar generation and energy storage capacity; (2) make the energy grid even more reliable and resilient; and (3) improve the efficiency and flexibility of existing generating plants to help lower fuel costs while proactively managing the changing grid. DEF is also prudently exploring developing technologies to be better prepared for the future.

DEF invested in increased reliability and resilience for years through its Storm Hardening Plans in base rates and more recently through its Storm Protection Plan. We continue to make significant investments to keep the system reliable due to changing conditions such as new loads, changing generation portfolios, more frequent and impactful weather events, and other items impacting the grid. DEF's customers have benefited from these investments as demonstrated in multiple reliability metrics. For example, in 2023, DEF had its best Distribution and Transmission Grid System Average Interruption Duration Index ("SAIDI") performance in more than a decade. Further, DEF's Distribution SAIDI has improved 27% from 2018 to 2023, and Distribution Grid System Average Interruption Frequency Index ("SAIFI") performance has improved by 15% over the same time period. The Transmission Grid has also shown significant improvement with Transmission Grid SAIDI decreasing by 50% and Outages per Hundred Miles per Year – Sustained Automatic ("OHMY-SA") improving by 14% since 2018.

Investments in self-healing technology and system hardening are examples of how DEF's strategic management of infrastructure provides customers with the service they expect and

deserve. DEF's investments in self-healing technology on transmission and distribution facilities allows the system to identify and make corrections necessary to prevent outages or to allow our personnel to quickly locate and make necessary repairs to either abbreviate or eliminate outages altogether. For example, during Hurricanes Ian, Nicole, and Idalia, DEF's self-healing technologies helped to automatically restore service to more than 230,000 customers who experienced outages and avoided more than 200 million minutes of total outage time. These investments also provide significant reliability and resiliency benefits to customers outside of extreme weather events. Indeed, since DEF began implementing this technology close to 75% of outage minutes avoided were outside of extreme weather events. DEF will continue to invest in this technology for its transmission and distribution lines and related facilities to ensure our customers maintain electric power during severe weather events or have their power quickly restored following them.

Additionally, DEF has moved to a cleaner generating fleet for decades and will continue that journey into the future. DEF's investment in modernizing its existing fleet, as well as effective planning around changes needed, has allowed DEF to significantly reduce SO2 and NOX pollutants by over 97% and 81% respectively since 2005. It also allowed DEF to retire two of its coal fired generating units. Since 2005 DEF has reduced CO2 emissions by about 25%. DEF's investments have facilitated the expiration of more expensive purchase power agreements, resulting in more customer savings. The 2021 Settlement Agreement allowed DEF to move forward the expected retirement dates for DEF's last two coal-fired generation plants on its system. This will require adding new solar power plants to DEF's system starting in 2025. These new solar power plants add to DEF's existing solar generation fleet that, at the end of 2024, will consist of a combined investment of over \$2 billion in 25 grid-tied solar power plants providing about 1,500 Megawatts of emission free, clean generation with approximately 5 million solar panels installed across DEF's service area.

Finally, to position the Company for an ever-changing future, DEF sought and obtained Commission approval of DEF's Vision Florida pilot program in its 2021 Settlement Agreement. This Vision Florida program includes industry-leading initiatives such as the Suwannee Long-Duration Energy Storage project and the DeBary Hydrogen project. Consistent with the 2021 Settlement, both the costs and benefits to DEF's customers of Vision Florida projects are included in DEF's current base rate request for the year 2025.

DEF expects total customer bills to decrease from 2024 to 2025. To support continued reliable, resilient, and increasingly clean energy, and noting that the final request is being finalized, DEF expects to request additional base rate revenue requirements of approximately \$596 million in 2025, \$95 million in 2026 and \$127 million in 2027. This is an average annual increase in revenue requirements of approximately 4% over 2025 through 2027. DEF further expects these increases to be offset by bill reductions from ending the 2022 fuel under-recovery, concluding storm restoration cost recovery, and the expiration of legacy purchased power contracts. Once these reductions are combined with the expected base rate requests, DEF expects customers will see an overall decrease in 2025 bills.

Test Years

DEF proposes to file three test periods. For DEF's base rate request, expected to be filed April 2, 2024, DEF proposes to use the projected 12-month periods ending December 31, 2025, 2026, and 2027 as the test years, with the adjusted rates to be effective with the first billing period of January 2025, 2026, and 2027, respectively. DEF's proposed use of projected test periods is consistent with current Commission practice and prior Commission and Florida Supreme Court precedent. Further, Rule 25-6.0425, F.A.C., provides that "The Commission may in a full revenue requirements proceeding approve incremental adjustments in rates for periods subsequent to the initial period in which new rates will be in effect."

