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VIA ELECTRONIC FILING

Mr. Adam Teitzman
Commission Clerk
Florida Public Service Commission
Betty Easley Conference Center
2540 Shumard Oak Boulevard, Room 110
Tallahassee, FL 32399-0850

Re: Docket No. 20190061-EI
FPL's Responses to Staff's First Data Request

Dear Mr. Teitzman:

Attached are Florida Power & Light Company's ("FPL") non-confidential responses to Staff's First Data Request (Nos. 1-94) in Docket No. 20190061-EI. FPL is contemporaneously filing via hand-delivery a request for confidential classification regarding its response to Data Request No. 34. In addition, FPL's responses to some of the Data Requests include attachments that are in MS Excel format, and FPL will serve copies of those files in native format upon Staff via electronic mail.

Please contact me if you or your Staff has any questions regarding this filing.

Sincerely,

s/ Maria Jose Moncada
Maria Jose Moncada

Attachments
cc: Walt Trierweiler
Stephanie Morse

:7297259

QUESTION:

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.

RESPONSE:

There is no formal relationship between the two programs; however, the success of SolarNow supported the development of FPL SolarTogether. FPL is continuing to explore the interaction between running both SolarNow and FPL SolarTogether contemporaneously as they potentially cater to slightly different to overlapping customer groups, and it is not clear to what extent enrollment in one program might impact the other. FPL will make a recommendation regarding the future of SolarNow later this year.

QUESTION:

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

RESPONSE:

Customer Type	Enrolled as of March 31, 2019	Percent of Total
Residential/Small Business	48,715	99%
Commercial	633	1%
Governmental¹	0	0%
Industrial	0	0%
Total	49,348	100%

¹ There is no formal governmental rate class; these customer types are typically included as “commercial” accounts.

QUESTION:

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

RESPONSE:

FPL has not yet planned future Phases. FPL’s intent is to offer future Phases based on customer demand and the continued cost-effectiveness of solar. FPL will actively evaluate enrollment levels and waitlisted customers to determine whether the construction of an additional phase or additional phases is warranted.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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)	\$71.2	74.5	\$956.3
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$7.2	74.5	\$97.1
Land	\$5.4	74.5	\$71.9
AFUDC	\$2.6	74.5	\$35.5
Total	\$86.5*	74.5	\$1,160.8

* Total does not add due to rounding

- A. The total size of the ST Project 1, Site Number 1 property is 565.79 acres.
- B. The land required for this solar installation is 407.35 acres, which includes the solar array, the substation and transmission facilities, construction laydown areas, a planned borrow pit for required fill material and other areas subject to permit conditions (such as land containing roads, easements and setbacks).
- C. None of the 158.44 remaining acres are suitable for future solar installations, energy storage installations, or other utility purposes. This is due to the fact that 133.04 acres are comprised of waters, wetlands and preserve areas, and the remaining 25.40 acres are comprised of small, isolated remote parcels with access limitations and attendant construction requirements.
- D. The property for Site Number 1 was acquired on January 5, 2018 for \$5.4 million.
- E. Yes, it does qualify.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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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)	\$67.6	74.5	\$907.7
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$6.4	74.5	\$86.4
Land (including easement costs)	\$5.2	74.5	\$69.3
AFUDC	\$2.5	74.5	\$33.6
Total	\$81.7	74.5	\$1,096.9*

* Total does not add due to rounding

- A. The total size of the ST Project 1, Site Number 2 property is 565.38 acres.
- B. The land required for this solar installation is 420.77 acres, which includes the solar array, the substation and transmission facilities, and other areas subject to permit conditions (such as land within the flood zone, roads and setbacks).
- C. None of the 144.61 remaining acres are suitable for future solar installations, energy storage installations or other utility purposes. This is due to the fact that 124.68 acres are comprised of waters, wetlands and preserve areas, and the remaining 19.93 acres are comprised of small, isolated remote parcels with access limitations and attendant construction requirements.
- D. The property for Site Number 2 was acquired on August 29, 2017 for \$5.0 million.
- E. Yes, it does qualify.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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)	\$75.8	74.5	\$1,017.8
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$6.0	74.5	\$80.0
Land	\$0.0	74.5	\$0.0
AFUDC	\$2.8	74.5	\$37.0
Total	\$84.6	74.5	\$1,134.8

- A. The total size of the ST Project 1, Site Number 3 property is 981.85 acres.
- B. The land required for this solar installation is 728.10 acres, which includes the solar array, the substation and transmission facilities, and other areas subject to permit conditions (such as setbacks and land located within a flood zone).
- C. None of the 253.74 remaining acres are suitable for future solar installations, energy storage installations or other utility purposes. This is due to the fact that 239.0 acres are comprised of waters, wetlands, preserve areas, 9.35 acres comprised of protected birds' nest exclusion zone and the remaining 5.39 acres are comprised of small, isolated remote parcels with access limitations and attendant construction requirements.
- D. The property for Site Number 3 was acquired in August 1974. No land costs are included in the Project cost.
- E. Yes, it does qualify.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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)	\$78.6	74.5	\$1,055.7
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$6.9	74.5	\$93.0
Land (including easement costs)	\$1.8	74.5	\$24.5
AFUDC	\$2.9	74.5	\$38.8
Total	\$90.3*	74.5	\$1,211.9*

* Total does not add due to rounding

- A. The total size of the ST Project 2, Site Number 1 property is 858.14 acres.
- B. The land required for this solar installation is 544.48 acres, which includes the solar array, the substation and transmission facilities, construction laydown areas, and other areas subject to permit conditions (such as setbacks and roads).
- C. None of the 313.66 remaining acres are suitable for future solar installations, energy storage installations or other utility purposes. This is due to the fact that 245.09 acres are comprised of waters, wetlands and preserve areas, and the remaining 68.57 acres are comprised of small, isolated remote parcels with access limitations and attendant construction requirements.
- D. The property for Site Number 1 was acquired on September 28, 2016 for \$1.6 million.
- E. Yes, it does qualify.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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)	\$79.2	74.5	\$1,062.9
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$7.2	74.5	\$97.1
Land (including easement costs)	\$5.1	74.5	\$68.2
AFUDC	\$2.9	74.5	\$39.1
Total	\$94.4	74.5	\$1,267.3

- A. The total size of the ST Project 2, Site Number 2 property is 628.40 acres.
- B. The land required for this solar installation is 446.69 acres, which includes the solar array, the substation and transmission facilities, construction laydown areas, and other areas subject to permit conditions (such as roads and setbacks).
- C. Of the remaining acres at Site Number 2, 147.71 acres are not suitable for future solar installations, energy storage installations or other utility purposes due to the fact that 79.27 acres are comprised of waters, wetlands and preserve areas, 45.35 acres that are comprised of small, isolated remote parcels and 23.09 acres comprised of abandoned areas for vegetation monitoring with access limitations and attendant construction requirements. The remaining 34 acres are comprised of two non-contiguous areas of 18 acres and 16 acres that might be suitable for future solar installation, energy storage installations or other utility purposes, subject to environmental and other permitting constraints.
- D. The property for Site Number 2 was acquired on March 16, 2018 for \$5.0 million.
- E. Yes, it does qualify.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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)	\$79.6	74.5	\$1,069.0
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$6.1	74.5	\$81.7
Land	\$4.4	74.5	\$59.5
AFUDC	\$2.9	74.5	\$38.8
Total	\$93.1	74.5	\$1,249.0

- A. The total size of the ST Project 2, Site Number 3 property is 430.01 acres.
- B. The land required for this solar installation is 403.16 acres, which includes the solar array, the substation and transmission facilities, and other areas subject to permit conditions (such as roads, easements and setbacks).
- C. None of the 26.85 remaining acres are suitable for future solar installations, energy storage installations or other utility purposes. This is due to the fact that 13.39 acres are comprised of waters, wetlands and preserve areas, and the remaining 13.46 acres are comprised of small, isolated remote parcels with access limitations and attendant construction requirements.
- D. The property for Site Number 3 was acquired on December 20, 2017 for \$4.4 million.
- E. Yes, it does qualify.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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)	\$72.6	74.5	\$974.4
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$7.2	74.5	\$97.1
Land	\$7.3	74.5	\$97.6
AFUDC	\$2.7	74.5	\$36.1
Total	\$89.8	74.5	\$1,205.2

- A. The total size of the ST Project 3, Site Number 1 property is 692.61 acres.
- B. The land required for this solar installation is 563.36 acres, which includes the solar array, the substation and transmission facilities, construction laydown areas, and other areas subject to permit conditions (such land located within flood zones, roads and setbacks).
- C. None of the 129.25 remaining acres are suitable for future solar installations, energy storage installations or other utility purposes. This is due to the fact that 58.69 acres are comprised of waters, wetlands and preserve areas, 63.47 are comprised of protected birds' nests and the remaining 7.09 acres are comprised of small, isolated remote parcels with access limitations and attendant construction requirements.
- D. The property for Site Number 1 was acquired on September 4, 2018 for \$7.3 million.
- E. Yes, it does qualify.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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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)	\$71.9	74.5	\$965.3
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$6.4	74.5	\$86.4
Land	\$0.0	74.5	\$0.0
AFUDC	\$2.6	74.5	\$35.4
Total	\$81.0*	74.5	\$1,087.1

* Total does not add due to rounding

- A. The total size of the ST Project 3, Site Number 2 property is 490.69 acres.
- B. The land required for this solar installation is 429.35 acres, which includes the solar array, the substation and transmission facilities.
- C. None of the 61.34 remaining acres are suitable for future solar installations, energy storage installations or other utility purposes. This is due to the fact that 61.34 acres are comprised of waters, wetlands and preserve areas with access limitations and attendant construction requirements.
- D. There is no purchase price for the property for Site Number 2 because it is leased.
- E. Yes, it does qualify.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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)	\$73.0	74.5	\$980.2
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$7.2	74.5	\$97.1
Land	\$6.2	74.5	\$83.1
AFUDC	\$2.7	74.5	\$36.3
Total	\$89.2*	74.5	\$1,196.7

* Total does not add due to rounding

- A. The total size of the ST Project 3, Site Number 3 property is 851.20 acres.
- B. The land required for this solar installation is 626.87 acres, which includes the solar array, the substation and transmission facilities, and other areas subject to permit conditions (such as roads and setbacks).
- C. None of the 224.33 remaining acres are suitable for future solar installations, energy storage installations or other utility purposes. This is due to the fact that 222.00 acres are comprised of waters, wetlands and preserve areas, and the remaining 2.33 acres are comprised of small, isolated remote parcels with access limitations and attendant construction requirements.
- D. The property for Site Number 3 was acquired on June 8, 2018 for \$6.2 million.
- E. Yes, it does qualify.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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)	\$71.3	74.5	\$956.9
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$9.5	74.5	\$127.1
Land	\$2.3	74.5	\$30.4
AFUDC	\$2.7	74.5	\$36.5
Total	\$85.7*	74.5	\$1,151.0*

* Total does not add due to rounding

- A. The total size of the ST Project 3, Site Number 4 property is 676.03 acres.
- B. The land required for this solar installation is 564.49 acres, which includes the solar array, the substation and transmission facilities, and other areas subject to permit conditions (such as roads and setbacks).
- C. None of the 111.54 remaining acres are suitable for future solar installations, energy storage installations or other utility purposes. This is due to the fact that 104.27 acres are comprised of waters, wetlands and preserve areas, and the remaining 7.27 acres are comprised of a small, isolated remote parcel with access limitations and attendant construction requirements.
- D. The property for Site Number 4 was acquired on December 10, 2018 for \$2.3 million.
- E. Yes, it does qualify.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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)	\$77.6	74.5	\$1,042.1
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$9.5	74.5	\$127.5
Land (including easement costs)	\$4.3	74.5	\$57.2
AFUDC	\$2.8	74.5	\$38.1
Total	\$94.2	74.5	\$1,264.9

- A. The total size of the ST Project 3, Site Number 5 property is 565.00 acres.
- B. The land required for this solar installation is 534.20 acres, which includes the solar array, the substation and transmission facilities, and other areas subject to permit conditions (such as land containing roads and setbacks).
- C. None of the 30.80 remaining acres are suitable for future solar installations, energy storage installations or other utility purposes. This is due to the fact that 25.29 acres are comprised of waters, wetlands and preserve areas, and the remaining 5.51 acres are comprised of small, isolated remote parcels with access limitations and attendant construction requirements.
- D. The property for Site Number 5 was acquired on May 15, 2019 for \$4.2 million.
- E. Yes, it does qualify.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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)	\$74.2	74.5	\$996.2
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$6.0	74.5	\$80.0
Land	\$0.0	74.5	\$0.0
AFUDC	\$2.7	74.5	\$36.3
Total	\$82.9	74.5	\$1,112.6*

* Total does not add due to rounding

- A. The total size of the ST Project 3, Site Number 6 property is 1,192.55 acres.
- B. The land required for this solar installation is 882.34 acres, which includes the solar array, the substation and transmission facilities, and other areas subject to permit conditions (such as roads, setbacks and land located within flood zones).
- C. Of the remaining acres, 154.91 acres are not suitable for future solar installations, energy storage installations or other utility purposes. This is due to the fact that 119.96 acres are comprised of waters, wetlands and preserve areas with access limitations and attendant construction requirements, and 34.95 acres are comprised of a birds' nest exclusion zone. There are 155.30 acres that are remote isolated and undeveloped areas and may be suitable for future solar installations, energy storage installations, or other utility purposes, subject to environmental and other permitting constraints.
- D. The property for Site Number 6 was acquired in August 1974. No land costs are included in the Project costs.
- E. Yes, it does qualify.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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)	\$75.3	74.5	\$1,010.2
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$9.3	74.5	\$125.5
Land (including easement costs)	\$9.4	74.5	\$125.8
AFUDC	\$2.9	74.5	\$38.3
Total	\$96.8*	74.5	\$1,299.8

* Total does not add due to rounding

- A. The total size of the ST Project 4, Site Number 1 property is 972.00 acres.
- B. The land required for this solar installation is 554.54 acres, which includes the solar array, the substation and transmission facilities, construction laydown areas, and other areas subject to permit conditions (such as roads, setbacks and land located within flood zones).
- C. None of the 417.46 remaining acres are suitable for future solar installations, energy storage installations or other utility purposes. This is due to the fact that 379.15 acres are comprised of waters, wetlands and preserve areas, and the remaining 38.31 acres are comprised of small, isolated remote parcels with access limitations and attendant construction requirements.
- D. The property for Site Number 1 was acquired on September 7, 2017 for \$9.3 million.
- E. Yes, it does qualify.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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)	\$76.1	74.5	\$1,021.9
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$7.2	74.5	\$97.1
Land (including easement costs)	\$5.4	74.5	\$72.4
AFUDC	\$2.8	74.5	\$37.7
Total	\$91.6*	74.5	\$1,229.1

* Total does not add due to rounding

- A. The total size of the ST Project 4, Site Number 2 property is 485.64 acres.
- B. The land required for this solar installation is 425.15 acres, which includes the solar array, the substation and transmission facilities, construction laydown areas, and other areas subject to permit conditions (such roads and setbacks).
- C. Of the remaining acres, 29.39 acres are not suitable for future solar installations, energy storage installations or other utility purposes due to the fact that they are comprised of waters, wetlands and preserve areas with access limitations and attendant construction requirements. There are 31.10 acres that are undeveloped and may be suitable for future solar installations, energy storage installations or other utility purposes, subject to environmental and other permitting constraints.
- D. The property for Site Number 2 was acquired on May 1, 2019 for \$5.3 million.
- E. Yes, it does qualify.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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)	\$76.8	74.5	\$1,031.5
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$6.4	74.5	\$86.4
Land	\$6.5	74.5	\$86.8
AFUDC	\$2.8	74.5	\$37.7
Total	\$92.6*	74.5	\$1,242.3*

