DUKE ENERGY® FLORIDA

Stephanie A. Cuello
SENIOR COUNSEL

February 21, 2025

VIA ELECTRONIC FILING

Adam J. Teitzman, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: *Duke Energy Florida, LLC's Petition for Limited Proceeding to Approve First Solar Base Rate Adjustment*; Docket No. _____

Dear Mr. Teitzman:

Enclosed for filing on behalf of Duke Energy Florida, LLC ("DEF") is DEF's Petition for Limited Proceeding to Approve First Solar Base Rate Adjustment, along with the following:

- Direct Testimony of Vanessa Goff with Exhibit No. VG-1 through Exhibit No. VG-8;
- Direct Testimony of Benjamin M. H. Borsch with Exhibit No. BMHB-1 through Exhibit No. BMHB-5;
- Direct Testimony of Marcia Olivier with Exhibit No. MJO-1;

Thank you for your assistance in this matter. Please feel free to call me at (850) 521-1425 should you have any questions concerning this filing.

Sincerely,

/s/ Stephanie A. Cuello

Stephanie A. Cuello

SAC/clg
Attachments

106 East College Avenue, Suite 800 ▪ Tallahassee, Florida 32301
Phone: 850.521.1425 ▪ Email: stephanie.cuello@duke-energy.com

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Duke Energy Florida, LLC Petition for limited proceeding to approve first solar base rate adjustment	Docket No.: Dated: February 21, 2025

_____/

DUKE ENERGY FLORIDA, LLC'S PETITION FOR A LIMITED PROCEEDING TO APPROVE DEF'S FIRST SOLAR BASE RATE ADJUSTMENT

Duke Energy Florida, LLC ("DEF"), pursuant to Sections 366.076(1) and 366.06(3), Florida Statutes ("F.S."), Rule 28-106.201, Florida Administrative Code ("F.A.C."), and the 2024 Settlement Agreement approved by the Florida Public Service Commission ("Commission") in Order No. PSC-2024-0472-AS-EI, Docket No. 20240025-EI (the "2024 Settlement"), hereby petitions the Florida Public Service Commission ("FPSC" or the "Commission") for a limited proceeding to approve DEF's first solar base rate adjustment. Specifically, pursuant to Paragraph 16 of the 2024 Settlement, DEF is authorized to request approval from the Commission for cost recovery of up to 900 MW of solar generation during the term of the 2024 Settlement. In this filing, DEF presents four solar projects: the Bailey Mill Solar Center ("Bailey Mill Project"), the Rattler Solar Center ("Rattler Project"), Half Moon Solar Center ("Half Moon Project), and Sundance Solar Center ("Sundance Project").

As explained further below and in the supporting testimonies and exhibits of Vanessa Goff, Benjamin Borsch, and Marcia Olivier filed with this Petition, DEF's solar projects meet the requirements set forth in the 2024 Settlement; namely, they lower the projected system CPVRR as compared to such CPVRR without the solar projects, the projects show positive benefits that exceed costs within ten years, the solar projects meet a 1.15 to 1 benefit to cost ratio; and the solar projects are 100 percent dedicated to serve DEF's retail load.

Accordingly, DEF requests that its solar projects be approved for rate recovery so that new rates for the first solar project can be implemented for bills effective August 2025.

In support of this Petition, DEF states:

Introduction

1. The Petitioner's name and address is:

Duke Energy Florida, LLC
299 1st Avenue North
St. Petersburg, Florida 33701

2. Any pleading, motion, notice, order, or other document required to be served upon DEF or filed by any party to this proceeding should be served upon the following individuals:

Dianne M. Triplett
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Duke Energy Florida, LLC
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3. DEF is an investor-owned electric utility regulated by the Commission pursuant to Chapter 366, Fla. Stat., and is a wholly-owned subsidiary of Duke Energy Corporation. The Company's principal place of business is located at 299 1st Avenue North, St. Petersburg, Florida 33701.

4. DEF serves more than 2 million customers in Florida. Its service area comprises approximately 20,000 square miles, including the densely populated areas of Pinellas and western

Pasco Counties and the greater Orlando area in Orange, Osceola, and Seminole Counties. DEF supplies electricity at retail to approximately 350 communities and at wholesale to Florida municipalities, utilities, and power agencies in the State of Florida.

5. This Petition is being filed consistent with Rule 28-106.201, Florida Administrative Code. The agency affected is the Florida Public Service Commission, located at 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399. This case does not involve reversal or modification of an agency decision or an agency's proposed action. Therefore, subparagraph (c) and portions of subparagraphs (b), (e), (f), and (g) of subsection (2) of that rule are not applicable to this Petition. In compliance with subparagraph (d), DEF states that it is not known at this time which, if any, of the issues of material fact set forth in the body of this Petition may be disputed by any others who may plan to participate in this proceeding.

2024 Settlement Requirements and DEF's Proposed Solar Facilities

6. Paragraph 16(a) of the 2024 Settlement authorizes the Company to seek Commission approval of up to 900 MW of solar projects during the term of the 2024 Settlement Agreement or within one year following expiration of the Term.

7. For projects not subject to the Power Plant Siting Act (i.e. less than 75 MW), Paragraph 16(c) of the 2024 Settlement obligates DEF to file a separate proceeding for approval of the solar projects and determination of the following issues: (a) the reasonableness and cost effectiveness of the solar generation projects (i.e., will the projects lower the projected requirement CPVRR as compared to such CPVRR without the solar projects and whether the projects show positive benefits that exceed costs within ten years); (b) whether the solar projects meet a 1.15 to 1 benefit to cost ratio; (c) whether the solar projects are 100 percent dedicated to serve DEF's retail

load; and (d) the amount of revenue requirements. DEF has filed this Petition for the purpose of resolving these issues.

8. DEF is proposing four new solar facilities for approval. The first is a 74.9 MW facility in Madison County, called the Sundance Solar Power Plant ("Sundance Project"), which is projected to come into service in July 2025. Next is a 74.9 MW facility in Sumter County, called the Half Moon Solar Power Plant ("Half Moon Project"), which is projected to come into service in January 2026. The third is a 74.9 MW facility in Hernando County, called the Rattler Solar Power Plant ("Rattler Project") and is projected to come into service in January 2026, and the fourth is the Bailey Mill Solar Project ("Bailey Mill Project"), which is projected to come into service in May 2026. DEF anticipates that the four proposed projects will have a total generation capital cost of approximately $455 million as presented in the testimony of Mr. Borsch and Ms. Goff.

9. The testimony of Ms. Goff, filed simultaneously with and incorporated by reference into this Petition, focuses on the characteristics of the solar projects presented for approval in this filing. It also provides details as to the Company's competitive solicitation processes, as well as the costs for the solar projects.

10. As explained in the testimony of Mr. Borsch, filed simultaneously with and incorporated by reference into this Petition, the proposed solar projects are cost-effective and needed. Specifically, the projects, when considered together, will lower DEF's CPVRR when compared to the CPVRR without the projects. Mr. Borsch's testimony also demonstrates that the project benefits will meet the tests identified in Paragraph 16(a) of the 2024 Settlement. Finally, Mr. Borsch explains the benefits of fuel diversity and other attributes that contribute to the Company's need for the facilities.

11. The 2024 Settlement, specifically Paragraphs 16(e) and (f) contain detailed requirements as to the calculation of revenue requirements to implement the solar base rate adjustment. DEF's request complies with these requirements, as demonstrated in the testimony of witness Marcia Olivier, filed simultaneously with and incorporated by reference into this Petition. Applying the 2024 Settlement, DEF requests approval of approximately $73.3 million in total annual revenue requirements associated with this group of solar projects.

Effective Date of Requested Changes

12. The solar projects in this filing have differing commercial in-service dates. The revenue requirements for each of the four projects are set forth in Ms. Olivier's testimony and exhibits. Estimated rate impacts will be filed with the Commission for approval approximately two months prior to the intended effective dates.

Conclusion

WHEREFORE, DEF respectfully requests that the Commission enter an order:

(1) approving the revenue requirements associated with its solar projects, as presented in this filing; and

(2) providing its Staff the authority to administratively approve the tariff sheets once filed.

Respectfully submitted,

/s/ Stephanie A. Cuello

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IN RE: DUKE ENERGY FLORIDA, LLC'S PETITION FOR A LIMITED PROCEEDING TO APPROVE FIRST SOLAR BASE RATE ADJUSTMENT

DOCKET NO. _____

DIRECT TESTIMONY OF VANESSA GOFF

FEBRUARY 21, 2025

I. INTRODUCTION AND PURPOSE.

Q. By whom are you employed and what is your position?

A. I am employed by Duke Energy Corporation as a Director of Renewables Business Development.

Q. Please describe your duties and responsibilities in that position.

A. As Director of Renewables Development, I am responsible for the development of new solar facilities in Florida on behalf of Duke Energy Florida, LLC ("DEF" or the "Company"). I lead a team that conducts solar development activities including project siting, land acquisition, resource assessment, permitting, obtaining interconnection rights, project layout and design, and arranging contracts for engineering, procurement, and construction ("EPC") services, as well as originating, structuring, and executing transactions to acquire rights to existing solar development projects.

Q. Please describe your educational background and professional experience.

A. I received a Bachelor of Science in Chemical Engineering from Lafayette College in 2002. I began my career as an engineer focusing on coal boilers and steam turbines for Cinergy Solutions. Cinergy was procured by Duke Energy, at which time I moved to development engineering for biomass plants. In 2008, I earned my MBA from St. John Fisher College. I continued to work for the commercial arm of Duke Energy and in 2009 worked as a development engineer focusing on solar, where I helped site new solar energy facilities across the United States. I moved to the regulated side of Duke Energy and worked in siting and licensing for one year and then became a Business Development Manager for solar and wind, and most recently Director of Renewable Development within the Regulated Renewables Development ("RRD") group. In total, I have over 20 years of professional work experience, including 15 years of renewable energy business development.

