APPENDIX A

REVIEW OF THE

2021 TEN-YEAR SITE PLANS

OF FLORIDA'S ELECTRIC UTILITIES

FLORIDA
PUBLIC
SERVICE
COMMISSION

OCTOBER 2021

Ten-Year Site Plan Comments

State Agencies

Regional Planning Councils

Water Management Districts

Local Governments

Environmental Groups

Florida Citizens

State Agencies

Department of Economic Opportunity

Ron DeSantis
GOVERNOR

FLORIDA DEPARTMENT of ECONOMIC OPPORTUNITY

Dane Eagle
SECRETARY

August 2, 2021

Mr. Donald Phillips
Engineering Specialist
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

RE: Review of the 2021 Ten-Year Site Plans for Florida's Electric Utilities

Dear Mr. Phillips:

At your request, we have reviewed the 2021 Ten-Year Site Plans of the electric utilities. The Department of Economic Opportunity's review focused on the potential and preferred sites for future power generation, and the compatibility of those sites with the applicable local comprehensive plan, including the adopted future land use map. Please see our enclosed comments.

Should you have any questions regarding these comments, please contact Scott Rogers, Planning Analyst, at (850) 717-8510, or by email at scott.rogers@deo.myflorida.com.

Sincerely,

James D. Stansbury, Chief
Bureau of Community Planning and Growth

JDS/sr

Enclosure: DEO Review Comments

Florida Department of Economic Opportunity 2021 Ten-Year Site Plan Review Comments

The Department's review focused on potential and preferred sites for future power generation, and the compatibility of those sites with the applicable local government comprehensive plan, including the adopted future land use map. In addition, the Department's comments provide information regarding the local zoning designation when the applicable future land use map designation for a site does not expressly address whether electric power generation facilities are allowed or prohibited. Nine utilities (Duke Energy Florida, Florida Municipal Power Agency, Florida Power and Light Company, Gainesville Regional Utilities, Gulf Power Company, Lakeland Electric, Orlando Utilities Commission, Seminole Electric Cooperative, and Tampa Electric Company) have identified a total of 67 potential or preferred sites for future power generation in their Ten-Year Site Plan (TYSP). Potential sites are defined in Rule 25-22.070, Florida Administrative Code (F.A.C.), as "sites within the state that an electric utility is considering for possible location of a power plant, a power plant alteration, or an addition resulting in an increase in generating capacity." Preferred sites are defined in Rule 25-22.070, F.A.C., as "sites within the state on which an electric utility intends to construct a power plant, a power plant alteration, or an addition resulting in an increase in generating capacity."

1. Duke Energy Florida

The Duke Energy Florida (DEF) TYSP identifies seven preferred sites (listed below) to increase power generating capacity (photovoltaic solar power generation). For these sites, the TYSP does not include maps of a suitable scale that show the location of each site in relation to an identified nearby or surrounding roadway network in order to assist the reader in understanding the location and suitability of the sites and to assist in determining the comprehensive plan future land use map designations.

A. Bay Trail Solar Site: The Bay Trail Solar site is located on approximately 600 acres in Citrus County. The TYSP states that the site is located on limestone mining lands and that DEF has received the necessary permit approvals from Citrus County.

B. Charlie Creek Solar Site: The Charlie Creek Solar site is located on approximately 650 acres in Hardee County. The TYSP states that the site is located on cattle grazing land and citrus groves and that DEF has received the necessary permit approvals from Hardee County.

C. Duette Solar Site: The Duette Solar site is located on approximately 600 acres in Manatee County. The TYSP states that the site is located on former citrus grove lands and that DEF has received the necessary permit approvals from Manatee County.

D. Fort Green Solar Site: The Fort Green Solar site is located on approximately 600 acres in Hardee County. The TYSP states that the site is located on reclaimed phosphate mining land.

E. Sandy Creek Solar Site: The Sandy Creek Solar site is located on approximately 650 acres in Bay County. The TYSP states that the site is located on former cattle grazing and timber lands and that DEF has received the necessary conditional permit approvals from Bay County.

F. Santa Fe Solar Site: The Santa Fe Solar site is located on 607 acres in Columbia County. The TYSP states that the site is located on former agricultural and cattle grazing lands and that DEF has received the necessary special use permit from Columbia County.

G. Twin Rivers Solar Site: The Twin Rivers Solar site is located on 515 acres in Hamilton County. The TYSP states that the site is located on former agricultural and timber lands and that DEF has received the necessary special use permits from Hamilton County.

2. Florida Municipal Power Agency

The Florida Municipal Power Agency TYSP identifies three potential sites for the increase in power generating capacity: (1) Cane Island Power Park; (2) Treasure Coast Energy Center; and (3) Stock Island.

A. Cane Island Power Park Site: The Cane Island Power Park (CIPP) site is located on 1,027 acres in rural northwest Osceola County, approximately one mile northwest of Intercession City. The site contains existing power generation facilities. The Osceola County Comprehensive Plan Future Land Use Map designates the site as "Rural/Agriculture", which allows electric utility facilities.

B. Treasure Coast Energy Center Site: The Treasure Coast Energy Center site is located on 69 acres in the Midway Industrial Park in the City of Fort Pierce. The site contains existing power generation facilities. The City of Fort Pierce Comprehensive Plan Future Land Use Map designates the site as "Institutional", which allows an electric generating plant.

C. Stock Island Power Plant Site: The Stock Island Power Plant site is located on Stock Island near Key West, and the site contains existing power generation facilities. The Monroe County Comprehensive Plan Future Land Use Map designates the Stock Island Power Plant site as "Public Facilities", which allows electric generation plants.

3. Florida Power and Light Company and Gulf Power Company

The Florida Power and Light Company (FPL) and Gulf Power Company submitted a combined TYSP because both companies are now owned by NextEra Energy, Inc., and NextEra Energy's plan is to integrate FPL and Gulf Power into a single electric operating system effective in January 2022. The TYSP identifies twenty-nine preferred sites and ten potential sites for the increase of power generating capacity.

A. The TYSP identifies the following as preferred sites:

1. Anhinga Solar Energy Center Site: The Anhinga Solar Energy Center site is located on 494 acres in Clay County. The Clay County Comprehensive Plan Future Land Use Map designates the site predominantly as "Agriculture" and "Agriculture/Residential" and a smaller portion as "Commercial" and "Conservation." The site is designated as "Agricultural" and "Agricultural/Residential" on the Clay County Zoning Map. Solar power generation may be permitted as a conditional use on the site through the Clay County Land Development Code.

2. Apalachee Solar Energy Center Site: The Apalachee Solar Energy Center site is located on 596 acres in Jackson County. The Jackson County Comprehensive Plan Future Land Use Map designates the site as "Agricultural-1." Electrical power generating facilities are allowable as a conditional use within the Agricultural-1 future land use category.

3. Blackwater River Solar Energy Center Site: The Blackwater River Solar Energy Center site is located on 366 acres in Santa Rosa County. The Santa Rosa County Comprehensive Plan Future Land Use Map designates the site as "Industrial", which allows all uses that are industrial in nature and public and private utilities.

4. Bluefield Preserve Solar Energy Center Site: The Bluefield Preserve Solar Energy Center site is located on 592 acres in St. Lucie County. The site is designated as "Agricultural-5" on the St. Lucie County Comprehensive Plan Future Land Use Map and "Agricultural-5" on the St. Lucie County Zoning Atlas. A solar generation station/plant may be allowed as a conditional use in the Agricultural-5 zoning district.

5. Blue Springs Solar Energy Center Site: The Blue Springs Solar Energy Center site is located on 444 acres in Jackson County. The Jackson County Comprehensive Plan Future Land Use Map designates the site as "Agriculture-2", and electric power generating facilities are allowed as a conditional use.

6. Cavendish Solar Energy Center Site: The Cavendish Solar Energy Center site is located on 930 acres in Okeechobee County. The Okeechobee County Comprehensive Plan Future Land Use Map designates the site as "Agriculture", which allows power generation.

7. Dania Beach Clean Energy Center Unit 7 Site: The Dania Beach Clean Energy Center Unit 7 site (134 acres) is located on the existing Lauderdale Plant property (392 acres) in Broward County within the City of Dania Beach and the City of Hollywood. The site contains existing power generating facilities. The Broward County Comprehensive Plan is applicable to both the unincorporated area of the County and the land within the incorporated municipalities of the County. The Broward County Comprehensive Plan Future Land Use Map designates the site as "Electrical Generating Facility", which allows electrical power plants. The City of Hollywood Comprehensive Plan Future Land Use Map designates the portion of the site within the City as "Utilities" and "Industrial", and the "Utilities" category allows electrical power plants and the "Industrial" category allows utility uses. The City of Dania Beach Comprehensive Plan Future

Land Use Map designates the portion of the site within the City as "Electrical Generation Facilities", which allows electrical power plants.

8. Discovery Solar Energy Center Site: The Discovery Solar Energy Center site is located on 491 acres within the John F. Kennedy Space Center in Brevard County. The site is owned by the United States Government and is not subject to the Brevard County Comprehensive Plan.

9. Echo River Battery Storage Center Site: The Echo River Battery Storage Center site is located on 4.31 acres in Suwannee County. The Suwannee County Comprehensive Plan Future Land Use Map designates the 4.31 acre site as "Agriculture-1." Electric generating facilities may be allowed as a special exception use in the Agriculture-1 future land use category.

10. Elder Branch Solar Energy Center Site: The Elder Branch Solar Energy Center site is located on 590 acres in Manatee County. The Manatee County Comprehensive Plan Future Land Use Map designates the site as "Agriculture/Rural", which allows utility use, including alternative energy generation facilities (a facility that utilizes Photovoltaic Solar Power to generate electricity).

11. Everglades Solar Energy Center Site: The Everglades Solar Energy Center site is located on 388 acres in Miami-Dade County. The Miami-Dade County Comprehensive Plan Future Land Use Map designates the site as "Agriculture", which allows utility uses that are compatible with agriculture and rural residential character. The Miami-Dade County Zoning Map designates the site as "General Use", which allows an electric power plant to be approved upon public hearing.

12. Fort Drum Solar Energy Center Site: The Fort Drum Solar Energy Center site is located on 930 acres in northeast Okeechobee County. The Okeechobee County Comprehensive Plan Future Land Use Map designates the site as "Agriculture", which allows power generation.

13. Gulf Clean Energy Center Unit 8 Site: The Gulf Clean Energy Center Unit 8 site is located on 58 acres in Escambia County (approximately ten miles north of the City of Pensacola) within the existing Plant Crist site, which contains existing power generation facilities. The Escambia County Comprehensive Plan Future Land Use Map designates the site as "Industrial", which allows electric power generation facilities.

14. Ghost Orchid Solar Energy Center Site: The Ghost Orchid Solar Energy Center site is located on 535 acres in Hendry County. The Hendry County Comprehensive Plan Future Land Use Map designates the site as "Electrical Generating Facility", which allows electric power generation facilities (including solar power generation).

15. Immokalee Solar Energy Center Site: The Immokalee Solar Energy Center site is located on 548 acres in Collier County. The Collier County Comprehensive Plan Future Land Use Map designates the site as "Agricultural/Rural Mixed Use District", which allows utility facilities. Collier County Board of County Commissioners approved the Immokalee Solar Energy Center in July 2021.

16. Manatee Battery Storage Center Site: The Manatee Energy Storage Center site is located on 40 acres in Manatee County, and the site is part of a larger site that contains existing power generation facilities. The Manatee County Comprehensive Plan Future Land Use Map designates the site as "Public/Semi-Public-1", which allows utility use, including alternative energy generation facilities (may include equipment that is directly involved in the storage and transmission of electricity). ??check see if same one as here

17. Orange Blossom Solar Energy Center Site: The Orange Blossom Solar Energy Center site is located on 607 acres in Indian River County. The Indian River County Comprehensive Plan Future Land Use Map designates the site as "Agricultural-2", which allows public and private utilities.

18. Sabal Palm Solar Energy Center Site: The Sabal Palm Solar Energy Center site is located on 646 acres in Palm Beach County. The Palm Beach County Comprehensive Plan Future Land Use Map designates the site as "Rural Residential", which allows electrical power generation facilities utilizing solar energy.

19. Sawgrass Solar Energy Center Site: The Sawgrass Solar Energy Center site is located on 603 acres in Hendry County. The Hendry County Comprehensive Plan Future Land Use Map designates the site as "Electrical Generating Facility", which allows electric power generation facilities (including solar power generation).

20. Sundew Solar Energy Center Site: The Sundew Solar Energy Center site is located on 473 acres in St. Lucie County. The site is designated as "Agricultural-5" on the St. Lucie County Comprehensive Plan Future Land Use Map and "Agricultural-5" on the St. Lucie County Zoning Atlas. A solar generation station/plant may be allowed as a conditional use in the Agricultural-5 zoning district.

21. Sunshine Gateway Battery Storage Center Site: The Sunshine Gateway Battery Storage Center site is located on 3 acres in Columbia County. The Columbia County Comprehensive Plan Future Land Use Map designates the site as "Agriculture-3" and "Agriculture-3" on the Columbia County Zoning Atlas. A solar power generation plant is allowed as a special exception use in the Agriculture-3 zoning district.

22. Turkey Point Units 6 and 7 Site: The Turkey Point Plant site is located on approximately 3,300 acres in the southern portion of Miami-Dade County. The site contains existing power generating facilities. The Miami-Dade County Comprehensive Plan Future Land Use Map designates the site as "Institutions, Utilities, and Communications" which allows power generation and "Environmental Protection Area."

23. White Tail Solar Energy Center Site: The White Tail Solar Energy Center site is located on 601 acres in Martin County. The site is designated as "Agriculture" on the Martin County Comprehensive Plan Future Land Use Map and "Agricultural-2 District" on the Martin County

Zoning Atlas. Solar energy facilities (solar farms) are allowed as a permitted use in the Agriculture future land use category and Agricultural-2 District.

24. Willow Solar Energy Center Site: The Willow Solar Energy Center site is located on 812 acres in Manatee County. The Manatee County Comprehensive Plan Future Land Use Map designates the site as "Agriculture/Rural", which allows utility use, including alternative energy generation facilities (a facility that utilizes photovoltaic solar power to generate electricity).

25. Other Preferred Sites: For the sites identified in the table below, the TYSP does not include maps of suitable scale that show the location of each site in relation to an identified nearby or surrounding roadway network. For these sites, it would be helpful to readers if the TYSP included maps of a suitable scale that show the location of each site in relation to an identified nearby or surrounding roadway network in order to assist the reader in understanding the location and suitability of the sites and to assist in determining the comprehensive plan future land use map designations.

Name	Site Area	County
Chipola River Solar Energy Center	575	Calhoun County
Cotton Creek Solar Energy Center	645	Escambia County
First City Solar Energy Center	458	Escambia County
Flowers Creek Solar Energy Center	689	Calhoun County
Grove Solar Energy Center	574	Indian River County

B. The TYSP identifies the following as potential sites:

Name	County
Chautauqua Solar Energy Center Site	Walton
Cypress Pond Solar Energy Center Site	Washington
Etonia Creek Solar Energy Center Site	Putnam
Little Pine Solar Energy Center Site	Baker
Pink Trail Solar Energy Center Site	St. Lucie
Shirer Branch Solar Energy Center Site	Calhoun
Terrill Creek Solar Energy Center Site	Clay
Timber Trail Solar Energy Center Site	Putnam
Wild Azalea Solar Energy Center Site	Gadsden
Wild Quail Solar Energy Center Site	Walton

For the ten potential sites identified in the table above, the TYSP does not: (1) state the size of the site in number of acres; and (2) include maps of suitable scale that show the location of each site in relation to an identified nearby or surrounding roadway network. For these potential sites, it would be helpful to readers if the TYSP identified the amount of acres of each site and included maps of a suitable scale that show the location of each site in relation to an

identified nearby or surrounding roadway network in order to assist the reader in understanding the location and suitability of the sites and to assist in determining the comprehensive plan future land use map designations.