* Total does not add due to rounding

- A. The total size of the ST Project 4, Site Number 3 property is 814.29 acres.
- B. The land required for this solar installation is 520.43 acres, which includes the solar array, the substation and transmission facilities, construction laydown areas, and other areas subject to permit conditions (such as roads and setbacks).
- C. None of the 293.86 remaining acres are suitable for future solar installations, energy storage installations or other utility purposes. This is due to the fact that 224.66 acres are comprised of waters, wetlands and preserve areas, and the remaining 69.20 acres are comprised of small, isolated remote parcels with access limitations and attendant construction requirements.
- D. The property for Site Number 3 was acquired on March 5, 2018 for \$6.5 million.
- E. Yes, it does qualify.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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)	\$76.4	74.5	\$1,026.1
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$7.0	74.5	\$94.4
Land	\$4.4	74.5	\$58.5
AFUDC	\$2.8	74.5	\$37.7
Total	\$90.6	74.5	\$1,216.8*

* Total do not add due to rounding

- A. The total size of the ST Project 4, Site Number 4 property is 606.75 acres.
- B. The land required for this solar installation is 501.47 acres, which includes the solar array, the substation and transmission facilities, construction laydown areas, and other areas subject to permit conditions (such as roads and setbacks).
- C. Of the remaining acres, 29.97 acres are not suitable for future solar installations, energy storage installations, or for other utility purposes due to the fact that they are comprised of waters, wetlands and preserve areas with access limitations and attendant construction requirements. There are 75.31 acres that are undeveloped areas and may be suitable for future solar installations, energy storage installations or other utility purposes, subject to environmental and other permitting constraints.
- D. FPL does not yet own the land for Site Number 4. FPL anticipates closing on the property for Site Number 4 in December 2019 for a purchase price of \$4.4 million.
- E. Yes, it does qualify.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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)	\$76.6	74.5	\$1,028.4
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$6.4	74.5	\$86.4
Land (including easement costs)	\$6.9	74.5	\$92.3
AFUDC	\$2.8	74.5	\$37.6
Total	\$92.7	74.5	\$1,244.6*

* Total does not add due to rounding

- A. The total size of the ST Project 5, Site Number 1 property is 843.98 acres.
- B. The land required for this solar installation is 554.20 acres, which includes the solar array, the substation and transmission facilities, construction laydown areas, and other areas subject to permit conditions (such as roads, setbacks and land located within flood zones).
- C. None of the 289.78 remaining acres are suitable for future solar installations, energy storage installations or other utility purposes. This is due to the fact that 218.44 acres are comprised of waters, wetlands and preserve areas, and the remaining 71.34 acres are comprised of small, isolated remote parcels with access limitations and attendant construction requirements.
- D. The property for Site Number 1 was acquired on August 2, 2018 for \$6.8 million.
- E. Yes, it does qualify.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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)	\$78.6	74.5	\$1,054.9
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$9.0	74.5	\$121.1
Land	\$9.7	74.5	\$129.7
AFUDC	\$3.0	74.5	\$39.6
Total	\$100.2*	74.5	\$1,345.2*

* Total does not add due to rounding

- A. The total size of the ST Project 5, Site Number 2 property is 646.03 acres.
- B. The land required for this solar installation is 559.95 acres, which includes the solar array, the substation and transmission facilities, and other areas subject to permit conditions (such as roads and setbacks).
- C. None of the 86.08 remaining acres are suitable for future solar installations, future energy storage installations or other utility purposes. This is due to the fact that 86.08 acres are comprised of waters, wetlands and preserve areas with access limitations and attendant construction requirements.
- D. The property for Site Number 2 was acquired on June 6, 2018 for \$9.7 million.
- E. Yes, it does qualify.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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)	\$69.9	74.5	\$938.7
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$7.5	74.5	\$101.1
Land (including easement costs)	\$4.6	74.5	\$62.0
AFUDC	\$2.6	74.5	\$35.1
Total	\$84.7*	74.5	\$1,136.9

* Total does not add due to rounding

- A. The total size of the ST Project 5, Site Number 3 property is 395.48 acres.
- B. The land required for this solar installation is 387.75 acres, which includes the solar array, the substation and transmission facilities, and other areas subject to permit conditions (such as roads and setbacks).
- C. None of the 7.73 remaining acres are suitable for future solar installation or other utility purposes. This is due to the fact that 7.73 acres are comprised of waters, wetlands and preserve areas that cannot be used for future solar installations or other utility purpose due to access limitations and attendant construction requirements.
- D. FPL does not yet own the property for Site Number 3. FPL anticipates closing on the property in December 2019 for a purchase price of \$4.5 million.
- E. Yes, it does qualify.

QUESTION:

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?

RESPONSE:

The site selection for individual FPL SolarTogether Projects is preliminary and subject to be changed in favor of a site currently assigned to a future project based on factors or risks that could adversely impact the timing for the commercial operation date. Additionally, an individual Site’s cost may vary either upward or downward. Notwithstanding potential variations in the cost of individual sites, FPL expects the total cost for all the projects to be no more than \$1.79 billion as stated in FPL’s Petition.

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)	\$75.8	74.5	\$1,017.0
Transmission Interconnection and Integration (includes generator step-up transformers, substation materials, and contractor scope)	\$6.5	74.5	\$87.7
Land	\$3.3	74.5	\$44.3
AFUDC	\$2.8	74.5	\$37.2
Total	\$88.4	74.5	\$1,186.2

- A. The total size of the ST Project 5, Site Number 4 property is 716.00 acres.
- B. The land required for this solar installation is 465.90 acres, which includes the solar array, the substation and transmission facilities, and other areas subject to permit conditions (such as roads and setbacks).
- C. None of the 250.10 remaining acres are suitable for future solar installations, energy storage installations, or other utility purposes. This is due to the fact that 250.10 acres are comprised of waters, wetlands and preserve areas with access limitations and attendant construction requirements.
- D. FPL does not yet own the property for Site Number 4. FPL anticipates that it will close on the property in August 2019 for a purchase price of \$3.3 million.
- E. Yes, it does qualify.

QUESTION:

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

RESPONSE:

FPL defines a project or resource plan as cost-effective when it results in a lower Cumulative Present Value of Revenue Requirement (CPVRR) than the alternative. FPL compared two resource plans, one plan that includes the FPL SolarTogether projects and the alternative of not including the projects. The plan with the FPL SolarTogether showed a lower CPVRR, making that plan cost-effective for participants and the general body of FPL customers. In determining CPVRR, FPL considers the annual revenue requirements of all system costs and system benefits, including all cost associated with the project or plan.

QUESTION:

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

RESPONSE:

The term unsubsidized as used in Paragraph 7 refers to the fact that over the life of the proposed Centers, non-participating customers are not burdened with program related costs from which they receive no benefits. Over the life of the program, base revenue requirements for non-participants' projected savings will more than offset the non-participants base revenue requirements (\$76.6 million savings compared to \$48.9 million revenue requirements).

QUESTION:

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.

RESPONSE:

FPL has not designated a specific capacity amount or percentage as “unreasonable.” See also FPL’s response to Staff’s First Data Request No. 66.

QUESTION:

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 CO₂ or CO₂ 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.

RESPONSE:

The emission savings achieved by the FPL SolarTogether Plan do include CO₂ costs which start in 2026. These projected CO₂ compliance costs are the same as used in the development of the 2019 Ten Year Site Plan, and the 2020 SoBRA filing. Please see FPL's response to Staff's First Data Request No. 78 for the sensitivity analysis that reflects no CO₂ costs.

QUESTION:

Please provide the annual and cumulative values over the period 2020 through 2051 (in nominal and net present value), separated by type (CO₂, NO_x, 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.

RESPONSE:

- A. Please refer to Attachment No. 1 to this Data Request that shows the avoided air emissions in tons resulting from FPL's solar generating units that comprise FPL's SolarTogether program. FPL used the hourly production costing model UPLAN to forecast the system air emissions, both tons and costs, by comparing resource plans, a No ST Plan vs. FPL SolarTogether Plan.
- B. Please refer to Attachment No. 2 to this Data Request that shows the avoided air emissions savings resulting from FPL's solar generating units that comprise FPL's SolarTogether program. See also FPL's response to subpart (A) above.

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Tab 1 of 1

Year	No ST Plan			
	CO ₂ Emission (Tons)	NO _x Emission (Tons)	SO ₂ Emission (Tons)	Total Emission (Tons)
2019	37,922,074	7,393	1,975	37,931,441
2020	36,999,697	6,702	1,172	37,007,571
2021	37,300,289	6,739	1,308	37,308,335
2022	36,599,892	6,307	1,161	36,607,360
2023	36,959,008	6,337	1,286	36,966,630
2024	36,982,948	5,783	1,160	36,989,891
2025	36,931,382	5,652	1,293	36,938,327
2026	37,365,668	5,670	1,213	37,372,551
2027	38,091,492	5,787	1,368	38,098,646
2028	38,108,229	5,701	1,384	38,115,313
2029	38,594,605	5,662	1,370	38,601,636
2030	38,769,157	5,560	1,354	38,776,071
2031	39,053,294	5,117	1,295	39,059,706
2032	40,216,012	5,270	1,313	40,222,595
2033	40,466,467	5,254	1,296	40,473,017
2034	40,942,217	5,258	1,293	40,948,768
2035	41,628,205	5,332	1,282	41,634,819
2036	44,913,434	5,713	1,298	44,920,445
2037	45,856,213	5,829	1,297	45,863,339
2038	46,512,066	5,863	1,289	46,519,218
2039	46,759,456	5,859	1,282	46,766,596
2040	47,314,074	5,865	1,278	47,321,217
2041	48,468,227	6,001	1,263	48,475,490
2042	48,824,802	6,011	1,252	48,832,065
2043	51,401,327	6,127	1,268	51,408,721
2044	53,129,950	6,320	1,277	53,137,547
2045	53,353,970	6,343	1,276	53,361,588
2046	53,942,290	6,380	1,286	53,949,955
2047	54,727,181	6,357	1,285	54,734,823
2048	55,202,257	6,366	1,287	55,209,910
2049	55,619,547	6,847	1,335	55,627,729
2050	56,787,557	6,990	1,363	56,795,911
2051	0	0	0	0

FPL SolarTogether Plan			
CO ₂ Emission (Tons)	NO _x Emission (Tons)	SO ₂ Emission (Tons)	Total Emission (Tons)
37,922,074	7,393	1,975	37,931,441
36,570,916	6,630	1,168	36,578,714
35,966,455	6,449	1,280	35,974,184
35,196,793	6,069	1,146	35,204,008
35,512,328	6,058	1,262	35,519,648
35,596,895	5,571	1,147	35,603,612
35,563,201	5,417	1,283	35,569,901
36,016,748	5,470	1,205	36,023,422
36,681,607	5,594	1,346	36,688,546
36,847,287	5,598	1,405	36,854,289
37,519,923	5,697	1,391	37,527,011
37,717,469	5,576	1,400	37,724,445
37,759,191	4,916	1,296	37,765,402
38,885,688	5,080	1,301	38,892,068
39,157,756	5,100	1,281	39,164,136
39,620,385	5,087	1,286	39,626,758
40,311,443	5,164	1,280	40,317,886
43,599,003	5,556	1,295	43,605,854
44,547,211	5,695	1,287	44,554,193
45,211,723	5,695	1,277	45,218,694
45,474,938	5,729	1,274	45,481,941
46,038,378	5,797	1,266	46,045,441
47,148,423	5,858	1,259	47,155,539
47,513,582	5,896	1,243	47,520,720
50,102,088	6,064	1,262	50,109,414
51,831,428	6,243	1,273	51,838,944
52,014,204	6,213	1,265	52,021,682
52,617,954	6,254	1,273	52,625,480
53,391,926	6,314	1,276	53,399,516
53,862,714	6,347	1,280	53,870,341
54,351,050	6,777	1,327	54,359,154
55,492,422	6,919	1,355	55,500,696
0	0	0	0

Difference			
CO ₂ Emission (Tons)	NO _x Emission (Tons)	SO ₂ Emission (Tons)	Total Emission (Tons)
0	0	0	0
(428,781)	(73)	(4)	(428,857)
(1,333,834)	(291)	(28)	(1,334,152)
(1,403,099)	(238)	(16)	(1,403,352)
(1,446,680)	(279)	(24)	(1,446,982)
(1,386,053)	(212)	(14)	(1,386,279)
(1,368,181)	(235)	(11)	(1,368,426)
(1,348,920)	(201)	(8)	(1,349,129)
(1,409,885)	(193)	(22)	(1,410,100)
(1,260,942)	(103)	21	(1,261,024)
(1,074,683)	36	22	(1,074,626)
(1,051,688)	16	47	(1,051,626)
(1,294,104)	(201)	1	(1,294,304)
(1,330,324)	(190)	(13)	(1,330,527)
(1,308,712)	(154)	(16)	(1,308,881)
(1,321,832)	(171)	(8)	(1,322,010)
(1,316,762)	(168)	(3)	(1,316,933)
(1,314,431)	(157)	(3)	(1,314,591)
(1,309,003)	(134)	(10)	(1,309,147)
(1,300,344)	(168)	(12)	(1,300,524)
(1,284,518)	(130)	(8)	(1,284,656)
(1,275,697)	(68)	(12)	(1,275,776)
(1,319,804)	(143)	(5)	(1,319,951)
(1,311,221)	(116)	(9)	(1,311,345)
(1,299,239)	(63)	(6)	(1,299,307)
(1,298,522)	(77)	(5)	(1,298,604)
(1,339,766)	(130)	(11)	(1,339,906)
(1,324,337)	(126)	(13)	(1,324,475)
(1,335,256)	(43)	(9)	(1,335,307)
(1,339,543)	(19)	(7)	(1,339,569)
(1,268,497)	(70)	(8)	(1,268,575)
(1,295,135)	(71)	(8)	(1,295,215)
0	0	0	0

- Negative () Indicates Savings to FPL Customers.

