STATE OF FLORIDA

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Public Service Commission

April 17, 2019

Maria Moncada
Florida Power & Light Company
700 Universe Blvd.
Juno Beach, Florida 33408

STAFF'S FIRST DATA REQUEST
via e-mail

RE: Docket No. 20190061-EI –Petition for approval of FPL SolarTogether program and tariff, by Florida Power & Light Company.

Dear Ms. Moncada:

By this letter, the Commission staff requests that Florida Power & Light Company (FPL) provide responses to the following data requests:

1. Petition at 1, Paragraph 3. Will the proposed program replace FPL's SolarNow program? Please explain the relationship, if any, between the SolarNow program and the SolarTogether programs.

2. Petition at 2, Paragraph 3. What percentage of SolarNow customers are categorizes as residential/small business accounts? What percentage of SolarNow customers are categorized as commercial, industrial, or governmental accounts?

3. Text in the Petition at 3, Paragraph 6 refers to the "initial" program as Phase 1. At this time, how many Phases are planned?

4. Petition at 3, Paragraph 6. For interrogatory numbers 4-6 and sub-parts, the three installations that FPL collectively refers to as "ST Project 1 sites" will be described as "Site Numbers 1, 2, and 3" for ST Project 1. For Site Number 1, populate Columns (b), (c), and (d) in the chart below.

ST Project 1, Site Number 1			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/$kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 1 in ST Project 1?
B. How many acres are required (or planned) for the solar installation at this site?
C. Of the remaining acres at Site Number 1, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, energy storage installations, or for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 1?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

5. For "Site Number 2" of ST Project 1, populate Columns (b), (c), and (d) in the chart below.

ST Project 1, Site Number 2			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/$kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 2 in ST Project 1?
B. How many acres are required (or planned) for the solar installation at this site?

C. Of the remaining acres at Site Number 2, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, energy storage installations, or for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 2?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

6. For "Site Number 3" of ST Project 1, populate Columns (b), (c), and (d) in the chart below.

ST Project 1, Site Number 3			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/$kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 3 in ST Project 1?
B. How many acres are required (or planned) for the solar installation at this site?
C. Of the remaining acres at Site Number 3, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, energy storage installations, or for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 3?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

7. Petition at 3, Paragraph 6. For interrogatory numbers 7-9 and sub-parts, the three installations that FPL collectively refers to as "ST Project 2 sites" will be described as "Site Numbers 1, 2, and 3" for ST Project 2. For Site Number 1, populate Columns (b), (c), and (d) in the chart below.

ST Project 2, Site Number 1			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/$kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 1 in ST Project 2?
B. How many acres are required (or planned) for the solar installation at this site?
C. Of the remaining acres at Site Number 1, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, energy storage installations, or for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 1?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

8. For "Site Number 2" of ST Project 2, populate Columns (b), (c), and (d) in the chart below.

ST Project 2, Site Number 2			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/$kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 2 in ST Project 2?
B. How many acres are required (or planned) for the solar installation at this site?
C. Of the remaining acres at Site Number 2, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, energy storage installations, or for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 2?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

9. For "Site Number 3" of ST Project 2, populate Columns (b), (c), and (d) in the chart below.

ST Project 2, Site Number 3			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/$kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 3 in ST Project 2?
B. How many acres are required (or planned) for the solar installation at this site?
C. Of the remaining acres at Site Number 3, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, energy storage installations, or for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 3?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

10. For Interrogatory Numbers 10-15 and sub-parts, the six installations that FPL collectively refers to as "ST Project 3 sites" will be described as "Site Numbers 1, 2, 3, 4, 5, and 6" for ST Project 3. For Site Number 1, populate Columns (b), (c), and (d) in the chart below.

ST Project 3, Site Number 1			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/$kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 1 in ST Project 3?
B. How many acres are required (or planned) for the solar installation at this site?
C. Of the remaining acres at Site Number 1, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, energy storage installations, or for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 1?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

11. For "Site Number 2" of ST Project 3, populate Columns (b), (c), and (d) in the chart below.

ST Project 3, Site Number 2			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/$kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 2 in ST Project 3?
B. How many acres are required (or planned) for the solar installation at this site?
C. Of the remaining acres at Site Number 2, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, energy storage installations, or for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 2?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

