

State of Florida



Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD
TALLAHASSEE, FLORIDA 32399-0850

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

DATE: June 7, 2022
TO: Adam Teitzman, Commission Clerk, Office of Commission Clerk
FROM: Donald Phillips, Engineering Specialist, Division of Engineering
RE: Docket No. 20220000-OT - Undocketed filings for 2022.

LK
DP POC

Please file in the above mentioned docket file the attached document, Staff's Data Request #4 to FPL regarding the Ten-Year Site Plan.

DP/pz

Attachment

From: [Patti Zellner](mailto:Patti.Zellner@psc.state.fl.us)
To: "mark.bubriski@fpl.com"
Cc: "Nanci_Nesmith@fpl.com"; "Lisa.Roddy@nexteraenergy.com"; "Richard.hume@fpl.com"; Donald Phillips; Phillip Ellis; Patti Zellner
Subject: DN 20220000-OT (Undocketed filings for 2022) Ten-Year Site Plan Review - Staff's Data Request #4 to FPL
Date: Wednesday, June 08, 2022 1:58:20 PM
Attachments: [DN 20220000-OT \(Undocketed filings for 2022\) TYSP-Staff's Data Request #4 to FPL.pdf](#)
[DN 20220000-OT \(Undocketed filings for 2022\) TYSP-Staff's Data Request #4 to FPL.docx](#)

June 7, 2022

Dear Mr. Bubriski,

Attached is Staff's Data Request #4 to FPL (in PDF and WORD format) for the Ten-Year Site Plan Review process. Please submit your responses to this data request to both the Florida Public Service Commission's (FPSC) Division of Engineering and the FPSC Office of Commission Clerk by following the instructions below:

Submission to the FPSC Division of Engineering

1. Please email your responses to Donald Phillips by **Wednesday, June 29, 2022**.
 - a. Please submit all **narrative** and any **non-narrative** (if applicable) responses following their respective questions in a **single Microsoft Word** document, making sure to preserve question order.

Submission to the FPSC Office of Commission Clerk

1. Please convert and combine the responses sent to the FPSC Division of Engineering into a **single PDF** document.
2. Please electronically file this PDF document via the Commission's website no later than **Wednesday, June 29, 2022**.
 - a. Navigate to www.floridapsc.com.
 - b. At the top of the page, hover the mouse cursor over the "Clerk's Office" tab.
 - c. Select from the drop-down menu "Electronic Filing Web Form."
 - d. Please complete the form, referencing "Docket No. 20220000-OT."
 - e. Attach to the form the PDF created in Step 1 as the "Primary PDF."
 - f. Submit the form.

If you have any questions, please contact Donald Phillips.

Donald Phillips Office: (850) 413-6974 Email: DPhillip@psc.state.fl.us
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Sincerely,
Patti Zellner, Administrative Assistant
Division of Engineering
Phone: (850) 413-6208
Email: pzellner@psc.state.fl.us

Enclosure

cc: Office of Commission Clerk (20220000-OT – Undocketed filings for 2022)

1. On page 11 of the Report, FPL details “DSM reductions for the years 2025 through 2031 are assumed based on FPL’s projections in the 2019 DSM Goals docket of then-cost-effective DSM levels starting in 2025.” Please answer the following.
 - a. Please explain the reasoning for using the 2019 DSM Goals docket for 2025-2029 projections when the goals outlined in FPL’s 2019 Goal docket for that period were not approved by the Commission.
 - b. Please identify what alternative(s) the Company considered for projecting DSM reductions for 2025-2031.

2. On page 17 under Factor #4, projected reductions are provided for summer peak load (approximately 1,640 MW), Winter peak load (approximately 419 MW), and annual energy use (approximately 3,821 GWh). Please provide the cumulative and incremental reductions by year, including historical years’ reductions back to the earliest year for which there is available data.

3. For the purpose of this question, please review the following table. For each time period presented in the table, please explain the variance between the values presented in the Goals Order shown in Column 2 and the TYSP values shown in Column 3.

(1)	(2)	(3)
Year	FPL and Gulf Summer Peak Demand Goal - Residential (MW)*	Forecast of Summer Peak Demand (MW)**
2022	27.6 (FPL) + 8.1 (Gulf) = 35.7	51 (2022 value for Column 6 less the 2021 value for Column 6 [31] + 2022 value for Column 7 [20])
2023	28.0 (FPL) + 8.8 (Gulf) = 36.8	39 (2023 value for Column 6 less the 2022 value for Column 6 [4] + 2023 value for Column 7) [35])
2024	28.5 (FPL) + 9.3 (Gulf) = 37.8	56 (2024 value for Column 6 less the 2023 value for Column 6 [5] + 2024 value for Column 7) [51]
*Summer Peak Demand Goals (Residential) appear on Pages 18 and 19, in Order No. PSC-2019-0509-FOF-EG (“Goals Order”).		
**FPL 2022 TYSP, Schedule 3.1 Forecast of Summer Peak Demand (MW), Page 76, Columns (6) and (7).		