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Tab 1

Year	Discount Factor	No ST Plan				FPL SolarTogether Plan				Difference			
		CO ₂ Emission (Millions)	NO _x Emission (Millions)	SO ₂ Emission (Millions)	Total Emission (Millions)	CO ₂ Emission (Millions)	NO _x Emission (Millions)	SO ₂ Emission (Millions)	Total Emission (Millions)	CO ₂ Emission (Millions)	NO _x Emission (Millions)	SO ₂ Emission (Millions)	Total Emission (Millions)
2019	1.01	\$0	\$1	\$0	\$1	\$0	\$1	\$0	\$1	\$0	\$0.00	\$0	\$0
2020	0.93	\$0	\$1	\$0	\$1	\$0	\$1	\$0	\$1	\$0	(\$0.01)	\$0	(\$0)
2021	0.87	\$0	\$1	\$0	\$1	\$0	\$1	\$0	\$1	\$0	(\$0.04)	\$0	(\$0)
2022	0.80	\$0	\$1	\$0	\$1	\$0	\$1	\$0	\$1	\$0	(\$0.03)	\$0	(\$0)
2023	0.75	\$0	\$1	\$0	\$1	\$0	\$1	\$0	\$1	\$0	(\$0.03)	\$0	(\$0)
2024	0.69	\$0	\$1	\$0	\$1	\$0	\$1	\$0	\$1	\$0	(\$0.02)	\$0	(\$0)
2025	0.64	\$0	\$1	\$0	\$1	\$0	\$1	\$0	\$1	\$0	(\$0.02)	\$0	(\$0)
2026	0.60	\$20	\$1	\$0	\$20	\$19	\$1	\$0	\$19	(\$1)	(\$0.02)	\$0	(\$1)
2027	0.55	\$32	\$1	\$0	\$33	\$31	\$1	\$0	\$31	(\$1)	(\$0.02)	\$0	(\$1)
2028	0.51	\$67	\$1	\$0	\$68	\$65	\$1	\$0	\$65	(\$2)	(\$0.02)	\$0	(\$2)
2029	0.48	\$85	\$1	\$0	\$85	\$82	\$1	\$0	\$83	(\$2)	\$0.01	\$0	(\$2)
2030	0.44	\$129	\$1	\$0	\$130	\$126	\$1	\$0	\$126	(\$3)	\$0.01	\$0	(\$3)
2031	0.41	\$166	\$1	\$0	\$167	\$160	\$1	\$0	\$161	(\$5)	(\$0.02)	\$0	(\$6)
2032	0.38	\$212	\$1	\$0	\$213	\$205	\$1	\$0	\$206	(\$7)	(\$0.02)	\$0	(\$7)
2033	0.35	\$260	\$1	\$0	\$261	\$252	\$1	\$0	\$253	(\$8)	(\$0.02)	\$0	(\$8)
2034	0.33	\$316	\$1	\$0	\$317	\$306	\$1	\$0	\$306	(\$10)	(\$0.02)	\$0	(\$10)
2035	0.31	\$381	\$1	\$0	\$382	\$369	\$1	\$0	\$370	(\$12)	(\$0.02)	\$0	(\$12)
2036	0.28	\$456	\$1	\$0	\$456	\$442	\$1	\$0	\$443	(\$13)	(\$0.02)	\$0	(\$13)
2037	0.26	\$515	\$1	\$0	\$516	\$501	\$1	\$0	\$501	(\$15)	(\$0.02)	\$0	(\$15)
2038	0.24	\$579	\$1	\$0	\$579	\$563	\$1	\$0	\$563	(\$16)	(\$0.03)	\$0	(\$16)
2039	0.23	\$644	\$1	\$0	\$645	\$626	\$1	\$0	\$627	(\$18)	(\$0.02)	\$0	(\$18)
2040	0.21	\$721	\$1	\$0	\$721	\$701	\$1	\$0	\$702	(\$19)	(\$0.02)	\$0	(\$19)
2041	0.20	\$823	\$1	\$0	\$823	\$800	\$1	\$0	\$801	(\$22)	(\$0.01)	\$0	(\$22)
2042	0.18	\$924	\$1	\$0	\$925	\$900	\$1	\$0	\$900	(\$25)	(\$0.01)	\$0	(\$25)
2043	0.17	\$1,086	\$1	\$0	\$1,087	\$1,059	\$1	\$0	\$1,059	(\$27)	(\$0.01)	\$0	(\$27)
2044	0.16	\$1,253	\$1	\$0	\$1,254	\$1,223	\$1	\$0	\$1,224	(\$31)	(\$0.02)	\$0	(\$31)
2045	0.14	\$1,406	\$1	\$0	\$1,407	\$1,371	\$1	\$0	\$1,372	(\$35)	(\$0.02)	\$0	(\$35)
2046	0.13	\$1,590	\$1	\$0	\$1,591	\$1,551	\$1	\$0	\$1,552	(\$39)	(\$0.02)	\$0	(\$39)
2047	0.12	\$1,804	\$1	\$0	\$1,805	\$1,760	\$1	\$0	\$1,761	(\$44)	(\$0.01)	\$0	(\$44)
2048	0.12	\$2,037	\$1	\$0	\$2,038	\$1,988	\$1	\$0	\$1,989	(\$49)	(\$0.01)	\$0	(\$49)
2049	0.11	\$2,299	\$1	\$0	\$2,299	\$2,246	\$1	\$0	\$2,247	(\$52)	(\$0.00)	\$0	(\$52)
2050	0.10	\$2,347	\$1	\$0	\$2,348	\$2,293	\$1	\$0	\$2,294	(\$54)	(\$0.00)	\$0	(\$54)
2051	0.09	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	\$0	\$0
	CPVRR Thru 2051	\$3,394	\$9	\$0	\$3,404	\$3,304	\$9	\$0	\$3,313	(\$90)	(\$0)	\$0	(\$91)

- Negative () Indicates Savings to FPL Customers.

Note:

Please refer to FPL's response to Staff's First Data Request No. 33 for the \$/ton for CO₂. The \$/ton forecast for NO_x is \$125/ton and \$0/ton for SO₂.

QUESTION:

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

RESPONSE:

The CO₂ compliance cost forecast that FPL is using in its 2019 IRP work (including the FPL SolarTogether analyses) was provided by the consultant ICF. This forecast has its first non-zero cost value in 2026.

QUESTION:

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

RESPONSE:

FPL uses ICF International for its CO₂ compliance cost forecast. ICF is a consulting firm with extensive experience in forecasting the cost of complying with the regulation of air emissions and is recognized as one of the industry leaders in this field. FPL has utilized ICF's CO₂ emission compliance cost forecast in all of its resource planning analyses since 2007. In the fourth quarter of 2018, ICF provided updated CO₂ compliance cost projections through the year 2050. ICF provided what amounts to a "middle" compliance cost projection and a "high" compliance cost projection. In addition, they provided annual probability values for these two non-zero compliance cost projections and for a zero compliance cost scenario. The compliance cost values were provided by ICF in real dollars and, following the direction from ICF, were converted by FPL to nominal dollars using a 2.1% factor. In the economic analysis of the FPL SolarTogether Program, as presented in the petition, FPL used the "middle" CO₂ emission price scenario.

QUESTION:

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

RESPONSE:

FPL adopted this price forecast as its official CO₂ price forecast in November 2018.

QUESTION:

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.

RESPONSE:

This forecast was conducted externally by ICF International. FPL has utilized ICF as the source of CO2 emission price forecasts since 2007.

QUESTION:

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

RESPONSE:

Please see Attachment No. 1 to this Data Request for FPL's official CO₂ price forecast.

Florida Power & Light Company

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Staff's First Data Request

Request No. 33

Attachment No. 1

Tab 1 of 1

Year	ICF	ICF	ICF
	Mid CO ₂ Nominal (\$/ton)	High CO ₂ Nominal (\$/ton)	Low CO ₂ Nominal (\$/ton)
2020	0.00	0	0
2021	0.00	0	0
2022	0.00	0	0
2023	0.00	0	0
2024	0.00	0	0
2025	0.00	0	0
2026	0.52	0	0
2027	0.84	0	0
2028	1.76	14.29	0
2029	2.19	15.26	0
2030	3.33	16.30	0
2031	4.25	17.40	0
2032	5.28	18.59	0
2033	6.44	19.85	0
2034	7.72	21.20	0
2035	9.15	22.64	0
2036	10.14	24.49	0
2037	11.24	26.49	0
2038	12.44	28.66	0
2039	13.77	31.00	0
2040	15.23	33.54	0
2041	16.98	37.91	0
2042	18.93	42.86	0
2043	21.13	48.45	0
2044	23.59	54.77	0
2045	26.36	61.92	0
2046	29.47	70.00	0
2047	32.97	79.13	0
2048	36.90	89.45	0
2049	41.33	101.12	0
2050	46.31	114.32	0

QUESTION:

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 commodity transportation, and delivered fuel prices.

RESPONSE:

Please refer to confidential Attachment No. 1 to this Data Request.

QUESTION:

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

RESPONSE:

FPL's Long Term Fuel Price Forecast was developed internally in December 3, 2018.

In its projections of oil and natural gas prices, FPL used the following methodology:

- (a) For the current + 2 years (2019-2021), the methodology used the December 2018 forward curve for New York Harbor 0.7% sulfur heavy oil, WTI Crude Oil, Ultra-Low Sulfur Diesel (ULSD) fuel oil, and Henry Hub natural gas commodity prices;
- (b) For the next two years (2022 and 2023), FPL used a 50/50 blend of the December 2018 forward curve and the most current projections (9/18/2018 for Gas and 11/16/2018 for Oil and products) from The PIRA Energy Group;
- (c) For the 2024 through 2040 period, FPL used the annual projections from The PIRA Energy Group (0/18/2018 for Gas and 11/16/2018 for Oil and products); and
- (d) For the period beyond 2040, FPL used the real rate of escalation from the Energy Information Administration (EIA) (EIA's Annual Energy Outlook (AEO) released 2/6/2018). In addition to the development of oil and natural gas commodity prices, nominal price forecasts also were prepared for oil and natural gas transportation costs. The pipeline charges and forward market location basis as of 12/3/2018 are applied on a monthly basis to the entire forecast period. The addition of commodity and transportation forecasts resulted in delivered price forecasts.

Coal prices were forecasted using the following approach:

- (a) Delivered price forecasts for Central Appalachian (CAPP), Illinois Basin (IB), and Powder River Basin (PRB) coal were provided by JD Energy (there are no future prices for coal so, we use the services of JD Energy for coal forecasts – the forecast is dated 11/2/2018; and
- (b) The coal price forecast for Plant Scherer assumes the continuation of the existing mine-mouth and transportation contracts until expiration, along with the purchase of spot coal (coal is purchased on an as needed basis), to meet generation requirements.

QUESTION:

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

RESPONSE:

FPL develops its Long Term Fuel Price Forecast once a year, typically in the 4th Quarter of the current year or early in the 1st Quarter of the new year.

QUESTION:

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.

RESPONSE:

As described in detail below, FPL's projections are thorough and are based on widely recognized sources. Therefore, the company does not believe comparisons to other forecasts are necessary.

Fossil Fuel:

FPL's medium fossil fuel price forecast methodology utilizes projections from The PIRA Energy Group (PIRA), rates of escalation from the U.S. Energy Information Administration (EIA), forward commodity price curves for fuel oil and natural gas, and projections from JD Energy, Inc. PIRA, a world-recognized consulting firm with expertise in all aspects of the fuel oil and natural gas industry, supplies FPL with an extensive database to support its short and long-term projections of future fuel oil and natural gas prices. FPL utilizes forward commodity price curves for fuel oil and natural gas to project the short-term forecast (current year, current year plus 1 and current year plus 2), creates a blend of forward curves and PIRA curves for the medium term (current year plus 3 and current year plus 4) and finally, applies escalation rates, provided by the EIA, to the long-term fuel oil and natural gas projections provided by PIRA. JD Energy, a consulting firm retained by many utilities and coal suppliers, has expertise in all aspects of the coal and petroleum coke industry. The firm supplies FPL with an extensive database to support its short and long-term projections of future coal prices. FPL's forecasts reflect these authoritative and independent sources. Consequently, FPL believes the Company's projections are reasonable and comparisons to other forecasts are not necessary.

Nuclear:

For nuclear fuel price projections, FPL subscribes to a number of publications such as reports published by UX Consulting, Energy Resources International, and Trade Tech. These firms represent a broad spectrum of companies and serves as indicators for spot and long term market behaviors. FPL's long term price projections are monitored and updated as necessary to be reasonably consistent with the best estimates/projections of these recognized independent companies. FPL expects that there will be times when uranium market prices will fluctuate about these projections, but the price used for uranium provides a better representation of long term trends.

QUESTION:

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 its base, high, and low, fuel sensitivities.
- B. If not, please detail why sensitivity analysis was not done.

RESPONSE:

- A. Yes. Please refer to FPL's response to Staff's First Data Request No. 78 with regards to the fuel price sensitivities.

FPL develops its Medium fuel cost forecast first. FPL's approach has been to then adjust the Medium fuel cost forecast upward (for the High fuel cost forecast) or downward (for the Low fuel cost forecast) by multiplying the annual cost values from the Medium fuel cost forecast by a factor of $(1 + \text{the historical volatility of the 12-month forward price, one year ahead})$ for the High fuel cost forecast, and by a factor of $(1 - \text{the historical volatility of the 12-month forward price, one year ahead})$ for the Low fuel cost forecast.

- B. Not applicable.

QUESTION:

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?

RESPONSE:

In the economic analysis of the FPL SolarTogether Program, as described in the Petition, FPL used the same major system assumptions and methodology as used in the 2019 FPL Ten Year Site Plan and the 2020 SoBRA filing. This applies to both plans [No ST Plan and FPL SolarTogether Plan].

- A. Please see Attachment No. 1 to this response.
- B. FPL's load forecast was completed and approved in December 2018.
- C. FPL's load forecast is a key input in the development of resource plans, and in the economic dispatch of FPL's generating units which in turn determine the CPVRR for each resource plan and, as such, it is used in FPL's resource plans and production costing models.
- D. FPL did not consider different load forecast sensitivities.
- E. See response to subpart (D) above.
- F. FPL does not perform load forecast sensitivity analysis in the economic determination of resource plans. The principal concern for potential load forecast error is system reliability; FPL's reserve margin criteria is in part developed to account for such potential load forecast error.

QUESTION:

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.

RESPONSE:

Net Energy Load (“NEL”)

There are a number of reasons why the NEL forecast in the 2019 TYSP is higher than the NEL forecast in the 2018 TYSP. First, the customer forecast is higher in the 2019 TYSP compared with the 2018 TYSP. Second, there is a smaller impact of Codes & Standards in the 2019 TYSP forecast compared with the 2018 TYSP. Third, on a weather normalized basis, the NEL forecast in the 2018 TYSP under forecasted NEL in 2018 by 3.1%. The model used in 2018 consistently under forecast NEL throughout 2018. A new model was developed with similar drivers as the 2018 model but with a different model specification. The new model is a daily as opposed to a monthly model. Along with the first two reasons, the result is a higher forecast, consistent with the actual 2018 NEL. Through the first quarter of 2019, this new NEL model has performed very well. While results are available only for the first three months of this year, both negative and positive monthly variances have been observed. This is a sign of an unbiased forecast. The first quarter weather normalized NEL variance is +0.8%.

Summer Peak and Winter Peak

The 2019 TYSP summer peak forecast is lower than the 2018 TYSP summer peak forecast for a few reasons. First, the real per capita income forecast which is a variable in the summer peak model and obtained from IHS Markit, was lowered by about 0.4%. Second, there is a larger impact of Codes & Standards in the 2019 TYSP model compared with the 2018 TYSP model. Third, since the 2018 summer peak model over forecasted the actual 2018 peak, it is not surprising that the revised 2019 TYSP forecast is lower than the 2018 TYSP forecast.

Like the summer peak, the 2018 TYSP over forecasted the winter peak. The actual 2018 winter peak, on a weather normalized basis, was 1.4% below the forecast. Since the 2010-2011 time frame, the model has consistently over-forecasted the winter peak. The trend since 2010-2011 has been a successively lower winter peak forecast due to the mild winters experienced in the FPL territory. The 2019 TYSP forecast continues this trend.

QUESTION:

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.

RESPONSE:

a. Net Energy for Load Model

- a. Actuals: January 2008 – August 2018
- b. Estimated: September 2018 – December 2040

Variables	Source
Net Energy for Load	FPL
Weekend Holiday	Calendar
Irma20170909 Dummy	FPL
Irma20170910 Dummy	FPL
Irma20170911 Dummy	FPL
Irma20170912 Dummy	FPL
Weighted Per capita income	IHS Markit
Codes Standards 2018 Update	Itron
Real Price Increase	FPL & IHS Markit
January - December Cooling Degree Hours	The Weather Company
January, February, March, and December Heating Degree Days	The Weather Company
Heating Degree Day Square Term	The Weather Company
Cooling Degree Hour Square Term	The Weather Company

b. Summer Peak Model

- a. Actuals: January 1991 – August 2018
- b. Estimated: September 2018 – December 2063

Variables	Source
Summer Peak	FPL
Annual Data 2019TYSP Max Temperature Day	The Weather Company
Annual Data 2019TYSP Cooling Degree Hours	The Weather Company
Annual Data 2019TYSP Sum KW savings per customer	Itron
Annual Data 2019TYSP Per capita income	IHS Markit
Trans1.Year 2005 Dummy	FPL

c. Winter Peak Model

- a. Actuals: January 2000 – August 2018
- b. Estimated: September 2018 – December 2063

Variables	Source
Winter Peak	FPL
Winter Peak Min Temp	The Weather Company
Trans1.trend80 Dummy	FPL

QUESTION:

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?