12. For "Site Number 3" of ST Project 3, populate Columns (b), (c), and (d) in the chart below.

ST Project 3, Site Number 3			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/$kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 3 in ST Project 3?
B. How many acres are required (or planned) for the solar installation at this site?
C. Of the remaining acres at Site Number 3, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, energy storage installations, or for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 3?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

13. For "Site Number 4" of ST Project 3, populate Columns (b), (c), and (d) in the chart below.

ST Project 3, Site Number 4			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/$kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 4 in ST Project 3?
B. How many acres are required (or planned) for the solar installation at this site?
C. Of the remaining acres at Site Number 4, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, energy storage installations, or for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 4?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

14. For "Site Number 5" of ST Project 3, populate Columns (b), (c), and (d) in the chart below.

ST Project 3, Site Number 5			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/$kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 5 in ST Project 3?
B. How many acres are required (or planned) for the solar installation at this site?
C. Of the remaining acres at Site Number 5, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, energy storage installations, or for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 5?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

15. For "Site Number 6" of ST Project 3, populate Columns (b), (c), and (d) in the chart below.

ST Project 3, Site Number 6			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 6 in ST Project 3?
B. How many acres are required (or planned) for the solar installation at this site?
C. Of the remaining acres at Site Number 6, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, energy storage installations, or for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 6?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

16. For Interrogatory Numbers 16-19 and sub-parts, the four installations that FPL collectively refers to as "ST Project 4 sites" will be described as "Site Numbers 1, 2, 3, and 4" for ST Project 4. For Site Number 1, populate Columns (b), (c), and (d) in the chart below.

ST Project 4, Site Number 1			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/$kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 1 in ST Project 4?
B. How many acres are required (or planned) for the solar installation at this site?
C. Of the remaining acres at Site Number 1, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, energy storage installations, or for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 1?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

17. For "Site Number 2" of ST Project 4, populate Columns (b), (c), and (d) in the chart below.

ST Project 4, Site Number 2			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/$kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 2 in ST Project 4?
B. How many acres are required (or planned) for the solar installation at this site?
C. Of the remaining acres at Site Number 2, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, energy storage installations, or for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 2?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

18. For "Site Number 3" of ST Project 4, populate Columns (b), (c), and (d) in the chart below.

ST Project 4, Site Number 3			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 3 in ST Project 4?
B. How many acres are required (or planned) for the solar installation at this site?
C. Of the remaining acres at Site Number 3, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, energy storage installations, or for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 3?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

19. For "Site Number 4" of ST Project 4, populate Columns (b), (c), and (d) in the chart below.

ST Project 4, Site Number 4			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/$kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 4 in ST Project 4?
B. How many acres are required (or planned) for the solar installation at this site?
C. Of the remaining acres at Site Number 4, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, energy storage installations, or for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 4?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

20. For Interrogatory Numbers 20-23 and sub-parts, the four installations that FPL collectively refers to as "ST Project 5 sites" will be described as "Site Numbers 1, 2, 3, and 4" for ST Project 5. For Site Number 1, populate Columns (b), (c), and (d) in the chart below.

ST Project 5, Site Number 1			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/$kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 1 in ST Project 5?
B. How many acres are required (or planned) for the solar installation at this site?
C. Of the remaining acres at Site Number 1, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, energy storage installations, or for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 1?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

21. For "Site Number 2" of ST Project 5, populate Columns (b), (c), and (d) in the chart below.

ST Project 5, Site Number 2			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/$kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 2 in ST Project 5?
B. How many acres are required (or planned) for the solar installation at this site?
C. Of the remaining acres at Site Number 2, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, energy storage installations, or for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 2?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

22. For "Site Number 3" of ST Project 5, populate Columns (b), (c), and (d) in the chart below.

ST Project 5, Site Number 3			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/$kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 3 in ST Project 5?
B. How many acres are required (or planned) for the solar installation at this site?
C. Of the remaining acres at Site Number 3, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, energy storage installations, or for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 3?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

23. For "Site Number 4" of ST Project 5, populate Columns (b), (c), and (d) in the chart below.

ST Project 5, Site Number 4			
(a)	(b)	(c)	(d)
Cost Category	Cost ($MM)	Alternating Capacity (MW_{ac})	Cost ($/$kW_{ac}$)
PV Array (includes panels, racks, posts, collection cables, EPC contractor, and development/project management expenses)			
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)			
Land			
AFUDC			
Total			

A. What is the total acreage for Site Number 4 in ST Project 5?
B. How many acres are required (or planned) for the solar installation at this site?
C. Of the remaining acres at Site Number 4, those not required (or planned) for this solar installation, how many acres would be suitable for future solar installations, or energy storage installations, for other utility purposes?
D. What was the purchase price, and how long has FPL owned Site Number 4?
E. Does this site qualify for the statewide property tax exemption for solar generation? If not, why?