Using the projected 12-month periods ending December 31, 2025, 2026, and 2027 as the test years will provide an accurate representation of costs for the purposes of setting rates effective in January of each of these three years. Both of DEFs last two base rate settlements, the 2017 Settlement with a term of 2018-2021 and the 2021 Settlement with a term of 2022-2024, have included multiple year rate increases. Otherwise, due to annual cost and rate base increases that are outpacing the annual increases in sales revenues under existing rates, DEF would need to file frequent rate cases. Therefore, to provide rate certainty for customers and avoid the cost and administrative burden of annual litigated rate cases, DEF is proposing three test periods, supported by a full set of minimum filing requirements for each of these periods. This allows for a three-year reprieve from filing DEF's next rate case, barring any unforeseen circumstances.

DEF will provide the Commission and parties representing DEF's customers in this rate case proceeding DEF's historical data for the calendar year 2023 and DEF's budget data for the calendar year 2024.

Major Factors Necessitating a General Base Rate Increase

Clean Energy: New Solar Generation and Energy Storage

DEF will invest \$1.5 billion in 1,050 Megawatts of new solar generation capable of powering more than 300,000 homes at peak production from 2025-2027. This investment includes fourteen (14) new 74.9 Megawatt solar power plants plus a 100 Megawatt energy storage project capable of releasing up to 200 Megawatt-Hours of energy every day. The cost of these additional solar power plants is partially offset by available production tax credits from the Inflation Reduction Act. As a result, DEF customers will receive reliable, clean solar power generation at a reduced cost that otherwise would not be available to them. DEF customers will also benefit from this solar investment because it facilitates the retirement of DEF's coal-fired generation (which lowers fuel costs) and reduces DEF's reliance on fuel oil and natural gas. The additional solar generation also replaces higher cost purchased power generation on DEF's system, again reducing fuel costs to customers.

Existing Generation Reliability and Lower Fuel Costs: Existing Generation Investment

DEF must continue to invest in its existing generation fleet for its customers. The necessity for this generation facility investment increases with the addition of solar plant generation at new

and more varied locations across DEF's service area and the movement away from larger, more concentrated generation locations like DEF's last two remaining coal-fired generation power plants. Although this new, cleaner generation profile available to DEF enhances fuel diversity, it requires additional costs to ensure that DEF's existing combined cycle and combustion turbine generation units are available to meet changes in loads, including minimum loads, across DEF's service area in the most cost-efficient manner for DEF's customers.

For example, changes in solar generation can occur quickly with changes in cloud cover or periods of rain, and DEF's existing combustion turbine or combined cycle generation plants must be flexible enough to respond to such changes in load requirements reliably and efficiently. DEF's proposed unit flexibility projects improve the ability to operate the units effectively to accommodate solar fluctuations and maintain system load stability.

DEF also plans to invest \$113.3 million (\$69.6 million of which will be incurred in the test years) in advancements in combustion turbine technology at its existing combined cycle generation plants to increase generation capacity by an additional 428 Megawatts by 2026. This additional combined cycle generation resulting from improvements in combustion turbine technology will provide generation that can more readily meet changes in load on DEF's system. Another benefit from this investment in advanced combustion turbine technology is reduced fuel costs to DEF's customers. DEF estimates customers will save \$150 million to \$200 million per year in reduced fuel costs from this investment. Despite DEF's increasing need for investment in the maintenance of its combined cycle and combustion turbine generation fleet, DEF's projected costs are still below the Commission's Operation and Maintenance ("O&M") overall benchmark costs for DEF's entire generation fleet for the years 2025 through 2027.

Electric Power Grid Reliability and Resiliency: Transmission and Distribution Investment

DEF will invest \$3.3 billion from 2025 through 2027 in its transmission and distribution systems to continue to provide reliable, safe electric service to customer homes and businesses. These investments will ensure these systems can provide reliable and safe electric service directly to the customer under the transition to cleaner generation sources spread more widely across DEF's service area, including at the customer's own location from solar rooftop generation. This requires DEF's transmission and distribution system to be more flexible to adjust to changes in load from different resources at increased varied times than any time before in DEF's long history of providing customers safe and reliable electric service.