RESPONSE:

Net Energy for Load (“NEL”)

Changes from the 2018 Ten Year Site Plan include moving from a monthly model to a daily model. A daily model is more responsive to the impact of day to day temperature swings on energy usage. Weather data was also changed from monthly to daily. Other changes to the model include the removal of the leap year term, the replacement of the monthly dummies with monthly temperature variables, the removal of the price decrease term, the inclusion of variables to account for the impact of Hurricane Irma, and the inclusion of an additional autoregressive term. These changes were made based on model diagnostics.

System Summer Peak

Changes made from the 2018 Ten Year Site Plan summer peak model were the inclusion of autoregressive terms. The inclusion of autoregressive terms was prescribed by the model diagnostics.

System Winter Peak

Changes from the 2018 Ten Year Site Plan winter peak model were the inclusion of a trend term and an autoregressive term, the removal of the two dummy variables; one for post 2011 and one for the year 2008, the removal of the customer variable, and the removal of the heating degree hour variable for the prior day squared. These changes were made based on model diagnostics.

QUESTION:

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.

RESPONSE:

Economic and non-economic assumptions used in the development of our Net Energy for Load (NEL), Summer Peak, and Winter Peak models include Florida real per capita income, the price of electricity, weather, and the impact of mandated energy efficiency standards.

Florida real per capita income is included in our NEL and Summer peak models. This variable is weighted by the percentage of the Florida population that is employed. This specification began following the Great Recession. During and following the Great Recession, the decline in electric sales was not fully reflected, as indicated by the model statistics, by the decline in Florida real per capita income. FPL determined that the missing component was the high unemployment rate at the time. Adjusting real per capita income by the percentage of the population employed markedly improved the significance of the real per capita income variable and the model overall.

Various specifications of electric price have been used in our NEL model over the years. For the current model, a price index of the real electric price increase is used. This price index has a 2005 base and increases when the real electric price increases from the prior month and stays constant when the real electric price decreases from the prior month. This is based on the notion that customers will react to higher electric prices by using less electricity, but the elasticity on declining electric prices would be small or insignificant.

Weather is a critical variable in forecasting NEL and peaks. For the NEL model, monthly Cooling Degree Hours "CDH", monthly Heating Degree Day "HDD" for the winter months, and monthly squared terms for CDH and HDD are used. The squared terms are used to capture the non-linear impacts of weather on energy usage. For the Summer peak model, the maximum temperature on the summer peak day and the CDH two days prior to the peak are the chosen weather variables. A hot summer day combined with prior days' heat buildup are important weather factors that drive the summer peak. For the Winter peak model, the minimum temperature on the winter peak day is used, since the colder the temperature, the higher the winter load.

A variable for the impact of mandated energy efficiency standards is used in our models to capture the behavioral component of the impact of energy efficiency measures. Every two years, Iron provides estimates of the impact of these standards on FPL's NEL and peaks. By including this variable in our models, FPL can capture customer behavior with respect to these energy efficiency measures.

QUESTION:

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.

RESPONSE:

FPL assumes the reference to “DEF’s” to mean “FPL’s.”

Plug-in Electric Vehicles (PHEV)

A line item adjustment is made for the incremental load from PHEVs in order to reflect additional load not otherwise captured in FPL’s historical load levels. The introduction of plug-in electric vehicles began at the end of 2010. Since then, the number of PHEVs has been increasing slowly but steadily. Because there is limited historical data for PHEV load, the load from PHEVs are not adequately reflected in the forecast. The forecast therefore is adjusted for the incremental load from PHEVs.

Private Solar

Similar to PHEVs, a line item adjustment is made for Private Solar in order to reflect the load impact not otherwise captured in FPL’s historical load levels. As with PHEVs, there are not enough historical data for Private Solar to adequately reflect its impact on the load forecast. Therefore, the forecast is adjusted to reflect the impact of incremental Private Solar.

Economic Development Rates

The Economic Development Rider and Existing Facility Economic Rider add incremental load to FPL’s system, not otherwise captured in FPL’s historical load levels. These riders offer discounts to customers for adding new or incremental load. Since this additional load is not captured by the models, a line item adjustment is made to incorporate this load into FPL’s forecasts.

Wholesale Contracts

FPL’s forecast is adjusted for incremental wholesale loads in order to reflect changes in load not otherwise reflected in FPL’s historical load levels. These adjustments are the result of new, modified, expanded, or expired wholesale contracts.

City of Vero Beach electric system (COVB)

A line item adjustment is made for the acquisition of the City of Vero Beach electric system. The City of Vero Beach became part of FPL’s system on December 17, 2018. In order to reflect additional load not captured in FPL’s historical load levels, the forecast is adjusted for the load expected from COVB.

QUESTION:

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.

RESPONSE:

The FPL load forecast used to support this docket was also used in the Company's 2019 Ten-Year Site Plan, as well as the following FPSC dockets:

- 20190001-EI – FPL Petition for Approval of Solar Base Rate Adjustment
- 20190082-EQ – FPL Petition for Approval of Renewable Energy Tariff and Standard Offer Contract
- 20190015-EG – FPL Petition for Approval of Numeric Conservation Goals

QUESTION:

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.

RESPONSE:

Please see Attachment No. 1 to this Data Request. Note the models for Summer Peak, Winter Peak, and Net Energy for Load are used to develop forecasts through 2040. Beyond 2040, the forecasts are trended. Although the useful life of the 1,490 MW FPL SolarTogether investment extends through 2051, there are no forecast data beyond 2040. Daily data are used to project Net Energy for Load. For the Summer and Winter peak, the data are annual.

QUESTION:

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).

RESPONSE:

When evaluating resource options, FPL performs economic analyses and develops resource plans to cover the life of the resource option under consideration. This approach culminates in the development of the resource plan shown in the 2019 FPL Ten Year Power Plant Site Plan as well as all other resource planning analyses. For the FPL SolarTogether Program analysis, FPL developed resource plans and annual revenue requirements through the year 2050. These resource plans through 2050 were included in the system modeling that develops annual revenue requirements for each resource plan. In this process, FPL modeled the system using its production costing model through the year 2049 and then extrapolated the results to obtain the results for 2050. This extrapolation was required as the UPLAN model can only run for 30 years.

The development of FPL's resource plans used in the FPL SolarTogether Program analysis is discussed in more detail in the response to Staff's First Data Request No. 76.

QUESTION:

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

RESPONSE:

A. FPL SolarTogether vs. SolarNow

- a. Both are voluntary programs, offering all customers who wish to participate the option to do so, and both are unsubsidized over the life of the projects they support.
- b. SolarNow is a program designed to focus on education and awareness. As such, the solar installations under SolarNow were intended to be in highly visible areas and supported by local messaging and online platforms to convey the larger story in solar energy. Under SolarNow, the participants bear the net revenue requirements (revenue requirements minus avoided fuel and emission costs resulting from the projects' electric production) associated with the Program's solar facilities and the addition of facilities is such that the net revenue requirements match the participants' contributions. The objective is that no remaining costs for the facilities will be borne by non-participating customers at the end of the pilot. While there is no direct bill benefit associated with SolarNow, program participants are enthusiastic about spreading the news about the potential of solar energy and the highly visible installations support this mission.
- c. FPL SolarTogether offers participants a bill credit that is representative of the actual solar generation the participant's share produces monthly. No such bill credits are offered to SolarNow program participants, and all generation value from SolarNow facilities is to the benefit of all FPL customers.

B. FPL SolarTogether vs. Net Metering (a/k/a NEM, private solar, or rooftop solar)

- a. Both are voluntary programs, offering all customers who wish to participate the option to do so. Both programs offer financial bill credits that are based, in part, on actual solar generation.
- b. Unlike SolarTogether, Net Metering is a legislatively created program. NEM participants own and operate their own solar energy system and are allowed to earn full retail rate bill credits for any solar generation produced but not utilized on site. This creates a cross subsidy where non-participants are burdened with a higher, disproportionate share of fixed system costs, as NEM customers are earning credits at the full retail rate inclusive of the fixed system costs related to generation, distribution, and transmission. Under the

existing rule, this full rate credit creates an inherent subsidy from non-participants to participants which persists through the life of the private solar asset.

- c. FPL SolarTogether allows those who cannot afford, do not wish to own, or cannot place private solar on their home, multi-unit dwelling or business the opportunity to participate in a program that increases their personal use of solar generation with no cross-subsidy over the life of the program. FPL owns and operates the solar energy centers built for the purposes of the program leveraging economies of scale of building universal scale solar. FPL SolarTogether participants will continue to pay their full customer bill as the program in no way changes their energy usage or rate structure.

QUESTION:

Please refer to paragraph 3 of the Petition. Provide the number of customers and the estimated installed capacity (in MW_{ac}) for each of the programs listed below by customer class.

- A. SolarNow
- B. Net Metering

RESPONSE:

As of March 31, 2019, customer counts and estimated installed capacity (MW_{ac}) for each program are as follows:

Participant Counts – As of March 31, 2019				
Program	Residential	Commercial	Industrial	Total
Total SolarNow	48,715	633	0	49,348
Net Metering – Solar	11,477	907	15	12,399
Net Metering – Wind	3	7	0	10
Net Metering - Biomass	0	1	3	4
Total Net Metering	11,480	915	18	12,413

Installed Capacity (MW_{ac}) – As of March 31, 2019				
Program	Residential	Commercial	Industrial	Total
Total SolarNow¹	1.883 MW_{ac}			
Net Metering – Solar	78.668	28.181	1.239	108.088
Net Metering – Wind	0.007	0.050	0.000	0.057
Net Metering – Biomass	0.000	0.750	5.199	5.949
Total Net Metering -	78.675	28.981	6.4380	114.094

¹ SolarNow program capacity is tracked based on MW_{DC}, for the purposes of this response the conversion was based on an estimated DC to AC ratio of 1.2.

QUESTION:

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?

RESPONSE:

- A. Yes, FPL SolarNow program participants pay a monthly contribution of \$9.00 and do not receive a credit on their bill.
- B. Yes, FPL SolarNow program is on a month to month basis.
- C. Assuming the SolarNow program continues beyond December 31, 2019, there is nothing that prohibits participants from exiting SolarNow to join FPL SolarTogether. Further, should they wish to do so, customers may participate in both program simultaneously.

QUESTION:

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.

RESPONSE:

FPL is developing a comprehensive program website with detailed information about how the program works, benefits, frequently asked questions, etc. The site will have a self-service engagement tool to help customers determine the subscription level that will best suit their personal needs and budget – (estimate monthly cost, credit, potential saving, and paybacks).

FPL also is partnering with Clean Power Research[®] to incorporate the intelligence of their WattPlan[®] calculator into FPL.com. WattPlan[®] calculator is a third party tool licensed product from Clean Power Research and is used by numerous other utilities across the country (www.cleanpower.com). Although this will not be part of the enrollment process, the calculator will give customers the ability to compare an FPL SolarTogether subscription with a net-metered rooftop solar system, including payback estimates. Clean Power Research's WattPlan[®] calculator is a customized web-based offering that has been implemented by other utilities and receives positive customer feedback.

QUESTION:

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

RESPONSE:

As FPL developed the FPL SolarTogether program it utilized learnings from both SolarNow and other successful community solar programs offered throughout the U.S.

FPL reviewed several of the in state community solar programs that have been approved or are in the process of being approved including: Orlando Utilities Commission, Jacksonville Electric Authority, City of Tallahassee Utilities, Duke Energy Florida, Gulf Power, and Tampa Electric Company programs. Additionally, FPL reviewed notable out of state community solar programs, including Xcel Energy, Southern Company, Duke/Progress Energy Carolinas, Puget Sound Energy, and Pacific Gas & Electric. Programs had numerous varying elements, including program and project size, location requirements, compensation, customer allocations, and subscription size. Finally, FPL conducted outreach with several large national commercial customers who participate in these types of programs outside of Florida to better understand what drives them to participate and what options/structures they preferred. This information helped to identify the attributes that were critical to program participation including ownership risk, generation risk, contractual commitments and financial attributes, such as first annual benefits and payback expectations, and renewable energy certificate retirement. Utilizing this information, FPL developed a program that would meet these needs while still working within the regulatory structure within which FPL operates today.

QUESTION:

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.

RESPONSE:

FPL elected to offer a pre-registration period for commercial, industrial, and governmental (C&I-G) accounts as these are the largest energy users and thus potentially the largest subscribers. Understanding the level at which C&I-G customers were willing to participate helped inform FPL on the appropriate initial program size and schedule. In reviewing other community solar programs, FPL learned that many have instituted programs that did not reasonably satisfy interest, leading to lengthy waitlists and delays in fulfilling customer subscriptions.

FPL had market information that indicated residential and small business customers have interest in different types of solar offers which was partially informed by FPL's SolarNow program. Based on this data, FPL felt it was not necessary to offer pre-registration to residential and small business customers, but rather set aside a fixed amount to ensure the program could service this interest. This desire to have different solar offerings continues today within FPL territory where, as of the end of March 2019, there are over 45,000 SolarNow participants and over 12,000 Net Energy Metering customers. This equates to approximately 1.1% of the 5 million total FPL customers. Each of these programs has seen increased levels of interest in the last 12-18 months, indicating that there is market demand within this segment for different types of solar and renewable products.

Residential and C&I-G accounts face very similar barriers to installing their own net metered solar generation. These include:

1. Availability of the upfront capital needed to fund the installation of a new system, which may include roof replacement
2. Willingness to take on the ownership obligations associated with a rooftop system, including the option to self-maintain or hire outside support to maintain and repair the system, and the associated recurring maintenance and insurance costs
3. Roof integrity and insolation. Many older roofs may not be suitable to support the additional weight of a system or would require replacement prior to installation of a system; the roof could be oriented such that it is not adequate to support effective generation or is shaded by nearby buildings or trees. In addition, rooftop solar panels can increase the cost of homeowner insurance and may cause homeowner insurance coverage issues if the panels cause damage to the roof.
4. Roof access and size. Many Florida residents rent or live in high-rise condos where they do not have a roof upon which to install a system. While less prevalent with C&I-G accounts, some do lease building space and do not have roof right access. Additionally, roof size may be limited and thus unable to provide enough space to provide for a 100% energy offset.

QUESTION:

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

RESPONSE:

Please refer to the following attachments to this Data Request and link below (Attachment Nos. 1-7 respectively):

- 1.) Webinar slides (recorded webinar: <https://youtu.be/PDCXp3SIVDM>)
- 2.) FPL.com pre-registration web pages
- 3.) Pre-registration website frequently asked questions and answers
- 4.) Pre-registration agreement
- 5.) Example 30-year value stream
- 6.) Example pre-registration letter (un-assigned account)
- 7.) Example pre-registration email (assigned account)

ADVANCING SOLAR IN FLORIDA

SolarTogether

An FPL Shared Solar Program



Solar in Florida is on the rise



Sunshine state now ranks
6th in the country for
universal solar capacity and
expected to grow

FPL plans to install **1,200 MW of solar by 2020**

The FPL Shared Solar Program leverages the economies of scale of building Universal Solar, bringing a cost effective, hassle-free solar alternative to our customers.



Advancing Solar in Florida

SolarTogether, an FPL shared solar program, is designed to allow all FPL customers the opportunity to share in the benefits and costs of large scale solar while receiving monthly bill credits on their FPL bill.