24. Petition at 4, Paragraph 7. Define the term cost-effective, as used in this text.

25. Petition at 4, Paragraph 7. Define the term unsubsidized, as used in this text.

26. Petition at 6, Paragraph 14. What amount of capacity would be deemed "unreasonable" for a single subscriber? Explain in your response how the threshold was established.

27. Please refer to FPL's petition filed March 13, 2019. In paragraph 22, FPL notes that emissions are a consideration of the variable costs.
A. Please detail whether FPL's emissions savings achieved in the "FPL SolarTogether Plan" include CO_2 or CO_2 equivalent emissions. If so, please provide a sensitivity of the analysis without these costs. Also, please provide the revised annual and cumulative values (in nominal and net present value) for each category in electronic (Excel) format.

28. Please provide the annual and cumulative values over the period 2020 through 2051 (in nominal and net present value), separated by type (CO2, NOx, SO2, etc.), and in total for the following:
A. Avoided air emissions resulting from FPL's solar generating units that comprise FPL's SolarTogether program, and show how each was calculated using the year 2022 as an example. Please present response in electronic (Excel) format.
B. Air Emission Savings resulting from FPL's solar generating units that comprise FPL's SolarTogether program, and explain fully how the saving amounts were derived. Please present response in electronic (Excel) format.

29. For consideration of the SolarTogether projects, and their combined savings, in what year does FPL first account for a non-zero CO2 emission price?

30. Please describe the methodology and assumptions that underlie FPL's CO2 price forecast.

31. Please identify the date on which this CO2 forecast was accepted as FPL's official CO2 price forecast.

32. Please identify the source of FPL's CO2 price forecast, in particular, was the forecast conducted internally or externally?
    A. If conducted externally please identify the organization responsible.

33. Please provide in electronic (Excel) format the forecasted values for FPL's official CO2 price forecast.

Please refer to FPL's (FPL or Company) Petition for Approval of SolarTogether Tariff (Petition).

34. Please provide a copy of the Company's annual fuel price forecast covering the useful life of the 1,490 MW SolarTogether projects. Please provide as commodit transportation, and delivered fuel prices.

35. Please identify the source and date of FPL's fuel price forecasts by fuel type used to support its Petition.

36. Please identify the date of FPL's next/updated fuel price forecast that will be used for Company/business planning purposes.

37. Has FPL compared the fuel price forecast considered in this Petition to any other publicly available source of forecasted fuel prices, such as forecasts which may be available from the Energy Information Administration? If so, please discuss the results of any analysis performed.

38. Did the Company perform any price sensitivity analysis (high and low) of its fuel price forecast considered in this Petition?
    A. If so, please provide the results for the full 30-year forecast period, and discuss the methodology used by the company in preparing it's base, high, and low, fuel sensitivities.
    B. If not, please detail why sensitivity analysis was not done.

39. Please refer to the petition, page 8, paragraph 21. It is stated that "Both plans [No ST Plan and FPL SolarTogether Plan] use the same major system assumptions, including the Company's official load, fuel price, and carbon dioxide price forecasts."
    A. Please provide FPL load forecasts used to determine the CPVRR in this proceeding in electronic format (Excel).
    B. Please provide the date(s) FPL's load forecasts were completed and approved.
    C. Please detail how FPL's load forecast is considered in the Cumulative Present Value Revenue Requirement Analysis.
    D. Did FPL consider different combinations of forecast sensitivities in the CPVRR? i.e. did FPL prepare a separate CPVRR based on "low case", "base case", and "high case" load forecast scenarios?

E. If the answer to 1(d) is yes, please provide all such forecasts, summaries of such CPVRR results using such forecasts, and all related data output.

F. If the answer to 1(d) is no, please explain why not?

40. Please refer to Schedules 3.1 and 3.2, Forecasted Columns (10) "Net Firm Demand," and Schedule 3.3, Column (2) "Forecasted Net Energy For Load without DSM" of the Ten Year Site Plans 2018-2029 and 2019-2029.