4. Gainesville Regional Utilities

The Gainesville Regional Utilities TYSP identifies one preferred site (Deerhaven Generating Station site) for the increase in power generating capacity.

A. Deerhaven Generating Station Site: The Deerhaven Generating Station site is located on 3,474 acres within the City of Gainesville, and the site contains an existing power generation facility. The City of Gainesville Comprehensive Plan Future Land Use Map designates the site as "Public and Institutional Facilities", which allows utilities.

5. Lakeland Electric

The Lakeland Electric TYSP identifies one preferred site (McIntosh Power Plant) for the increase in power generating capacity.

A. McIntosh Power Plant Site: The McIntosh Power Plant site is located on 530 acres in the City of Lakeland, and the site contains an existing power generation facility. The City of Lakeland Comprehensive Plan Future Land Use Map designates the site as "Industrial", and electric power generating facilities may be allowed as a conditional use through the Land Development Code.

6. Orlando Utilities Commission

The Orlando Utilities Commission (OUC) TYSP states that OUC's existing Stanton Energy Center and Indian River Plant sites may accommodate future generating unit additions. It would be helpful to readers if the OUC TYSP (Section 10 Environmental and Land Use Information) included a map showing the location of these sites in relation to the nearby or surrounding roadway network.

A. Stanton Energy Center Site: The Stanton Energy Center site is located on 3,280 acres in unincorporated Orange County, approximately 12 miles southeast of the City of Orlando, and contains existing power generation facilities. The Orange County Comprehensive Plan Future Land Use Map designates the site as Institutional, which allows utilities and public facilities.

B. Indian River Plant Site: The Indian River Plant site is located on 160 acres in unincorporated Brevard County, south of the City of Titusville, and contains existing power generation facilities.

The Brevard County Comprehensive Plan Future Land Use Map designates the site as Public Facility, which allows government managed utilities.

7. Seminole Electric Cooperative

The Seminole Electric Cooperative TYSP identifies one potential site (Gilchrist site) and one preferred site (Seminole Generating Station site) for the increase in power generating capacity.

A. Gilchrist Site: The Gilchrist site is located on 520 acres in the central portion of Gilchrist County, approximately two miles northeast of the City of Bell. The site does not contain existing power generation facilities. Much of the site has been used for silviculture (pine plantation) and consists of large tracts of planted longleaf and slash pine community, and the site contains a limited amount of wetlands (10.1 acres). The site is designated Agriculture-2 on the adopted Future Land Use Map of the Gilchrist County Comprehensive Plan. Electric generating facilities are not identified as an allowable land use within the Agriculture-2 future land use category; however, solar farms are an allowable land use within the Agriculture-2 future land use category by special use permit.

B. Seminole Generating Station Site: The Seminole Generating Station site is located on 1,996 acres in unincorporated Putnam County, approximately five miles north of the City of Palatka. The site contains existing power generation facilities. The site is designated as Public Facilities on the adopted Future Land Use Map of the Putnam County Comprehensive Plan. Power generation facilities are an allowable use within the Public Facilities future land use category.

8. Tampa Electric Company

The Tampa Electric Company TYSP identifies twelve preferred sites for the increase in power generating capacity.

1. Bayside Power Station Site: The Bayside (H.L. Culbreath) Power Station site is located in unincorporated Hillsborough County and contains existing power generation facilities. The site is designated mostly as "Heavy Industrial" with a smaller area as "Light Industrial" on the adopted Future Land Use Map of the Hillsborough County Comprehensive Plan. Electric generation plants are an allowed use in the Heavy Industrial future land use category.

2. Big Bend Power Station Site: The Big Bend Power Station site is located in unincorporated Hillsborough County and contains existing power generation facilities. The site is designated as "Heavy Industrial," "Light Industrial," and "Environmentally Sensitive Areas" on the adopted Future Land Use Map of the Hillsborough County Comprehensive Plan. Electric generation plants are an allowed use only in the Heavy Industrial future land use category. The "Environmentally Sensitive Areas" protect wetlands and significant wildlife habitat along the southern portion of the site.

3. Durrance Solar Site: The Durrance Solar site is located on 473 acres near Bradley Junction in unincorporated Polk County. The site is designated as "Agriculture/Residential Rural" on the Polk County Comprehensive Plan Future Land Use Map. Solar electric generating facilities are allowed as a conditional use in the Agriculture/Residential Rural future land use category.

4. Mountain View Solar Site: The Mountain View Solar site is located on 345 acres in northeastern Pasco County. The Pasco County Comprehensive Plan Future Land Use Map designates the site with the following future land use categories: (1) Residential-1; (2) Residential-3; and (3) Agricultural/Rural. Private electric public utilities (includes power plants) may be permitted in these future land use categories.

5. Other Sites: The Tampa Electric Company TYSP lists the following sites for the increase in power generating capacity but does not include maps of a suitable scale that show the specific location of these sites in relation to the nearby or surrounding roadway network:

Name	Site Area	County
Alafia Solar Site	408 acres	Polk
Dover Solar Site	unspecified	Hillsborough
Jamison Solar Site	695 acres	Polk
Laurel Oaks Solar Site	515 acres	Hillsborough
Magnolia Solar Site	577 acres	Hillsborough/Polk
Palm River Dairy Solar Site	575 acres	Pasco
Riverside Solar Site	546 acres	Hillsborough
Wheeler Solar Site	464 acres	Polk

For these sites, it would be helpful to readers if the Tampa Electric Company TYSP (Chapter VI: Environmental and Land Use Information) included maps of a suitable scale that show the location of each site in relation to an identified nearby or surrounding roadway network in order to assist the reader in understanding the location and suitability of the sites and to assist in determining the comprehensive plan future land use map designations.

State Agencies

Department of Environmental Protection

From: DeHaven, Callie <Callie.Dehaven@dep.state.fl.us>
Sent: Tuesday, May 04, 2021 11:20 AM
To: Patti Zellner
Cc: Laura King; Phillip Ellis; Donald Phillips; Damian Kistner; Richardson, Brad; Fleener, Andrew
Subject: RE: DN 20210000-OT - Review of the Ten-Year Site Plans - Comment Request (004)

Hi Patti. Thank you. Message with attachment received.

Callie

Callie DeHaven
Director, Division of State Lands
Florida Department of Environmental Protection
Callie.DeHaven@FloridaDEP.gov
Office: 850-245-2025

From: Patti Zellner <PZELLNER@PSC.STATE.FL.US>
Sent: Tuesday, May 4, 2021 9:45 AM
To: DeHaven, Callie <Callie.Dehaven@dep.state.fl.us>
Cc: Laura King <LKing@PSC.STATE.FL.US>; Phillip Ellis <PEllis@PSC.STATE.FL.US>; Donald Phillips <DPhillip@psc.state.fl.us>; Damian Kistner <DKistner@psc.state.fl.us>; Patti Zellner <PZELLNER@PSC.STATE.FL.US>
Subject: DN 20210000-OT - Review of the Ten-Year Site Plans - Comment Request (004)

Dear Ms. DeHaven,
Please find attached your copy of the 2021 Ten-Year Site Plans – Comment Request letter dated May 3, 2021, filed with the Florida Public Service Commission Clerk today.

Thank you,
Patti Zellner
Administrative Assistant
Division of Engineering
Phone: (850) 413-6208
Email: pzellner@psc.state.fl.us

State Agencies

Fish and Wildlife Conservation Commission

Donald Phillips

From: Ganey, Jessica <Jessica.Ganey@MyFWC.com>
Sent: Thursday, June 03, 2021 10:44 AM
To: Donald Phillips
Cc: Hight, Jason; Cucinella, Josh; Goff, Jennifer; Conservation Planning Services
Subject: FWC's Comments on Review of the 2021 Ten-Year Site Plans for Florida's Electric Utilities
Attachments: 2021 Ten-Year Site Plans_44431_06022021.pdf

Please find attached FWC's comments on the above-referenced project. You will **not** receive a hard-copy version of this letter unless requested.

If you wish to reply to our comments, please send your reply to:

ConservationPlanningServices@myFWC.com

Jessica Ganey
Government Operations Consultant II
Office of Conservation Planning Services
850-410-5367

June 3, 2021

Donald Phillips
Engineering Specialist
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850
DPhillip@psc.state.fl.us

RE: Review of the 2021 Ten-Year Site Plans for Florida's Electric Utilities

Dear Mr. Phillips:

Florida Fish and Wildlife Conservation Commission (FWC) staff reviewed the 2021 Ten-Year Site Plans for the electric utilities operating in Florida submitted to the Florida Public Service Commission (PSC) pursuant to Section 186.801, Florida Statutes. There are no comments or recommendations related to listed species or other fish and wildlife resources to offer on the following plans:

- Florida Power & Light Company / Gulf Power Company
- Duke Energy Florida
- Tampa Electric Company
- Florida Municipal Power Agency
- Gainesville Regional Utilities
- JEA
- Lakeland Electric
- Orlando Utilities Commission
- Seminole Electric Cooperative
- City of Tallahassee Utilities

FWC staff appreciates the opportunity to review the Ten-Year Site Plans submitted by the PSC. Please submit any future requests for assistance with fish and wildlife resources to our office at ConservationPlanningServices@MyFWC.com. For specific technical questions about this year's reviews, please call Josh Cucinella at (352) 620-7330.

Sincerely,

Jason Hight
Land Use Planning Program Administrator
Office of Conservation Planning Services

jh/jc
2021 Ten-Year Site Plans_44431_06022021

Treasure Coast Regional Planning Council

From:	Liz Gulick
To:	Donald Phillips
Cc:	Damian Kistner; Kate Cotner; will.p.cox@fpl.com
Subject:	Florida Power & Light Company and Gulf Power Company"s 2021-2030 Ten Year Power Plant Site Plan
Date:	Thursday, July 08, 2021 2:35:30 PM
Attachments:	Letter to Donald Phillips (FPSC) dated 7-2-21.pdf

Dear Mr. Phillips:

The Treasure Coast Regional Planning Council reviewed the ten year power plant site plan prepared by Florida Power & Light Company/Gulf Power Company. Council approved the attached report at their board meeting on June 18, 2021.

If you have any questions, please call.

Sincerely,

Liz

Liz Gulick
Treasure Coast Regional Planning Council
421 SW Camden Avenue
Stuart, FL 34994
772 221-4060

TREASURE COAST REGIONAL PLANNING COUNCIL

INDIAN RIVER – ST. LUCIE – MARTIN – PALM BEACH

July 2, 2021

Mr. Donald Phillips, Engineering Specialist
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Subject: Florida Power & Light Company/Gulf Power Company Ten Year Power Plant Site Plan 2021-2030

Dear Mr. Phillips:

The Treasure Coast Regional Planning Council has reviewed the ten-year power plant site plan prepared by Florida Power and Light Company and Gulf Power Company. Council approved the comments in the attached report at their board meeting on June 18, 2021. The report concludes that while the region and all of South Florida remain vulnerable to fuel price increases and supply interruptions because of the continued heavy reliance on only two primary fuel types, natural gas and nuclear fuel, the use of solar power is projected to increase dramatically.

Council urges FPL/Gulf and the State of Florida to continue developing new programs to 1) reduce the reliance on fossil fuels as future energy sources, 2) increase conservation activities to offset the need to construct new power plants, and 3) increase the use of renewable energy sources to produce electricity.

Please contact me if you have any questions.

Sincerely yours,

Thomas J. Lanahan
Executive Director

Attachment

cc: William P. Cox, FPL
Kate Cotner, FPL
Damien Kistner, FPSC

TREASURE COAST REGIONAL PLANNING COUNCIL

MEMORANDUM

To: Council Members AGENDA ITEM 4B3

From: Staff

Date: June 11, 2021

Subject: Florida Power & Light (FPL)/Gulf Ten-Year Power Plant Site Plan 2021-2030

Background

Each year, every major electric utility in the State of Florida produces a ten-year site plan that includes an estimate of future electric power generating needs, a projection of how those needs will be met, and disclosure of information pertaining to the utility's preferred and potential power plant sites. The Florida Public Service Commission (FPSC) requested our Council review the most recent ten-year site plan prepared by FPL/Gulf and provide comments to the FPSC on or before August 3, 2021.

As background, NexEra Energy, Inc. is the parent company of FPL and Gulf; acquiring Gulf in January 2019. Gulf was merged into FPL effective January 1, 2021, so this document no longer separates FPL and Gulf except where necessary to add clarity to plans and actions around the prior individual service areas. Consolidation of the two utilities will be completed by 2022, and the two systems will begin operating as a single integrated electric operating system effective in mid-2022 after the completion of a new 161 kV transmission line.

Analysis

The attached report was prepared to summarize FPL plans for future power generation and provide comments for transmittal to the FPSC. The report concludes they continue to rapidly increase solar generating capacity but remain heavily dependent on natural gas and nuclear.

Council urges FPL and the State of Florida to continue developing new programs to 1) reduce the reliance on fossil fuels as future energy sources, 2) increase conservation activities to offset the need to construct new power plants, and 3) increase the use of renewable energy sources to produce electricity.

Recommendation

Council should approve the attached report and authorize its transmittal to the Florida Public Service Commission.

Council Action – June 18, 2021

Attachment

TREASURE COAST REGIONAL PLANNING COUNCIL

Report on the

Florida Power & Light Company/Gulf Power Company
Ten Year Power Plant Site Plan 2021-2030

June 18, 2021

Introduction

Each year every major electric utility in the State of Florida produces a ten-year site plan that includes an estimate of future electric power generating needs, a projection of how those needs will be met, and disclosure of information pertaining to the utility's preferred and potential power plant sites. The Florida Public Service Commission (FPSC) has requested that Council review the most recent ten-year site plan prepared by FPL/Gulf and provide comments to the FPSC on or before August 3, 2021.

Summary of the Plan

The plan indicates combined total summer peak demand projected growth of 13.8% over the 10-year period; from 27,083 megawatts (MW) in 2021 to 30,832 MW in 2030. During the same timeframe, FPL is expecting to reduce electrical use through demand-side management (DSM) programs that include conservation, energy efficiency, and load management initiatives. FPL/Gulf's combined DSM savings are expected to grow by 21.6% over the reporting period; from 1,827 MW in 2021 to 2,221 MW in 2030 (see Exhibit 1, Schedule 7.1).

After all DSM savings are factored in, FPL will still require additional capacity from conventional and renewable power sources to meet future electrical demand. This plan adds 3,477 MW of summer system capacity from 2021 to 2030 (Exhibit 2, Table ES-1).

The current plan makes primary electricity gains through upgrades and modernization to existing facilities plus construction of new generating units. Simultaneously, their plan continues to take older and coal-fired capacity out of service.

In the former Gulf service region, plans include new photovoltaic (PV) solar facilities, enhancements to an existing natural gas plant, conversion of two generating units from coal-fueled to natural gas, and retirement of their ownership portion of two other coal-fueled generating units. These changes will make the fuel mix and emissions profile of the former Gulf Power similar to FPL's service area prior to the merger with Gulf.