FPL Shared Solar

How the program works in first year of enrollment



100 kW

Shared Solar Subscription

100 kW subscription share
X \$6.76/kW fixed subscription rate

Your Monthly Subscription Cost

\$676



Solar Energy Produced

212 hours per month
x 100 kW subscription share

21,200 kWh solar energy



Subscription Credit

21,200 kWh solar energy produced
x \$0.0308/kWh subscription credit rate/ kWh

Your Monthly Bill Credit

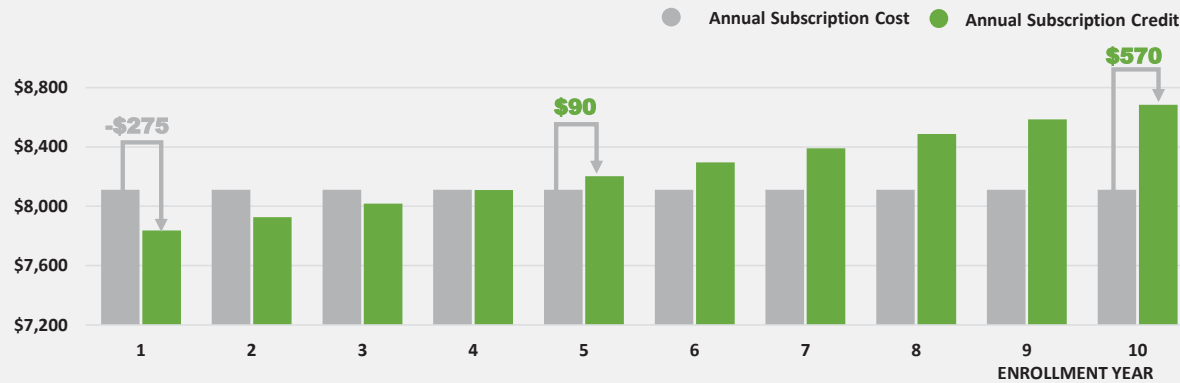
\$653

Illustrative examples presented here for discussion purposes only, program charges and credits will be established per the Florida PSC approved tariff



Estimated Bill Impact

ESTIMATED ANNUAL SUBSCRIPTION BILL IMPACT



Overtime the annual benefits are forecasted to exceed the costs

ESTIMATED CUMULATIVE SUBSCRIPTION BILL IMPACT



Program is designed to allow participants to achieve simple payback between years 5-7

Illustrative examples presented here for discussion purposes only, program charges and credits will be established per the Florida PSC approved tariff



FPL Shared Solar

Reduce your energy costs while achieving your sustainability goals.

Benefits

- » Offset up to 100 percent of your energy usage
- » Renewable Energy Credits (RECs) are retired on your behalf
- » Receive bill credits immediately

Economics

- » Simple payback between 5-7 years
- » Fixed monthly subscription rate
- » Escalating bill credits
- » No maintenance, operational or insurance costs

Terms

- » No upfront cost
- » No long term contract
- » Subscription is transferable to another store or location
- » Subscription cannot be sold or transferred to another customer



Pre-Registration

Pre-Registration starts November 29, 2018 through January 25, 2019

- **Why is there a pre-registration window for Commercial, Industrial, and Municipal customers?**
 - Allows us to better understand Customer interest so we can file an appropriately sized program and development plan to meet the need
 - Allows interested customers to reserve their spot in the program



Pre-Registration Process

Easy 3 Step Pre-Registration Process

Step 1

- Learn about the program
- Sign up for an informational webinar

Step 2

- Calculate your maximum subscription

Step 3

- Complete the pre-registration form
- Read, sign, and submit the pre-registration agreement

Determining Maximum Subscription

Method 1: Estimation from FPL bill

1. Review your FPL bills to determine your annual kWh usage
2. Divide your annual kWh usage by 2,535 kWh / kW
3. Maximum Subscription Calculation:

$$\frac{15,300 \text{ kWh}}{2,535 \text{ kWh / kW}} = 6 \text{ kW Max. Subscription}$$



Determining Maximum Subscription

Method 2: Subscription Calculator

Program Subscription Estimator

First, let's calculate your estimated maximum subscription based on your average monthly FPL bill.

How many business locations do you currently have in FPL service territory?

10

On average, how much do you spend monthly (in dollars) on your FPL bill for a single location?

1000

CALCULATE

Your maximum subscription is **479** kW

You are eligible to subscribe between 1 kW - 479 kW.

Remember this number, you will need it to complete your early registration.

Recalculate >

PRE-REGISTER

Or to learn more, view our FAQs >



Pre-Registration Form & Agreement

Customer Information

This is how we'll send status updates.

Test Company

test.company@att.net

999-888-7777

47 kW

1298347655

NEXT

FPL Shared Solar Subscription Agreement

Your signature is required to submit your enrollment. Please read carefully the Subscription Agreement and provide your signature electronically.

SolarTogether - An FPL Shared Solar Program

Pre-Registration Agreement

Pursuant to this pre-registration agreement ("Agreement"), the undersigned ("Subscriber") is agreeing to subscribe to a specified number of kilowatts ("kW") of solar-generated electric power under SolarTogether - An FPL Shared Solar Program ("Program") sponsored by Florida Power & Light Company ("FPL"). The Program will be filed with the Florida Public Service Commission ("FPSC") in 2019, and it is anticipated that Program power will become available to FPL customers sometime in March 2020. This voluntary program allows FPL customers to subscribe to a portion of universal solar capacity built specifically for this Program, thereby sharing in the benefits of solar generation and receiving a credit for the custom savings produced by the respective

By signing below I agree to the subscription terms and conditions

Please print your name here

Jane Doe

Please print your company here

TEST Company

[View Pre-Registration Agreement](#)

SUBMIT



Program Implementation

Pending Florida PSC Approval, Billing would begin as early as March 2020

	2018	2019				2020	
	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Pre-Registration For Commercial Cust.		■ 11/29/2018 - 1/25/2019					
Florida PSC Petition & Tariff Filing		■ 3/1/2019 - 10/31/2019					
Expected PSC Program Approval					■ 10/7/2019 - 10/31/2019		
Expected Program Opening					■ 11/1/2019 - 11/17/2019		
Energy Centers Operational						▲ 1/31/2020	
First Bill Cycle						▲ 3/1/2020	



FPL Shared Solar

Helpful Program Information

Program Website

www.fpl.com/solartogether

Contact Us via Email

SolarTogether@fpl.com





Advancing solar in Florida

Solar Together, an FPL Shared Solar Program, allows customers to share in the benefits and costs of universal solar while receiving monthly bill credits on their FPL bill.

Reduce your energy costs while achieving your sustainability goals

 Benefits	 Economics	 Terms
<ul style="list-style-type: none"> Offset up to 100 percent of your energy usage (subject to availability) Renewable Energy Credits (RECs) are retired on your behalf Receive bill credits immediately 	<ul style="list-style-type: none"> Simple payback between 5-7 years Fixed monthly subscription rate Excluding all credits No maintenance, operational or insurance costs 	<ul style="list-style-type: none"> No upfront cost No long term contract Subscription is transferable to another state or location Subscription cannot be sold or transferred to another customer

[GET STARTED](#)

How the program works

- Determine your subscription share by selecting the amount of energy you wish to offset - up to 100%
- Calculate your monthly subscription total based on the fixed subscription rate of \$6.76/kWh multiplied by your subscription share
- Estimate your monthly subscription credit based on your subscription share multiplied by the amount of solar energy produced multiplied by the subscription credit rate

100 kW subscription example

 100 kW Shared Solar Subscription 100 kW subscription share x \$6.76/kWh fixed subscription rate	 Solar Energy Produced 212 kWh per month x 100 kW subscription share	 Subscription Credit 21,200 kWh solar energy produced x \$0.0309/kWh subscription credit rate
Your Monthly Subscription Cost \$676	21,200 kWh solar energy	Your Monthly Bill Credit \$653

That means you get solar energy for just \$23 for the month!*

And over time, the annual benefits are forecasted to exceed the costs.

Estimated Annual Bill Impact
 100 kW Subscription Example



The graph above shows the estimated bill impact over a ten-year period for a 100 kW subscription example. While the annual subscription cost remains the same year after year, due to the fixed nature of the subscription rate, the annual subscription credit grows annually. In the first year of a 100 kW subscription, program participation would cost approximately \$275, which is the difference between the subscription cost of \$6,112 and the credit of \$7,337. By year five, the annual subscription remains \$6,112 and the credit grows to \$5,292, so the credit exceeds subscription cost by \$90. By year ten, the cost of the subscription is still \$6,112 and the credit is now \$5,683 for the year, increasing the credit difference by \$570.

Ready to sign up?

[GET STARTED](#)

Or to learn more, view our frequently asked questions or register for one of our upcoming webinars >

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First, let's calculate your estimated maximum subscription based on your average monthly FPL bill.

How many business locations do you currently have in FPL service territory?

On average, how much do you spend monthly (in dollars) on your FPL bill for a single location?

CALCULATE

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- Community
- Donate to Care To Share®
- Rates and Your Bill

About Energy

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- Clean Energy
- Smart Meters
- Power Disturbances
- Safety

Partner Resources

- Supplier Home and Login
- PIC Login
- Fuel Portal
- Building and Construction
- Land Use
- Assist Agency Login
- WebTAXI Login

En Español

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Ahora la información que necesitas sobre tu servicio eléctrico está disponible en español en FPL.com.

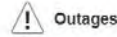
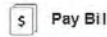


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Customer Info

Agreement

Confirmation

1

2

3

Customer Information

This is how we'll send status updates.

Business Name

Please enter Business Name

Email Address

Phone Number

Estimated Kilowatt Subscription

Account Number (Optional)

NEXT

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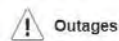
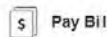


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SolarTogether - An FPL Shared Solar Program

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By signing below I agree to the subscription terms and conditions

Please print your name here

Full Name

Please enter your full name

Please print your company here

Cristina Test

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Customer Info

Agreement

Confirmation



Thank you!

Thank you for your interest in FPL's Shared Solar program. Your early registration has been received.

REGISTRATION NUMBER	1920
ESTIMATED SUBSCRIPTION	7
REGISTRATION DATE	Apr 25, 2019 09:58 AM
A confirmation email will be sent to cristina.habersetzer@fpl.com	

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Program Questions

How does SolarTogether, FPL shared solar program work?

SolarTogether, FPL's shared solar program is designed to provide customers with the opportunity to share in the benefits and costs of a large solar energy center while receiving monthly credits on their FPL bill.

Who can participate and how are the costs/benefits different between customer rate classes?

All of FPL's residential and business customers, regardless of whether you own or rent your residence or business, are eligible to participate.

All customers and all rate classes may enroll in this program – the monthly subscription charge and subscription credit rates are the same for all customers.

How much energy can a customer/account subscribe?

Participants can subscribe an amount that would produce up to 100% of their annual kilowatt hour electricity usage.

When will the program be approved by the Florida PSC?

The program will be filed with the Florida PSC in the first quarter of 2019, and we anticipate the Commission's approval in the fourth quarter of 2019.

Pending approval, we expect the earliest you would be billed for your subscription is the first quarter of 2020.

When will the program be approved by the Florida PSC?

The program will be filed with the Florida PSC in the first quarter of 2019, and we anticipate the Commission's approval in the fourth quarter of 2019.

Pending approval, we expect the earliest you would be billed for your subscription is the first quarter of 2020.

What if the program is sold out and I want to participate?

FPL will maintain a waitlist of interested customers. Pending program approval and the start of enrollment, FPL will notify you if space is available; you then will have 2 weeks to enroll in the program.

You can notify FPL at any time if you would like to be removed from the waitlist.

Is my subscription transferable, and if so, what are the guidelines for transferring my subscription?

Yes, your subscription is transferable to another metered account that is in your name (i.e., a different retail store location, office or manufacturing operation).

We assist you in finding another one of your FPL accounts with similar usage to your current subscription or we can adjust your subscription in the program to align with the new account associated with your subscription.

Can participants in the program claim the Investment Tax Credit?

No. The subscription charge already factors in the financial benefits associated with the Investment Tax Credit (ITC).

How does participating in this program impact my electric rate structure, time of use, demand charges, and/or load control credits?

Enrolling in the program will have no impact on your existing electric rate structure, time of use charges and/or demand charges.

Enrolling will not change in any way the number of kWh you consume on a monthly basis.

Your subscription charge and subscription credit will appear as individual line items on your monthly billing statement.

Can I subscribe for all the power I need or only a portion of it? How do you determine how much power each customer can receive?

Participants can subscribe to an amount that would produce up to 100% of their annual kilowatt-hour usage. (Refer to [the subscription calculator](#))

Following the PSC's expected approval of our filing, FPL will provide information to subscribers about the capacity they will receive.

What does the monthly subscription cost represent?

our monthly subscription cost is the fixed dollar subscription rate times your subscription share (the number of kW in your subscription).

The subscription rate reflects the costs related to construct, own and operate the solar plants we build to serve participants in the program. The monthly subscription rate does not change over time.

What does the subscription credit represent?

Your subscription credit is based on the actual solar generation your subscription share produced in a given month multiplied by the subscription credit rate.

The subscription credit rate will increase annually, if you remain in the program.

How will the program appear on my bill?

Your subscription cost and subscription credit will appear as two individual line items on your bill, so you can always see how much your subscription is saving you.

When will billing begin for enrolled customers?

FPL will file the program with the Florida PSC in the first quarter of 2019, and we anticipate PSC approval in the fourth quarter of 2019.

Pending PSC approval, we expect the earliest you would be billed for your subscription is the first quarter of 2020.

Does my enrollment and PSC approval of the program mean that I'll be billed under a new FPL electric rate?

Enrolling in the program will have no impact on your existing electric rate structure, time of use charges and/or demand charges.

Enrolling will not change in any way the number of kWh you consume on a monthly basis.

The subscription charge and subscription credit will appear as individual line items on your monthly billing statement.

Could program subscription rates be changed if the price of natural gas or other fuels changes?

No, the subscription rates approved by the Florida PSC will be locked and cannot change without Florida PSC approval.

When can I expect to see this program lower my electric service bills?

On an annual basis, program participants are expected to realize a net bill reduction sometime between three to five years and achieve simple payback between five to seven years.

Will I have access to the subscription credit schedule to help me determine my payback timeframe?

Because your credit is based on solar generation, we cannot guarantee payback. However, assuming typical Florida weather, we expect a payback between years 5-7.

Yes, the credit schedule will be submitted to the PSC and will appear on the SolarTogether website for those considering participation in the program.

As a participant, am I able to obtain the Renewable Energy Credits (RECs)?

During the enrollment process you may elect to have the Renewable Energy Credits (RECs) retired on your behalf. FPL will provide you with the appropriate documentation if REC retirement is elected.

Is the renewable energy I support through the program, delivered directly to my residence or business?

No, as with any solar energy center connected to the electric grid, the power generated for the FPL SolarTogether program is delivered directly to the grid, where it is combined with power from conventional generation sources in FPL's energy system.

How much capacity will FPL build for the program?

Capacity has not yet been finalized, we're offering pre- registration to our largest energy user, commercial on a demand-use rate, to better understand their interest in the program and plan accordingly for the solar capacity we will need to meet customers' interest.

Where will the FPL SolarTogether projects be built – must I live in the same community as the solar project?

FPL will build and operate solar energy centers for this program throughout the FPL service territory.

There is no geographic restriction on participation if you live within FPL's service area.

What is the expected life cycle of the new solar power energy centers?

As with all of FPL's power-generating assets, the new solar energy centers are designed to operate for 30 years or more.

Standard O&M, upgrades and equipment replacement over the 30-year lifespan have been factored into program pricing and rates.

How do your solar energy centers perform during/after hurricanes?

Our solar energy centers are built to local wind and building codes; they have performed extremely well during major storms, including Hurricane Irma.