A. Staff notes that the Company expects both Summer and Winter Peak Forecasts to decrease in 2019 relative to their 2018 forecast, while Net Energy For Load (NEL) is forecasted to be higher in 2019 than FPL's NEL forecast in 2018. Please discuss in detail the implications and the drivers behind a lower Peak Forecast but a higher Net Energy For Load forecast. Additionally, please specify what model inputs contribute significantly to the lower Peak forecasts and the higher Net Energy for Load forecasts.

41. Please identify the source and date of all historical and projected independent and dependent variables used to produce forecasted values in the Net Energy for Load, Summer Firm Peak, and Winter Firm Peak models.

42. Please detail all changes to model specifications or assumptions used to prepare the 2019 Ten Year Site Plan Net Energy for Load, Winter Firm Peak, and Summer Firm Peak models relative to FPL's 2018 Ten Year Site Plan specifications and assumptions. Why did these assumptions/specifications change and how are they implemented in the modeling process?

43. Please discuss all economic and non-economic assumptions undertaken in development of the Net Energy for Load, Summer Firm Peak, and Winter Firm Peak models. Please detail how these assumptions were built into all three models.

44. Please identify all "out of model" adjustments to DEF's Net Energy for Load, Summer Firm Peak, and Winter Firm Peak models and/or forecasts and explain the basis for each.

45. Please identify all FPSC dockets where FPL's load forecast used to support the instant docket has been used to support FPL's filings in those dockets.

46. Please provide historical and forecasted data used to project FPL's Summer Firm Peak, Summer Winter Peak, and Net Energy for Load in monthly series. Please provide forecasted values for the entire useful life of the 1,490 MW SolarTogether investment in electronic (Excel) format.

47. Please provide an explanation of the method(s) FPL used to continue its projections appearing in FPL's 2019 Ten Year Site Plan for the period 2029 through 2051 for each forecasted load series used to determine the CPVRR cited in the Petition, Page 8, Paragraph 20 ($139 M).

48. Please refer to paragraph 3 of the Petition. Explain the similarities and differences of SolarTogether with each of the programs listed below, especially with regards to whether they are subsidized by the general body of ratepayer
    A. SolarNow
    B. Net Metering

49. Please refer to paragraph 3 of the Petition. Provide the number of customers and the estimated installed capacity (in MWac) for each of the programs listed below by customer class.
    A. SolarNow
    B. Net Metering

50. Please refer to paragraph 3 of the Petition. Please answer the following questions regarding FPL's existing SolarNow program:
    A. Do current participants of FPL's SolarNow program pay a monthly contribution of $9.00 and receive no additional credit on their bill?
    B. Is enrollment in the SolarNow program on a month-to-month basis?
    C. Could these participants move from the SolarNow to the SolarTogether program?

51. Please refer to paragraph 4 of the Petition where it states that the SolarTogether program is a "… cost-effective opportunity for customers to directly support the expansion of solar power without the need to install solar on their rooftop." Explain whether the web-based enrollment system described in paragraph 16 of the Petition will provide a payback calculation for residential and small commercial customers. If yes, as part of this response explain whether the web-site will also include a payback estimate if the customer were to install roof-top solar.

52. Please refer to paragraph 4 of the Petition. What alternative program options or structures did FPL consider for community solar?

53. Please refer to paragraph 5 of the Petition. Explain why FPL opened a pre-registration period for only commercial, industrial, and government accounts. Describe any barriers these customers face to install solar on their rooftop that are similar to the barriers faced by residential customers.

54. Please refer to paragraph 5 of the Petition. Provide all pre-registration marketing materials given to commercial, industrial, and governmental accounts.

55. Please refer to paragraph 5 of the Petition. For the approximately 200 customers with 1,100 MW of pre-registered capacity, provide the number of customers by type (commercial, industrial, and governmental), their individual subscription capacity, and subscription level compared to annual energy usage. As part of this response, provide a copy of the pre-registration agreements and binding subscription reservation agreements.

56. Please refer to paragraph 6 of the Petition. Explain why FPL has opted to only construct facilities below the 75 MW Power Plant Siting Act threshold. As part of this response, discuss whether any economics of scale are being lost by limiting capacity below this threshold for each site.iscuss whether any economics of scale are being lost by limiting capacity below this threshold for each site.
    A. Has FPL has conducted a comparison of the costs and benefits of building solar facilities at or above the 75 MW threshold? If so, provide the results. If not, explain why not.
    B. Identify any of the 20 SolarTogether project sites that could accommodate solar facilities greater than 74.9 MW.