Major changes in generating capacity are as follows:

FPL system area:

- 2021 through 2030 - new solar (PV) additions of approximately 7,599 MW (nameplate);
- 2021 through 2026 - capacity upgrades of existing combined cycle units;

- By January 2022 - retirement of FPL's ownership portion of the Scherer 4 coal unit (approximately 630 MW);
- By late 2021 – retirement of the Manatee existing steam Units 1 & 2 – approximately 1,620 MW);
- By late 2021 - a 409 MW battery storage facility will be added at the existing Manatee plant site plus two 30 MW of battery storage is projected to be added to the Sunshine Gateway and Echo River solar energy centers (see Exhibit 2, Table ES-1).
- Mid-2022 – modernization of the existing Lauderdale power plant site with the new DBEC Unit 7 CC (approximately 1,160 MW); and
- In 2029 and 2030, a total of approximately 400 MW of battery storage.

Gulf system area:

- 2022 through 2030 - new solar (PV) additions of approximately 1,714 MW (nameplate);
- Mid-2022 - A new FPL-to-Gulf transmission line (the NFRC line) enabling a bidirectional transfer capability between the two areas of up to 850 MW;
- Beginning of 2022 - Four new CTs at the Gulf Clean Energy Center (formerly Crist) plant site (approximately 940 MW);
- May 2023 - Expiration (as per terms of the contract) of 885 MW from the Shell PPA;
- Beginning of 2024 - The retirement of Gulf's ownership portion of the coal-fueled Daniel Units 1 & 2 (approximately 500MW); and
- 2030 - A total of approximately 300 MW of battery storage.

Preferred and Potential Power Plant Sites

One of the primary reasons to prepare an annual ten-year power plant site plan is to get information on a utility's plans on preferred and potential siting of new facilities.

Based on projected future resource needs, FPL/Gulf has identified 29 "preferred sites" for future power generating facilities. The following are in the Treasure Coast Region (Exhibit 3):

1. Orange Blossom Solar Energy Center, Indian River County: The proposed 607-acre site is located at 118th Avenue west of Interstate 95.
2. Sabal Palm Solar Energy Center, Palm Beach County: The proposed 646-acre site is located north of 60th Street between Carol Street and 190th Trail.
3. Sundew Solar Energy Center, St. Lucie County: The proposed 473-acre site is located one mile west of the Glades Cut-off Road and Carlton Road intersection.
4. Grove Solar Energy Center, Indian River County: The proposed 574-acre site is located at the southwest corner of Oslo Road and Ninth Street, Southwest.
5. White Tail Solar Energy Center, Martin County: The proposed 601-acre site is located on the north side of Citrus Boulevard about 8 miles southwest of Florida's Turnpike.
6. Bluefield Preserve Solar Energy Center, St. Lucie County: Location to be determined – estimated 592-acres.

Each of the above sites are planned for 74.5 MW PV solar plants. By their nature, these facilities have minimal offsite impacts.

FPL has also identified 10 "potential sites" for future generation and storage facilities, though potential sites do not represent a commitment by the utility to construct these new facilities. One of these sites is currently planned to be in the Treasure Coast Region:

1. Pink Trail Solar Energy Center, St. Lucie County

Other Factors

The FPL/Gulf 2021-2030 plan describes seven factors that have influenced or may influence this resource plan. They are summarized below:

1. The need to maintain balance between load and generating capacity in Southeastern Florida (Miami-Dade and Broward counties). This balance has both reliability and economic implications.

2. The desire to maintain/enhance fuel diversity in the FPL system while considering system economics.

3. The need to maintain an appropriate balance of DSM and supply resources from the perspectives of both system reliability and operations including a 20 percent total reserve margin criterion for summer and winter.

4. The impact of meeting Federal and state energy-efficiency codes and standards that will reduce forecasted summer and winter peak loads but also reduce potential DSM initiatives.

5. The trends of decreasing costs for fuel, decreasing costs for new generating units, and increasing fuel efficiency of new generating units.

6. The forecast of potential CO2 compliance costs that remain lower than projections from a decade ago due to lower forecasted electricity usage growth rate, lower forecasted natural gas cost, retirements of existing coal units, and increasing implementation of renewable energy sources including solar.

7. Projected increases in electric vehicle (EV) adoption. FPL's current load forecast includes a significantly higher projection of EV adoption than the load forecast that was used to develop the resource plan in the 2020 Site Plan.

Evaluation

The ten-year site plan indicates that fossil fuels will be the primary source of energy used by FPL to generate electricity during the next 10 years (see Exhibit 4 Schedule 6.2); accounting for 71.4% (0.5% from coal and 70.9% from natural gas) of FPL's electric generation in 2021. The plan predicts fossil fuels will account for 61.6% (0.2% from coal and 61.4% from natural gas) of combined FPL/Gulf electric generation in 2030. During the same period, nuclear sources are predicted to drop from 22.8% in 2021 to 19.5% in 2030, primarily due to significant FPL solar investment and the delay of significant nuclear power expansion beyond the 10-year time horizon. Solar sources are predicted to dramatically increase from 4.9% in 2021 to 17.5% in 2030. For Gulf

Power, their fuel sources in 2021 will also primarily be fossil fuels at 111.7% (16.2% from coal and 95.5% from natural gas) (percentage exceeds 100% due to exchange with other utilities). The 2030 sources are shown above integrated with FPL.

Renewable Energy

The ten-year site plan indicates FPL is continuing its efforts to implement cost-effective renewable energy. FPL has facilitated a number of renewable energy projects (facilities which burn bagasse, waste wood, municipal waste, etc.) through power purchase agreements. For example, FPL has a contract to receive firm capacity from the Solid Waste Authority of Palm Beach County through April 2034. FPL's efforts to increase use of cost-effective renewable energy also include the use of utility-scale solar and customer-focused solar. FPL also has interest in battery storage. These efforts are described below.

Solar:

Universal Solar: This plan shows a significant increase in utility-scale solar throughout the 10-year period. It adds 9,313 MW of PV generation, with a breakout of 7,599 MW in the former FPL service area and 1,714 MW in Gulf's prior individual service area. When combined with the current 2,345 MW of solar PV already installed, projected solar PV climbs to 11,657 MW (nameplate) for the integrated utility by the end of 2030. This planned solar implementation schedule is consistent with FPL's January 2019 announcement of its "30-by-30" plan in which FPL stated an objective to install more than 30 million solar panels on FPL's system by the year 2030.

Customer-Focused Voluntary PV Pilot Programs: FPL began implementation of two customer-focused PV pilot programs in 2015.

a. FPL SolarNow provides customers the opportunity to bring solar projects into local communities by funding solar facility construction in public areas such as parks, zoos, schools, and museums. Customers voluntarily contribute $9/month. As of the end of 2020, there were 51,916 participants enrolled in the program with 77 projects located in 36 communities within the FPL service territory. These projects represent approximately 2,528 kW-DC of PV generation.

b. FPL SolarTogether Program offers FPL customers the option to purchase solar output/attributes from cost-effective, large-scale solar energy centers with no long-term contracts, administrative fees, or termination penalties. Under this program, participants' monthly electric bills show a subscription charge and a direct credit on their electric bills associated with the amount of solar-generated capacity purchased. The first phase of the program is projected to add approximately 1,490 MW of new solar facilities. Open enrollment began on March 17, 2020 which received favorable reception by residential, small businesses, and commercial customers. Eleven of the twenty approved solar sites under this program were completed in 2020. Four additional sites were completed in February and March of 2021 and the remaining five sites are expected to become commercially operational between April and June 2021. As of this same time, total

subscriptions for the program have reached 1,367 MW of the 1,490 MW available (92% subscribed).

C&I Solar Partnership Pilot Program: This program is a partnership with interested commercial and industrial (C&I) customers over an approximately 5-year period and expired in 2020. The objective was to examine the effect of high localized PV penetration on FPLs distribution system and determine how best to address any problems that may be identified.

Battery Storage:

A 409 MW battery storage facility will be added in late 2021 at the existing Manatee plant site and two 30 MW battery storage units will be added in late 2021; one at the existing Sunshine Gateway Solar Energy Center and another at the Echo River Solar Energy Center. An additional total of approximately 700 MW of battery storage is also included in the resource plan in the years 2029 and 2030 in both FPL's area and Gulf's area.

Electric Vehicle Efforts:

Florida continues to rank in the top three nationally for EV adoption, and more Floridians are buying electric vehicles every year. FPL began implementing the new FPL EVolution pilot program in 2019 to support EV growth. The goal is to install more than 1,000 charging ports, which would increase public EV charging stations in Florida by 50%. This pilot program will be conducted in partnership with interested host customers over an approximate 3-year period. Limited investments will be made in EV charging infrastructure. Installations will encompass different EV charging technologies and market segments, including level 2 workplace and fleet charging at public and/or private workplaces; customers' homes; and DC fast charging in high-traffic areas and strategically located sites along highway corridors and evacuation routes to further enable long distance travel for EV drivers.

These places will include Florida's Turnpike Service Plazas, public parking areas, tourist attractions, hospitals, and large businesses that employ hundreds of Florida residents. As of December 31, 2020, FPL has installed 306 ports at 60 locations.

Conclusions and Recommendations

Council is encouraged that FPL continues to aggressively expand cost-effective utility-scale and customer solar capacity across the generation system, with projects to increase the percentage of total electric generation system capacity from approximately 4.9% to 17.5% by the end of 2030. Council urges FPL to continue their commitment to install more than 30 million solar panels on the system by the year 2030.

Council recommends FPL continue to make progress toward adopting a more balanced portfolio of fuels that includes a significant component of renewable energy sources. This is important to reduce vulnerability to fuel price increases and supply interruptions. Council continues to encourage the Florida Legislature to adopt a Renewable Portfolio Standard to provide a mechanism to expand the use of renewable energy in Florida.

Council supports FPL's existing and proposed solar projects and encourages FPL to develop additional projects based on renewable resources. FPL should consider developing other programs to install, own, and operate PV units on the rooftops of private and public buildings. The shift to rooftop PV systems distributed throughout the area of demand could reduce reliance on large transmission lines and reduce costs associated with owning property; purchasing fuel; and permitting, constructing, and maintaining a power plant. Another advantage of this strategy is that PV systems do not require water for cooling. The incentive for owners of buildings to participate in this strategy is they could be offered a reduced rate for purchasing electricity. Also, FPL should consider expanding solar rebate programs for customers who install PV and solar water heating systems on their homes and businesses. These rebates should be coordinated with other programs, such as the Solar and Energy Loan Fund (SELF) and Property-Assessed Clean Energy (PACE) programs, to provide participants in these programs the option of receiving a rebate. SELF is a low interest rate loan program that provides financing for clean energy solutions. PACE programs allow property owners to finance energy retrofits by placing an additional tax assessment on the property in which the investment is made.

Council urges FPL and the State of Florida to continue developing new programs to: 1) reduce the reliance on fossil fuels as future energy sources; 2) increase conservation activities to offset the need to construct new power plants; and 3) increase the use of renewable energy sources to produce electricity. The complete costs of burning fossil fuels, such as the costs to prevent environmental pollution and costs to the health of the citizens, need to be considered in evaluating these systems. State legislators should amend the regulatory framework to provide financial incentives for power providers and customers to increase conservation measures and to rely to a greater extent on renewable energy sources. The phasing in of PV and other locally available energy sources will help Florida achieve a sustainable future as called for in Council's Strategic Regional Policy Plan.

The utility filing can be accessed at the following link:

http://www.psc.state.fl.us/ElectricNaturalGas/TenYearSitePlans

Attachments

Exhibit 1

Schedule 7.1
Forecast of Capacity, Demand, and Scheduled
Maintenance At Time Of Summer Peak

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
August of Year	Firm Installed Capacity MW	Firm Capacity Import MW	Firm Capacity Export MW	Firm QF MW	Total Firm Capacity Available MW	Total Peak Demand MW	DSM MW	Firm Summer Peak Demand MW	Total Reserve Margin Before Maintenance MW	% of Peak	Scheduled Maintenance MW	Total Reserve Margin After Maintenance MW	% of Peak	Generation Only Reserve Margin After Maintenance MW	% of Peak
								FPL							
2021	27,623	110	0	434	28,166	24,621	1,821	22,800	5,367	23.5	0	5,367	23.5	3,545	14.4
								Gulf							
2021	2,440	1,015	0	0	3,456	2,462	6	2,456	1,000	40.7	0	1,000	40.7	994	40.4
								Integrated FPL and Gulf							
2022	30,741	1,125	0	4	31,870	27,277	1,886	25,392	6,478	25.5	0	6,478	25.5	4,592	16.8
2023	31,163	240	0	4	31,407	27,771	1,943	25,828	5,579	21.6	0	5,579	21.6	3,636	13.1
2024	31,300	240	0	4	31,543	28,278	2,006	26,272	5,271	20.1	0	5,271	20.1	3,265	11.5
2025	31,750	240	0	4	31,993	28,675	2,050	26,625	5,368	20.2	0	5,368	20.2	3,318	11.6
2026	32,135	240	0	4	32,378	29,051	2,084	26,967	5,411	20.1	0	5,411	20.1	3,327	11.5
2027	32,440	240	0	0	32,679	29,340	2,118	27,221	5,458	20.1	0	5,458	20.1	3,340	11.4
2028	32,868	239	0	0	33,107	29,721	2,152	27,568	5,539	20.1	0	5,539	20.1	3,386	11.4
2029	33,436	239	0	0	33,676	30,233	2,186	28,047	5,629	20.1	0	5,629	20.1	3,442	11.4
2030	34,109	239	0	0	34,348	30,832	2,221	28,612	5,736	20.0	0	5,736	20.0	3,515	11.4

Col. (2) represents capacity additions and changes projected to be in-service by June 1st. These MW are generally considered to be available to meet Summer peak loads which are forecasted to occur during August of the year indicated.
Col. (6) = Col.(2) + Col.(3) - Col(4) + Col(5).
Col.(7) reflects the 2021 load forecast without incremental DSM or cumulative load management.
Col.(8) represents cumulative load management capability, plus incremental conservation and load management, from 9/2020-on intended for use with the 2021 load forecast.
Col.(10) = Col.(6) - Col.(9)
Col.(11) = Col.(10) / Col.(9)
Col.(12) indicates the capacity of units projected to be out-of-service for planned maintenance during the Summer peak period.
Col.(13) = Col.(10) - Col.(12)
Col.(14) = Col.(13) / Col.(9)
Col.(15) = Col.(6) - Col.(7) - Col.(12)
Col.(16) = Col.(15) / Col.(7)

Exhibit 2

Table ES-1: Projected Capacity & Firm Purchase Power Additions and Changes:

Year [1]	Projected Capacity & Firm Purchase Power Changes	FPL Area Summer MW (Approx.)	Gulf Area Summer MW (Approx.)	Date	Summer Reserve Margin [2]
	FPL				
2021	Solar PV [3]	321		1st/2nd Quarter 2021	
	Total of MW changes to Summer firm capacity:	**321**			**23.5%**
	Gulf				
2021					
	Total of MW changes to Summer firm capacity:		**0**		**40.7%**
	Integrated FPL and Gulf				
2022	Manatee 1 and 2 Retirement	(1,626)		Fourth Quarter 2021	
	Scherer 4 Retirement	(634)		Fourth Quarter 2021	
	Manatee Battery Storage	409		Fourth Quarter 2021	
	Sunshine Gateway Battery Storage	30		Fourth Quarter 2021	
	Echo River Battery Storage	30		Fourth Quarter 2021	
	Gulf Clean Energy Center Unit 8		938	Fourth Quarter 2021	
	Blue Springs PV [3]		41	Fourth Quarter 2021	
	Cotton Creek PV [3]		43	Fourth Quarter 2021	
	Solar PV [3]	232		First Quarter 2022	
	Manatee 3 Upgrade	47		Second Quarter 2022	
	Martin 8 Upgrade	11		Second Quarter 2022	
	Dania Beach Clean Energy Center Unit 7	1,163		Second Quarter 2022	
	Solar Degradation [4]	(6)			
	Total of MW changes to Summer firm capacity:	**(344)**	**1,022**		**25.5%**
2023	Manatee 3 Upgrade	16		Third Quarter 2022	
	Solar PV	152	186	First Quarter 2023	
	Sanford 4 Upgrade	18		First Quarter 2023	
	Sanford 5 Upgrade	9		First Quarter 2023	
	Shell PPA Retirement		(885)	Second Quarter 2023	
	Turkey Point 5 Upgrade	45		Second Quarter 2023	
	Fort Myers 2 Upgrade	4		Third Quarter 2023	
	Solar Degradation [4]	(8)			
	Total of MW changes to Summer firm capacity:	**236**	**(699)**		**21.6%**
2024	Sanford 5 Upgrade	17		Third Quarter 2023	
	Solar PV [3]	263	171	First Quarter 2024	
	Daniel 1 and 2 Retirement		(502)	First Quarter 2024	
	Martin 8 Upgrade	21		First Quarter 2024	
	Sanford 4 Upgrade	17		First Quarter 2024	
	Turkey Point 5 Upgrade	67		Second Quarter 2024	
	Okeechobee Energy Center Upgrade	15		Second Quarter 2024	
	Fort Myers 2 Upgrade	18		Second Quarter 2024	
	Manatee 3 Upgrade	58		Second Quarter 2024	
	Solar Degradation [4]	(9)			
	Total of MW changes to Summer firm capacity:	**468**	**(331)**		**20.1%**
2025	Pea Ridge 1, 2 and 3 Retirement		(12)	Second Quarter 2024	
	Crist 4 Retirement		(78)	Fourth Quarter 2024	
	Solar PV [3]	263	171	First Quarter 2025	
	Sanford 5 Upgrade	9		First Quarter 2025	
	Martin 8 Upgrade	86		Second Quarter 2025	
	Okeechobee Energy Center Upgrade	29		Second Quarter 2025	
	Solar Degradation [4]	(10)			
	Total of MW changes to Summer firm capacity:	**358**	**81**		**20.2%**
2026	Fort Myers 2 Upgrade	4		Third Quarter 2025	
	Solar PV [3]	370	34	First Quarter 2026	
	Solar Degradation [4]	(11)			
	Total of MW changes to Summer firm capacity:	**363**	**34**		**20.1%**
2027	Crist 5 Retirement		(78)	Fourth Quarter 2026	
	Broward South PPA Retirement	(4)		Fourth Quarter 2026	
	Solar PV [3]	396		First Quarter 2027	
	Solar Degradation [4]	(12)			
	Total of MW changes to Summer firm capacity:	**379**	**(78)**		**20.1%**
2028	Lansing Smith A Retirement		(32)	Fourth Quarter 2027	
	Solar PV [3]	473		First Quarter 2028	
	Solar Degradation [4]	(13)			
	Total of MW changes to Summer firm capacity:	**460**	**(32)**		**20.1%**
2029	Solar PV [3]	224	60	First Quarter 2029	
	Battery Storage	300		First Quarter 2029	
	Solar Degradation [4]	(15)			
	Total of MW changes to Summer firm capacity:	**509**	**60**		**20.1%**
2030	Perdido 1 and 2 Retirement		(3)	Fourth Quarter 2029	
	Solar PV [3]	198	90	First Quarter 2030	
	Battery Storage	100	300	First Quarter 2030	
	Solar Degradation [4]	(16)			
	Total of MW changes to Summer firm capacity:	**283**	**387**		**20.0%**

1/ Year shown reflects when the MW change begins to be accounted for in Summer Reserve Margin calculations.
2/ Winter Reserve Margins are typically higher than Summer Reserve Margins. Winter Reserve Margins are shown on Schedule 7.2 in Chapter III.
3/ MW values shown for the PV facilities represent the Summer firm capacity assumptions for the PV facilities.
4/ An annual 0.3% degradation for PV output is assumed for both FPL and Gulf Solar. Total degradation is shown solely in the FPL column.

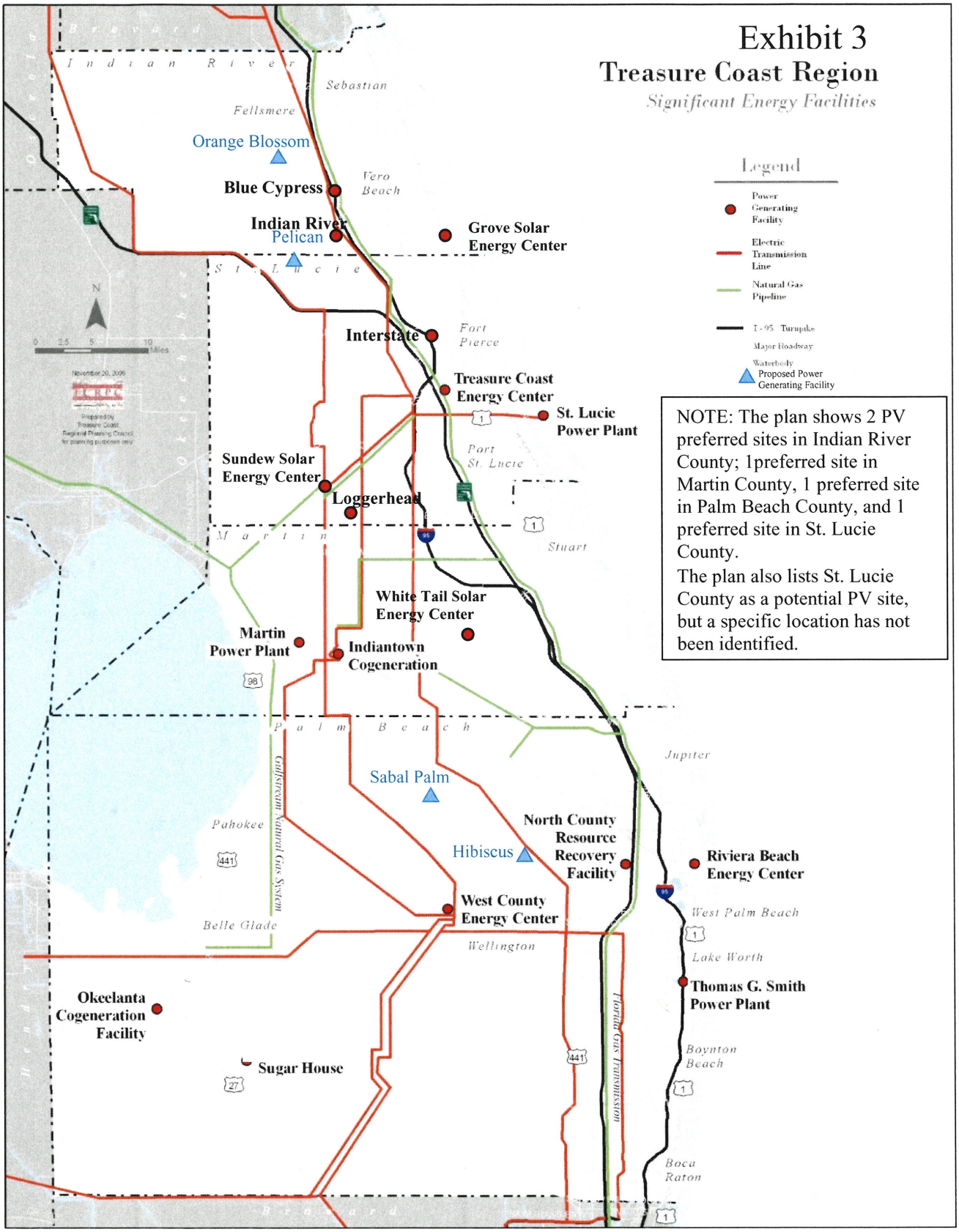


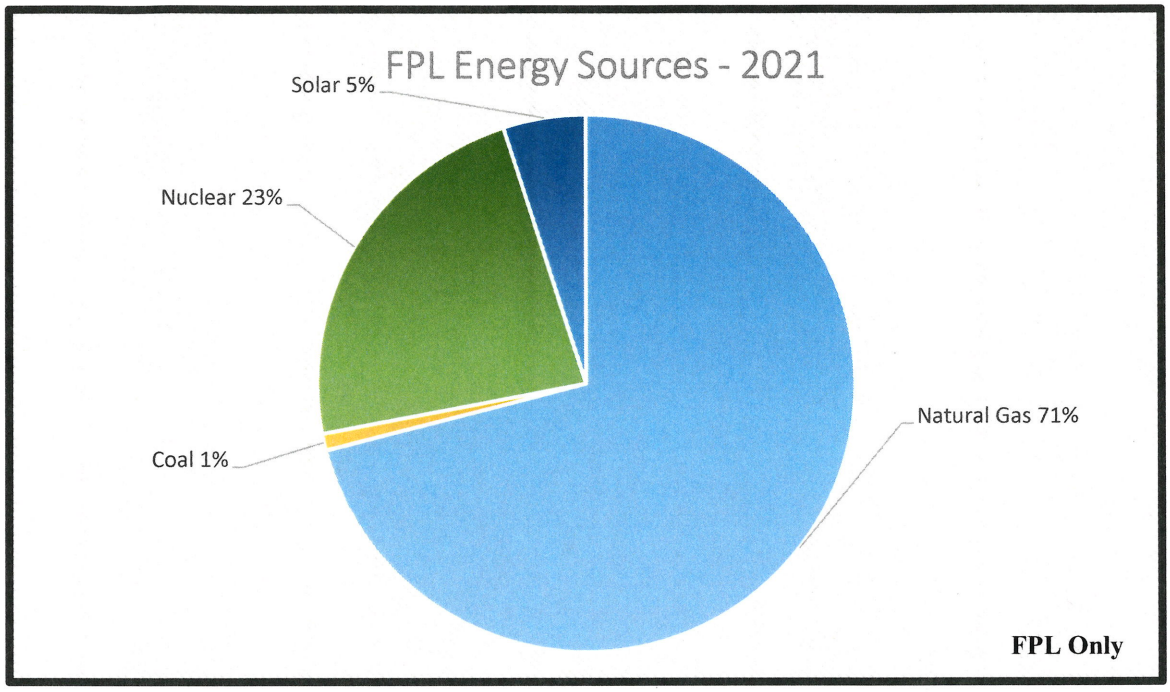
Exhibit 3
Treasure Coast Region
Significant Energy Facilities
Legend
Power Generating Facility
Electric Transmission Line
Natural Gas Pipeline
I-95 Turnpike
Major Roadway
Waterbody
Proposed Power Generating Facility
NOTE: The plan shows 2 PV preferred sites in Indian River County; 1preferred site in Martin County, 1 preferred site in Palm Beach County, and 1 preferred site in St. Lucie County.
The plan also lists St. Lucie County as a potential PV site, but a specific location has not been identified.
Indian River
Sebastian
Fellsmere
Orange Blossom
Blue Cypress
Vero Beach
Indian River
Pelican
Grove Solar Energy Center
St. Lucie
Interstate
Fort Pierce
Treasure Coast Energy Center
St. Lucie Power Plant
Port St. Lucie
Sundew Solar Energy Center
Loggerhead
Martin
Stuart
White Tail Solar Energy Center
Martin Power Plant
Indiantown Cogeneration
Palm Beach
Jupiter
Sabal Palm
Pahokee
Hibiscus
North County Resource Recovery Facility
Riviera Beach Energy Center
Gulfstream Natural Gas System
West County Energy Center
West Palm Beach
Belle Glade
Wellington
Lake Worth
Okeelanta Cogeneration Facility
Thomas G. Smith Power Plant
Florida Gas Transmission
Boynton Beach
Sugar House
Boca Raton
Broward

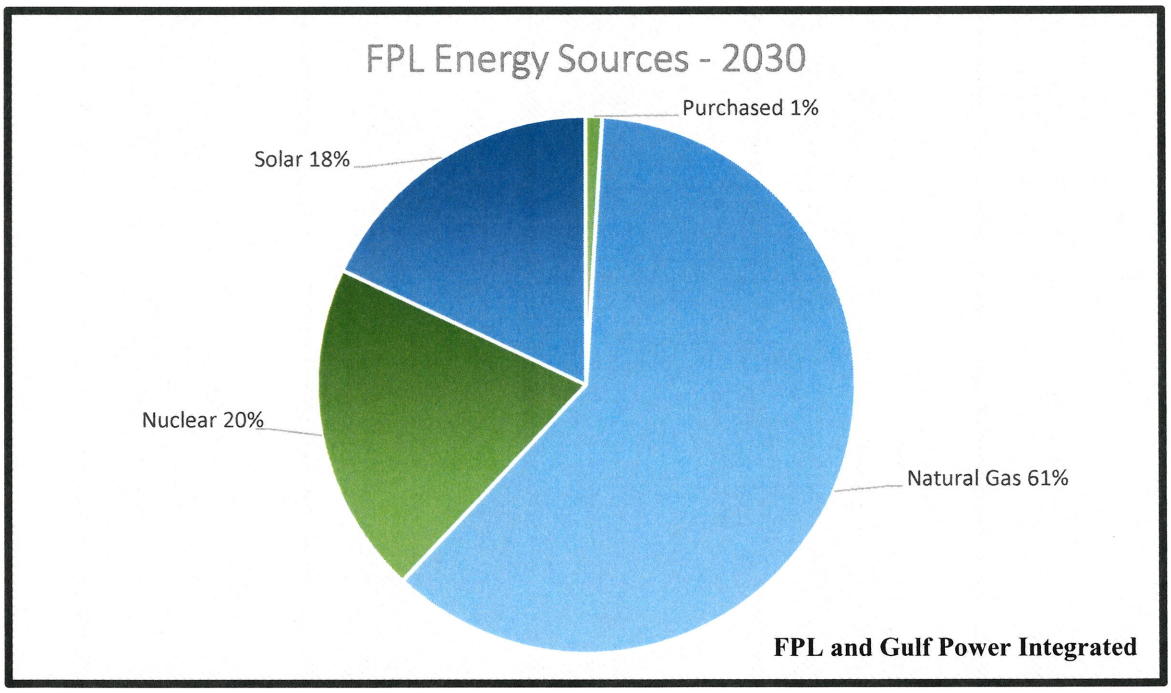
Exhibit 4

Schedule 6.2 Forecasted
Energy Sources % by Fuel Type

Energy Source	Units	2021		Forecasted 2022	2023	2024	2025	2026	2027	2028	2029	2030
		FPL	Gulf [1]	Integrated FPL and Gulf								
(1) Annual Energy Interchange [2]	%	0.0	(25.5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2) Nuclear	%	22.8	0.0	21.3	20.8	20.5	20.7	20.3	20.2	20.3	19.7	19.5
(3) Coal	%	0.5	16.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2
(4) Residual (FO6) -Total	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(5) Steam	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(6) Distillate (FO2) -Total	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(7) Steam	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(8) CC	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(9) CT	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(10) Natural Gas -Total	%	70.9	95.5	70.9	70.3	69.0	67.5	66.5	65.2	63.4	62.4	61.4
(11) Steam	%	0.0	8.9	0.3	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.1
(12) CC	%	70.6	42.1	65.9	68.1	68.0	66.5	65.9	64.6	62.8	61.8	61.0
(13) CC PPAs - Gas	%	0.0	44.0	4.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(14) CT	%	0.3	0.6	0.5	0.7	0.5	0.5	0.2	0.3	0.2	0.3	0.2
(15) Solar [3]	%	4.9	3.5	5.8	6.9	8.4	9.8	11.2	12.7	14.4	16.0	17.5
(16) PV	%	2.6	1.6	3.4	4.6	6.1	7.5	8.9	10.4	12.1	13.8	15.4
(17) Solar Together [4]	%	2.3	0.0	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0
(18) Solar Thermal	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(19) Solar PPAs	%	0.0	1.9	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
(20) Wind PPAs	%	0.0	8.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7
(21) Other [5]	%	0.9	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	0.8
		100	100	100	100	100	100	100	100	100	100	100

1/ Sources: Forecast for Gulf 2021: Projections from Southern Company.
2/ Represents interchange between FPL/Gulf and other utilities. For Gulf, this number represents the net energy exchange with Southern Co.
3/ Represents output from FPL and Gulf's Solar PV, Solar Together, Solar Thermal, and Solar PPA facilities.
4/ The values shown represent energy produced from FPL-owned solar facilities that are part of FPL's SolarTogether (ST) program. At the request of any ST participant, environmental attributes in the form of renewable energy certificates for that participant's allocation of the total energy produced will be retired on the participant's behalf.
5/ Represents a forecast of energy expected to be purchased from Qualifying Facilities, Independent Power Producers, etc., net of Economy and other Power Sales.