Q. What is the purpose of your testimony?

A. My testimony is provided to support DEF's request for cost recovery approval of the first portfolio of its solar power plants or projects authorized under the approved 2024 Settlement Agreement ("2024 Settlement"), in Docket No. 20240025-EI. My testimony describes the solar power plants that DEF plans to build to serve its customers and includes an overview of the process DEF has used to ensure that the project costs meet the requirements of the 2024 Settlement. My testimony supports

the reasonableness of the proposed project costs. As required by the 2024 Settlement, Mr. Borsch's testimony will demonstrate that this group of four solar projects, on a Cumulative Present Value Revenue Requirements ("CPVRR") basis, shows positive benefits that exceed costs within ten years of the commercial in-service date, and his testimony will demonstrate that this group of 4 solar projects meets a 1.15 to 1 benefit to cost ratio. Ms. Olivier's testimony will provide the revenue requirements of these four solar projects.

Q. Are you presenting exhibits in this proceeding?

A. Yes. They consist of the following exhibits:

Exhibit No. VG-1 Bailey Mill Solar Center Site Plan;

Exhibit No. VG-2 Bailey Mill Solar Center Costs;

Exhibit No. VG-3 Half Moon Solar Center Site Plan;

Exhibit No. VG-4 Half Moon Solar Center Plant Costs;

Exhibit No. VG-5 Rattler Solar Center Site Plan;

Exhibit No. VG-6 Rattler Solar Center Costs;

Exhibit No. VG-7 Sundance Solar Center Site Plan; and

Exhibit No. VG-8 Sundance Solar Center Costs

These exhibits are true and accurate to the best of my knowledge.

Q. What solar projects is DEF proposing for approval in this filing?

A. DEF is proposing the following projects (a) Bailey Mill Solar Center, ("Bailey Mill Project), (b) the Halfmoon Solar Center ("Halfmoon Project"), (c) the Rattler Solar

Center (“Rattler Project”), and (d) the Sundance Solar Center ("Sundance Project”).

Q. How did DEF select and develop the solar projects included in this filing?

A. DEF considers several factors while developing a greenfield project, with interconnection and the ability to connect to the grid as primary factors. For this portfolio of projects DEF conducted desktop analyses using publicly available data to locate buildable sites adjacent to existing DEF transmission lines. This desktop study will look at parcel size, wetlands, floodplains, slope, soils, and any known environmentally sensitive areas. Once a site has been identified, DEF will work with landowners to execute site control agreements. DEF will then file an interconnection request. If the interconnection studies are favorable, DEF will conduct site due-diligence to make sure the site is buildable with minimal environmental impacts. Some of these studies include environmental assessment for species, wetlands delineation, ESA Phase I, cultural assessment, topographical surveys, geotechnical surveys, and American Land Title Association surveys. If all results are positive, DEF will add these projects to the solar portfolio.

DEF has several greenfield projects in the interconnection queue with favorable queue positions and will continue to develop most of these solar projects. DEF is willing to purchase solar projects in various stages of completion from third-party developers, but projects must meet DEF’s standards of development and construction and fit into our strategic build plan. The factors

when considering the purchase of a third-party developed site include interconnection queue position for transmission connection to the grid and expected grid upgrades, environmental impacts, constructability of the site, development status and schedule, overall cost, project location, zoning entitlements, experience and competencies of developer, and construction schedule.

Q. Are any of the solar projects in this filing subject to the Power Plant Siting Act?

A. The solar generation projects in this filing are not subject to the Florida Electrical Power Plant Siting Act and are all less than 75MWac at the point that are metered at the Point of Interconnect.

Q. Please Describe the Bailey Mill Project

A. The Bailey Mill Project is a 74.9 MWac / 111.78 MWdc fixed-tilt facility located in Jefferson County, FL, with an expected design capacity factor of approximately 25%. The design capacity does not take into account any downtime for preventative maintenance, forced outages, weather events or commissioning and testing during year 1. The project will use a mixture of 685-watt and 690-watt modules, procured from Canadian Solar Inc. (a leading, Tier I manufacturer) and the fixed-tilt racking system will be procured from GameChange. Inverters will be sourced from Sungrow, which is a $35 billion company founded in 1997, with global installed solar production capacity in excess of 340GW. The project will be constructed on approximately 400-acres that is secured under a lease option and consists of mostly

harvestable timber and recreational hunting grounds. The point of interconnection ("POI") is a single breaker line tap adjacent to the Waukeenah 115kV Substation. Overland Contracting Inc. ("OCI") was selected to perform final facility engineering, design and construction. OCI is a Black & Veatch company that was formed in 1996. OCI has completed four (4) other DEF solar projects. Bailey Mill is a utility developed greenfield project. The project is required to obtain a site plan approval from the Jefferson County Board of County Commissioners as well an Environmental Resource Permit ("ERP") from the Florida Department of Environmental Protection ("FDEP"). Both of these applications have been submitted. An environmental assessment has been completed, resulting in minimal concerns or impacts. A wetland delineation, habitat assessment, and cultural assessment were completed. A minimal number of Gopher Tortoises were present on site and have been relocated after obtaining a Gopher tortoise relocation permit from Florida Fish and Wildlife Services. The project is expected to start construction in May 2025 and is expected to achieve placed in-service in May of 2026. My Exhibit No. VG-1 shows the site plan for the Bailey Mill Project.

Q. What is the projected installed cost for the Bailey Mill Project?

A. The projected cost of the Bailey Mill Project is $127.7 million inclusive of network upgrades and a carrying cost. Pursuant to Paragraph 16.a. of DEF's 2024 Settlement, DEF will be allowed to accrue a carrying charge to be added to the construction work in progress balances based on the applicable AFUDC rate on all

solar projects while under construction during the term of the 2024 Settlement. My Exhibit No. VG-2 shows the categories that make up the total installed cost.

Q. Please Describe the Half Moon Project

A. The Half Moon project is a 74.9 MWac / 97.68 MWdc single-axis tracking facility located in Sumter County, FL with an expected design capacity factor of approximately 28%. The design capacity does not take into account any downtime for preventative maintenance, forced outages, weather events or commissioning and testing during year 1. The project will be constructed on a portion of approximately 650-acres of mostly flat agricultural and timber land that is secured under a lease option. DEF acquired the early stage development assets of the Half Moon Project from Southeast Solar and Power, LLC. The Membership Interest Purchase Agreement was executed by the end of September 2024. This was DEF's third transaction with Southeast Solar & Power. Southeast Solar and Power, LLC was responsible for securing all land rights, filing the interconnection and completing all cultural, habitat and wetland surveys. The project will use a mixture of 460-watt and 465-watt modules, procured from First Solar (a leading, Tier I manufacturer) and the single-axis racking system will be procured from Array Technologies Inc. Inverters will be sourced from Sungrow. The project site is zoned Agricultural and is permitted by right under Florida Senate Bill 896 and therefore a local permit is not required. In January 2025, DEF obtained Final Site Plan Approval from Sumter County as well as the ERP from FDEP. An environmental assessment has been completed, resulting in minimal concerns or impacts. A

wetland delineation, habitat assessment, and cultural assessment were completed. Gopher Tortoises were present on site and have been relocated after obtaining a Gopher Tortoise Relocation Permit from Florida Fish and Wildlife Services. A Scrub Jay survey was also completed due to the presence of habitat, but no Scrub Jay were found on site. The POI is a new 230kV 3-breaker ring bus on the Central Florida to Holder 230kV line which intersects the project site. M.A Mortenson Company ("Mortenson") was selected to perform final facility engineering, design and construction. DEF had selected Mortenson as the preferred EPC contractor on eight (8) other DEF solar projects. Mortenson has proven to be a reliable and bankable EPC partner. The project started construction in late January 2025 with an expected backfeed in December 2025. The project will be placed in service in January 2026. My Exhibit No. VG-3 shows the site plan for the Half Moon Project.

Q. What is the projected installed cost for the Half Moon Project?

A. The projected cost of the Half Moon Project is $145.2 million. My Exhibit No. VG-4 shows the categories that make up the total installed cost.

Q. Please Describe the Rattler Project

A. The Rattler Project is a 74.9 MWac / 101.20 MWdc single-axis tracking facility located in Hernando County, FL with an expected design capacity factor of approximately 28%. The design capacity does not take into account any downtime for preventative maintenance, forced outages, weather events or commissioning

and testing during year 1. The project will be constructed on a portion of approximately 500 acres of pastureland that is secured under a lease option. The project will use a mixture of 460-watt and 465-watt modules, procured from First Solar (a leading, Tier I manufacturer) and the single-axis racking system will be procured from Array Technologies Inc. Inverters will be sourced from Sungrow. The project site is zoned Agricultural and is permitted by right under Florida Senate Bill 896 and therefore a local permit is not required. In February 2025, DEF obtained its Final Site Plan Approval from Hernando County. In January 2025, the project received its approval of the ERP from FDEP. An environmental assessment has been completed, resulting in minimal concerns or impacts. A wetland delineation, habitat assessment, and cultural assessment were completed. Gopher Tortoises were present on site and have been relocated after obtaining a Gopher Tortoise Relocation Permit from Florida Fish and Wildlife Services. The POI is a new Compact breaker 69kV Switching Station on the Brooksville to Inverness 69kV transmission line with an approximate 1.1 mile generation tie line. DEF selected Mortenson to perform final facility engineering, design and construction. The project started construction in February 2025 with an expected backfeed in November 2025. The project will be placed in service in January 2026. My Exhibit No. VG-5 shows the site plan for the Rattler Project.