Will I have access to information to monitor how my subscription share is performing?

Your subscription cost and subscription credit will appear as two individual line items on your bill, so you can always see how much your subscription is saving.

You will have online access to additional details, including your shares' monthly power generation.

We expect to make this information available on the program website in near-real time; also, previous months' data will appear on your energy dashboard.

Who should I contact if I have questions about this program?

If you have further questions, please e-mail us at SolarTogether@FPL.com. If you would prefer to speak to a net metering representative, you can contact us at (305) 387-6614.

Pre-Registration Questions

Why is pre-registration restricted to only commercial customers?

We're offering pre-registration for all commercial customer with accounts on a demand rate. These are our largest energy users and will enable us to better understand their interest in the program and plan accordingly for the solar capacity we will need to meet customers' interest.

Following approval from the Florida PSC, the program will be open to all FPL customers for enrollment in the fourth quarter of 2019. We will announce more details closer to the program's expected launch next year. And you are always welcome to check back with us.

When will small business and residential customers be able to enroll?

Following approval from the Florida PSC, the program will be open to all FPL customers for enrollment in the fourth quarter of 2019.

We will announce more details on the program closer to its expected launch next year. And you are always welcome to check back with us.

Where can I find a copy of the pre-registration agreement?

You can download a [copy of the agreement here](#).

How many customers are going to be selected for the program?

We expect this program to be very well received -- **that's why we** are opening a pre-registration period to encourage you to reserve your space now.

Is the pre-registration agreement binding?

Pre-registering in the program requires a binding agreement. Customers who pre-register will be automatically enrolled in the program pending PSC approval.

Participants will not see a subscription cost or subscription credit on their bill until after the solar power plants dedicated to this program are operational.

After the first billing cycle of the program, customers can unsubscribe from the program and will not be able to re-enroll for a 12-month period. **Customer's may also elect to reduce their subscription following the first billing cycle.**

What if I decide I don't want to participate in the program after pre-registering or if I'd like to reduce my subscription?

Pre-registering in the program requires a binding agreement. Customers who pre-register will be automatically enrolled in the program pending PSC approval.

If I pre-register, can I increase, decrease or terminate my subscription?

Pre-registering in the program requires a binding agreement. Customers who pre-register will be automatically enrolled in the program pending PSC approval.

If you wish to increase your subscription, we ask you to submit a new agreement through the FPL SolarTogether website (www.fpl.com/solartogether).

After the first billing cycle of the program, customers can unsubscribe from the program and will not be able to re-enroll for a 12-month period. **Customer's may also elect to reduce their subscription following the first billing cycle.**

If I don't subscribe before the pre-register deadline, can I be placed on a waiting list?

The pre-registration window is Nov. 29, 2018 through Jan. 25, 2019. Following approval from the Florida PSC, the program will be open to all FPL customers for enrollment in the fourth quarter of 2019.

We will announce more details on the program closer to its expected launch next year. And you are always welcome to check back with us.

What is the subscription calculator and how does it work?

The subscription calculator is a tool to help you estimate your maximum program subscription.

To use the tool successfully you need to provide the number of FPL business locations and an average monthly spend in dollars for a single location. The calculator uses this information to estimate your annual electric usage in kWh and converts that to a maximum subscription quantity.

I haven't received a pre-registration status update; can you provide me with one?

FPL will update you on your subscription request by email within 30 to 60 days after pre-registration has closed.

If I pre-registered, how will I be notified of my subscription size and if I have been waitlisted?

Within 30 to 60 days after pre-registration has closed, FPL will update you on your subscription request by email.

Who should I contact if I have questions about the pre-registration process?

If you have further questions, please e-mail us at SolarTogether@FPL.com. If you would prefer to speak to a net metering representative, you can contact us at (305) 387-6614.

**SolarTogether – An FPL Shared Solar Program
Pre-Registration Agreement**

Pursuant to this pre-registration agreement (“**Agreement**”), the undersigned (“**Subscriber**”) is agreeing to subscribe to a specified number of kilowatts (“**kW**”) of solar-generated electric power under SolarTogether – An FPL Shared Solar Program (“**Program**”) sponsored by Florida Power & Light Company (“**FPL**”). The Program will be filed with the Florida Public Service Commission (“**FPSC**”) in 2019, and it is anticipated that Program power will become available to FPL customers sometime in March 2020. This voluntary program allows FPL customers to subscribe to a portion of universal solar capacity built specifically for this Program, thereby sharing in the benefits of solar generation and receiving a credit for the system savings produced by the respective capacity for which such customer subscribes.

**Article I
Pre-Registration Terms**

1. **Pre-Registration Quantity.** Subscriber hereby registers for [] kilowatts (kW) (“**Pre-Registration Quantity**”) of Program capacity. The Pre-Registration Quantity Amount must be in whole kilowatt (kW) increments and cannot exceed Subscriber’s total kWh usage for the immediately preceding 12 months, which will be determined by dividing Subscriber’s total kWh for the preceding 12 months by 2,535 (“**Maximum Subscription Quantity**”).

2. **Reservations; Wait Listing; Reservation Quantity Increases and Decreases.**

- a) **Reservations.** Upon submission of this Agreement, Subscriber will receive via email a date and time stamped confirmation of its receipt (“**Timestamped Confirmation**”) by FPL. Following the pre-registration period, FPL will verify Subscriber’s FPL electric service account (“**FPL Account**”) information and, subject to then-remaining Program capacity, will reserve the Pre-Registration Quantity based on Subscriber’s Timestamped Confirmation. FPL reserves the right to apportion the available Program power to ensure that no single customer or customer group amasses all or an unreasonable share of the Program capacity. FPL will notify Subscriber in writing of Subscriber’s reserved kilowatt (kW) allocation of Program capacity (“**Reservation**”). If the Reservation reflects a reduction in the Pre-Registration Quantity by more than 10%, Subscriber will have 10 business days after its receipt of the Reservation in which to cancel the Reservation, except in the case where the reduction is made to meet the Maximum Subscription Quantity requirement.
- b) **Wait Listing.** Subscribers whose Agreements are received after the Program’s kW capacity is fully subscribed will be so notified by FPL and will be placed on a waiting list in the order of their Timestamped Confirmation and will be admitted into the Program as, when and to the extent that Program kW capacity thereafter becomes available.
- c) **Reservation Increases.** Subscriber may elect to increase the Reservation, subject to the Program’s then-available kW capacity and the Maximum Subscription Quantity, at any time prior to the opening of the Program in accordance with Section 3 of this Article I by executing and delivering to FPL a new Agreement, which would supersede this Agreement. Subscriber

may not elect to decrease its Reservation prior to Enrollment (as defined in Section 3 of this Article I). A decrease in Subscriber's Subscription Quantity (as defined in Section 3 of this Article I) may be made after Enrollment in accordance with Section 4 of Article II of this Agreement.

3. **Opening of Program and Enrollment.** When the Florida Public Service Commission approves the Program ("**FPSC Approval**"), FPL will designate the date on which the Program will open ("**Program Opening Date**"), and Subscriber hereby authorizes FPL to enroll Subscriber in the Program ("**Enrollment**") on the Program Opening Date. The Reservation will determine the total number of kW subscribed to ("**Subscription Quantity**") by Subscriber. Opening of the Program and Enrollment are conditioned upon FPSC Approval. FPL will notify all Subscribers as to whether FPSC Approval is or is not obtained, and if FPSC Approval is obtained, FPL will notify Subscribers of the Program Opening Date and their Enrollment in the Program, provided that, if the FPSC Approval provides for Monthly Subscription Charge pricing *in excess* of, or Monthly Subscription Credit pricing *less than*, the amounts set forth in Section 1 of Article II of this Agreement or other material modifications to any of the other material terms in Article II of this Agreement, FPL will so notify Subscribers, and each Subscriber will have 10 business days after the date of its receipt of such notification in which to elect to (i) cancel its Reservation and forgo Enrollment or (ii) cancel its Enrollment, if Enrollment shall have already occurred prior to the expiration of such period of 10 business days.

4. **Termination.** This Agreement shall remain in effect until the earlier of the Program Opening Date and the date on which FPSC Approval is denied. Except as provided in the last sentence of Section 3 of this Article I, Subscriber may not terminate this Agreement at any time prior to Enrollment. If Subscriber terminates this Agreement after Enrollment and before the first billing month under the Program, Subscriber's monthly FPL Account bill for the first billing month under the Program will nevertheless include the full amount of the Monthly Subscription Charge and the full amount of the Monthly Subscription Credit (as such terms are defined in Section 1 of Article II of this Agreement).

Article II

FPL Proposed FPSC Program Terms

1. **Monthly Rate.** Subscriber's total monthly FPL Account bill will include a "Monthly Subscription Charge" and a "Monthly Subscription Credit," calculated as follows:

Monthly Subscription Charge = Subscription Quantity x \$6.76/kW

Monthly Subscription Credit = \$0.0308/kWh (escalating annually at 1.45%) × $\frac{\text{Subscription Quantity}}{\text{Program Capacity}}$ × Program Output (kWh)

2. **Eligibility.** Any FPL customer that takes electric service under a metered rate schedule and has no delinquent FPL Account balances is eligible to participate in the Program ("**Eligible Customers**"). An Eligible Customer may elect a subscription level in whole kW increments up to such customer's total kWh usage for the immediately preceding 12 months and may elect once every year thereafter to increase the number of whole kW purchased under the Program, subject to then-available Program capacity.

3. **Billing.** Eligible Customers participating in the Program will be subject to the minimum FPL Account bill on their otherwise applicable rate schedule. The Monthly Subscription Charge and the

offsetting Monthly Subscription Credit will appear as separate line items on the monthly FPL Account bills of participating Eligible Customers during every month of their respective Enrollments and will be subject to all applicable taxes and fees.

4. **Termination and Reduction.** Program participants may terminate their participation in the Program ("**Voluntary Termination**"), or reduce the number of their respective whole kW Subscription Quantities, at any time after the Program Opening Date, and FPL may terminate any customer's participation in the Program if such customer's FPL Account becomes delinquent ("**Involuntary Termination**"), provided that, in the event of either Voluntary Termination or Involuntary Termination, (i) the customer's monthly FPL Account bill for the month in which such termination occurs will include the full amount of the Monthly Subscription Charge and the full amount of the Monthly Subscription Credit, and (ii) the customer will be prohibited from re-enrolling in the Program for a period of 12 months after any such termination, subject to then-available Program capacity.

5. **Portability.** Program participation is entirely portable within FPL's electric service territory. A Program participant may transfer Program participation to a new service address and will be deemed to have continuous, uninterrupted Enrollment for the purpose of determining the participant's Monthly Subscription Credit.

6. **Attributes.** Program participants may elect to have FPL retire on their behalf any renewable energy credits associated with their Program participation.

7. **Subscription Is Not a Security; No Guarantee of Savings.** A Program participant's subscription to purchase kW under the Program is not a security and does not represent an ownership interest in any of the Program's assets and, therefore, may not be sold, assigned, transferred or conveyed by such participant to any other person or entity or otherwise disposed of by such participant. There is no guarantee that a Program participant will realize any savings from participation in the Program.

Example Customer

INPUTS

Customer's Annual Electricity **10,000,000** kilowatt hours
Selected Offset **100%**
Maximum Subscription 3,944 kilowatts

Subscription Size 3,944 kilowatts

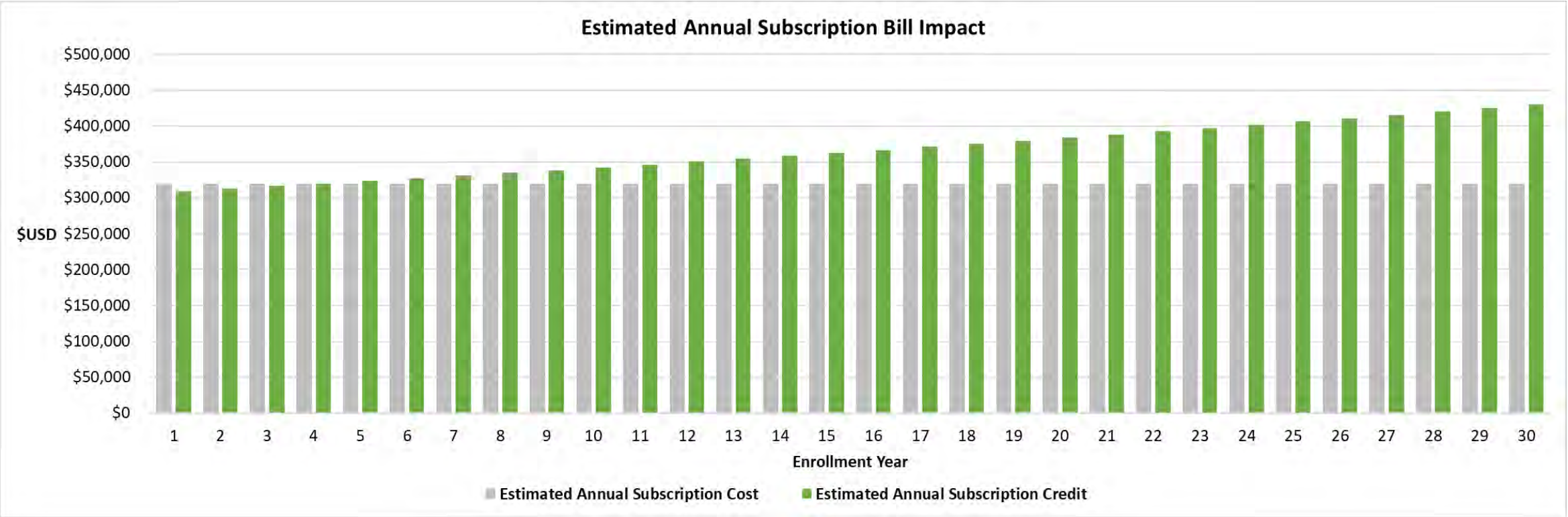
<u>Enrollment Yr</u>	<u>YR 1</u>	<u>YR 2</u>	<u>YR 3</u>	<u>YR 4</u>	<u>YR 5</u>	<u>YR 6</u>	<u>YR 7</u>	<u>YR 8</u>	<u>YR 9</u>	<u>YR 10</u>	<u>YR 11</u>	<u>YR 12</u>	<u>YR 13</u>	<u>YR 14</u>	<u>YR 15</u>
Estimated Annual Subscription Cost	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937
Estimated Annual Subscription Credit	\$309,094	\$312,635	\$316,216	\$319,839	\$323,503	\$327,210	\$330,958	\$334,750	\$338,585	\$342,464	\$346,387	\$350,356	\$354,370	\$358,430	\$362,536
Annual Bill Impact	(\$10,844)	(\$7,303)	(\$3,721)	(\$98)	\$3,566	\$7,272	\$11,021	\$14,813	\$18,648	\$22,527	\$26,450	\$30,419	\$34,432	\$38,492	\$42,599
Net Cumulative Impact	(\$10,844)	(\$18,146)	(\$21,867)	(\$21,965)	(\$18,399)	(\$11,127)	(\$106)	\$14,707	\$33,355	\$55,882	\$82,332	\$112,750	\$147,183	\$185,675	\$228,273