4. For the purpose of this question, please review the following table. For each time period presented in the table, please explain the variance between the values presented in the Goals Order shown in Column 2 and the TYSP values shown in Column 3.

(1)	(2)	(3)
Year	Winter Peak Demand Goals – Residential (MW)*	Forecast of Winter Peak Demand (MW)**
2022	17.2 (FPL) + 4.6 (Gulf) = 21.8	29 (2022 value for Column 6 less the 2021 value for Column 6 [24] + 2022 value for Column 7 [5])
2023	17.5 (FPL) + 5 (Gulf) = 22.5	17 (2023 value for Column 6 less the 2022 value for Column 6 [10] + 2023 value for Column 7 [7])
2024	17.8 (FPL) + 5.3 (Gulf) = 23.1	21 (2024 value for Column 6 less the 2023 value for Column 6 [12] + 2024 value for Column 7 [9])
*Winter Peak Demand Goals (Residential) appear on Pages 18 and 19, in Order No. PSC-2019-0509-FOF-EG (“Goals Order”)		
**FPL 2022 TYSP, Schedule 3.2, Forecast of Winter Peak Demand (MW), Page 78, Columns (6) and (7).		

5. For the purpose of this question, please review the following table. For each time period presented in the table, please explain the variance between the values presented in the Goals Order shown in Column 2 and the TYSP values shown in Column 3.

(1)	(2)	(3)
Year	FPL and Gulf Summer Peak Demand Goal – Commercial/ Industrial (MW)*	Forecast of Summer Peak Demand (MW)**
2022	27.1 (FPL) + 0.9 (Gulf) = 28	78 (2022 value for Column 8 less the 2021 value for Column 8 [55] + 2022 value for Column 9 [23])
2023	27.5 (FPL) + 1.0 (Gulf) = 28.5	50 (2023 value for Column 8 less the 2022 value for Column 8 [9] + 2023 value for Column 9 [41])
2024	28.0 (FPL) + 1.1 (Gulf) = 29.1	68 (2024 value for Column 8 less the 2023 value for Column 8 [8] + 2024 value for Column 9 [60])
*Summer Peak Demand Goals (Commercial/Industrial) appear on Pages 18 and 19, in Order No. PSC-2019-0509-FOF-EG (“Goals Order”)		
**FPL 2022 TYSP, Schedule 3.1 Forecast of Summer Peak Demand (MW), Page 76, Columns (8) and (9).		

6. For the purpose of this question, please review the following table. For each time period presented in the table, please explain the variance between the values presented in the Goals Order shown in Column 2 and the TYSP values shown in Column 3.

(1)	(2)	(3)
Year	Winter Peak Demand Goal - Commercial/Industrial (MW)*	Forecast of Winter Peak Demand (MW)**
2022	16.9 (FPL) + 0.3 (Gulf) = 17.2	51 (2022 value for Column 8 less the 2021 value for Column 8 [35] + 2022 value for Column 9 [16])
2023	17.3 (FPL) + 0.3 (Gulf) = 17.6	33 (2023 value for Column 8 less the 2022 value for Column 8 [6] + 2023 value for Column 9 [27])
2024	17.7 (FPL) + 0.3 (Gulf) = 18.0	46 (2024 value for Column 8 less the 2023 value for Column 8 [7] + 2024 value for Column 9 [39])
*Winter Peak Demand Goals (Residential) appear on Pages 18 and 19, in Order No. PSC-2019-0509-FOF-EG (“Goals Order”)		
**FPL 2022 TYSP, Schedule 3.2, Forecast of Winter Peak Demand (MW), Page 78, Columns (8) and (9).		