FPL Energy Sources - 2021
Solar 5%
Nuclear 23%
Coal 1%
Natural Gas 71%
FPL Only


FPL Energy Sources - 2030
Purchased 1%
Solar 18%
Nuclear 20%
Natural Gas 61%
FPL and Gulf Power Integrated

St. Johns River Water Management District

Donald Phillips

From: Steve Fitzgibbons <SFitzgibbons@sjrwmd.com>
Sent: Friday, June 04, 2021 10:26 AM
To: Donald Phillips; Damian Kistner
Cc: Richard Burklew; Jeff Prather; Tom Frick; Marji Hightower
Subject: RE: DN 20210000-OT - Review of the Ten-Year Site Plans - Comment Request (021)
Attachments: 2021 TYSP Comment Request.pdf

Mr. Phillips:

As requested in your letter dated May 4, 2021 (attached), St. Johns River Water Management District (District) staff have reviewed the Ten-Year Site Plans (TYSP) for Florida Power & Light Company/Gulf Power, Duke Energy Florida, Florida Municipal Power Agency, and Seminole Electric Cooperative. Based on review of the submitted materials, District staff had no comments on the TYSP and found them to be suitable as planning documents.

If you have any questions or need additional information, please contact me.

Sincerely,
Steve Fitzgibbons

Steven Fitzgibbons, AICP
Intergovernmental Planner
Division of Strategic Planning and Initiatives
St. Johns River Water Management District
7775 Baymeadows Way, Suite 102
Jacksonville, FL 32256
Office (386) 312-2369
Website: www.sjrwmd.com
Connect with us: Newsletter, Facebook, Twitter, Instagram, YouTube, Pinterest

From: Patti Zellner <PZELLNER@PSC.STATE.FL.US>
Sent: Tuesday, May 4, 2021 9:47 AM
To: Ann Shortelle <ashortelle@sjrwmd.com>
Cc: Laura King <LKing@PSC.STATE.FL.US>; Phillip Ellis <PEllis@PSC.STATE.FL.US>; Donald Phillips <DPhillip@psc.state.fl.us>; Damian Kistner <DKistner@psc.state.fl.us>; Patti Zellner <PZELLNER@PSC.STATE.FL.US>
Subject: DN 20210000-OT - Review of the Ten-Year Site Plans - Comment Request (021)

Dear Ms. Shortelle,
Please find attached your copy of the 2021 Ten-Year Site Plans – Comment Request letter dated May 3, 2021, filed with the Florida Public Service Commission Clerk today.

Thank you,

Patti Zellner
Administrative Assistant
Division of Engineering
Phone: (850) 413-6208
Email: **pzellner@psc.state.fl.us**

We value your opinion. Please take a few minutes to share your comments on the service you received from the District by clicking this link

Notices
• Emails to and from the St. Johns River Water Management District are archived and, unless exempt or confidential by law, are subject to being made available to the public upon request. Users should not have an expectation of confidentiality or privacy.
• Individuals lobbying the District must be registered as lobbyists (§112.3261, Florida Statutes). Details, applicability and the registration form are available at http://www.sjrwmd.com/lobbyist/

From: Steve Fitzgibbons <SFitzgibbons@sjrwmd.com>
Sent: Friday, June 04, 2021 10:26 AM
To: Donald Phillips; Damian Kistner
Cc: Richard Burklew; Jeff Prather; Tom Frick; Marji Hightower
Subject: RE: DN 20210000-OT - Review of the Ten-Year Site Plans - Comment Request (021)
Attachments: 2021 TYSP Comment Request.pdf

Mr. Phillips:

As requested in your letter dated May 4, 2021 (attached), St. Johns River Water Management District (District) staff have reviewed the Ten-Year Site Plans (TYSP) for Florida Power & Light Company/Gulf Power, Duke Energy Florida, Florida Municipal Power Agency, and Seminole Electric Cooperative. Based on review of the submitted materials, District staff had no comments on the TYSP and found them to be suitable as planning documents.

If you have any questions or need additional information, please contact me.

Sincerely,
Steve Fitzgibbons

Steven Fitzgibbons, AICP
Intergovernmental Planner
Division of Strategic Planning and Initiatives
St. Johns River Water Management District
7775 Baymeadows Way, Suite 102
Jacksonville, FL 32256
Office (386) 312-2369
Website: www.sjrwmd.com
Connect with us: Newsletter, Facebook, Twitter, Instagram, YouTube, Pinterest

From: Patti Zellner <PZELLNER@PSC.STATE.FL.US>
Sent: Tuesday, May 4, 2021 9:47 AM
To: Ann Shortelle <ashortelle@sjrwmd.com>
Cc: Laura King <LKing@PSC.STATE.FL.US>; Phillip Ellis <PEllis@PSC.STATE.FL.US>; Donald Phillips <DPhillip@psc.state.fl.us>; Damian Kistner <DKistner@psc.state.fl.us>; Patti Zellner <PZELLNER@PSC.STATE.FL.US>
Subject: DN 20210000-OT - Review of the Ten-Year Site Plans - Comment Request (021)

Dear Ms. Shortelle,
Please find attached your copy of the 2021 Ten-Year Site Plans – Comment Request letter dated May 3, 2021, filed with the Florida Public Service Commission Clerk today.

Thank you,
Patti Zellner
Administrative Assistant
Division of Engineering
Phone: (850) 413-6208
Email: pzellner@psc.state.fl.us

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Local Government

Pinellas County

Pinellas County

County Administration

July 26, 2021

State of Florida Public Service Commission
Attn: Donald Phillips, Engineering Specialist
Capital Circle Office Center
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Review of 2021 Ten-Year Site Plans for Florida's Electric Utilities

Dear Mr. Phillips:

Thank you for the invitation to review the Ten-Year Site Plans (TYSP) for Florida's Electric Utilities. Pinellas County (County) is included in the Duke Energy Florida (DEF} electric utility service area. Hence, comments on the TYSP the focus of the County's review is specific to DEF's TYSP. The County has a keen interest in DEF's TYSP, as there remains a current Qualified Facility (QF) Power Purchase Agreement (PPA) in place between both parties for avoided electrical power capacity and the sale of electrical power from a municipal solid waste to energy facility. The PPA expires on December 31, 2024.

The County has questions, issues, and/or concerns with the following:

1. As previously noted by the County to the Commission based on 2019 review of the DEF TYSP, DEF continues to rely on ambitious retail sales to offset wholesale sales to justify demand growth to install more capacity or purchase additional electrical power from others.

2. DEF's assumption that retail/residential sales will increase as the number of customers increase, when the actual percent of change, since 2011, between number of customers and retail energy load sales clearly shows that growth of number of customers does not indicate growth in retail energy load sales.

3. The significant growth of twenty-seven (27) planned solar photovoltaic (PV) generation sites from 194 MW in 2021 to 2,000 MW by 2030. Twenty (20) of the planned site are essentially defined at 'TBD' and void of all economics. Yet, DEF has clearly detailed cost data for natural gas fired combustion turbine installations for the same forecast period.

315 Court Street, Room 601
Clearwater, FL 33756
Phone (727) 464-3485
Fax (727) 464-4384
V/TDD (727) 464-4062
www.pinellascounty.org

4. The Pinellas Waste-to-Energy (WTE) facility is listed as 'Renewable MSW' but continues to use non-renewable natural gas fired combustion turbines as the basis of cost for avoided capacity calculations for a QF Standard Offer Contract. As listed as 'renewable', why not combine Renewable MSW into the same category as Renewable Solar and pay at the equivalent rates as avoided capacity for PV installations? The County strongly believes that all 'Renewables' should be treated on the same economic basis. This is especially true for Renewable MSW since it provides base load, highly reliable capacity, with a proven track record of over 30-years in the State of Florida.

5. The plan indicates that most interest in QF sales is from PV developers with sixty (60) active projects and 4,700 MW of interconnection requests and DEF is the project developer for twelve (12) of the active projects. The plan documents do not elaborate on what constitutes an "active" project.

6. Pinellas County is one of the largest Clean Energy Connection municipal partners and would recommend DEF to consider large scale solar generation and/or battery energy storage in Pinellas County for grid resiliency and emergency management needs.

7. As a large customer of DEF's, the plan lacks program information that targets large customer assistance such as energy audits and automated software to assist with energy data transfer to energy management software. It is recommended that DEF joins other nationwide utilities to provide data transfer to systems such as the Energy STAR Portfolio Manager. Doing so will permit customers to better track consumption to compare to energy efficiency goals.

If you have any questions regarding the County's review, please contact Paul Sacco, Department of Solid Waste Director at 727-464-7514 or at psacco@pinellascounty.org.

Sincerely,

Barry A. Burton
County Administrator

cc: Jill Silverboard, Deputy County Administrator/Chief of Staff
Paul Sacco, Director, Department of Solid Waste

COMMISSIONERS:
GARY F. CLARK, CHAIRMAN
ART GRAHAM
ANDREW GILES FAY
MIKE LA ROSA

STATE OF FLORIDA

DIVISION OF ENGINEERING
TOM BALLINGER
DIRECTOR
(850) 413-6910

Public Service Commission

May 4, 2021

Mr. Barry Burton, County Administrator
Pinellas County
315 Court Street
Clearwater, FL 33756
bburton@pinellascounty.org

Re: Review of the 2020 Ten-Year Site Plans for Florida's Electric Utilities

Dear Mr. Burton,

Pursuant to Section 186.801, Florida Statutes, the Florida Public Service Commission (Commission) is responsible for reviewing and classifying each electric utility's Ten-Year Site Plan as "suitable" or "unsuitable." As part of the annual review, in accordance with Rule 25-22.071, Florida Administrative Code, the Commission must provide a copy of the relevant Ten-Year Site Plans (TYSP) to, and solicit the views of, the appropriate state, regional, and local agencies. To this end, the Commission has made available on its website electronic copies of the 2020 TYSPs for all the Florida electric utilities at the following link: http://www.psc.state.fl.us/ElectricNaturalGas/TenYearSitePlans.

Below is a list of the TYSPs of electric utilities that have identified preferred or potential plant sites in your jurisdiction for your review and comments in regard to their suitability as planning documents. Please note that these plans are not designed to give information about proposed facilities in such detail as would be required for a development permit or other formal process.

Relevant Ten-Year Site Plan
Florida Power & Light (FPL)/Gulf Power Company (GULF)
Duke Energy Florida (DEF)
Tampa Electric Company (TECO)

Please forward all comments by August 3, 2021, including an electronic copy to my email address below. If you have any questions, or require additional time to file comments, please feel free to contact me by phone at (850) 413-6974, or by email at DPhillip@psc.state.fl.us, or Damian Kistner by phone at (850) 413-6858, or by email DKistner@psc.state.fl.us. Thank you for your assistance.

Sincerely,

Donald Phillips
Engineering Specialist

Santa Rosa County

Donald Phillips

From: Shawn Ward <ShawnW@santarosa.fl.gov>
Sent: Tuesday, May 04, 2021 11:59 AM
To: Donald Phillips; Damian Kistner
Cc: Evelyn Hamilton; Dan Schebler
Subject: FW: DN 20210000-OT - Review of the Ten-Year Site Plans - Comment Request (049)
Attachments: 2021 TYSP Comment Request.LETTER FINAL_Part49.pdf

Mr. Phillips,

Thank you for the opportunity to review and provide comments. Santa Rosa County has no comments or objections to the proposed Florida Power and Light, Blackwater River Solar Energy Center in Santa Rosa County.

Respectfully,

Shawn Ward, AICP
Planning and Zoning Director
Santa Rosa County Development Services Center
6051 Old Bagdad Hwy, Suite 202 | Milton, Florida 32583
P: 850.981.7082 | C: 850.776.4488 | F: 850.983.9874
Santarosa.fl.gov | Facebook | Twitter |Instagram

Help us improve our customer service with this short survey:

From: Evelyn Hamilton <EvelynH@santarosa.fl.gov>
Sent: Tuesday, May 4, 2021 10:41 AM
To: Shawn Ward <ShawnW@santarosa.fl.gov>
Cc: Dan Schebler <DanS@santarosa.fl.gov>
Subject: FW: DN 20210000-OT - Review of the Ten-Year Site Plans - Comment Request (049)

Hi Shawn,

Can you follow-up and provide update or response if required.

Thanks.

Evelyn Hamilton
Executive Assistant to
Dan Schebler, County Administrator
Santa Rosa County Administrator's Office
6495 Caroline Street, Suite M | Milton, Florida 32570
P: 850.983.1855 | C: 850-375-0256 | F: 850.983.1856
Santarosa.fl.gov | Facebook | Twitter | Instagram

Help us improve our customer service with this short survey

From: Patti Zellner <PZELLNER@PSC.STATE.FL.US>
Sent: Tuesday, May 4, 2021 8:59 AM
To: Web Email - County Administration <County-Admin@santarosa.fl.gov>
Cc: Laura King <LKing@PSC.STATE.FL.US>; Phillip Ellis <PEllis@PSC.STATE.FL.US>; Donald Phillips <DPhillip@psc.state.fl.us>; Damian Kistner <DKistner@psc.state.fl.us>; Patti Zellner <PZELLNER@PSC.STATE.FL.US>
Subject: DN 20210000-OT - Review of the Ten-Year Site Plans - Comment Request (049)

Dear Mr. Schebler,
Please find attached your copy of the 2021 Ten-Year Site Plans – Comment Request letter dated May 3, 2021, filed with the Florida Public Service Commission Clerk today.

Thank you,
Patti Zellner
Administrative Assistant
Division of Engineering
Phone: (850) 413-6208
Email: **pzellner@psc.state.fl.us**

Florida has a very broad Public Records Law. Virtually all written communications to or from Santa Rosa County Personnel are public records available to the public and media upon request. E-mail sent or received on the county system will be considered public and will only be withheld from disclosure if deemed confidential pursuant to State Law.