Q. What is the projected installed cost for the Rattler Project?

A. The projected cost of the Rattler Project is $137.6million. My Exhibit No. VG-6 shows the categories that make up the total installed cost.

Q. Please Describe the Sundance Project

A. The Sundance Project is a 74.9 MWac / 99.01 MWdc single-axis tracking facility located in Madison County, FL with an expected design capacity factor of approximately 28%. The design capacity does not take into account any downtime for preventative maintenance, forced outages, weather events or commissioning and testing during year 1. The project will be constructed on a portion of approximately 460 acres of pastureland that is secured under a lease option. The project will use a mixture of 690-watt, 695-watt and 700-watt modules, procured from Canadian Solar Inc. (a leading, Tier I manufacturer) and the single-axis racking system will be procured from Array Technologies Inc. Inverters will be sourced from Sungrow. The project site is zoned Agricultural and is permitted by right under Florida Senate Bill 896 and therefore a local permit is not required. In May 2024, DEF obtained its Final Site Plan Approval from Madison County. Also in May 2024, the project received its approval of the ERP from FDEP. An environmental assessment has been completed, resulting in minimal concerns or impacts. A wetland delineation, habitat assessment, and cultural assessment were completed. Gopher Tortoises were present on site and have been relocated after obtaining a Gopher Tortoise Relocation Permit from Florida Fish and Wildlife Services. The POI is a new breakered feeder in the existing Birch 230kV Substation on the Suwannee to Perry 230kV transmission line. Moss & Associates ("Moss") was selected to perform final facility engineering, design and construction. Moss is a proven and reliable Engineering, Procurement, and Construction ("EPC")

partner, based in Florida, having constructed five (5) other DEF solar facilities. The project started construction in February 2024 with an expected backfeed in May 2025. The project will be placed in service in July 2025. My Exhibit No. VG-5 shows the site plan for the Sundance Project.

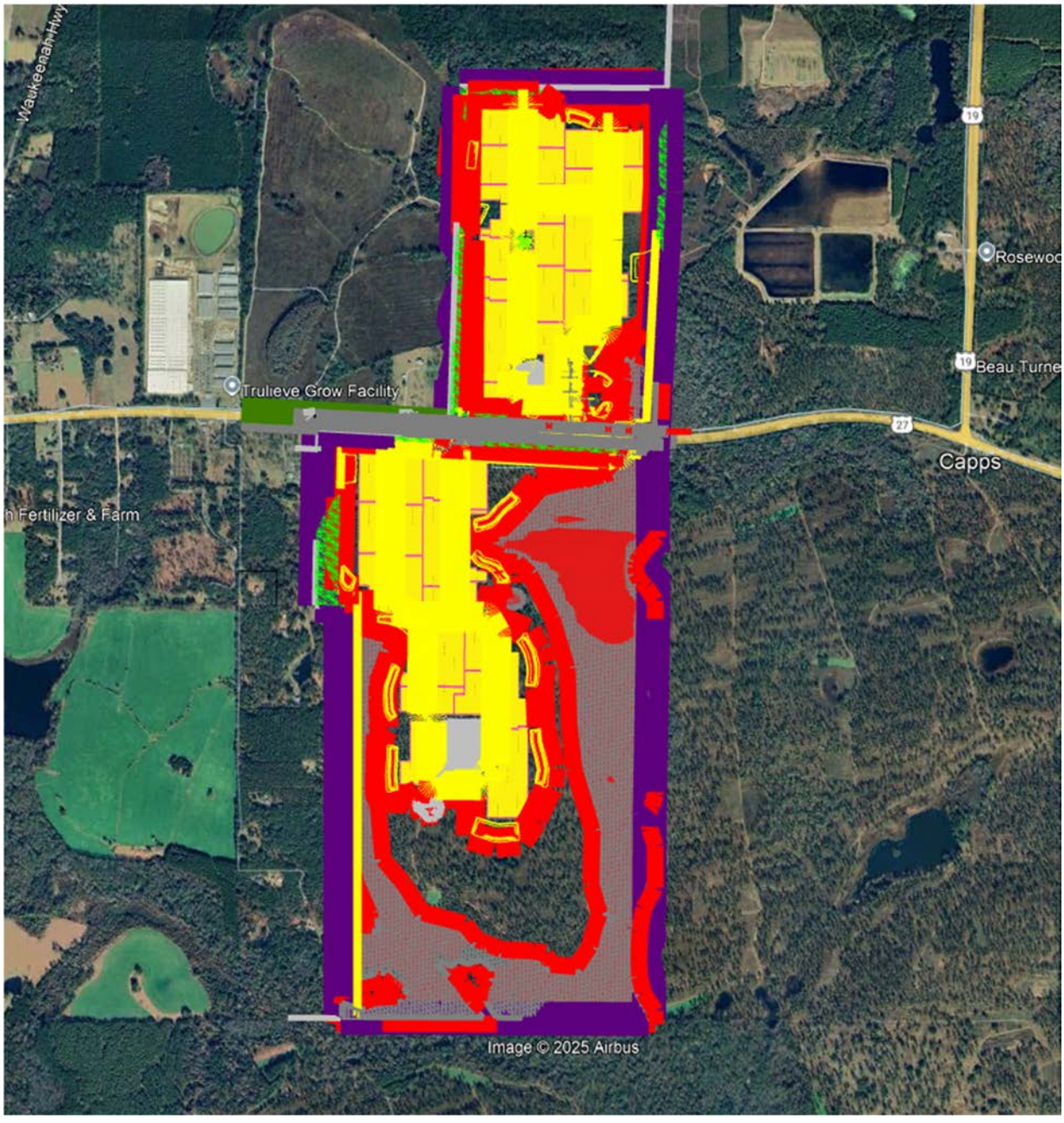
Q. What is the projected installed cost for the Sundance Project?

A. The projected cost of the Sundance Project is $110.9million. My Exhibit No. VG-8 shows the categories that make up the total installed cost.

Q. Does that conclude your testimony?

A. Yes.

Bailey Mill Solar Center Site Plan



Bailey Mill Solar Center
Estimated Installed Cost by Category

Estimated Costs ($MM)	
Project Output (MW-ac)	74.9
Major Equipment[1]	$37.5
Balance of System[2]	69.7
Construction Management	1.9
Development and Permitting[3]	2.4
Transmission Interconnect[4]	5.8
Land[5]	0.0
Total Installed Cost	$117.3
Total ($kW-ac)	$1,566
Carrying Charge	$6.7
Network Upgrades (NU)	3.7
Total	$127.7

1. Includes equipment such as solar panels, project transformer, high side breaker, and any other equipment that was not included in EPC contract.
2. Includes remaining equipment such as racking, posts, inverters, and collection cables and EPC services.
3. Includes items such as lease rental payments during construction, legal fees, development costs, development fees, and title insurance.
4. Includes Interconnection Customer charges identified in the Large Generator Interconnection Agreement and associated with affected third-party systems. Excludes Network Upgrades.
5. Solar project occupies land leased to Duke Energy Florida.