<u>Enrollment Yr</u>	<u>YR 16</u>	<u>YR 17</u>	<u>YR 18</u>	<u>YR 19</u>	<u>YR 20</u>	<u>YR 21</u>	<u>YR 22</u>	<u>YR 23</u>	<u>YR 24</u>	<u>YR 25</u>	<u>YR 26</u>	<u>YR 27</u>	<u>YR 28</u>	<u>YR 29</u>	<u>YR 30</u>
Estimated Annual Subscription Cost	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937	\$319,937
Estimated Annual Subscription Credit	\$366,689	\$370,890	\$375,139	\$379,437	\$383,784	\$388,181	\$392,628	\$397,126	\$401,676	\$406,278	\$410,932	\$415,640	\$420,402	\$425,218	\$430,090
Annual Bill Impact	\$46,752	\$50,953	\$55,202	\$59,500	\$63,847	\$68,244	\$72,691	\$77,189	\$81,739	\$86,341	\$90,995	\$95,703	\$100,465	\$105,281	\$110,153
Net Cumulative Impact	\$275,025	\$325,978	\$381,180	\$440,680	\$504,527	\$572,771	\$645,462	\$722,651	\$804,389	\$890,730	\$981,725	\$1,077,428	\$1,177,893	\$1,283,174	\$1,393,326

30 yr Net Present Value at 3%	\$732,746
30 yr Net Present Value at 5%	\$489,708
30 yr Net Present Value at 7%	\$333,466

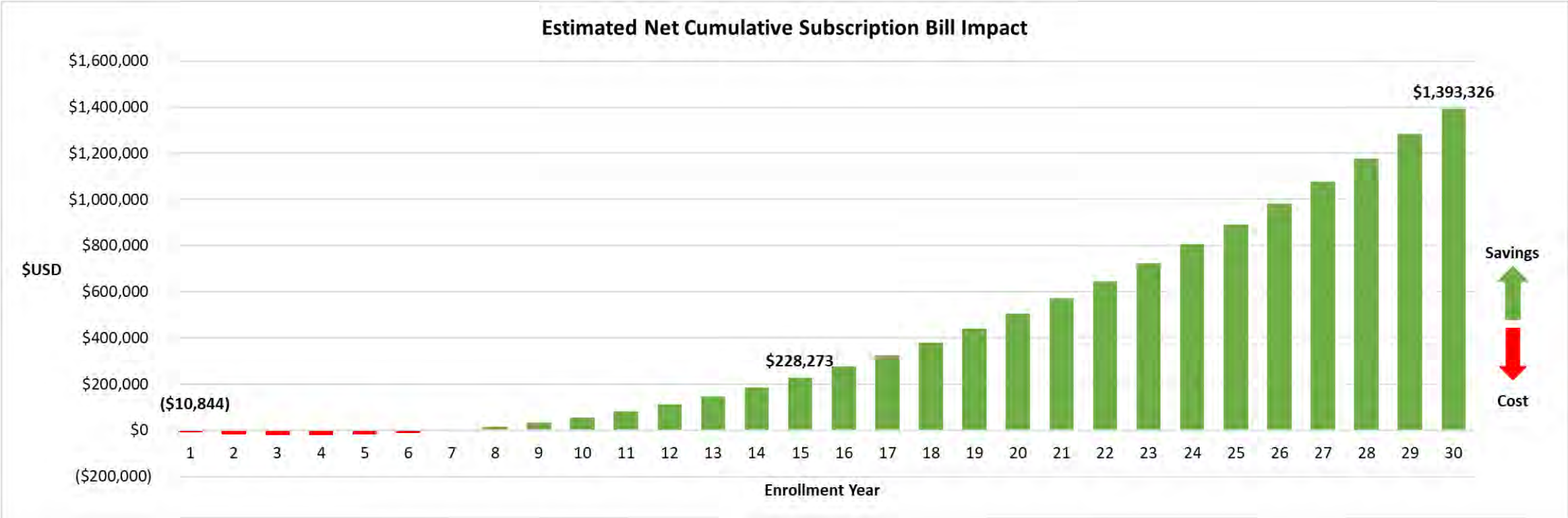
Illustrative examples presented here for discussion purposes only, program charges and credits will be established per the Florida PSC approved tariff

Example Customer



Illustrative examples presented here for discussion purposes only, program charges and credits will be established per the Florida PSC approved tariff

Example Customer



Illustrative examples presented here for discussion purposes only, program charges and credits will be established per the Florida PSC approved tariff



<Customer Address

Dear <Customer,

Announcing FPL Shared Solar Program

SolarTogether, an FPL Shared Solar Program, is an exciting new program that allows you to participate directly in large-scale solar projects in Florida. As a participant, you will be able to offset up to 100% of your energy usage with solar and receive monthly bill credits on your FPL bill for a fixed subscription rate.

The program will be filed with the Florida Public Service Commission (PSC) in the first quarter of 2019. Based on preliminary feedback, we anticipate this program will be very well received, and we're providing you with the opportunity to pre-register starting Nov. 29, 2018, through Jan. 25, 2019. By pre-registering, you are reserving your spot in the program as FPL will enroll you upon PSC approval.

Renewable Benefits

- Offset up to 100% of your annual energy usage (subject to availability)
- Meet sustainability goals - FPL to retire Renewable Energy Credits (RECs) on your behalf

Economics

- Simple payback by seven years
- Fixed monthly subscription rate
- Bill credits that escalate over time

Terms

- No upfront costs or termination fees
- No contract
- Subscription is transferable within FPL territory
- Subscription cannot be sold or transferred to another customer

Once you pre-register, you will receive a confirmation email. As a future participant, FPL will continue to update you on the status of the program in 2019 as we near approval and launch of the program.

We invite you to learn more about the program at an upcoming webinar – visit FPL.com/sswebinar for a list of dates and times.

Sincerely,

John Haney
Sr. Director of Customer Solutions

USEFUL TELEPHONE NUMBERS

Customer Service: (954)797-5000
Outside Florida: 1-800-226-3545
Power Outages: 1-800-4OUTAGE (468-8243)
Hearing/Speech Impaired: 711 (Relay Service)
Visit FPL's Web Site at <http://www.fpl.com>



Dear <customer>,

Introducing SolarTogether - An FPL Shared Solar Program

SolarTogether, an FPL Shared Solar Program is an exciting new program that allows your company to participate directly in large-scale solar projects in Florida. As a participant, you will be able to offset up to 100% of your energy usage with solar and receive monthly bill credits on your FPL bill for a fixed subscription rate.

The program will be filed with the Florida Public Service Commission (PSC) in the first quarter of 2019. Based on preliminary feedback, we anticipate that this program will be very well received, and we're providing you with the opportunity to pre-register starting Nov. 29, 2018, through Jan. 25, 2019. By pre-registering, you are reserving your spot in the program.

To assist you with the registration process, we've calculated your maximum subscription based on your previous 12 months' energy usage – <insert annual usage kWh>. Your maximum subscription is <insert max subscription kW>.

Once you pre-register, you will receive a confirmation email. As a future participant, FPL will continue to update you on the status of the program in 2019 as we near approval and launch of the program.

We invite you to learn more about the program at FPL.com/solartogether and register for an upcoming informational webinar by visiting FPL.com/sswebinar.

Pre-registration will start on Nov. 29 at FPL.com/ssregister

Sincerely

<customer advisor name>

<customer advisor title>

QUESTION:

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.

RESPONSE:

See Attachment No. 1 to this Data Request for the requested data for pre-registered customers. Pre-registration was offered online only, and participants committed to the terms of the pre-registration agreement, (see Attachment No. 2 to this Data Request) by signing electronically, as such there are no "individual" pre-registration agreements to provide. Upon signature, customers were provided with an email and on screen confirmation including a confirmed registration number, estimated subscription, and the registration date (see Attachment No. 3).

**Florida Power & Light Company; Docket No. 20190061-EI
Staff's First Data Request; Request No. 55
Attachment No. 1; Page 1 of 5**

Customer	Reserved Subscription (kW)	Previous 12 mo. Energy Usage (kWh)
Commercial 1	2,330	5,908,080
Commercial 2	153	388,320
Commercial 3	34	85,838
Commercial 4	62	157,777
Commercial 5	41	3,300,054
Commercial 6	77	195,178
Commercial 7	1	172,260
Commercial 8	500	21,263,071
Commercial 9	16	41,220
Commercial 10	142	359,640
Commercial 11	31	78,862
Commercial 12	1,314	3,331,402
Commercial 13	6	25,875
Commercial 14	22	32,026
Commercial 15	68	172,260
Commercial 16	30	76,017
Commercial 17	962	2,438,800
Commercial 18	601	1,524,266
Commercial 19	56	142,620
Commercial 20	11	28,543
Commercial 21	32	80,783
Commercial 22	200	967,200
Commercial 23	113	285,360
Commercial 24	19	46,952
Commercial 25	51	128,409
Commercial 26	3,418	8,666,880
Commercial 27	4,590	11,637,320
Commercial 28	101	42,558
Commercial 29	29	74,524
Commercial 30	7	17,475
Commercial 31	31	77,668
Commercial 32	15	37,719
Commercial 33	706	1,791,360
Commercial 34	200,000	686,173,020
Commercial 35	96	243,060
Commercial 36	62	156,213
Commercial 37	27	69,615
Commercial 38	24	60,292
Commercial 39	19	49,249
Commercial 40	102	258,780
Commercial 41	31	78,293
Commercial 42	29	53,908
Commercial 43	16	40,591
Commercial 44	60	152,880
Commercial 45	209	528,840

**Florida Power & Light Company; Docket No. 20190061-EI
Staff's First Data Request; Request No. 55
Attachment No. 1; Page 2 of 5**

Customer	Reserved Subscription (kW)	Previous 12 mo. Energy Usage (kWh)
Commercial 46	21	52,536
Commercial 47	66	166,055
Commercial 48	36	90,673
Commercial 49	24	59,649
Commercial 50	13	32,874
Commercial 51	5,414	13,726,755
Commercial 52	2,998	7,600,120
Commercial 53	1,300	4,837,691
Commercial 54	800	2,064,182
Commercial 55	550	4,837,691
Commercial 56	30	75,199
Commercial 57	173	437,640
Commercial 58	93	236,100
Commercial 59	93	234,840
Commercial 60	64	161,590
Commercial 61	34	85,241
Commercial 62	29	74,098
Commercial 63	32	81,369
Commercial 64	34	85,903
Commercial 65	12	30,501
Commercial 66	43	108,540
Commercial 67	22	56,672
Commercial 68	16	39,731
Commercial 69	132	354,180
Commercial 70	86	253,260
Commercial 71	185	468,360
Commercial 72	38	97,177
Commercial 73	285	721,920
Commercial 74	44	111,320
Commercial 75	18	46,568
Commercial 76	29	89,837
Commercial 77	23	59,356
Commercial 78	13,891	34,214,030
Commercial 79	45	113,111
Commercial 80	75	189,180
Commercial 81	24	61,454
Commercial 82	240	837,600
Commercial 83	190	514,980
Commercial 84	169	214,080
Commercial 85	82	208,947
Commercial 86	25	63,903
Commercial 87	37	94,765
Commercial 88	101	270,870
Commercial 89	256	649,320
Commercial 90	38	95,096

**Florida Power & Light Company; Docket No. 20190061-EI
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Attachment No. 1; Page 3 of 5**

Customer	Reserved Subscription (kW)	Previous 12 mo. Energy Usage (kWh)
Commercial 91	27	67,920
Commercial 92	420	1,066,796
Commercial 93	9,022	22,872,216
Commercial 94	785	1,992,480
Commercial 95	778	1,973,760
Commercial 96	739	1,874,160
Commercial 97	1,831	4,642,080
Commercial 98	1,344	3,407,271
Commercial 99	381	968,079
Commercial 100	1,962	4,974,400
Commercial 101	630	1,598,956
Commercial 102	55,960	189,143,639
Commercial 103	427	1,082,800
Commercial 104	500	4,787,895
Commercial 105	561	1,424,160
Commercial 106	561	1,424,160
Commercial 107	542	1,375,920
Commercial 108	508	1,289,220
Commercial 109	88	222,624
Commercial 110	174	440,453
Commercial 111	46	115,780
Commercial 112	100	254,520
Commercial 113	452	1,148,160
Commercial 114	2,198	5,574,000
Commercial 115	41	104,400
Commercial 116	35	89,841
Commercial 117	41	114,267
Commercial 118	44	111,303
Commercial 119	41	104,400
Commercial 120	35	89,841
Commercial 121	420	1,065,480
Commercial 122	6	12,714,800
Commercial 123	10,155	25,744,502
Commercial 124	271	687,720
Commercial 125	1,805	4,575,840
Commercial 126	109	277,500
Commercial 127	40,007	116,572,815
Commercial 128	25	63,853
Commercial 129	17	42,214
Commercial 130	573	2,006,640
Commercial 131	74	186,828
Commercial 132	2,519	6,386,640
Commercial 133	13,585	9,423,588
Commercial 134	11,933	1,722,000
Commercial 135	117	296,162

**Florida Power & Light Company; Docket No. 20190061-EI
Staff's First Data Request; Request No. 55
Attachment No. 1; Page 4 of 5**

Customer	Reserved Subscription (kW)	Previous 12 mo. Energy Usage (kWh)
Commercial 136	75	200,340
Commercial 137	548	1,391,461
Commercial 138	9	23,391
Commercial 139	8,902	22,568,904
Commercial 140	18,299	48,650,557
Commercial 141	31	77,909
Commercial 142	12,677	20,290,440
Commercial 143	48	135,876
Commercial 144	9	22,775
Commercial 145	27	68,728
Commercial 146	8	19,818
Commercial 147	689	1,749,021
Commercial 148	6	83,640
Commercial 149	108,263	185,755,773
Commercial 150	12,468	31,606,640
Commercial 151	3,844	185,755,773
Commercial 152	4,202	10,654,005
Commercial 153	70	223,560
Commercial 154	43	109,440
Commercial 155	61	154,020
Commercial 156	90	1,081,560
Commercial 157	5,428	48,650,557
Commercial 158	487	1,236,210
Commercial 159	1,020	2,584,800
Commercial 160	338	858,698
Commercial 161	10,077	27,711,700
Commercial 162	65	165,716
Commercial 163	3,000	8,827,360
Commercial 164	18,920	49,253,844
Commercial 165	3,853	9,769,640
Commercial 166	1,821	6,040,000
Commercial 167	559	1,418,400
Commercial 168	750	1,901,544
Commercial 169	10	25,680
Commercial Total	622,937	1,931,515,885
Governmental 1	986	2,499,690
Governmental 2	215	546,738
Governmental 3	9,544	24,195,171
Governmental 4	132,000	222,057,425
Governmental 5	17,105	43,363,390
Governmental 6	77	194,280
Governmental 7	11,210	28,417,558
Governmental 8	815	2,067,082
Governmental 9	17,606	44,633,410
Governmental 10	586	1,486,313

**Florida Power & Light Company; Docket No. 20190061-EI
Staff's First Data Request; Request No. 55
Attachment No. 1; Page 5 of 5**

Customer	Reserved Subscription (kW)	Previous 12 mo. Energy Usage (kWh)
Governmental 11	4,567	5,417,659
Governmental 12	11,802	29,919,267
Governmental 13	8,706	22,071,202
Governmental 14	12,305	80,814,788
Governmental 15	83	258,462,689
Governmental 16	1,610	4,083,327
Governmental 17	681	1,726,320
Governmental 18	3,234	8,200,652
Governmental 19	106,000	1,079,286,136
Governmental 20	528	28,997,015
Governmental 21	622	28,997,015
Governmental 22	3,125	7,923,911
Governmental 23	7,366	18,674,776
Governmental 24	417	1,057,791
Governmental 25	10,000	33,791,743
Governmental 26	8,950	22,688,979
Governmental 27	26,076	66,104,890
Governmental 28	42,000	133,014,747
Governmental 29	6,976	17,684,230
Governmental 30	7,307	96,091,853
Governmental 31	180	28,997,015
Governmental 32	180	28,997,015
Governmental 33	1,092	2,770,271
Governmental 34	12,736	32,287,438
Governmental Total	466,687	2,407,521,786
Industrial 1	2,031	5,150,601
Industrial 2	23,003	58,314,073
Industrial 3	6,000	77,964,144
Industrial Total	31,034	141,428,818
Grand Total	1,120,658	4,480,466,489

SolarTogether – An FPL Shared Solar Program Pre-Registration Agreement

Pursuant to this pre-registration agreement (“**Agreement**”), the undersigned (“**Subscriber**”) is agreeing to subscribe to a specified number of kilowatts (“**kW**”) of solar-generated electric power under SolarTogether – An FPL Shared Solar Program (“**Program**”) sponsored by Florida Power & Light Company (“**FPL**”). The Program will be filed with the Florida Public Service Commission (“**FPSC**”) in 2019, and it is anticipated that Program power will become available to FPL customers sometime in March 2020. This voluntary program allows FPL customers to subscribe to a portion of universal solar capacity built specifically for this Program, thereby sharing in the benefits of solar generation and receiving a credit for the system savings produced by the respective capacity for which such customer subscribes.