7. On page 75 of FPL’s 2022 Ten Year Site Plan (TYSP), Schedule 3.1, History of Summer Peak Demand (MW), reflects negative 15 MWs of summer peak demand reduction for Residential Load Management in 2021, and 11 MWs of summer peak demand reduction for Residential Conservation in 2021 (the 2021 value in Column 7 [1,600 MWs] less the 2020 value in Column 7 [589 MWs]). In FPL’s Demand Side Management Annual Report for 2021, dated March 1, 2022 (a/k/a “FEECA filing”), Page 2, the Company reported that it achieved 18 MWs of residential summer peak demand reductions in 2021. Please explain the variance between the amounts of residential summer peak demand reduction reported in Schedule 3.1 for 2021, compared to the amount reflected the FEECA filing.
8. On page 75 of FPL’s 2022 TYSP, Schedule 3.1, History of Summer Peak Demand (MW), reflects negative 5 MWs of summer peak demand reduction for Commercial/Industrial Load Management in 2021, and 16 MWs of summer peak demand reduction for Commercial/Industrial Conservation 2021 (the 2021 value for Column 9 [956 MWs] less the 2020 value for Column 9 [940 MWs]). In FPL’s Demand Side Management Annual Report for 2021, dated March 1, 2022 (a/k/a “FEECA filing”), page 2, the Company reported that it achieved 38 MWs of commercial/industrial summer peak demand reductions in 2021. Please explain the variance between the amounts of commercial/industrial summer peak demand reduction reported in Schedule 3.1 for 2021, compared to the amount reflected the FEECA filing.

9. On page 77 of FPL's 2022 TYSP, Schedule 3.2, History of Winter Peak Demand (MW), reflects negative 13 MWs of winter peak demand reduction for Residential Load Management in 2021, and 2 MWs of winter peak demand reductions for Residential Conservation in 2021 (the 2021 value for Column 7 [872 MWs] less the 2020 value for Column 7 [870 MWs]). In FPL's Demand Side Management Annual Report for 2021, dated March 1, 2022 (a/k/a "FEECA filing"), Page 2, the Company reported that it achieved 11 MWs of residential winter peak demand reductions in 2021. Please explain the variance between the amounts of residential winter peak demand reduction reported in Schedule 3.2 for 2021, compared to the amount reflected the FEECA filing.
10. On Page 77 of FPL's 2022 TYSP, Schedule 3.2, History of Winter Peak Demand (MW), reflects 5 MWs of winter peak demand reductions for Commercial/Industrial Load Management (the 2021 value in Column 8 [619 MWs] less the 2020 value in Column 8 [614 MWs]), and 12 MWs of winter peak demand reductions for Commercial/Industrial Conservation 2021 (the 2021 value in Column 9 [402 MWs] less the 2020 value in Column 9 [390 MWs]). In FPL's Demand Side Management Annual Report for 2021, dated March 1, 2022 (a/k/a "FEECA filing"), page 2, the Company reported that it achieved 22 MWs of commercial/industrial winter peak demand reductions in 2021. Please explain the variance between the amounts of commercial/industrial winter peak demand reduction reported in Schedule 3.2 for 2021, compared to the amount reflected the FEECA filing.
11. Please refer to page 105 of FPL's 2022 TYSP. Please explain the reason and elaborate on any factors known to FPL that caused the fuel price forecast for natural gas in the 2022 TYSP to be lower than what was projected in the 2021 TYSP.
12. Please refer to page 164 of FPL's 2022 TYSP. The first paragraph states, "an October 2021 fuel price forecast was used in the analyses which developed the resource plans presented in this 2022 site plan." Are FPL's most current forecasts significantly different than the October 2021 fuel price used to support its 2022 TYSP? If so, what is/are driving those differences?
13. Please refer to page 164 of FPL's 2022 TYSP. Please provide FPL's High and Low fuel price forecasts.
14. Please refer to page 165 of FPL's 2022 TYSP and page 161 of FPL's 2021 TYSP.
 - a. Please explain the timing differences of the JD Energy long-term forecast for coal used in the 2021 TYSP (forecast released in September of 2019) and for the 2021 TYSP (forecast released in March of 2021).
 - b. Please explain why FPL relied upon the JD Energy short-term price forecast for the 2021 TYSP but not for the 2022 TYSP.

15. Please refer to FPL’s Response to Staff’s First Data Request, No. 19 for the following questions.
- a. Please identify the “knowledgeable professionals in the automotive industry” that FPL references.
 - b. Please cite and identify any sources that support FPL’s PEV forecast methodology.
16. Please refer to Attachment 1 and 2 of FPL’s Response to Staff’s First Data Request No. 19 (FPL’s 2021 TYSP), and Attachment 1 of FPL’s Response to Staff’s First Data Request No. 20 (FPL’s 2022 TYSP).
- a. Comparing FPL’s 2021 and 2022 TYSP’s, the Company has increased its PEV forecast for 2022 by approximately 87.3 percent (see charts/calculations below). Please identify and explain the major drivers in FPL’s PEV forecasting models that have contributed to this significant increase.