57. Please refer to paragraphs 6 and 13 of the Petition, including the table on page 3. Please explain the discrepancy between paragraph 6, which states that five SolarTogether Projects have billing start dates ranging from March 2020 to May 2021, and paragraph 13, which states the last SolarTogether Projects are estimated to come online by April 2020.

58. Please refer to paragraph 7 of the Petition, where it states "… FPL SolarTogether will share the resulting system benefits between participants and the general body of FPL customers." Demonstrate how the SolarTogether program will share the resulting system benefits between participants and the general body of ratepayers.

59. Please refer to paragraph 7, where it states "… customers who do not participate in FPL SolarTogether will not subsidize the Program."
    A. Explain how FPL guarantees no subsidization given the variability of fuel forecasts and the usage of fixed credit payments to participants.
    B. Does this statement mean that non-participants will not pay for any administrative costs associated with the Program, rate base costs for FPL SolarTogether Projects, above avoided cost capacity/energy payments, or any similar expenses?

60. Please refer to paragraph 10 of the Petition. Provide sample calculations of how FPL would convert a customer's usage for the preceding 12 months into an equivalent solar capacity value. Provide a sample calculation for a typical residential, commercial, and industrial customer.

61. Please refer to paragraph 10 of the Petition where it states "FPL will review annually the enrolled accounts to ensure that participants have not exceeded their maximum allowable subscription and will make adjustments if needed."
    A. Explain how FPL will monitor and notify the customer of any changes.
    B. If a customer's usage declines due to behavioral changes or the adoption of energy efficiency measures could FPL reduce the customer's subscription in the SolarTogether program? If so, how will this be disclosed to the customer?

62. Please refer to paragraph 11 of the Petition where it states that "… FPL will maintain the right to terminate participation of any customer whose service account becomes delinquent or who fails to meet Program eligibility requirements." Please list the Program eligibility requirements referenced here and identify where they are referred to in the proposed tariffs.

63. Please refer to paragraph 12 of the Petition. Explain why divestiture of generation would result in termination of the SolarTogether program.

64. Please refer to paragraph 14 of the Petition. Explain how FPL determined the allocation of 25 percent to residential and small business customers and 75 percent to commercial, industrial, and government accounts. As part of the response, explain how FPL would determine whether a customer is a small business customer or a commercial customer.

65. Please refer to paragraph 14 of the Petition, where it states that "FPL will periodically reevaluate demand among these two customer groups and, if warranted, reassign unsubscribed capacity between the groups and adjust the allocation as appropriate."
    A. How often will FPL perform this evaluation?
    B. How will FPL evaluate the demand among the two customer groups?
    C. What notice, if any, would be provided to customers and/or the Commission?
    D. Would reassignment of capacity require Commission approval or review?
    E. What limits would FPL have for reassigning capacity? As part of this response, consider whether FPL could allocate 100 percent of the SolarTogether Program to one customer group.
    F. If allocated 100 percent to residential, what percentage of the Company's residential customers would be able to participate?

66. Please refer to paragraph 14 of the Petition, where it states "FPL reserves the right to implement a cap on the maximum portion of Program capacity that can be attributed to one subscriber to ensure that no single customer amasses an unreasonable share of the Program capacity."
    A. Has FPL determined what would be considered an unreasonable share of the Program Capacity? If so, provide the value and explain its derivation. If not, explain how FPL would determine what an unreasonable share is.
    B. Explain how FPL would implement a cap on maximum program subscription by a participant.

67. Please refer to paragraph 15 of the Petition, where it states "FPL will actively evaluate enrollment levels and waitlisted customers to determine whether the construction of additional FPL SolarTogether Projects is warranted." Explain what factors FPL will consider in this evaluation.

68. Please refer to paragraphs 16 and 17. Provide separate estimates of the administrative costs for the residential web-based system and the Commercial/Industrial/Governmental customer system.

69. Please refer to paragraph 18 of the Petition. Regarding renewable energycertificates (RECs), answer the following questions below.
    A. Provide an example of a social attribute that is represented by a REC.
    B. Provide an example of a non-power attribute that is represented by a REC.
    C. Do REC's environmental benefits confer any other benefits, such as emissions?
    D. If a participant elects to have FPL retire RECs on their behalf, would FPL be able to claim the social and other non-power attributes represented by the REC?
    E. Could a participant elect to have RECs continuously retired at a rate equivalent to their subscription?
    F. If a participant elects to have FPL retire RECs on their behalf, would this be at any additional cost to the participant?
    G. Identify where in the proposed tariff participating customers can elect to have RECs retired on their behalf.
    H. What happens if a customer does not request retirement of RECs on their behalf?