Environmental Groups

Vote Solar

August 25, 2021

Mr. Phillip Ellis
Florida Public Service Commission
Capital Circle Office Center
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850
Email: pellis@psc.state.fl.us

Dear Chairman Clark and Commissioners:

Vote Solar respectfully offers these comments concerning Florida utilities' 2021 10-year site plans, in order to support the Commission's oversight role and encourage an electric system that is affordable, reliable, secure and clean.

Since 1974, certain electric utilities under Florida law have been required to submit to the Commission a 10-year site plan estimating their power-generating needs and the location of any proposed power plants. *See* Section 186.801, F.S.[1] The Commission is charged with conducting a preliminary review of each plan, classifying each as suitable or unsuitable, and may suggest alternatives to the plan. *Id*.

Florida law states that the Commission "shall review" the following elements of each plan: the need for electrical power; the effect on fuel diversity within the state; the environmental impact of each power plant site; possible alternatives to the proposed plan; the views of other relevant agencies; the extent to which the plan is consistent with the state comprehensive plan; state data on energy availability and consumption; the amount of renewable energy resources the utility produces or purchases; the amount of renewable energy resources the utility plans to produce or purchase over the 10-year planning horizon and the means by which the production

[1] Utilities are only required to submit TYSPs if (1) their generating capacity is greater than 250 MW or they are planning to construct a 75 MW or greater new generating facility at least 3 years prior. In 2021, 11 out of Florida's 58 utilities submitted TYSPs.

or purchases will be achieved; and how the production and purchase of renewable energy resources impact the utility's present and future capacity and energy needs. Fla. Stat. Ann. § 186.801. Under Florida law, 10-year site plans are "tentative information for planning purposes only and may be amended at any time" by utilities. *Id*. As permitted by statute, the Commission has implemented regulations concerning the 10-year site plans. *See* Fla. Stat. Ann. § 186.801; Rule 25-22.070, F.A.C.

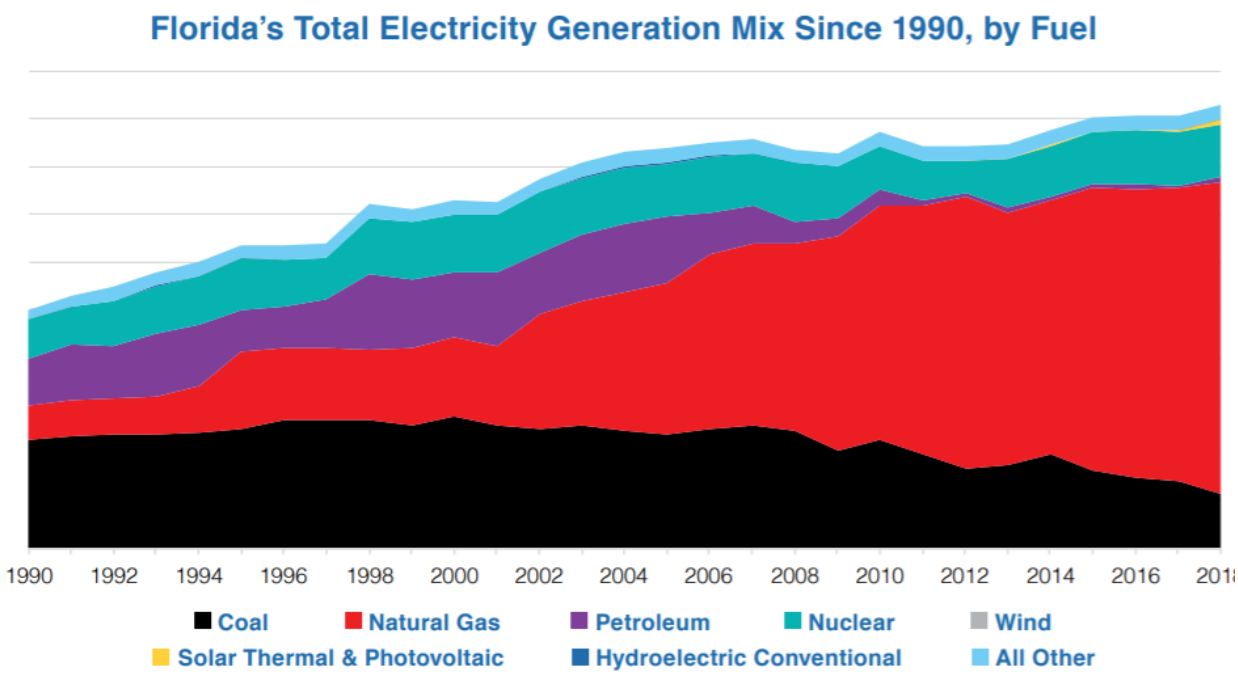
As Vote Solar reviewed utilities' 2021 plans, we saw significant diversity among the plans with respect to their transparency, incorporation of sound planning principles, clean energy commitments and preparedness to adapt to climate risk. During this analysis, several important cross-cutting themes also emerged among many of the utilities' plans. Below, we present these themes as **"Five Questions the Commission Should Ask"** as it reviews the 2021 plans. We hope that this framework assists the Commission and its staff in its important oversight role.

"Five Questions the Commission Should Ask as it Reviews TYSPs"

1. **How do utilities plan to address gas over-dependence?**

Florida's share of natural gas generation places it among the top four states in the country, and its **70% reliance on gas is double the national average**. The end result is that each year, some $5 billion dollars leave Florida's economy to pay for fuel (accounting for about $1 out of every $4 spent by Floridians on electric bills). Several of Florida's utilities plan to expand their reliance on gas generating plants even more over the next decade, potentially putting Florida consumers on the hook for fuel price shock as well as stranded asset risk as lower-risk alternatives like solar power threaten to make today's gas investments obsolete. Vote Solar recently released a report on these issues entitled *The Costs and Risks of Florida's Dependence on Natural Gas*, which we have attached for your convenience.

The Legislature, in requiring 10-year site plans to be filed, stated that the Commission "shall review" each plan's effect on fuel diversity within the state. *See* Fla. Stat. Ann. § 186.801. Under this authority, we encourage the Commission to scrutinize utilities' over-reliance on gas.

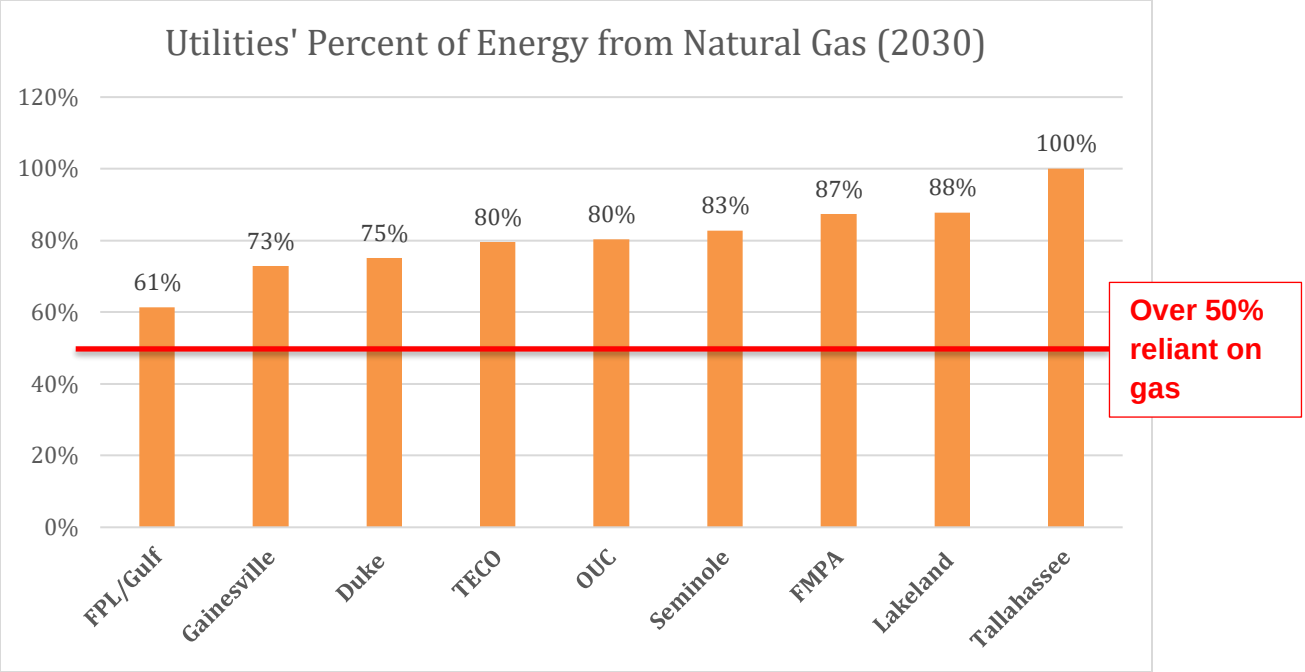


Source: Vote Solar analysis of 2019 U.S. Energy Information Administration Data

Since 1990, the vast majority of all installed capacity - over 33 GW - has been in gas plants; and Florida utilities plan to add even more gas generation in this decade. According to utilities' 2021 filings, below is the percentage of total energy from natural gas projected for 2030:

- ➔ Seminole Electric: 82.7%
- ➔ Duke Energy: 75.1%
- ➔ Tampa Electric: 79.6%
- ➔ FMPA: 87.4%
- ➔ FPL/ Gulf Power: 61.4%
- ➔ OUC: 80.3%
- ➔ Lakeland Electric: 87.8%
- ➔ City of Tallahassee: over 100%[2]
- ➔ Gainesville Regional Utilities: 72.9%

[2] This total is due to the fact that Tallahassee, as a smaller municipal utility, must run its gas plants at certain minimum thresholds in order to avoid shutting them down; as a result, Tallahassee sometimes generates excess energy that it sells on the wholesale market.



Over this decade, FPL projects the cost of natural gas will go up, increasing by 32% from $2.44/MMBtu in 2020 to $3.57 in 2030.[3] If gas prices do increase by a third, Floridians could see their electric bills increase by over $200/year. In contrast, Jim Robo, CEO of NextEra Energy, has described solar as being "very, very competitive" compared to gas-fired generation, and notes "a significant opportunity in almost every part of the country where batteries are now more economic than gas-fired peakers, even at today's natural-gas prices."

We strongly believe that utilities should not have more than 50% of their energy mix coming from gas, consistent with national averages, and should not be continuing to invest in new gas capacity once they hit that limit. All ten of the utilities analyzed will remain more than 50% reliant on natural gas through 2030, representing a major risk to consumers as well as a significant climate impact. Of these utilities, six plan to *increase* their reliance on natural gas, which typically corresponds to a decreasing amount of coal power generation. While reducing coal use is important, immediately replacing it with natural gas brings on a slate of new problems. As mentioned in Vote Solar's 2020 report titled "The Costs and Risks of Florida's Dependence on Natural Gas," Florida utilities are capturing only a small fraction of their energy efficiency potential and ignoring the cost-effectiveness and environmental benefits of solar energy through such a heavy commitment to natural gas. Based upon the current site plans, 68.2% of Florida's total energy usage in 2030 will still come from natural gas, with the average utility receiving 78.1% of its individual energy portfolio from gas. This level of reliance means that about $5 billion dollars will continue to leave Florida each year to pay for gas imports.

[3] *See* FPL responses to 2021 TYSP discovery requests, FPSC Docket 2020-0000, Staff Data Request No. 71.

Florida's regulators should carefully weigh both fuel price and stranded asset risks in assessing the prudence of continued investments of ratepayer funds in gas.

Florida regulators should also investigate the risks evidenced by the February 2021 cold snap in Texas. There is broad consensus that failures across Texas' natural gas operations and supply chains due to extreme temperatures were the most significant cause of the power crisis that left millions of Texans without heat and electricity.[4] As temperatures averaged nearly 30 degrees lower than normal, natural gas production in Texas fell almost 45% between February 13 and February 17, according to HIS Markit.[5] Twenty of the fifty gigawatts of gas plants that ERCOT expected to be online in February weren't, due to operators' failure to winterize (lines froze and systems couldn't run) or due to the fact that gas was simply unavailable.[6] Even as far away as Florida, FPL was forced to run some gas plants on distillate oil due to price hikes and gas unavailability. Florida is even more dependent on natural gas than Texas: only fifty-two percent of the electricity generated in Texas in 2020 was from natural gas, much less than Florida's current ***seventy percent*** reliance on gas. We encourage the Commission and Florida utilities to closely study the causes of the Texas blackouts, and whether there are lessons learned that could help Florida avoid similar gas plant unavailability.

2. How does Florida stack up on clean energy investments?

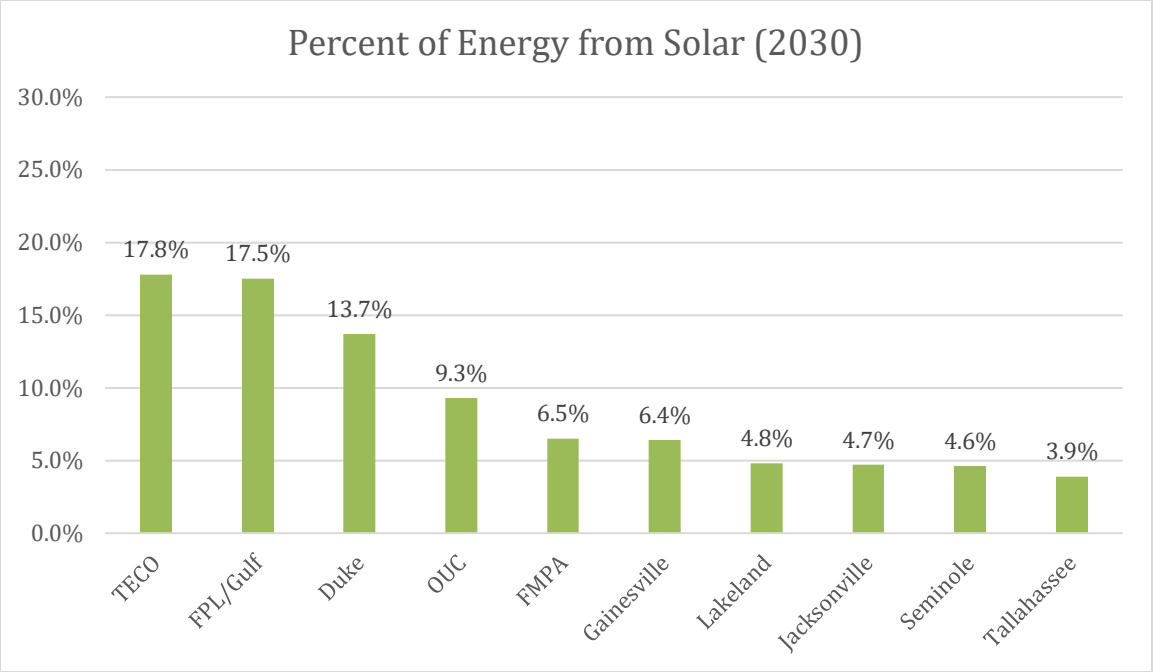
According to the U.S. Energy Information Administration, solar is now the cheapest generating resource available to Florida utilities, but many utilities continue to treat it as a niche energy source. While solar energy is increasing across Florida over the next decade, the state has a lot of catching up to do, and a whole lot of runway to do it.