FPL’s 2021 TYSP

FPL Service Territory

Year	Number of PEVs ⁽¹⁾	Number of Public PEV Charging Stations ⁽²⁾	Number of Public DCFC PEV Charging Stations. ⁽²⁾	Cumulative Impact of PEVs ⁽³⁾		
				Summer Demand	Winter Demand	Annual Energy
				(MW)	(MW)	(GWh)
2021	49,282	4,007	761	13	5	43
2022	59,636	5,286	1,045	36	13	112
2023	75,862	7,320	1,502	70	25	217
2024	97,925	9,210	1,959	117	42	362
2025	127,482	11,437	2,520	181	65	555
2026	168,680	13,815	3,148	267	95	813
2027	222,806	16,534	3,893	379	135	1,145
2028	291,594	20,377	4,952	520	186	1,558
2029	375,053	24,580	6,159	691	247	2,056
2030	479,126	26,857	6,821	899	321	2,660

Notes

- 1) Includes cars and trucks
- 2) Charging Stations represent estimated number of ports in FPL service territory. Quick-charge PEV station ports included in total Number of Public PEV Charging Stations.
- 3) MW and GWh are incremental from the end of 2020

Gulf Service Territory

Year	Number of PEVs ⁽¹⁾	Number of Public PEV Charging Stations ⁽²⁾	Number of Public DCFC PEV Charging Stations. ⁽²⁾	Cumulative Impact of PEVs ⁽³⁾		
				Summer Demand	Winter Demand	Annual Energy
				(MW)	(MW)	(GWh)
2021	1,981	165	31	1	0	1
2022	2,397	218	43	1	1	2
2023	3,049	302	62	3	1	5
2024	3,936	380	81	5	2	8
2025	5,124	472	104	7	3	12
2026	6,780	570	130	11	4	18
2027	8,955	682	160	15	5	26
2028	11,720	841	204	21	7	36
2029	15,074	1,014	253	28	10	48
2030	19,257	1,108	281	36	13	63

Notes

- 1) Includes cars and trucks
- 2) Charging Stations represent estimated number of ports in Gulf service territory. Quick-charge PEV station ports included in total Number of Public PEV Charging Stations.
- 3) MW and GWh are incremental from the end of 2020

FPL 2022 PEV forecast: 59,636
 Gulf 2022 PEV forecast: 2,397
 FPL/Gulf 2022 PEV forecast combined: 62,033

FPL’s 2022 TYSP

Year	Number of PEVs ⁽¹⁾	Number of Public PEV Charging Stations ⁽²⁾	Number of Public DCFC PEV Charging Stations. ⁽²⁾	Cumulative Impact of PEVs ⁽³⁾		
				Summer Demand	Winter Demand	Annual Energy
				(MW)	(MW)	(GWh)
2022	116,202	4,646	1,713	34	15	231
2023	162,141	6,292	2,307	76	33	401
2024	220,697	5,535	2,993	131	57	623
2025	293,809	10,431	3,746	202	87	908
2026	391,240	10,802	3,944	297	129	1289
2027	512,104	12,678	4,589	418	181	1771
2028	657,776	14,681	5,381	565	244	2361
2029	831,693	17,063	6,338	744	322	3075
2030	1,037,328	18,700	7,476	958	414	3930
2031	1,273,609	20,908	8,588	1203	520	4913

Notes

- 1) Number of PEVs includes cars and trucks.
- 2) Charging Stations represent estimated number of ports in FPL service territory. Quick-charge PEV station ports included in total Number of Public PEV Charging Stations.
- 3) MW and GWh are incremental from the end of 2021.

FPL 2022 PEV forecast: 116,202

2022 Forecast variance:

$(2022 \text{ TYSP forecast of } 2022 \text{ PEV's} - 2021 \text{ TYSP forecast of } 2022 \text{ PEV's}) / 2021 \text{ TYSP forecast of } 2022 \text{ PEV's} = (116,202 - 62,033) / 62,033 = 87.3 \text{ percent}$

- b. Since there appears to be a significant increase in the Company's forecasted number of PEV's across the planning period (2022-2031) compared to FPL's 2021 TYSP, Has FPL performed any changes or alterations to its PEV forecast methodology? If so, please explain how?
- c. Please identify and explain what factors are driving the lower growth rate in the number of Public PEV Charging Stations over the planning period in the Company's 2022 TYSP compared to the Company's 2021 TYSP. Please also reconcile this lower growth rate with the significant increase in forecasted number of PEV's operating in FPL's service territory.
- d. Referring to the Company's 2022 TYSP PEV forecast, please explain the reasons or causes for the projected reduction in the number of Public PEV Charging Stations in 2024.

17. Did the Company analyze the impacts, if any, the "extreme winter" scenario would have on energy and demand from PEV charging stations (home and public)?