70. Please refer to paragraph 18 of the Petition. Regarding the regulatory treatment of RECs associated with the SolarTogether Program, answer the following questions:
    A. How are proceeds from REC sales calculated?
    B. What are the administrative costs to create and/or retire a REC, and who would be responsible for these costs?
    C. Where are REC related costs and/or benefits attributed?
    D. Is there a viable REC market for which RECs produced by FPL's solar facilities could be sold? If yes, provide an estimated sales price.

71. Please refer to paragraph 19 of the Petition. Explain why the projected installed cost rate, including administrative costs, is below FPL's Solar Base Rate Adjustment facilities in the Company's 20190001-EI clause filings.

72. Please refer to paragraph 19. Provide the annual and total expenses for Program administrative costs.

73. Please refer to paragraph 20 of the Petition where it states that the "… SolarTogether offering is projected to save customers an estimated $139 million when compared to FPL's system costs without these additions."
    A. Are these net benefits dependent on any changes in forecasts such as fuel, sales, or capacity costs?
    B. If the answer to a) is yes, has FPL performed any sensitivities to these forecast assumptions? If so, provide the results of these sensitivities.

74. Please refer to paragraph 20 and Exhibits B and C.
    A. Verify that the system CPVRR difference between the total participant's SolarTogether Charges ($1,321,343,647 from Exhibit B) and the total participant's SolarTogether Credits ($1,432,320,931 from Exhibit C) is approximately $111 million.
    B. Does this show that the estimated net system benefits of $139 million stated in paragraph 20 would be reduced to $28 million ($139M - $111M) CPVRR for non-participants?
    C. Explain whether these benefits are subject to change since both the cost and benefits to the participant is known.

75. Please refer to paragraph 21 of the Petition. Please provide the resource plans for each of the Plans discussed. As part of this response, please provide annual reserve margin data similar to Schedule 7 of the Ten-Year Site Plan, and for each unit identified in the resource plans please provide information similar to Schedule 9 of the Ten-Year Site Plan.

76. Please refer to paragraph 21 of the Petition. Explain FPL's process for determining generation resources for its resource planning. As part of this response, explain why FPL did not consider solar facilities in evaluating alternative generation resources in the "No ST Plan," given that solar units were included in its 2018 and 2019 Ten-Year Site Plan outside of the SoBRA or SolarTogether mechanisms.

77. Please refer to paragraphs 21 and 22 of the Petition. Complete the table below for each scenarios listed. Provide the cumulative present value revenue requirement of each Plan, the "No ST Plan" and "FPL SolarTogether Plan," and the net difference between them. Assume zero participation in SolarTogether, resulting in no Charges or Credits.

System CPVRR (NPV $ millions)				
Scenario	No ST Plan	FPL SolarTogether Plan	Net Difference	Difference from Base Case
Base Case				
Low Fuel				
High Fuel				
No CO2				

78. Please refer to paragraphs 21 and 22 of the Petition. Complete the table below for each scenarios listed (a) through (d). Provide the annual revenue requirement of each Plan, the "No ST Plan" and "FPL SolarTogether Plan," by category. These include SolarTogether costs for generation, transmission, and O&M, as well as FPL's remainder of system costs for generation, transmission, fuel, fuel transportation, O&M, emissions (excluding CO2 and CO2 only). Provide a version of this table in nominal and present value dollars for each scenario.
    A. Base Case scenario
    B. Low Fuel scenario.

C. High Fuel scenario.
D. No CO2 Cost scenario.

[Scenario Name] – [No ST Plan / FPL SolarTogether Plan] – ([Nominal / NPV] $ millions)														
Year	SolarTogether				Remainder of System									System Total
	Generation	Transmission	O&M	Total	Generation	Transmission	Fuel	Purchases	Fuel Transportation	O&M	Emissions (Non-carbon)	Emissions (Carbon-only)	Total	
2020														
…														
Total														

79. Please refer to paragraphs 21 and 22 and Exhibits B and C. Complete the table below for each scenarios listed (a) through (d). Provide the annual and total value for the net system savings between the "No ST Plan" and the "FPL Solar Together Plan," the total SolarTogether Charges, the SolarTogether Credits, and the remaining net system benefits to the general body of ratepayers. Provide a version of this table in nominal and present value dollars.
A. Base Case scenario.
B. Low Fuel scenario.
C. High Fuel scenario.
D. No CO2 Cost scenario.