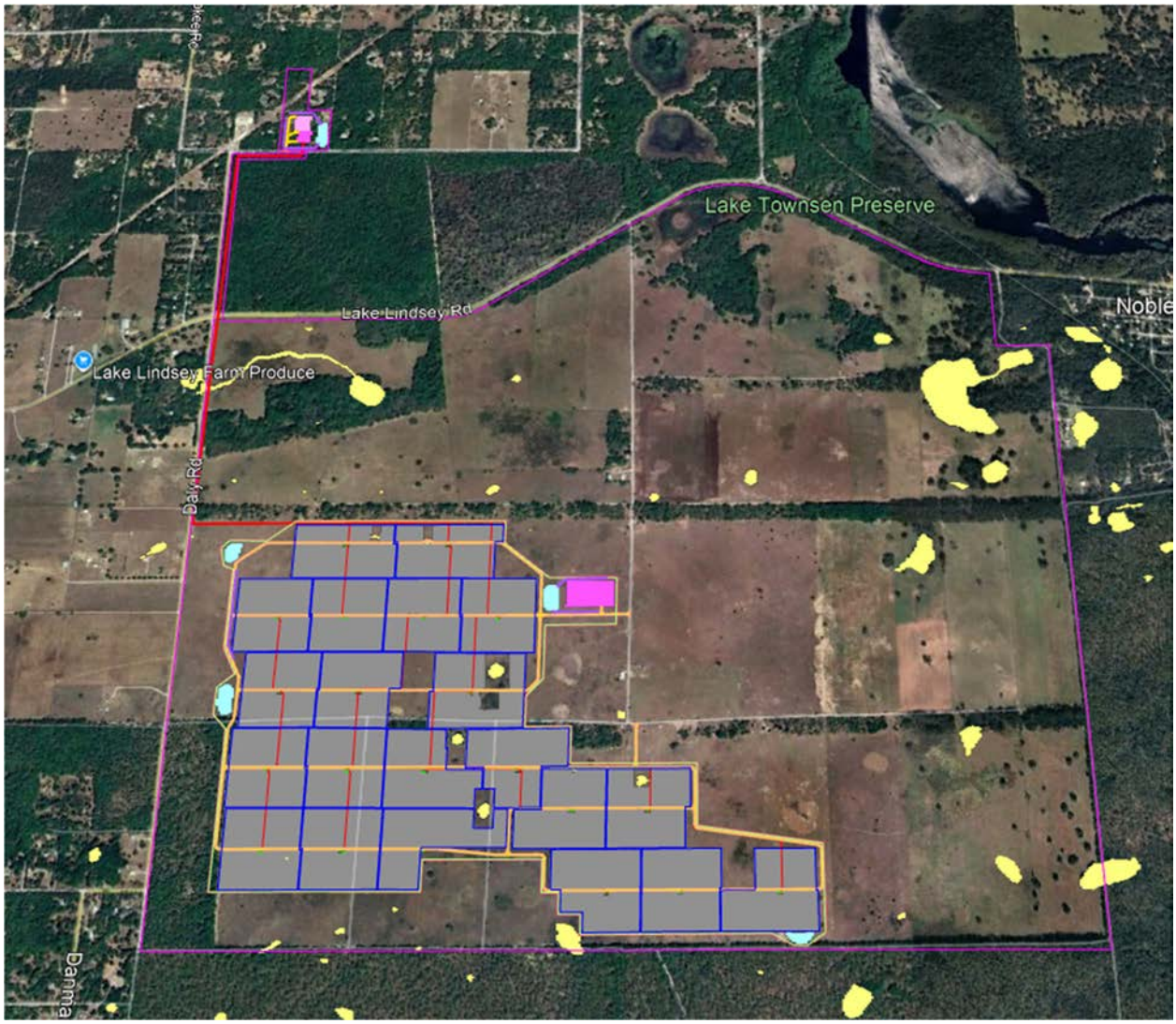
Half Moon Solar Center Site Plan

Half Moon Solar Center
Estimated Installed Cost by Category

Estimated Costs ($MM)	
Project Output (MW-ac)	74.9
Major Equipment[1]	$30.6
Balance of System[2]	75.0
Construction Management	1.6
Development and Permitting[3]	4.8
Transmission Interconnect[4]	3.0
Land[5]	0.2
Total Installed Cost	$115.2
Total ($kW-ac)	$1,538
Network Upgrades (NU)	$24.4
Carrying Charge	5.6
Total	$145.2

1. Includes equipment such as solar panels, project transformer, high side breaker, and any other equipment that was not included in EPC contract.
2. Includes remaining equipment such as racking, posts, inverters, and collection cables and EPC services.
3. Includes items such as lease rental payments during construction, legal fees, development costs, development fees, and title insurance.
4. Includes Interconnection Customer charges identified in the Large Generator Interconnection Agreement and associated with affected third-party systems. Excludes Network Upgrades.
5. Transmission substation located on land purchased by Duke Energy Florida, remainder of solar project occupies land leased to Duke Energy Florida.

Rattler Solar Center Site Plan

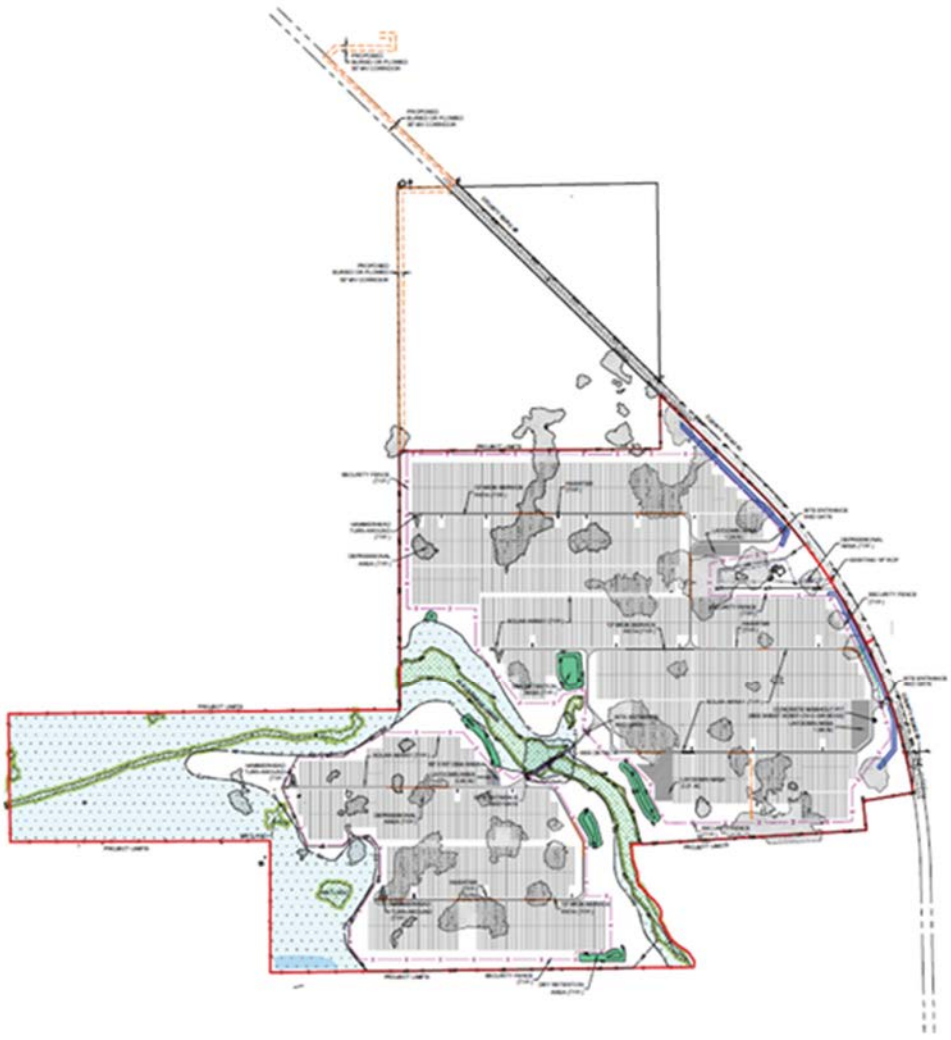


Rattler Solar Center
Estimated Installed Cost by Category

Estimated Costs ($MM)	
Project Output (MW-ac)	74.9
Major Equipment[1]	$30.6
Balance of System[2]	73.4
Construction Management	2.0
Development and Permitting[3]	4.9
Transmission Interconnect[4]	4.8
Land[5]	0.5
Total Installed Cost	$116.2
Total ($kW-ac)	$1,551
Network Upgrades (NU)	$16.8
Carrying Charge	4.6
Total	$137.6

1. Includes equipment such as solar panels, project transformer, high side breaker, and any other equipment that was not included in EPC contract.
2. Includes remaining equipment such as racking, posts, inverters, and collection cables and EPC services.
3. Includes items such as lease rental payments during construction, legal fees, development costs, development fees, and title insurance.
4. Includes Interconnection Customer charges identified in the Large Generator Interconnection Agreement and associated with affected third-party systems. Excludes Network Upgrades.
5. Transmission substation located on land purchased by Duke Energy Florida, remainder of solar project occupies land leased to Duke Energy Florida.

Sundance Solar Center Site Plan



Sundance Solar Center
Estimated Installed Cost by Category

Estimated Costs ($MM)	
Project Output (MW-ac)	74.9
Major Equipment[1]	$32.7
Balance of System[2]	66.2
Construction Management	1.5
Development and Permitting[3]	3.0
Transmission Interconnect[4]	2.3
Land[5]	0.0
Total Installed Cost	$105.7
Total ($kW-ac)	$1,411
Network Upgrades (NU)	$1.9
Carrying Charge	3.3
Total	$110.9

1. Includes equipment such as solar panels, project transformer, high side breaker, and any other equipment that was not included in EPC contract.
2. Includes remaining equipment such as racking, posts, inverters, and collection cables and EPC services.
3. Includes items such as lease rental payments during construction, legal fees, development costs, development fees, and title insurance.
4. Includes Interconnection Customer charges identified in the Large Generator Interconnection Agreement and associated with affected third-party systems. Excludes Network Upgrades.
5. Solar project occupies land leased to Duke Energy Florida.

IN RE: DUKE ENERGY FLORIDA, LLC'S PETITION FOR A LIMITED PROCEEDING TO APPROVE FIRST SOLAR BASE RATE ADJUSTMENT

FPSC DOCKET NO. _____

DIRECT TESTIMONY OF BENJAMIN M. H. BORSCH

FEBRUARY 21, 2025

Q. Please state your name and business address.

A. My name is Benjamin M. H. Borsch. My business address is Duke Energy Florida, LLC, 299 1st Avenue North, St. Petersburg, Florida 33701.

Q. By whom are you employed and what is your position?

A. I am employed by Duke Energy Florida, LLC ("DEF" or the "Company") as the Managing Director, IRP & Analytics.

Q. Please describe your duties and responsibilities in that position.

A. I am responsible for resource planning for DEF. I am responsible for directing the resource planning process in an integrated approach in order to find the most cost-effective alternatives to meet the Company's obligation to serve its customers in Florida. I oversee the completion of the Company's Ten-Year Site Plan ("TYSP") filed each April.

Q. Please describe your educational background and professional experience.

A. I received a Bachelor of Science and Engineering degree in Chemical Engineering from Princeton University. I joined Progress Energy in 2008 supporting the project management and construction department in the development of power plant projects. In 2009, I became Manager of Generation Resource Planning for Progress Energy Florida, and following the 2012 merger with Duke Energy Corporation, I accepted my current position. Prior to joining Progress Energy, I was employed for more than five years by Calpine Corporation where I was Manager (later Director) of Environmental Health and Safety for Calpine's Southeastern Region. In this capacity, I supported development and operations and oversaw permitting and compliance for several gas-fired power plant projects in nine states. I was also employed for more than eight years as an environmental consultant with projects including development, permitting, and compliance of power plants and transmission facilities. I am a professional engineer licensed in Florida and North Carolina.