To this end, DEF has and will continue to invest in technological advancements like its Recloser Replacement Program, in which the Company installs automated line disconnect devices, such as the TripSaver, on power lines to help limit the frequency and duration of service interruptions. TripSavers are installed on local power lines that branch from the main power lines serving an area and are essentially similar in action to a recloser. This technology reduces outages. In addition, by containing issues at the feeder level and isolating them as a localized event, TripSavers allow the Company to reduce its overall exposure to momentary outages, power quality complaints, and fault tolerance of branch lines.

DEF expects to serve approximately 35,000 additional customers each year. Based on that projection, DEF will serve over 2 million customers in 2025 and over 2.1 million customers by 2027. To meet the increased demand, DEF needs to invest in additional distribution system facilities and equipment to provide the new customers electric service. DEF will further invest in distribution grid projects across its 18,000 circuit miles of overhead distribution conductors and approximately 16,000 circuit miles of underground distribution cable. This continued investment in DEF's distribution system has resulted in a favorable trend in customer reliability over the last six years that DEF intends to maintain from 2025 through 2027.

DEF has also increased investment in the transmission system with projects located in increased demand areas, locations associated with the new solar generation, and areas associated with varied changes in the direction and load on DEF's system. These needs have resulted in new 115 kV and 230 kV switching stations and substations, 500 kV substation expansion, line rebuilds and net new lines, all of which are required to maintain compliance with the North American Electric Reliability Corporation ("NERC") Transmission Planning ("TPL") Standards and transmission system planning performance requirements.

DEF will further invest in additional security projects to protect its substations from intentional disruptions in service. The majority of these are directly tied to compliance with NERC's Critical Infrastructure Protection ("CIP") Reliability Standards, mandated and enforced by NERC and the Federal Energy Regulatory Commission. DEF faces increasing threats to the security of its system that DEF has and will address to continue to meet its obligation to provide customers with reliable electric service. Furthermore, DEF faces increased stringency and scope in the NERC Operations & Planning (i.e., non-CIP) Reliability Standards. These Reliability Standards contain hundreds of requirements that govern the planning, operation and maintenance of the DEF Transmission System requiring substantial future investments by DEF.

Customer Investment

DEF's customers want more ways to engage with the Company regarding their electric service, usage, and billing, and more ways to manage and pay for their electric use. DEF will continue to provide its customers with options they value, for example, offering additional digital means of interacting with the Company and enhancing usage alert options.

DEF also plans to expand its Clean Energy Connection program to five additional new solar plants (of the 14 sites referenced above). This community solar program offered to DEF's customers allows those who cannot or do not want to install solar on their own homes or businesses to participate in clean energy investment.

DEF will continue its programs and assistance options to support DEF's low-income customers. This includes connecting customers with assistance agencies that administer the Low-Income Home Energy Assistance Program and Elderly Home Energy Assistance Program. Through the Duke Energy Foundation, DEF also manages and contributes to DEF's Share the Light Fund, which assists customers with paying their energy bills. In 2023, we distributed more than \$1 million in energy bill assistance to qualifying Florida customers.

Vision Florida Program

Recognizing the evolving energy landscape, DEF proposed, and the Commission approved, DEF's Vision Florida program in its 2021 Settlement Agreement. This program includes projects that maximize customer benefits while providing technological and geographic diversity through state-of-the-art technology solutions that offset traditional utility investments, improve resilience of utility facilities, and help meet carbon reduction goals.

DEF's Vision Florida program includes various projects expected to be in service in the test periods that will facilitate the continued resilience of the grid and preparation for the future. For example, the Suwannee Long-Duration Energy Storage project is a long-duration, advanced technology 5 Megawatt battery storage project that will provide bulk storage capacity benefits to DEF's system and energy arbitrage and ancillary service benefits such as system ramping, load following, and contingency reserves. This project will be the first test of this advanced battery storage technology on DEF's system to determine its capability to provide renewable energy in a cost-effective and reliable manner to DEF's customers.

Another Vision Florida project, the DeBary Hydrogen project, is a state-of-the-art, clean energy hydrogen production and storage system. This project allows DEF to evaluate the future viability of hydrogen production and fuel usage to further reduce carbon dioxide emissions in a cost-effective manner.