System Benefits and SolarTogether Program Impacts - [Nominal $] or [NPV $]				
Year	Net System Savings	SolarTogether Charges	SolarTogether Credits	Remaining Net System Savings
2020				
…				
Total				

80. Please refer to paragraph 22 of the Petition where it states that "Based on the economic analysis, the addition of the SolarTogether Centers is projected to be cost-effective, saving approximately $139 million CPVRR." Given that the SolarTogether facilities are projected to be FPL's least cost alternative generation addition, does FPL believe these are a prudent capacity addition? If so, please explain why FPL is proposing a voluntary cost recovery program for the SolarTogether project sites.

81. Please refer to paragraphs 24 and 25 of the Petition. Provide a numerical example of how the FPL SolarTogether Charge Subscription Rate of $6.76 and Credit's Benefit Rate were calculated.

82. Please refer to paragraphs 24 and 25 of the Petition. Identify where in the tariff the formulas used to establish monthly charges and credits are included.

83. Please refer to paragraph 24 of the Petition. Provide the amount the Subscription Rate would need to be in order to cover the full revenue requirements of the SolarTogether projects without accounting for avoided generation.

84. Please refer to paragraph 25 of the Petition. Explain how the escalation rate of 1.45% for the Benefit Rate was determined.

85. Please refer to paragraph 27 of the Petition. Explain whether FPL is seeking approval of some or all of these facilities for inclusion in rate base. As part of this response, explain whether they will be fully included in rate base or if FPL is removing portions from rate base because of subscriptions.

86. Please refer to paragraphs 27 and 28(c) of the Petition. Reconcile the difference between attributing all costs to rate base in paragraph 28(c) but stating only unsubscribed portions be included in rate base in paragraph 27.

87. Please refer to paragraphs 27 and 28(c) of the Petition. If one or more of the SolarTogether project sites were damaged (for example, from a Hurricane), how would FPL seek cost recovery for the repairs performed?

88. Please refer to paragraph 28(a) of the Petition. Explain whether these sales would be eligible for FPL's Incentive Mechanism approved by Order No. PSC-2016-0560-AS-EI.

89. Please refer to paragraph 28(b) of the Petition, which states that proposed SolarTogether Credit will be recovered through the Fuel Clause.
    A. How will this be allocated among residential, C/I, and government customers?
    B. Will Credit costs be allocated to the same customer class in the Fuel Clause in same proportion they receive them in the Program?
    C. Will both participants and non-participants pay for this Credit in the Fuel Clause?

90. Please refer to the FPL's proposed SolarTogether Rider tariff sheet 8.932 under the heading Limitation of Service. How does FPL intend to monitor and enforce the requirement that the customer "supports continuity of the program"?

91. Please refer to proposed tariff sheet 8.934.
    A. Verify if a customer signing up in 2020 receive a Credit of 3.42881 cents/kWh.
    B. Verify whether a customer that waited until 2023 to enroll, assuming capacity was available from the 2020 SolarTogether projects, would receive a credit of 3.42881 cents/kWh or a credit of 3.52897 cents/kWh?
    C. If a participant exits the program after five years of participation, and then returns to the program after one year, what Subscription Credit rate would they receive?

92. Please refer to Exhibit C of the Petition. Provide the monthly generation estimated for each of the SolarTogether project sites over the life of the projects. As part of this response, explain how the energy production projections of the facilities were developed.

93. Please expand the information shown in Exhibit D to include each month for the example years of enrollment listed.

94. As part of the SolarTogether Program, FPL is proposing to offer customers a fixed stream of credits for up to 30 years for recovery through the Fuel Clause. Has FPL offered fixed pricing options to third party developers of solar facilities in the past? If not, explain why not and why the two situations require different treatments.

Please file all responses electronically no later than May 17, 2019 from the Commission's website at www.floridapsc.com, by selecting the Clerk's Office tab and Electronic Filing Web Form. Please feel free to call me at (850) 413-6584 if you have any questions.

Sincerely,

/s/ Walt Trieweiler

Walt Trierweiler
Senior Attorney

WLT/lms

cc: Office of Commission Clerk
Ken Hoffman - FPL