Q. Please give an overview of the Company's presentation in this filing.

A. The Company is presenting testimony from three witnesses. My testimony will focus on the Company's demonstration of cost effectiveness for the proposed projects and their compliance with the terms set forth in DEF's 2024 Rate Case Settlement (the "2024 Settlement"). The testimony of Ms. Vanessa Goff focuses on the characteristics of the solar projects presented for approval in this filing. It also provides details as to the Company's competitive solicitation processes, as well as the costs for the solar projects. The testimony of Ms. Marcia Olivier presents the revenue requirements for the solar projects.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present the results of the economic analysis which shows that DEF's proposed four solar projects presented in this filing are cost effective and consistent with the terms of the 2024 Settlement. My testimony covers several areas. First, I discuss details of the four specific solar projects covered by this filing. Second, I discuss the major assumptions and methodology used to perform the economic analysis. Third, I present the results of the economic analysis, demonstrating that the addition of the proposed solar projects is cost effective and consistent with the terms of the 2024 Settlement.

Q. Are you presenting exhibits in this proceeding?

A. Yes. They consist of the following exhibits which are attached to my testimony:

Exhibit No. BMHB-1, "Solar Power Plant Assumptions;"

Exhibit No. BMHB-2, "Load Forecast;"

Exhibit No. BMHB-3, "Fuel Forecasts;"

Exhibit No. BMHB-4, "Cost Effectiveness (CPVRR) Analysis Results;" and

Exhibit No. BMHB-5, "Cost Effectiveness (CPVRR) Ten Year Analysis Results."

These exhibits are true and accurate.

Q. Please summarize your testimony.

A. In the 2024 Settlement, DEF is authorized to request cost recovery of up to twelve solar projects totaling approximately 900 MW of solar generation in three tranches over the

course of the 2024 Settlement period, including one year following the expiration of the Term of the 2024 Settlement subject to the demonstration of cost effectiveness and other provisions specified in the settlement. In this filing, DEF is proposing the construction and operation of 299.6 MW_{ac} of solar PV generation, consisting of four separate projects of 74.9 MW_{ac} capacity each, coming into service between July 2025 and May 2026. DEF performed an economic analysis and determined that these projects result in a reduction in the Cumulative Present Value Revenue Requirements ("CPVRR") to DEF customers for a total savings of approximately $253 million.

Q. Please describe the solar projects DEF is presenting for approval.

A. In this filing, DEF proposes four solar facilities. The first is a 74.9 MW facility in Madison County, called the Sundance Solar Power Plant ("Sundance Project") which will come into service in July 2025. Next is a 74.9 MW facility located in Sumter County called the Half Moon Solar Power Plant ("Half Moon Project") which is projected to come into service in January 2026, the third is a 74.9 MW facility located in Hernando County which will be called the Rattler Solar Power Plant ("Rattler Project") and which will come into service in January 2026, and the fourth is the Bailey Mill Solar Project ("Bailey Mill Project"), which will come into service in May 2026. Collectively, these projects will generate approximately 650,000 MWhs per year. Key data regarding these projects are provided in Exhibit No. BMHB-1. The projects are described in greater detail in Ms. Goff's testimony.

Q. What will these proposed solar projects cost?

A. DEF anticipates that the four proposed projects will have a total generation capital cost of approximately $455 million. These costs translate to an average per kW cost of $1,517/kW$_{ac}$. The costs are described in more detail in Ms. Goff's testimony.

Q. What does the 2024 Settlement require DEF to demonstrate to obtain cost recovery for the solar projects?

A. DEF must demonstrate that the projected solar projects in each filing meet several required elements. DEF must calculate the annual revenue requirements, as explained in Ms. Olivier's testimony. These revenue requirements are used to test two cases, one with and one without the new solar projects. An analysis of the Cumulative Present Value of the Revenue Requirements (CPVRR) for each case demonstrates whether the projects are cost effective and whether they meet the tests set out in the 2024 settlement, specifically that the overall benefits shall exceed the costs by a ratio of greater than 1.15 to 1 and that the CPVRR shall be positive in or before the tenth year of operation of the projects. Finally, the solar projects must be limited to a certain total MW size through one year following the Term of the 2024 Settlement, be cost effective on DEF's system, and DEF must demonstrate a need for the solar projects.

Q. Do the proposed solar projects meet the project limitations set forth in the 2024 Settlement?

A. Yes. Paragraph 16(a) of the 2024 Settlement states that DEF may install up to 900 MW of solar generation over the term of the 2024 Settlement. The Paragraph states that DEF shall make efforts to ensure that projects generally fall into one-year blocks and

that DEF will not bring a large number of the projects into service in a single year. This filing is in accordance with the intent of that agreement. The four projects proposed here will come into service over a 10-month period and represent approximately 300 MW being brought into service in the first 17 months following the start of the settlement implementation.

Q. Are the proposed solar projects cost effective?

A. Yes. As explained below, DEF analyzed the total system cost of the DEF system with the projects as compared to the total DEF system costs without the projects and found that the solar projects as proposed reduce the total system cost and are thus cost effective for DEF's customers.

Q. How did DEF evaluate the cost effectiveness of the solar projects?

A. DEF calculated the cost effectiveness in the same manner that it performs cost effectiveness evaluations of numerous projects including the development of the Ten-Year Site Plan and the previous SoBRA program. DEF calculates the total system cost projected over the life of the solar projects for a scenario with the solar projects and compares it to the total system cost calculated for a scenario without the solar projects. Lower total system costs for the scenario with the solar projects represents savings to DEF's customers. As with our Ten-Year Site Plan, this analysis is performed using the EnCompass® Power System Planning software from YES Energy (formerly Anchor Power Systems) to evaluate the production cost results. Project specific capital costs come from the project development teams and revenue requirements are then

developed. Project specific solar performance projections are developed using the PVSyst model and provided to the production cost model. This data becomes inputs to derive the system costs for the two cases developed with and without the solar projects in service.

Results of these differential CPVRR analyses, the difference between with and without the solar projects are shown below and in Exhibit No. BMHB-4.

Q. Please describe the major assumptions used in developing the CPVRR analyses.

A.

- Load Forecast – The analysis uses DEF's most recent official load forecast developed in the fall of 2024, which will be presented as the base case load forecast in the DEF 2025 Ten-Year Site Plan ("TYSP") will be filed with the commission in April 2025. This load forecast is attached as Exhibit No. BMHB-2.
- Fuel Price Forecast – The analysis uses DEF's most recent fuel price forecast also utilized in DEF's 2025 TYSP. This fuel price forecast was developed using short-term and long-term spot market price projections from industry-recognized sources. The cost for coal is based on the existing contracts and spot market coal prices and transportation arrangements between DEF and its various suppliers. For the longer term, the prices are based on spot market forecasts reflective of expected market conditions. Oil and natural gas prices are estimated based on current and expected contracts and spot purchase arrangements as well as near-term and long-term market forecasts. Oil and natural gas commodity prices are driven primarily by open market forces of supply and demand. Natural gas firm transportation cost is determined

primarily by pipeline tariff rates. The fuel price forecast used is shown in Exhibit No. BMHB-3 attached to this testimony.

- Production Tax Credits – DEF assumes that the solar projects will be eligible for production tax credits as described under Section 45Y of the 2022 Inflation Reduction Act.

Q. What are the results of DEF's cost effectiveness evaluation for these projects?

A. DEF has found that the projects are cost effective for its customers. The total system costs calculated over the project lives when including the projects in the DEF resource plan are lower when compared to the total system costs excluding the projects. The net results of this analysis (system costs with the projects minus system costs without the projects) are summarized in the table below and in Exhibit No. BMHB-4.

Q. Does the cost effectiveness evaluation show that the projects meet the additional criteria specified in the 2024 Settlement?

A. Yes. The cost benefit ratio test is shown as an outcome of the cost effectiveness results presented in Exhibit No. BMHB-4. Exhibit No. BMHB-5 presents the CPVRR over the first ten full years of operation, showing a positive CPVRR in year 10 (2036), satisfying the criterion specified in the Settlement.

Q. What benefits do the proposed solar facilities bring to DEF's system and customers?

A. The primary purpose of the proposed DEF solar projects is to provide customers with cost-effective, clean, renewable energy. These large-scale solar projects and additional future projects to be filed under the 2024 Settlement will diversify DEF's fuel mix with dependable energy, and provide firm summer capacity, helping to meet DEF's needs for future capacity and satisfy DEF's need for future generation capacity.

The solar resources contribute value in several ways. The contribution to firm capacity contributes value in that it reduces the need for other resources in the future. Solar energy is also an important low-cost resource that serves to offset the use of fuel fired resources, providing significant fuel cost reductions. This also serves as a physical hedge against future variability in the price of fuel, especially natural gas. Finally, a new value stream comes in the form of tax credits associated with the 2022 Inflation Reduction Act. These tax credits create savings for each megawatt-hour of solar energy produced which serves to reduce costs to customers. While DEF is not currently ascribing additional value to these facilities for future Greenhouse gas (GHG) emissions regulations (e.g., a carbon price), the clean generation from these units and the resulting reduction in emissions from fossil fired generation also insulates DEF customers from the impact of potential future GHG regulation.

Q. Will the proposed solar units reduce fossil fuel consumption?

A. Yes. DEF projects that the four solar units contemplated in this filing will displace nearly 5 billion cubic feet of natural gas, 35,000 tons of coal and 70,000 barrels of fuel oil per year. These values will continue annually throughout the first several years of

unit operation. Over the longer term, as the fuel mix changes, the fuel offset will change, but the solar sites will continue to produce meaningful fuel savings.