Today, despite significant gains over the past year, most Florida utilities still have less solar (in terms of watts per customer) than peer Southeast utilities Duke Energy Progress, Dominion Energy SC, Duke Energy Carolinas and Georgia Power. Duke Energy Florida still falls below the Southeast average in terms of solar per customer.[7] For comparison, Duke Energy Progress in the Carolinas has 1,952 solar watts per customer; FPL has 448 and Duke Energy Florida only has 272. As an upside, it means that **utilities like Duke Power have demonstrated an ability to integrate and harness nearly ten times as much solar energy in the Carolinas as they have in Florida** -- creating valuable lessons learned that will allow for smooth integration of renewables in our state.

[4] https://www.dallasnews.com/news/weather/2021/02/17/texas-largely-relies-on-natural-gas-for-power-it-wasnt-ready-for-the-extreme-cold/.
[5] https://www.eia.gov/todayinenergy/detail.php?id=46896.
[6] https://www.texasmonthly.com/news-politics/texas-blackouts-natural-gas/.
[7] Southern Alliance for Clean Energy, *Solar in the Southeast Annual Report (2021), available at* https://cleanenergy.org/wp-content/uploads/Solar-in-the-Southeast-Report-June-2021.pdf.

Current forecasts also project Florida's utilities providing only 14.2% of the state's total energy consumption through solar by 2030, which is well below most other state utility standards and is also woefully inadequate if the U.S. is to reach its goal of 100% carbon-free electricity by 2035. The total amount of energy forecasted from renewables as a whole only reaches 15.1%, indicating that expanding solar generation is key to improving Florida utilities' carbon emissions. As a benchmark, we believe that each utility should be aggressively moving towards **at least 30% renewable energy by 2030**. To date, Florida utilities have demonstrated that significant solar investments can be made that put downward pressure on rates, creating cumulative present value revenue requirement (CPVRR) benefits for all customers. As solar costs continue to decline, along with battery storage, the value proposition of renewable energy will continue to increase for Florida ratepayers. One easy way for the Commission to assess future savings would be to ask utilities to model a 30% by 2030 alternative plan in next year's TYSP filings (this recommendation is discussed further on page

FPL, which plans for the highest percentage of renewable energy among Florida utilities in 2030 (17.5%), is only a little over halfway to that goal. Peer utilities across the country, from Xcel and NIPSCO in the Midwest to PG&E in California, are voluntarily planning for renewable energy as a reliable and economic energy resource. States such as California, Hawaii, North Carolina and Arizona have navigated the integration of clean energy to date at significantly higher solar penetrations than Florida, and have demonstrated the predictable value that these resources add to the grid. These path-breaking states should give Florida regulators peace of mind that our state can confidently invest in significant amounts of renewable energy over the next decade -- much more than utilities are currently planning for.



Vote Solar also believes that how renewable energy is procured for customers matters, and the Florida legislature agrees. As part of their 10-year site plan filings, the Legislature requires utilities to provide information about how renewable energy is going to be procured (a requirement that it did not specify for traditional generating resources). *See* Section 186.801(2)(i), F.S. (the Commission "shall review…[t]he amount of renewable energy resources the utility plans to produce or purchase over the 10-year planning horizon and ***the means by which*** the production or purchases will be achieved.") (emphasis added).

Markets work -- and Florida utilities should be aggressively relying on market options to procure more affordable power, instead of solely relying on self-built capacity. Third-party developed and owned projects have shown themselves to be the most cost-effective option for customers time again in competitive solicitations across the Southeast, including in nearby Georgia.[8] Florida utilities should focus on adding additional solar capacity through PPAs, saving consumers money and becoming more environmentally friendly. Eight of the ten utilities currently have no PPAs lined up through 2030, much less any additional solar PPAs. We encourage the Commission to question utilities' plans when they exclude consideration of market alternatives. Utilities' financial incentives should be aligned with customer value to maximize system benefits when renewables are being added to the grid.

[8] *See, e.g.*, https://dailyenergyinsider.com/news/11265-georgia-power-awards-power-purchase-agreements-three-solar-projects/.

3. Are Florida utilities preparing for a carbon-constrained world?

There is broad consensus among market analysts and large, sophisticated utilities that carbon regulation is a matter of when, not if. Building a future carbon price into planning protects customers from this eventuality, helping ensure that utilities are projecting reasonable future costs on carbon-heavy generation. Some Florida utilities (including FPL and Duke) incorporate a future carbon cost into their planning, but most of the municipal utilities do not, which likely biases their planning in favor of carbon-heavy resources. Florida regulators should scrutinize the impact of these flawed assumptions on municipal utilities' plans.

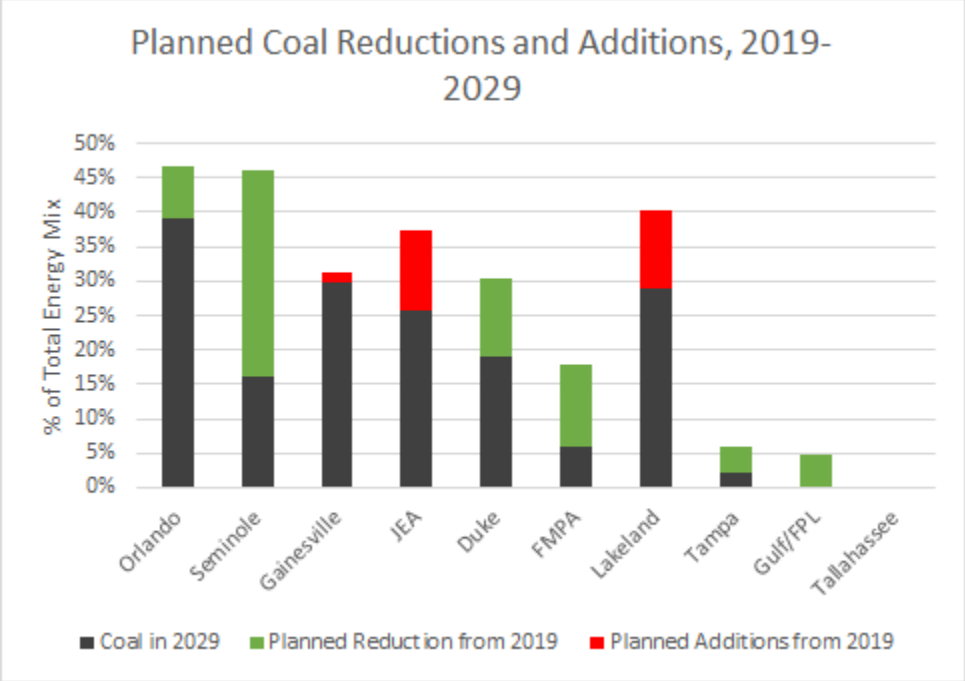
A good utility helps empower its customers so they can meet their clean energy goals and keep energy bills stable. Many Fortune 500 companies have established carbon reduction goals based on market trends and evolving investor expectations, and these corporations are looking to grow in states where clean energy options are readily available. Nearly 200 global corporations have committed to 100% renewable energy, including household names like Google, Ikea, Apple, Bank of America, Coca Cola, ebay, Facebook, GM, Microsoft, Target, and Walmart.[9]

Florida's forward-looking utilities are seriously exploring battery storage and clean energy options for customers, but Florida's smaller utilities are generally overlooking these "next gen" technology opportunities. We specifically commend utilities like FPL, OUC and Duke Energy Florida that are offering both robust rooftop net metering programs, while simultaneously creating solar subscription programs that expand access to solar power for those customers who are unable to go solar on their homes or businesses. These options make Florida a more attractive place to live and do business.

To date, the cost evaluation of energy storage has generally lacked sophistication (e.g., by not fully considering all sub-hourly capacity and ancillary services benefits) and failed to keep up with rapidly falling energy storage costs.[10] In March of 2019, FPL announced its plan to build the world's largest solar-powered battery in Manatee County, replacing two natural gas units and saving customers more than $100 million dollars.[11] Now that battery storage has been demonstrated to be cost effective in Florida, the Commission should question gas investments that are made by utilities whose planning lacks sophistication when it comes to analyzing storage -- their plans likely ignore cheaper, carbon-neutral capacity options that are now up for the taking.

[9] https://www.there100.org/companies.
[10] https://energystorage.pnnl.gov/pdf/PNNL-28627.pdf
[11] http://newsroom.fpl.com/2019-03-28-FPL-announces-plan-to-build-the-worlds-largest-solar-powered-battery-and-drive-accelerated-retirement-of-fossil-fuel-generation

In our comments to this Commission concerning utilities' TYSPs last year, we noted that some Florida utilities were actually *increasing* coal energy over the next decade -- a trend that was sharply at odds with the rest of the country.[12] JEA, GRU and Lakeland all anticipated significant increases in coal energy usage in the 2020s, a decision that they did not justify based on cost in their plans.



We are encouraged to see that several utilities have since changed direction and are now planning to largely phase out coal by the end of the decade. FPL's coal reliance shrinks to 0.2% in 2030; TECO's is 1.8%; OUC's is 0%; FMPA's is 0%; Lakeland's is 0%; and GRU's is 0%.

To quote NextEra CEO Jim Robo, "There is not a regulated coal plant in this country that is economic today, full period and stop."[13] Coal plants are no longer economic for Florida ratepayers. Vote Solar believes that utilities should be phasing out coal to less than 5% by 2030, in line with FPL and Tampa Electric's plans. We specifically call out JEA for its 21.5% reliance on coal in 2030 (the highest in the state); Duke Energy Florida for its 9% reliance on coal in 2030; and Seminole Electric for its 7.6% reliance on coal. These utilities plan to remain significantly committed to coal through 2030 despite the overwhelming evidence that it is both more expensive and leads to more pollution than other energy sources. Utilities such as Lakeland Electric and Tampa Electric have made great strides, altering their previous plans in favor of phasing out coal by 2030. JEA, Duke Energy and Seminoles' plans are very concerning given the market dynamics, not to mention the carbon and public health impacts of coal. We believe

[12] https://www.eia.gov/outlooks/steo/report/coal.php.
[13] https://insideclimatenews.org/news/04022021/inside-clean-energy-coal-power-renewable-utilities/.

that a utility's decision to continue to invest in coal energy warrants rejection of these utilities' plans, and at the very least, we encourage the Florida Commission to question these utilities concerning how these plans can possibly be least cost compared to alternatives.

Moreover, we urge the Commission to closely scrutinize any future investments in carbon-emitting generation. Given the national trends by electric utilities towards 100% carbon-free electricity by 2050 (or earlier), it is very likely that any carbon-emitting resources that are projected to be in operation beyond 2050 will represent stranded assets that customers will end up paying for. We specifically urge FPL, Florida's largest electric utility, to adopt a strong commitment to carbon-free generation by 2050 or earlier, in line with TECO and DEF.

4. Are utilities protecting Florida's most vulnerable ratepayers?

The cheapest kilowatt-hour is the one that never gets used. Quite simply, that makes energy efficiency the cheapest energy source available to Florida's electric utilities. But according to the American Council for an Energy Efficient Economy (ACEEE), many Florida utilities rank far below their peers in terms of energy efficiency investments. The 2020 ACEEE Utility Energy Efficiency Scorecard reviews the efficiency investments of 52 utilities across the country. Of that list, TECO, Duke Energy Florida and FPL all rank in the bottom 8 utilities, with TECO at #46, DEF at #48 and FPL at #51 (ahead of only one utility - Alabama Power).[14] This

[14] https://www.aceee.org/sites/default/files/pdfs/u2004%20rev_0.pdf

lack of investment is also tied to Floridians having higher than average electricity bills than the national average.[15]

Energy efficiency investments matter now more than ever, as many Floridians are struggling to pay their electric bills due to the economic fallout from COVID. Consumer protection needs to be top priority right now during the coronavirus pandemic. Energy efficiency should be utilities' first investment before adding additional generation capacity, and utilities should be targeting **a minimum of 1% of annual energy savings**.

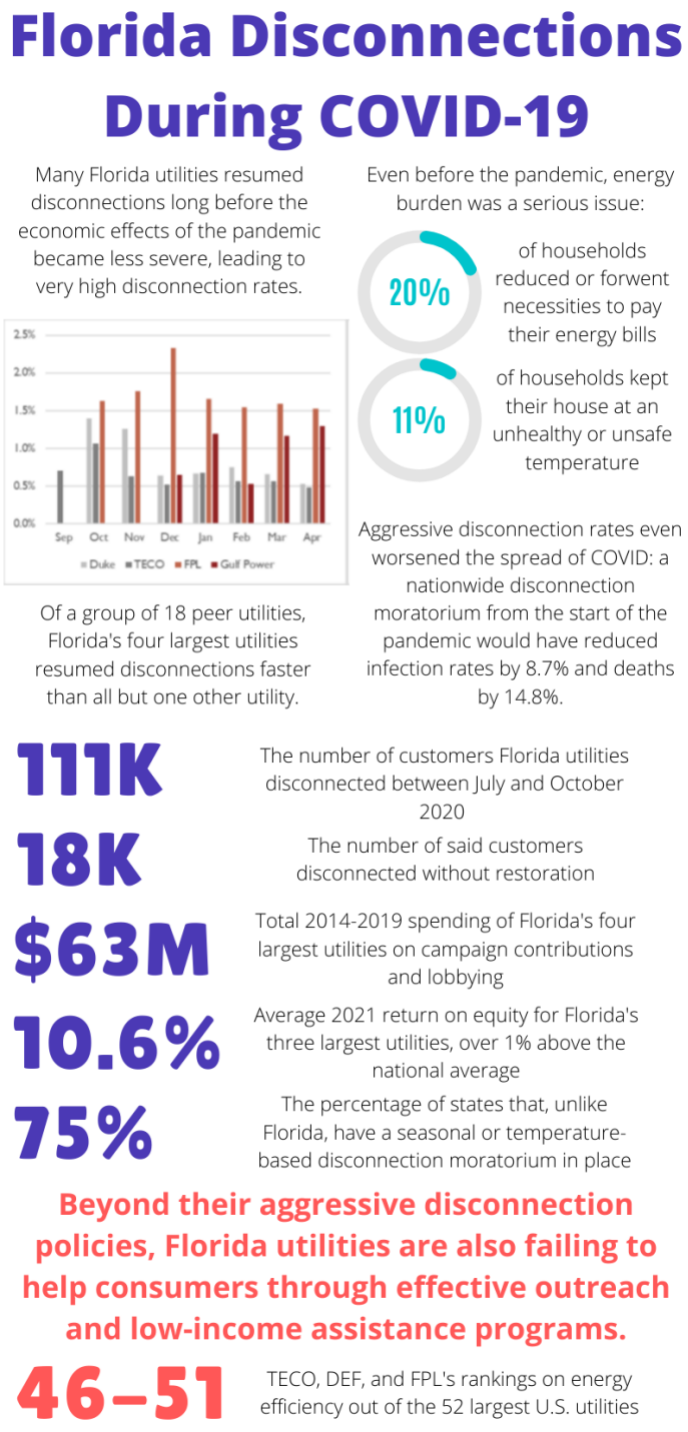
Disconnections are an important and unfortunate development from 2020-2021 that should be addressed in utilities' plans. All of the consumer-facing utilities except Gainesville Regional Utilities and the City of Tallahassee Utilities were exceedingly aggressive in resuming disconnections following the onset of the COVID-19 pandemic. These two utilities expanded low-income grant programs, didn't disconnect customers who applied for such aid, and in Tallahassee's case, waited until April 2021 before resuming disconnections. However, the majority of Floridians were completely unprotected from severe financial stress and losing power. This lack of protection occurred despite the fact that 35 states around the country implemented long disconnection moratoria and many of them also require or incentivize meaningful outreach to low-income customers.