Other Matters

In addition to the major cost drivers described above, DEF faces increasing long-term debt interest rates, increasing depreciation expense, declining wholesale sales, and the amortization of deferrals from the 2021 Settlement Agreement that are driving revenue requirements primarily in 2025. The difference in revenue requirement needs in 2025 as compared to 2026 and 2027 is another reason for Commission consideration of the base rate adjustments for DEF for the years 2025 through 2027.

Also, DEF will propose to set the Company's approved return on common equity ("ROE") midpoint at 11.15% on a proposed capital structure containing 53% equity and 47% debt. This ROE request reflects capital market expectations looking forward during the three-year period from 2025 through 2027 that will enable DEF to continue to access capital on competitive terms during this period. DEF's ability to earn a fair rate of return is crucial to DEF's ability to obtain the capital necessary to fund its investments for its customers in cost-effective, reliable electric generation, transmission, and distribution facilities like those described above under all market conditions. DEF's proposed ROE also reflects the significant increase in interest rates in recent years.

Approximately \$99 million of the 2025 increase in base rates is driven by the benefits from spent fuel litigation proceeds from the Department of Energy ("DOE") that were recognized by DEF in lieu of increasing base rates in 2023 and 2024. Pursuant to the 2021 Settlement, DEF's annual base rate increases in 2023 and 2024 were lower than they otherwise would have been due to the projected recognition of the spent nuclear fuel proceeds of approximately \$74 million in

2023 and \$99 million in 2024. Therefore, all else held equal from 2024 to 2025, DEF would need to implement a rate increase in 2025 just to recover the non-recurring \$99 million pre-tax earnings impact from 2024.

Finally, DEF will file updated depreciation and dismantlement studies contemporaneously with this case. In DEF's last depreciation study filed with its 2021 Settlement Agreement, DEF agreed to hold transmission and distribution depreciation rates constant. Those depreciation rates alone will need to be increased to ensure full recovery of DEF's assets upon retirement. These updated studies will result in approximately \$70 million higher revenue requirements starting in 2025.

Actions Taken to Avoid a Retail Base Rate Increase

DEF proved its stewardship of its customers' dollars in the 2021 Settlement Agreement when DEF mitigated rate increases in 2023 and 2024 by recognizing the expected spent nuclear fuel litigation proceeds from the DOE. As explained above, DEF advanced its customers litigation proceeds to cover DEF revenue requirements during the period of the 2021 Settlement Agreement, thereby lowering customer rates below what they otherwise would have been during the period of the 2021 Settlement Agreement. This benefit now has been fully passed on to customers. Those litigation proceeds are no longer available to offset DEF's revenue requirements. In the 2021 Settlement, DEF reduced revenue requirements by \$173 million: \$74 million in 2023 and \$99 million in 2024. The result is an increased revenue requirement in 2025 of \$99 million as DEF's revenue requirements return to levels that existed before these litigation proceeds were used as an offset.

DEF's last storm reserve study was filed in January 2021. Pursuant to Rule 25-6.0143(1)(1), F.A.C., DEF's next storm reserve study is due by January 2026. DEF will not include an updated storm reserve study or an additional accrual to the storm reserve in this rate case given the ability to recover storm costs and replenish the storm reserve to its currently approved level of \$132 million. In other words, DEF expects to file the storm reserve study by January 2026 as required, but it will not then request a rate increase associated with that study.

Across all business groups, the Company has worked to control and reduce costs. Despite increasing costs and inflation, DEF's distribution expenses per customer are projected to remain lower than 2022 levels through 2027. DEF is also below the Commission's O&M overall benchmark costs for DEF's generation and transmission groups for the years 2025 through 2027. These results, in a period of rising costs, are a reflection that the Company has taken specific measures to avoid this rate request.

Other Matters

Rule 25-6.140(1)(d), F.A.C. requires the Company to indicate in this letter whether it will request that its petition be processed pursuant to Section 366.06(4), Florida Statutes. Because DEF's annual sales exceed 500 gigawatt-hours, DEF is not eligible under this section of Rule 25-6.140 to make this request.

Conclusion

DEF's customers are receiving more reliable, resilient, and cleaner energy. We are committed to continuing this trend of improving the reliability and resilience of our system. The Company is also dedicated to delivering power in a cleaner and cost-effective manner while adapting to changing generation and grid realities. DEF looks forward to and appreciates the opportunity to present this proposal to the Commission for its review and consideration.

Respectfully submitted,

Melissa Seixas

State President, Duke Energy Florida, LLC

Melison Sings

cc: All via Electronic Mail

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