Q. How does this translate into savings for the customer?

A. At 2024 market prices, these four solar units are projected to reduce the DEF fuel expenditure by over $18 million. Relatively speaking, 2023 was a low fuel cost year. Fuel prices in 2022 were roughly double what they were in 2024 and the attendant fuel cost savings from solar generation to DEF customers was roughly double the 2024 price-based estimate, demonstrating that, in addition to direct near-term savings, the solar units provide a natural hedge against future volatility in the price of fuel. Further, generation from the solar facilities will generate tax credits for DEF, the value of which will flow back to customers in the form of rate reductions. For the four solar facilities, these are expected to be approximately $20 million per year for the first 10 years of operation.

Q. Given all these benefits, does DEF have a need for these solar projects?

A. Yes. DEF has a need for cost-effective clean generation that will diversify its fuel mix and defer the need for future gas-fired generation.

Q. Should the Commission approve DEF's request for approval of this first group of solar projects?

A. Yes. As demonstrated above, these solar projects are cost effective and will provide DEF's customers with an additional 299.6 MW of clean, reliable, renewable energy to meet its needs.

Q. Does that conclude your testimony?

A. Yes.

Solar Power Plant Assumptions

Solar Energy Centers	In-service date	Name Plate Capacity (Mwac)	Projected 1st Year Net Capacity Factor	Generation Capital Cost ($M)	Capital Cost ($/Kwac)
Sundance	Jul-25	74.9	26.2%	$105.7	$ 1,411
Rattler	Jan-26	74.9	26.2%	$116.2	$ 1,551
Half Moon	Jan-26	74.9	25.7%	$115.2	$ 1,538
Bailey Mill	May-26	74.9	25.0%	$117.3	$ 1,566

Load Forecast

Year	Summer Firm Peak MW	Winter Firm Peak MW	Net Energy for Load Mwh
2025	8,792	9,105	43,447,217
2026	8,908	9,269	44,417,535
2027	8,971	9,328	44,664,655
2028	8,962	8,796	45,072,775
2029	9,009	8,853	45,314,041
2030	9,143	8,910	45,664,821
2031	9,202	8,876	45,046,757
2032	9,305	8,907	45,434,809
2033	9,390	8,954	45,738,504
2034	9,504	9,050	46,358,600
2035	9,622	9,160	47,051,713
2036	9,491	8,892	47,822,802
2037	9,704	9,012	48,472,515
2038	9,866	9,110	49,054,525
2039	9,945	9,225	49,709,214
2040	10,045	9,380	50,591,260
2041	10,230	9,485	51,091,581
2042	10,450	9,635	51,816,945
2043	10,668	9,747	52,547,309
2044	10,805	9,891	53,433,630
2045	10,951	10,036	54,154,385
2046	11,134	10,193	54,993,251
2047	11,399	10,353	55,851,114
2048	11,655	10,536	56,934,402
2049	11,949	10,720	57,837,325
2050	12,249	10,919	58,915,135

Fuel Forecasts (Delivered Costs)

Fuel Mid Price Forecast (2025 TYSP)			
Year	Natural Gas	CRN Coal	Distillate Oil
	$/MMBTU		
2025	3.46	2.95	15.54
2026	3.85	3.60	15.79
2027	3.89	3.68	16.03
2028	3.81	3.77	16.51
2029	3.74	3.84	17.09
2030	3.82	3.98	17.43
2031	4.16	4.08	17.72
2032	4.67	4.23	18.00
2033	5.21	4.38	18.30
2034	5.39	4.46	18.66
2035	5.69	4.56	18.97
2036	5.93	4.66	19.26
2037	6.09	4.78	19.54
2038	6.32	4.87	20.01
2039	6.56	4.96	20.50
2040	6.88	5.07	21.02
2041	7.22	5.18	21.54
2042	7.48	5.30	22.08
2043	7.72	5.42	22.63
2044	8.01	5.54	23.20
2045	8.33	5.67	23.78
2046	8.81	5.80	24.37
2047	9.14	5.93	24.98
2048	9.58	6.07	25.61
2049	9.93	6.22	26.25
2050	10.37	6.37	26.90

CPVRR over the life of the solar units through 2060			
CPVRR $M (2025$)	**Base Case**	**Change Case**	**Base Case - Change Case**
Fuel Cost	$ 18,484	$ 18,156	$ 328
Environmental Costs	$ 56	$ 55	$ 1
Variable Costs	$ 2,504	$ 2,489	$ 15
PTC	$ (3,616)	$ (3,616)	$ 0
Inc Fixed O&M Cost	$ 4,630	$ 4,656	$ (26)
Inc Gas Reserv Charges	$ 5,533	$ 5,419	$ 113
Inc Gen and Transm Capital	$ 16,282	$ 15,971	$ 312
	$ 43,873	$ 43,131	$ 742
Fixed O&M Add Solar	$ -	$ 36	$ (36)
Gen Capital Add Solar	$ -	$ 574	$ (574)
Transm Capital Add Solar	$ -	$ 61	$ (61)
	$ -	$ 671	$ (671)
PTC Add Solar	$ -	$ (182)	$ 182
Savings from Add Solar	$ 43,873	$ 43,620	$ 253

Discount Rate **7.44%**

Benefit	$ 924		
Cost	$ 671		
Benefit to Cost Ratio	1.38	>	1.15

Note: Base Case has no new Duke owned stand alone solar after year 2024
Change Case adds 4 Solar Units between 2025 and early 2026

CPVRR through 2036			
CPVRR $M (2025$)	**Base Case**	**Change Case**	**Base Case - Change Case**
Fuel Cost	$ 10,678	$ 10,515	$ 163
Environmental Costs	$ 53	$ 52	$ 1
Variable Costs	$ 1,096	$ 1,090	$ 6
PTC	$ (534)	$ (534)	$ 0
Inc Fixed O&M Cost	$ 291	$ 275	$ 16
Inc Gas Reserv Charges	$ 3,139	$ 3,125	$ 15
Inc Gen and Transm Capital	$ 1,755	$ 1,582	$ 173
	$ 16,477	$ 16,104	$ 373
Fixed O&M Add Solar	$ -	$ 19	$ (19)
Gen Capital Add Solar	$ -	$ 393	$ (393)
Transm Capital Add Solar	$ -	$ 44	$ (44)
	$ -	$ 455	$ (455)
PTC Add Solar	$ -	$ (182)	$ 182
Savings from Add Solar	$ 16,477	$ 16,378	$ 99

Discount Rate **7.44%**

Note: Base Case has no new Duke owned stand alone solar after year 2024
Change Case adds 4 Solar Units between 2025 and early 2026

IN RE: DUKE ENERGY FLORIDA, LLC'S PETITION FOR A LIMITED PROCEEDING TO APPROVE FIRST SOLAR BASE RATE ADJUSTMENT

FPSC DOCKET NO. _____

DIRECT TESTIMONY OF MARCIA J. OLIVIER

FEBRUARY 21, 2025

Q. Please state your name and business address.

A. My name is Marcia J. Olivier. My business address is 299 1st Avenue North, St. Petersburg, Florida 33701.

Q. By whom are you employed, and what is your position?

A. I am employed by Duke Energy Florida, LLC ("DEF" or the "Company") as the Director of Rates and Regulatory Planning.

Q. Please describe your duties and responsibilities in that position.

A. I am responsible for the preparation of jurisdictional separation studies and class cost of service studies, overseeing rate case activities, reporting actual and forecasted earnings surveillance results, and supporting various regulatory filings and initiatives.

Q. Please describe your educational background and professional experience.

A. I hold a Bachelor of Science degree in Accounting and a Bachelor of Science degree in Finance from the University of South Florida and have over 25 years of utility experience, primarily in the regulatory area.

Q. What is the purpose of your testimony?

A. Pursuant to the 2024 Settlement Agreement approved in Order No. PSC-2024-0472-AS-EI, Docket No. 20240025-EI ("2024 Settlement"), my testimony will provide the annualized revenue requirements for each of the four solar projects included in this First Solar Base Rate Adjustment ("SoBRA") filing: Sundance, Rattler, Half Moon, and Bailey Mill. I will also present the process for submitting the customer rate impacts and tariff sheets. Vanessa Goff will present direct testimony describing these solar projects and the reasonableness of the costs, and Benjamin Borsch will present direct testimony demonstrating the cost effectiveness of the solar projects.

Q. Have you prepared, or caused to be prepared under your direction, supervision, or control, exhibits in this proceeding?

A. Yes. I am sponsoring the following exhibit:

- Exhibit No. MJO-1, "First SoBRA First Year Annualized Revenue Requirement"

This exhibit is true and accurate to the best of my knowledge.

Q. Please describe the SoBRA filing requirements in DEF's 2024 Settlement.

A. Paragraph 16 of the 2024 Settlement provides for solar base rate adjustments. Specifically, Paragraph 16.c. states:

> Solar generation projects not subject to the Florida Electrical Power Plant Siting Act (i.e., fewer than 75 MW), also will be subject to approval by the Commission as follows: (i) DEF will file a request for approval of the solar generation project in a separate docket; and (ii) the issues for determination are limited to: the reasonableness and cost effectiveness of the solar generation projects (i.e., will the projects lower the projected system CPVRR as compared to such CPVRR without the solar projects and whether the projects show positive benefits that exceed costs within ten years); whether the solar projects meet a 1.15 to 1 benefit cost ratio; whether the solar projects are 100 percent dedicated to serve DEF's retail load; and the amount of revenue requirements Any Party may challenge the reasonableness of DEF's actual or projected solar project costs. If approved, DEF will calculate and submit for Commission confirmation the base rate adjustment for each such solar project, consistent with Subparagraphs 16.d. and 16.e.