Florida Power and Light disconnected nearly 500,000 customers from October 2020 to April 2021, with around 50,000 of those customers being disconnected without restoration. Duke Energy Florida reported disconnections equating to around 3% of its customers, nearly 64,000, from September 2020 to January 2021. Other utilities like the Tampa Electric Company, the Jacksonville Electric Authority, the Orlando Utilities Commission, and Lakeland Electric immediately began disconnecting thousands of customers a month as early as June and July 2020, during the height of this ongoing pandemic. These early disconnections were particularly severe due to the heat of the summer, which along with COVID-19 makes a lack of power life-threatening. Additionally, few utilities forgave late fees, expanded low-income support programs, or took other important measures to alleviate the burden of the pandemic on customers. Florida consumers deserve better protection from disconnections, especially during the heat of the summer and during unusual events like the COVID-19 pandemic that drastically increase unemployment rates and financial stress on residents.

Vote Solar also believes that utilities should be mobilizing energy saving programs to provide extra bill support and stability to customers who are in arrears on bills, in addition to halting all shut-offs through the end of hurricane season. We strongly support emergency bill relief programs for customers who are in arrears during this time, which should rely on a

[15] https://www.eia.gov/todayinenergy/detail.php?id=34932

combination of arrearage management, bill forgiveness incentives for consistent repayment, and targeted efficiency programs.



5. How can Florida modernize its resource planning review?

There are actions that the Commission can take this year within its existing statutory authority to modernize its review process concerning Florida utilities' plans. The Commission can begin by formalizing the 10-year site plan review process and shoring up opportunities for public and stakeholder engagement. *See* Section 186.801(2), F.S. (the commission may adopt rules governing the method of submitting, processing, and studying the 10-year plans).

We recommend that the Commission strengthen the 10-year site plan process by making 10-year site plans part of a docketed proceeding, similar to FEECA dockets; providing a clear opportunity and timeline for public comments; requiring utilities to file sworn testimony associated with their plans; allowing for intervention, discovery and the filing of non-utility expert testimony; and subjecting utilities' plans to cross-examination.

We also urge the Commission to require utilities to file both preferred plans and alternatives for the Commission to review, beginning in 2021, with clear price per GWh comparisons for each plan. *See* Section 186.801(2)(d), F.S. (the Commission "shall review... [p]ossible alternatives to the proposed plan"). These improvements will better ensure that the Commission has the information it needs to meaningfully regulate the utilities' resource decisions to meet the public interest.

In terms of the Commission's substantive review, we encourage the Commission to exercise the following legislatively granted authority:

- Making comments and recommendations to utilities concerning their plans (*see* Section 186.801(2), F.S. (states PSC may "suggest alternatives"); Fla. Admin. Code Ann. r. 25-22.071(4) (the Commission "will report its findings, along with any comments or recommendations"). These recommendations can be directed to utilities' current or future plan filings.
- Rejecting unsuitable plans and sending plans back for additional data to be provided (Section 186.801(2), F.S. ("the commission shall make a preliminary study of such plan and classify it as "suitable" or "unsuitable."); Fla. Admin. Code Ann. r. 25-22.071(5) (unsuitable plans can later be deemed suitable with additional data).

Florida should also consider beginning a holistic review of its electric planning process, which does not appear to have undergone substantive review since the 1970s. Some best practices for resource planning may require legislative reforms in order to implement. Such improvements include, but are not limited to: increasing the 10-year time period to 15 or 20 years, in keeping with many other states; making plans binding and subject to both review and amendment by regulators; and requiring utilities to conduct full integrated resource planning

with transparency around least cost, least risk plans and alternatives. Without a binding, long term planning process with thorough vetting, the Commission's ability to regulate the utilities in the public interest will be hamstrung.

Such a holistic review would provide an opportunity to rethink system needs in a future likely dominated by renewable energy, new technology, and engaged consumers.[16] Battery storage, EV charging demand, demand response, rooftop and utility scale solar threaten to rapidly overtake traditional supply, but traditional planning approaches are ill-equipped to evaluate this new reality. Planning needs to be responsive to new reliability and flexibility needs; policy goals; new technology; customer preferences and sustainability goals; electrification; and the proliferation of distributed energy resources. *Id*. For example, electrification may DOUBLE total demand by 2050; planning processes must consider the impact of this new load on electric utilities and their customers. Similarly, instead of assuming that gas is the best option to replace retiring coal plants, modern planning should allow for portfolios of clean energy resources (solar, bulk storage and controllable demand) that, when combined, can offer the same energy, flexibility and capacity needs at less cost than gas. *Id*. The best way to ensure fair access for all resources to compete is to require all-source, competitive procurements for all new capacity investments, thus inviting innovation into utility plans to maximize savings for consumers.

Going forward, we encourage a conversation about how Florida can ensure it is well situated for next generation energy resource planning. We have provided a list of resources in an appendix that we hope will prove helpful to this end.

We appreciate the Commission's attention to these important issues, and hope that these comments aid the Commission in its review of Florida utilities' long-term plans.

Sincerely,

Katie Chiles Ottenweller
Southeast Director
Vote Solar

[16] The Brattle Group, *The Next Generation of Energy Resource Planning: Rethinking System Needs in a Future Dominated by Renewables, New Tech, and Engaged Customers* (2019), *available at* https://brattlefiles.blob.core.windows.net/files/16833_the_next_generation_of_energy_resource_planning.pdf.

Attachment 1:

Electric Utility Best Practice Planning Resource List

Brattle Group (2019), The Next Generation of Energy Resource Planning

RAP & Synapse (2013), Best Practices in Integrated Resource Planning

LBNL (2016), The Future of Electricity Resource Planning

NARUC electricity planning task force library of resources here

Florida Citizens

Mr. Nathan A. Skop

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Review of Ten-Year Site Plans of Electric Utilities	DOCKET NO.: 20210000 (Undocketed) FILED: August 18, 2021

WRITTEN COMMENTS RELATED TO THE FILING OF THE GAINESVILLE REGIONAL UTILITIES TEN-YEAR SITE PLAN FOR 2021

Nathan A. Skop, as a GRU residential customer, and pursuant to the Purpose and Procedure section of the Amended Notice of Commission Workshop dated August 4, 2021, hereby files written comment to the Gainesville Regional Utilities ("GRU") Ten-Year Site Plan ("TYSP") for 2021 in the above captioned docket requesting that the Florida Public Service Commission ("Commission" or "FPSC"): (1) open a formal docket to investigate the adequacy, reliability, and resiliency of the GRU electric system, and (2) order GRU to amend its 2021 TYSP filing to clarify omissions and information submitted to the Commission as set forth within the written comments provided herein. The written comments providing the basis for the requested Commission action are set forth as follows:

I. SINGLE POINT ELECTRIC SYSTEM FAILURE

On March 3, 2021, the GRU General Manager sent an e-mail to the Gainesville City Commission communicating information from GRU Chief Operating Officer Tom Brown relating to the siting of the Origis solar project. Within the body of the subject e-mail, GRU advised the Gainesville City Commission that:

- "GRU has two transmission lines that run from the North at Deerhaven around the city to the East. GRU has one transmission line that runs from Deerhaven around to the West to Parker substation."

- "**If/when GRU losses the singular west circuit, all the power has to be wheeled through the east circuits. When this occurs, depending on system load, we come close to exceeding the thermal limits of the East transmission lines.**" (Emphasis Added).
- **"The solution on would be to build a second T-line around the west**. The towers on the west side were not constructed with a second line in mind. They would have to be modified to allow for the second line. **Cost would be in 25MM range** (if my memory serves me correctly)." (Emphasis Added).

A true and correct copy of the e-mail sent by GRU to the Gainesville City Commission is attached herein as Exhibit A.

Ironically, Section 1.2 (Transmission), Section 1.3 (Distribution), and Section 3.4 (Distribution System Additions) of the 2021 GRU TYSP dated April 1, 2021 fail to disclose and discuss the GRU assertion that the reliability and resiliency of the entire GRU electric system is seemingly at risk from a single point transmission line failure. Additionally, in Section 1.2.2 (Transmission Lines) of the 2021 GRU TYSP, GRU states that, "GRU participates in Florida Reliability Coordinating Council, Inc. (FRCC) studies that analyze multi-level contingencies. Contingencies are occurrences that depend on changes or uncertain conditions and, as used here, represent various equipment failures or fault conditions that may occur." Furthermore, in Section 1.2.3 (State Interconnections) of the 2021 GRU TYSP, GRU claims that, "The System is planned, operated, and maintained to be in compliance with all FERC, NERC, and FRCC requirements to assure the integrity and reliability of Florida's Bulk Electric System (BES)".

In response to a public records request, GRU stated that GRU had no responsive documents relating to GRU notifying the FPSC, FRCC, SERC, and/or NERC regarding this electric system reliability and resiliency issue. Despite requesting approval for a $81 million dollar Advanced Metering Infrastructure ("AMI") capital project that provides no tangible return on investment for GRU customers, GRU was also unable to produce any records over the past five (5) years associated with GRU requesting approval of a capital project (e.g., $25 million) relating to installing a second transmission line to address the alleged single point failure condition that GRU failed to communicate to regulatory authorities.

Pursuant to Section 366.05 (7) and 366.05 (8), Florida Statues, the Commission has exclusive jurisdiction relating to electric system reliability, adequacy, and resiliency for all electric utilities in the state of Florida, including municipal utilities.

Section 3.2 (Reserve Margin) of the 2021 GRU TYSP dated April 1, 2021, further illustrates that GRU has an excessive reserve margin (if not the highest in the state) which greatly exceeds the 15% capacity reserve margin by the Commission pursuant to Rule 25-6.035, Florida Administrative Code.

Most importantly, transmission and electric system reliability that is so threatened by a single point failure and the limitations alleged by GRU management should be immediately addressed to ensure adequate reliability and resiliency of the GRU electric system prior to adding additional generating capacity and pursuing far more costly discretionary capital projects (i.e., AMI). The recent ERCOT winter storm outage further illustrates the need

for the Commission to exercise its jurisdiction related to this matter to ensure the adequacy, reliability, and resiliency of the GRU electric system.

Based upon the above, the Commission is respectfully requested to open a formal docket to investigate the adequacy, reliability, and resiliency of the GRU electric system. Upon a finding of probable cause that an inadequacy exists, the Commission should order GRU to take corrective action to make the necessary improvements to ensure the adequacy, reliability, and resiliency of the GRU electric system is maintained for the benefit of GRU customers.

II. DUAL FUEL UPGRADE (DEERHAVEN 2)

The Deerhaven 2 ("DH2") unit is identified as a 228 MW baseload unit within the 2021 GRU TYSP. On Section 2.51 (Page 25) of the 2021 GRU TYSP dated April 1, 2021, GRU stated that, "In late 2020, GRU began a ***dual fuel upgrade on Deerhaven Unit 2 to allow it to be able to operate fully on natural gas.***" (Emphasis Added). During the recent Gainesville City Commission meeting on July 19, 2021, GRU Chief Operating Officer Tom Brown claimed (in response to my question) that GRU never represented that DH2 could operate fully on natural gas stating that, "I don't believe we ever represented the plant would be capable of 100% fire on gas". The GRU claim is seemingly contradicted by the representations that GRU made to the Gainesville City Commission when seeking approval of the dual fuel upgrade project before the City Commission on July 16, 2020, along with the representation that GRU made to the FPSC within Section 2.51 (Page 25) of the 2021 GRU TYSP. Most recently, GRU updated the City Commission on the DH2 dual fuel upgrade stating:

> "The retrofit project has gone well from standpoint of being able to burn natural gas up to 175 MW of load. The outstanding issue is we have not been able to get the main gas valve to operate in automatic mode as required. We have operated the valve in manual with no issues, and the OEM for the valve states that the valve actuator capability is inadequate to put valve in auto. We are working with the OEM to resolve the valve actuator issue design. Once this issue is resolved we will be conducting a full load test of DH2 to determine maximum load on natural gas, as well as the associated heat rate curves. [sic] s going very well."

Based upon the inconsistencies identified above, the Commission should order GRU to clarify the statement that GRU made to the FPSC within Section 2.51 (Page 25) of the 2021 GRU TYSP relating to the ability of DH2 to operate fully on natural gas at the baseload rated capacity of 228 MW.

WHEREFORE, the Commission is respectfully requested to: (1) open a formal docket to investigate the adequacy, reliability, and resiliency of the GRU electric system, and (2) order GRU to amend its 2021 TYSP filing to clarify omissions and information submitted to the Commission as set forth within the written comments above.

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Respectfully submitted this 18th day of August 2021.

/s/ Nathan A. Skop
Nathan A. Skop, Esq.
Florida Bar No. 36540
420 NW 50th Blvd.
Gainesville, FL 32607
Phone: (561) 222-7455
E-mail: n_skop@hotmail.com

GRU Residential Customer

EXHIBIT A

: Message View

Back to message results | Download Message (.eml)

Date Received:	3/4/2021 3:29:35 PM
To:	citycomm
Cc:	DL_Utility Advisory Board
From:	Bielarski, Edward J
Subject:	Origis solar siting facts
Attachments:	
Message:	Mayor, Commissioners and UAB members;

Tom Brown has shared some of the technical challenges GRU considered when Origis responded to the Invita on to Nego ate (ITN), as reflected as follows:

- In the ITN, GRU told developers that the Deerhaven area would not be viewed favorably because of the technical challenges it would pose by connec ng it into the switchgear in that area, as well as:
  - A significant por on of the Deerhaven site is wetland. Permi. ng this as a site would be difficult. The area around Archer is higher and drier. The buffer area around Deerhaven is part of a Regulated Strategic Ecosystem known as the Hague Flatweeds. It is referred to as an environmental corridor between various ecosystems surrounding the Deerhaven site. Any development is regulated and restricted.
  - There are about 3,577 acres of land on the en re Deerhaven property. The original site is approximately 1,300 acres which GRU owns outright. The balance of the land (2,327 acres) is owned as a buffer, but not the mber rights. Weyerhaeuser ownership of the mber rights will make solar development much more expensive.
  - There is a City Ordinance with developmental restric ons on the Deerhaven property.
  - The Fawnhaven site is an alterna ve site, not actually owned by GRU, proposed by Origis. It is north of the Deerhaven site. GRU recognized there are technical challenges for GRU to add this amount of genera on capacity into the Deerhaven substa on.
    - GRU has two transmission lines that run from the North at Deerhaven around the city to the East. GRU has one transmission line that runs from Deerhaven around to the West to Parker substa on.
    - If/when GRU losses the singular west circuit, all the power has to be wheeled through the east circuits. When this occurs, depending on system load, we come close to exceeding the thermal limits of the East transmission lines.
    - The solu on would be to build a second T-line around the west. The towers on the west side were not constructed with a second line in mind. They would have to be

modified to allow for the second line. Cost would be in 25MM range (if my memory serves me correctly).

- From a system reliability perspec ve, feeding the power into Parker provides a more diverse distribu on network and reduces the probability of power disrup on.

I have asked Lisa Bennett from the city attorney's office to weigh in on the legal issues you have ques oned. I have asked Chuck Height in our energy supply department to gain details about Origis' public outreach program. I hope to have more to follow after more mee ngs this week.

Ed B