Q. Have you calculated the revenue requirements for the solar projects consistent with the 2024 Settlement?

A. Yes. Based on the cost information provided in Ms. Goff's testimony, I have calculated in Exhibit MJO-1 "First SoBRA First Year Annualized Revenue Requirement" the

annualized revenue requirements for the Sundance, Rattler, Half Moon, and Bailey Mill projects in accordance with Paragraph 16.e. of the 2024 Settlement, which states:

> Each base rate adjustment created by this Paragraph will be calculated using a 10.3% ROE and DEF's projected 13-month average capital structure for the first 12 months of operation, including all specific adjustments consistent with DEF's most recently filed December earnings surveillance report, and adjusted to include an ADIT proration adjustment consistent with 26 C.F.R. Section 1.167(l)-1(h)(6) and adjusted to reflect the inclusion of investment tax credits on a normalized basis if normalization is required by the Internal Revenue Service.

The revenue requirement calculation for each of these solar projects also includes a carrying charge at the applicable AFUDC rate and the foregone Clean Energy Connection expansion revenues of $7.5 million pursuant to Par. 16.a. of the 2024 Settlement, which states:

> Solar investment costs will be removed from rate base in DEF's filed 2025 COSS, including any construction costs on solar projects that are forecasted to go in service beyond the Term of this 2024 Settlement Agreement, and as such, DEF will be allowed to accrue a carrying charge to be added to the construction work in progress balances based on the applicable AFUDC rate on all solar projects while under construction during the Term of this Settlement Agreement. The SoBRA Annualized Base Revenue Requirement shall include the

foregone Clean Energy Connection expansion revenues of $7.5 million for each of the first five solar facilities that served to reduce DEF's base rate revenue requirements in its Minimum Filing Requirements ("MFR").

The following table provides the estimated in-service date, estimated rate effective date, and estimated revenue requirement for each project.

	Sundance	**Rattler**	**Half Moon**	**Bailey Mill**
Est. In-Service Date	Jul-25	Jan-26	Jan-26	May-26
Est. Rate Effective Date	Aug-25	Feb-26	Feb-26	Jun-26
Est. Revenue Requirement	$16.4 million	$19.1 million	$19.8 million	$18.1 million

Q. Please explain DEF's expected process for calculating and submitting the final base rate adjustments for each solar project.

A. Paragraph 16.d. in the 2024 Settlement requires DEF to use the sales forecast in DEF's then-most-current Capacity Cost Recovery (CCR) Clause projection filing to calculate the base rate adjustments. Since the base rate adjustments for these solar projects are expected to be implemented in August 2025 (Sundance), February 2026 (Rattler & Half-Moon), and June 2026 (Bailey Mill), and since DEF's 2026 CCR projection filing is expected to be due in August or September, 2025, DEF will use the spring sales forecast which will also be used in DEF's 2026 CCR projection filing to calculate the

base rate adjustments for all of these projects. 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. For example, DEF will file the rate adjustments and tariff sheets on approximately June 1, 2025 for the Sundance rate adjustment expected on August 1, 2025.

Q. Does the 2024 Settlement provide for a true-up mechanism to be applied to SoBRA rates?

A. Yes. Paragraph 16.f. of the 2024 Settlement states:

> In the event that the actual capital expenditures are less than the approved projected costs, included in the petition for cost recovery and used to develop the initial base rate adjustment, the lower figure shall be the basis for the full revenue requirements and a one-time credit will be made through the CCR Clause. In order to determine the amount of this credit, a revised base rate adjustment will be computed using the same data and methodology incorporated in the initial base rate adjustment, with the exception that the actual capital expenditures will be used in lieu of the estimated capital expenditures on which the Annualized Base Revenue Requirement was based. On a going-forward basis, base rates will be adjusted to reflect the revised base rate adjustment. The difference between the cumulative base revenues since the implementation of the initial base rate adjustment and the cumulative base revenues that would have resulted if the revised base

rate adjustment had been in-place during the same time period will be credited to customers through the CCR Clause with interest at the 30-day commercial paper rate as specified in Rule 25-6.109, F.A.C.

Once the capital expenditures are final, if they are less than the amount approved by the Commission, then DEF will make a true-up filing to reduce base rates going forward and provide a refund through the CCR clause consistent with the provisions in Paragraph 16.f. of the 2024 Settlement.

Q. **How will DEF notify the Commission of the commercial operation date of each solar facility?**

A. DEF will submit to the Commission a letter that declares the commercial operation date of each solar facility prior to any Solar base rate changes.

Q. Does that conclude your testimony?

A. Yes.

Duke Energy Florida, LLC
First SoBRA First Year Annualized Revenue Requirement
($000)

	Description	Reference	(1) Sundance	(2) Rattler	(3) Half Moon	(4) Bailey Mill
1	Jurisdictional Adjusted Rate Base	Page 2	$108,541	$130,000	$135,401	$124,535
2	Rate of Return on Rate Base	Pages 3, 4, & 5	6.700%	6.740%	6.740%	6.740%
3	Net Operating Income Required	Line 1 x Line 2	7,272	8,762	9,126	8,394
4	Net Operating Income Achieved	Page 2	(4,910)	(5,419)	(5,579)	(5,068)
5	Net Operating Income Deficiency/(Excess)	Line 3 - Line 4	12,182	14,181	14,705	13,462
6	Net Operating Income Multiplier	Note 1	1.343	1.344	1.344	1.344
7	Revenue Requirement	Line 5 x Line 6	$16,364	$19,054	$19,758	$18,093

8 Note 1: Net Operating Income Multiplier is based on MFR C-44 in Docket No. 20240025

Duke Energy Florida, LLC
First SoBRA First Year Annualized Revenue Requirement
($000)

Docket No. _____-EI
Witness: Marcia Olivier
Exhibit No. MJO-1

Line	Description	(1) Sundance Total Company	(2) Sundance FPSC Jurisdictional	(3) Rattler Total Company	(4) Rattler FPSC Jurisdictional	(5) Half Moon Total Company	(6) Half Moon FPSC Jurisdictional	(7) Bailey Mill Total Company	(8) Bailey Mill FPSC Jurisdictional	(9) Jurisdictional Separation Factor[1]
1	**Rate Base (13 month average):**									
2	Plant - Solar Production[2]	$107,149	$107,149	$118,149	$118,149	$117,978	$117,978	$122,439	$122,439	100.000%
3	Plant - GSU[2]	1,788	1,788	1,928	1,928	1,788	1,788	1,390	1,390	100.000%
4	Plant - Network Upgrades[2]	1,991	1,401	17,017	11,623	25,204	17,595	3,880	2,730	70.369%
5	Transmission Substation Land Purchase[2]			500	352	200	141			70.369%
6	Accumulated Depreciation - Solar Production	(1,528)	(1,528)	(1,685)	(1,685)	(1,683)	(1,683)	(1,746)	(1,746)	100.000%
7	Accumulated Depreciation - GSU	(16)	(16)	(17)	(17)	(16)	(16)	(13)	(13)	100.000%
8	Accumulated Depreciation - Network Upgrades	(18)	(13)	(154)	(109)	(229)	(161)	(35)	(25)	70.369%
9	Accumulated Reserve - Dismantlement		(240)	(240)	(240)	(240)	(240)	(240)	(240)	100.000%
10	Rate Base (13 month average):	$109,365	$108,541	$135,496	$130,000	$143,001	$135,401	$125,674	$124,535	
11										
12	**Net Operating Income Achieved:**									
13	**Revenue:**									
14	Foregone CEC 2.0 Revenue[3]	($7,505)	($7,505)	($7,505)	($7,505)	($7,505)	($7,505)	($7,505)	($7,505)	100.000%
15	**Operating Expense:**									
16	O&M (Including Land Lease)	1,063	1,063	1,065	1,065	1,193	1,193	971	971	100.000%
17	Depreciation Expense - Solar Production[4]	3,057	3,057	3,371	3,371	3,366	3,366	3,493	3,493	100.000%
18	Depreciation Expense - GSU[5]	32	32	35	35	32	32	25	25	100.000%
19	Depreciation Expense - Network Upgrades[5]	36	25	309	217	457	322	70	50	70.369%
20	Dismantlement Expense[6]	481	481	481	481	481	481	481	481	100.000%
21	Property Insurance	1,065	1,065	1,321	1,321	1,394	1,394	1,226	1,226	100.000%
22	Property Tax - Solar Production[7]	346	311	360	287	319	288	321	243	100.000%
23	Property Tax - GSU[7]	35	35	73	73	30	30	78	78	100.000%
24	Property Tax - Network Upgrades[7]	29	21	258	182	248	175	49	35	70.369%
25	Total Operating Expenses	$6,145	$6,090	$7,272	$7,031	$7,520	$7,280	$6,713	$6,600	
26	**Net Operating Income:**									
27	Net Operating Income Before Tax (NOIBT)		(13,595)		(14,536)		(14,785)		(14,105)	
28	Income Tax - (NOIBT x 25.345%)		3,446		3,684		3,747		3,575	
29	Income Tax - Interest Expense (Rate Base x WACD x 25.345%)		517		630		656		606	
30	Income Tax - Production Tax Credits[8]		4,723		4,803		4,803		4,856	
31	Net Operating Income Achieved		($4,910)		($5,419)		($5,579)		($5,068)	
32										

33 Note 1: 2024 Settlement Agreement, Par. 7 and Exh. 3
34 Note 2: Total Plant per testimony and exhibits of Ms. Goff
35 Note 3: 2024 Settlement Agreement, Par. 16.a.
36 Note 4: 35 year life per 2024 Settlement Agreement, Par. 22
37 Note 5: Depreciation rate of 1.81% for Plant Account 353 per 2024 Settlement Agreement, Exhibit 7
38 Note 6: 2024 Settlement Agreement, Exh. 1
39 Note 7: Property tax rates are based on the applicable county rate and expected assessed value (reduced by an 80% abatement for solar facilities)
40 Note 8: Production Tax Credits are calculated per 2024 Settlement, Par. 23 and Exh. JRP-1 in 2024 Rate Case filing

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	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
					Sundance Project						
1		System Per	Proration	System Per	Retail Per	Pro Rata	Specific	Adjusted	Cap	Cost	Weighted
2		Books	Adjustment	Books Adj'd	Books	Adj	Adj	Retail	Ratio	Rate	Cost
3	Common Equity	$12,084,379	$3,843	$12,088,222	$11,157,492	($4,589,000)	($15,257)	$6,553,236	46.01%	10.30%	4.74%
4	Long Term Debt	10,617,236	3,376	10,620,612	9,802,881	(4,031,858)		5,771,024	40.52%	4.63%	1.88%
5	Short Term Debt	(35,476)	(11)	(35,487)	(32,755)	13,472		(19,283)	-0.14%	4.91%	-0.01%
6	Cust Dep Active	158,877	51	158,928	158,928	(65,366)		93,562	0.66%	2.61%	0.02%
7	Invest Tax Cr	247,635	79	247,713	228,641	(94,038)		134,602	0.95%	7.64%	0.07%
8	Deferred Inc Tax	3,642,998	(7,337)	3,635,661	3,355,735	(1,380,191)	(265,713)	1,709,831	12.00%		
9	**Total**	$26,715,649		$26,715,649	$24,670,922	($10,146,980)	($280,970)	$14,242,972	100.00%		6.70%
10											
11	**Proration Adjustment to Reflect Projected ADFIT Consistent with Projection Year**										
12									Prorated	Prorated	
13			ADIT	Deprec-Related	Deprec-Related	Days to	Future Days	Deprec-Related	Deprec-Related		
14		Month	Bal.	ADFIT Bal.	ADFIT Activity	Prorate	in Period	ADFIT Activity	ADFIT Bal.		
15		Aug-25		3,044,462					3,044,462		
16	projected	Sep-25		3,059,441	14,979	30	336	13,789	3,058,251		
17	projected	Oct-25		3,074,504	15,063	31	305	12,587	3,070,838		
18	projected	Nov-25		3,088,530	14,026	30	275	10,567	3,081,405		
19	projected	Dec-25		3,111,988	23,458	31	244	15,681	3,097,087		
20	projected	Jan-26		3,127,432	15,444	31	213	9,013	3,106,099		
21	projected	Feb-26		3,143,465	16,033	28	185	8,126	3,114,226		
22	projected	Mar-26		3,160,427	16,961	31	154	7,156	3,121,382		
23	projected	Apr-26		3,175,418	14,992	30	124	5,093	3,126,475		
24	projected	May-26		3,191,916	16,498	31	93	4,204	3,130,679		
25	projected	Jun-26		3,209,309	17,393	30	63	3,002	3,133,681		
26	projected	Jul-26		3,224,857	15,549	31	32	1,363	3,135,044		
27	projected	Aug-26		3,239,733	14,876	31	1	41	3,135,085		
28	13 Mo Avg Bal			3,142,422		365		90,623	3,135,085		
29								13 Mo Avg Bal	3,142,422		
30								Proration Adj.	(7,337)		

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Rattler & Half Moon Projects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1		System Per	Proration	System Per	Retail Per	Pro Rata	Specific	Adjusted	Cap	Cost	Weighted
2		Books	Adjustment	Books Adj'd	Books	Adj	Adj	Retail	Ratio	Rate	Cost
3	Common Equity	$12,443,060	$4,210	$12,447,270	$11,489,320	($4,905,717)	($15,257)	$6,568,347	46.10%	10.30%	4.75%
4	Long Term Debt	10,734,202	3,632	10,737,833	9,911,442	(4,231,994)		5,679,449	39.88%	4.71%	1.88%
5	Short Term Debt	109,530	37	109,567	101,135	(43,183)		57,952	0.41%	4.88%	0.02%
6	Cust Dep Active	158,877	54	158,931	158,931	(67,860)		91,070	0.64%	2.61%	0.02%
7	Invest Tax Cr	249,502	84	249,587	230,378	(98,367)		132,011	0.93%	7.71%	0.07%
8	Deferred Inc Tax	3,751,225	(8,017)	3,743,208	3,455,129	(1,475,273)	(265,713)	1,714,142	12.04%		
9	**Total**	$27,446,397		$27,446,397	$25,346,335	($10,822,393)	($280,970)	$14,242,972	100.00%		6.74%
10											

11 **Proration Adjustment to Reflect Projected ADFIT Consistent with Projection Year**

									Prorated	Prorated
12										
13			ADIT	Deprec-Related	Deprec-Related	Days to	Future Days		Deprec-Related	Deprec-Related
14		Month	Bal.	ADFIT Bal.	ADFIT Activity	Prorate	in Period		ADFIT Activity	ADFIT Bal.
15		Feb-26		3,143,465						3,143,465
16	projected	Mar-26		3,160,427	16,961	31	335		15,567	3,159,032
17	projected	Apr-26		3,175,418	14,992	30	305		12,527	3,171,560
18	projected	May-26		3,191,916	16,498	31	274		12,385	3,183,944
19	projected	Jun-26		3,209,309	17,393	30	244		11,627	3,195,571
20	projected	Jul-26		3,224,857	15,549	31	213		9,074	3,204,645
21	projected	Aug-26		3,239,733	14,876	31	182		7,417	3,212,062
22	projected	Sep-26		3,256,890	17,157	30	152		7,145	3,219,207
23	projected	Oct-26		3,273,406	16,516	31	121		5,475	3,224,682
24	projected	Nov-26		3,289,282	15,876	30	91		3,958	3,228,640
25	projected	Dec-26		3,308,578	19,296	31	60		3,172	3,231,812
26	projected	Jan-27		3,325,372	16,794	31	29		1,334	3,233,147
27	projected	Feb-27		3,336,882	11,510	28	1		32	3,233,178
28	13 Mo Avg Bal			3,241,195		365			89,713	3,233,178
29								13 Mo Avg Bal		3,241,195
30								Proration Adj.		(8,017)

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Bailey Mill Project

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1		System Per	Proration	System Per	Retail Per	Pro Rata	Specific	Adjusted	Cap	Cost	Weighted
2		Books	Adjustment	Books Adj'd	Books	Adj	Adj	Retail	Ratio	Rate	Cost
3	Common Equity	$12,642,285	$4,013	$12,646,298	$11,674,431	($4,999,262)	($15,243)	$6,659,926	46.03%	10.30%	4.74%
4	Long Term Debt	10,805,924	3,430	10,809,355	9,978,656	(4,273,092)		5,705,565	39.45%	4.74%	1.87%
5	Short Term Debt	220,763	70	220,833	203,862	(87,299)		116,564	0.81%	4.61%	0.04%
6	Cust Dep Active	158,877	50	158,928	158,928	(68,056)		90,871	0.63%	2.61%	0.02%
7	Invest Tax Cr	243,438	77	243,515	224,801	(96,265)		128,536	0.89%	7.73%	0.07%
8	Deferred Inc Tax	3,843,193	(7,641)	3,835,552	3,540,790	(1,516,248)	(261,694)	1,762,847	12.19%		
9	**Total**	$27,914,481		$27,914,481	$25,781,468	($11,040,222)	($276,938)	$14,464,308	100.00%		6.74%
10											

11 **Proration Adjustment to Reflect Projected ADFIT Consistent with Projection Year:**

12								Prorated	Prorated
13			ADIT	Deprec-Related	Deprec-Related	Days to	Future Days	Deprec-Related	Deprec-Related
14		Month	Bal.	ADFIT Bal.	ADFIT Activity	Prorate	in Period	ADFIT Activity	ADFIT Bal
15		Jun-26		3,209,309					3,209,309
16	projected	Jul-26		3,224,857	15,549	31	335	14,271	3,223,579
17	projected	Aug-26		3,239,733	14,876	31	304	12,390	3,235,969
18	projected	Sep-26		3,256,890	17,157	30	274	12,880	3,248,849
19	projected	Oct-26		3,273,406	16,516	31	243	10,996	3,259,844
20	projected	Nov-26		3,289,282	15,876	30	213	9,264	3,269,109
21	projected	Dec-26		3,308,578	19,296	31	182	9,622	3,278,730
22	projected	Jan-27		3,325,372	16,794	31	151	6,948	3,285,678
23	projected	Feb-27		3,336,882	11,510	28	123	3,879	3,289,557
24	projected	Mar-27		3,353,278	16,396	31	92	4,133	3,293,689
25	projected	Apr-27		3,365,139	11,860	30	62	2,015	3,295,704
26	projected	May-27		3,376,657	11,518	31	31	978	3,296,682
27	projected	Jun-27		3,397,568	20,911	30	1	57	3,296,740
28	13 Mo Avg Bal			3,304,381		365		87,431	3,296,740
29								13 Mo Avg Bal	3,304,381
30								Proration Adj.	(7,641)