Article I Pre-Registration Terms

1. **Pre-Registration Quantity.** Subscriber hereby registers for [] kilowatts (kW) (“**Pre-Registration Quantity**”) of Program capacity. The Pre-Registration Quantity Amount must be in whole kilowatt (kW) increments and cannot exceed Subscriber’s total kWh usage for the immediately preceding 12 months, which will be determined by dividing Subscriber’s total kWh for the preceding 12 months by 2,535 (“**Maximum Subscription Quantity**”).

2. **Reservations; Wait Listing; Reservation Quantity Increases and Decreases.**

- a) **Reservations.** Upon submission of this Agreement, Subscriber will receive via email a date and time stamped confirmation of its receipt (“**Timestamped Confirmation**”) by FPL. Following the pre-registration period, FPL will verify Subscriber’s FPL electric service account (“**FPL Account**”) information and, subject to then-remaining Program capacity, will reserve the Pre-Registration Quantity based on Subscriber’s Timestamped Confirmation. FPL reserves the right to apportion the available Program power to ensure that no single customer or customer group amasses all or an unreasonable share of the Program capacity. FPL will notify Subscriber in writing of Subscriber’s reserved kilowatt (kW) allocation of Program capacity (“**Reservation**”). If the Reservation reflects a reduction in the Pre-Registration Quantity by more than 10%, Subscriber will have 10 business days after its receipt of the Reservation in which to cancel the Reservation, except in the case where the reduction is made to meet the Maximum Subscription Quantity requirement.
- b) **Wait Listing.** Subscribers whose Agreements are received after the Program’s kW capacity is fully subscribed will be so notified by FPL and will be placed on a waiting list in the order of their Timestamped Confirmation and will be admitted into the Program as, when and to the extent that Program kW capacity thereafter becomes available.
- c) **Reservation Increases.** Subscriber may elect to increase the Reservation, subject to the Program’s then-available kW capacity and the Maximum Subscription Quantity, at any time prior to the opening of the Program in accordance with Section 3 of this Article I by executing and delivering to FPL a new Agreement, which would supersede this Agreement. Subscriber

may not elect to decrease its Reservation prior to Enrollment (as defined in Section 3 of this Article I). A decrease in Subscriber's Subscription Quantity (as defined in Section 3 of this Article I) may be made after Enrollment in accordance with Section 4 of Article II of this Agreement.

3. **Opening of Program and Enrollment.** When the Florida Public Service Commission approves the Program ("**FPSC Approval**"), FPL will designate the date on which the Program will open ("**Program Opening Date**"), and Subscriber hereby authorizes FPL to enroll Subscriber in the Program ("**Enrollment**") on the Program Opening Date. The Reservation will determine the total number of kW subscribed to ("**Subscription Quantity**") by Subscriber. Opening of the Program and Enrollment are conditioned upon FPSC Approval. FPL will notify all Subscribers as to whether FPSC Approval is or is not obtained, and if FPSC Approval is obtained, FPL will notify Subscribers of the Program Opening Date and their Enrollment in the Program, provided that, if the FPSC Approval provides for Monthly Subscription Charge pricing *in excess* of, or Monthly Subscription Credit pricing *less than*, the amounts set forth in Section 1 of Article II of this Agreement or other material modifications to any of the other material terms in Article II of this Agreement, FPL will so notify Subscribers, and each Subscriber will have 10 business days after the date of its receipt of such notification in which to elect to (i) cancel its Reservation and forgo Enrollment or (ii) cancel its Enrollment, if Enrollment shall have already occurred prior to the expiration of such period of 10 business days.

4. **Termination.** This Agreement shall remain in effect until the earlier of the Program Opening Date and the date on which FPSC Approval is denied. Except as provided in the last sentence of Section 3 of this Article I, Subscriber may not terminate this Agreement at any time prior to Enrollment. If Subscriber terminates this Agreement after Enrollment and before the first billing month under the Program, Subscriber's monthly FPL Account bill for the first billing month under the Program will nevertheless include the full amount of the Monthly Subscription Charge and the full amount of the Monthly Subscription Credit (as such terms are defined in Section 1 of Article II of this Agreement).

Article II FPL Proposed FPSC Program Terms

1. **Monthly Rate.** Subscriber's total monthly FPL Account bill will include a "Monthly Subscription Charge" and a "Monthly Subscription Credit," calculated as follows:

Monthly Subscription Charge = Subscription Quantity x \$6.76/kW

Monthly Subscription Credit = \$0.0308/kWh (escalating annually at 1.45%) × $\frac{\text{Subscription Quantity}}{\text{Program Capacity}}$ × Program Output (kWh)

2. **Eligibility.** Any FPL customer that takes electric service under a metered rate schedule and has no delinquent FPL Account balances is eligible to participate in the Program ("**Eligible Customers**"). An Eligible Customer may elect a subscription level in whole kW increments up to such customer's total kWh usage for the immediately preceding 12 months and may elect once every year thereafter to increase the number of whole kW purchased under the Program, subject to then-available Program capacity.

3. **Billing.** Eligible Customers participating in the Program will be subject to the minimum FPL Account bill on their otherwise applicable rate schedule. The Monthly Subscription Charge and the

offsetting Monthly Subscription Credit will appear as separate line items on the monthly FPL Account bills of participating Eligible Customers during every month of their respective Enrollments and will be subject to all applicable taxes and fees.

4. **Termination and Reduction.** Program participants may terminate their participation in the Program ("**Voluntary Termination**"), or reduce the number of their respective whole kW Subscription Quantities, at any time after the Program Opening Date, and FPL may terminate any customer's participation in the Program if such customer's FPL Account becomes delinquent ("**Involuntary Termination**"), provided that, in the event of either Voluntary Termination or Involuntary Termination, (i) the customer's monthly FPL Account bill for the month in which such termination occurs will include the full amount of the Monthly Subscription Charge and the full amount of the Monthly Subscription Credit, and (ii) the customer will be prohibited from re-enrolling in the Program for a period of 12 months after any such termination, subject to then-available Program capacity.

5. **Portability.** Program participation is entirely portable within FPL's electric service territory. A Program participant may transfer Program participation to a new service address and will be deemed to have continuous, uninterrupted Enrollment for the purpose of determining the participant's Monthly Subscription Credit.

6. **Attributes.** Program participants may elect to have FPL retire on their behalf any renewable energy credits associated with their Program participation.

7. **Subscription Is Not a Security; No Guarantee of Savings.** A Program participant's subscription to purchase kW under the Program is not a security and does not represent an ownership interest in any of the Program's assets and, therefore, may not be sold, assigned, transferred or conveyed by such participant to any other person or entity or otherwise disposed of by such participant. There is no guarantee that a Program participant will realize any savings from participation in the Program.



[LOG IN](#)

[PAY BILL](#)

Registration Name: [REDACTED]
Registration Date: May 09, 2019 02:39 PM
Subscription Quantity Requested: 40,007 kW
Registration Confirmation Number: 430

FPL Shared Solar Registration Confirmation

Thank you for pre-registering for SolarTogether, an FPL Shared Solar Program.

As a future participant, we will continue to update you on the status of the program in 2019 as we near approval and launch of the program.

Please do not reply to this email. This address is not monitored.

For help, visit FPL.com

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[Contact Us](#)

Florida Power & Light Company
700 Universe Blvd., Juno Beach, FL 33408
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QUESTION:

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. Discuss 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.

RESPONSE:

FPL considers numerous factors when evaluating the scope of its solar facilities. These factors include availability of land, proximity to transmission, facility costs, and environmental impacts, to name a few. Since 2016 FPL has successfully added fifteen new 74.5 MW solar energy centers. This practice is advantageous for a number of reasons, including:

- **Timing:** Limiting the capacity to less than 75 MW allows the proposed sites to be permitted locally rather than via the Power Plant Siting Act, as correctly identified in this question. Local permitting typically saves 6-8 months on the overall site development timeline, meaning that FPL can deliver low-cost solar energy to its customers as quickly as possible and avoid unforeseen risks resulting from political changes or movement in commodity and labor markets.
- **Local Input:** Because the sites are permitted locally instead of via a State level process, the communities and elected officials who live and work in the areas where the sites are constructed have the opportunity to provide their input and approve these sites. This helps to attain local input which may otherwise be absent via approval by a geographically remote siting authority.
- **Siting Flexibility:** A 74.5 MW sized facility typically requires between six to eight acres per MW, or roughly 450-600-acres per site – essentially one “section” of land. Experience has shown that parcels of this size are available on the real estate markets with far greater frequency than parcels of a much larger size. This allows FPL to construct its facilities in places where it makes practical sense from a land use and environmental perspective.
- **Geographic Diversity:** By geographically dispersing its solar generation assets, FPL is able to minimize the risk to the portfolio from weather events (*i.e.*, hurricanes or other high wind

events), solar resource fluctuations from local weather patterns, or catastrophic failures to critical equipment, such as the main transformer or interconnected transmission line.

Regarding economies of scale, as FPL has stated in various other proceedings and filings before this commission, experience indicates that there is no material loss of scale benefits for an individual site above 50-60 MW. At the 74.5 MW size, FPL is able to capture the economies of scale related to each site's fixed costs, such as the interconnection equipment and also achieve the benefits discussed above. FPL in fact realizes significant benefits of scale in procurement and construction because, for the FPL SolarTogether program, FPL went to market for major equipment and Engineering, Procurement, Construction (EPC) services for all sites at the same time thus realizing savings similar to those associated with constructing a single large site.

That said, since 2016 FPL has historically constructed multiple sites in different locations concurrently. These multiple sites are managed as a "Project" for engineering, procurement, construction, and contracting purposes, which would capture any other theoretical scale economies that may be available from contractors or suppliers.

In regards to the specific sub-questions:

- A. As noted above, there are advantages associated with sites below the 75 MW threshold. At the same time, FPL's experience indicates there is not material loss of scale economies based on its engineering procurement, contracting, and construction management practices. Accordingly, FPL has not conducted the specific comparison referenced in the question.
- B. Of the twenty FPL SolarTogether sites under consideration, three of the locations could accommodate sites larger than 74.5 MW.

QUESTION:

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.

RESPONSE:

Paragraph 13 contains a scrivener's error. It should state that the last SolarTogether Projects are estimated to come online by April 2021. The billing dates on the table on page 3 reflect FPL's proposal to begin including the SolarTogether charge and credit 30 days after the commercial operation date of the Project associated with the participant's capacity subscription. The estimated dates are as follows:

	Comm. Operation Date (Est.)	Billing Start Date (Est.)
ST Project 1	2/1/2020	3/1/2020
ST Project 2	2/1/2020	3/1/2020
ST Project 3	1/1/2021	2/1/2021
ST Project 4	4/1/2021	5/1/2021
ST Project 5	4/1/2021	5/1/2021

QUESTION:

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.

RESPONSE:

All FPL customers benefit from the FPL SolarTogether centers over the life of the assets as FPL SolarTogether displaces higher cost fossil-fuel generation and lowers fuel expenses for all customers. The CPVRR analysis estimates projected benefits of \$139 million that will be shared between participants and the general body of customers. Over the life of the program, base revenue requirements for non-participants are expected to increase, on a CPVRR basis, \$48.9 million. This increase is more than offset by the expected clause related CPVRR savings of \$76.6 million, resulting in non-participant CPVRR savings of \$27.7 million. In addition, non-participants benefit from the fuel diversity and environmental benefits associated with the additional solar centers while paying for less than 4% of the cost of the assets, assuming full subscription in the program.

QUESTION:

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?

RESPONSE:

- A. The assumptions embedded in the program's financial analysis regarding system benefits are consistent with the analyses provided to support FPL's SoBRA investments and other generation expansion. This analysis provides the Cumulative Present Value of Revenue Requirements (CPVRR) which in this case shows the program is expected to save customers \$139 million over the life of the FPL SolarTogether Centers. Recognizing the variable nature of fuel pricing and forecasting, FPL designed the program such that 20% of the forecasted system benefits are reserved for the non-participants to protect them from the unknown potential decline in future fuel prices versus the forecast utilized in the analysis. However, it is important to recognize that fuel prices could increase above forecasted levels, in which case the participants' benefits would be unchanged and non-participants' benefits would increase.
- B. The FPL SolarTogether program is designed for FPL to recover 96.4% of the program revenue requirements from the participants through the levelized subscription fees, when fully subscribed; however, the subscription fees will not cover the entire declining revenue requirement at the program onset. All Program costs and expenses will be reflected as base rate recoverable costs. At the time of the next base rate review, the difference between the levelized and declining revenue requirement as well as any unsubscribed capacity would then be recovered via base rates. Over the life of the program, base revenue requirements for non-participants are expected to be \$48.9 million on a CPVRR basis. This increase is more than offset by the expected clause related CPVRR savings of \$76.6 million, resulting in non-participant CPVRR savings of \$27.7 million.

QUESTION:

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.

RESPONSE:

The calculation for determining a participant’s maximum subscription is as follows:

$$\frac{\text{Annual Usage (kWh)}}{\text{Estimated Solar Production Rate (kWh/kW)}} = \text{Maximum Subscription (kW)}$$

Where:

Annual Usage = Total kilowatt hours consumed in the preceding 12-month period

Estimated Solar Production Rate = 2,278 kWh/kW installed¹

Maximum Subscription (kW) is rounded down to the full kilowatt

Customer Type	Annual Usage		Est. Solar Production		Maximum Subscription
Residential (RS-1)	12,000 kWh	÷	2,278	=	5 kW
Commercial (GSLD-1)	219,000 kWh	÷	2,278	=	96 kW
Industrial (GSLDT-3)	5,475,000 kWh	÷	2,278	=	2,403 kW

¹ Based on solar system with a 26% net capacity factor. This figure is used establishing the maximum subscription size, and participants monthly subscription credits will be based on actual monthly generation.

QUESTION:

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?

RESPONSE:

Similar to net metering, the goal of the program is to allow participants to offset all or a part of their own energy use with solar energy; subscriptions therefore are sized to not exceed 100% of the customer's annual kWh consumption. FPL recognizes natural variation, consumer behavior, and energy efficiency measures may impact a customer's annual kWh consumption. The ability to make adjustments effectuates the program intent to offset the participant's personal usage with solar generation.

- A. On an annual basis FPL will review the customer's historical energy consumption. If the customer's subscription exceeds 115% of their historical kWh consumption, the customers will be notified by email or standard mail notification that their subscription will be reduced to 100%, effective as of the next billing cycle. The 115% threshold is the same FPL standard applied to net metering customers and will provide a buffer for natural fluctuations or changes in energy use.
- B. Yes. This provision is intended to account for all reductions in energy consumption, including behavioral changes or new energy efficiency measures adopted by a participant. The same process explained in response to subsection (A) above would be followed to determine if a reduction is necessary.

QUESTION:

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.

RESPONSE:

Program eligibility is defined by the proposed STR - Tariff No. 8.932 as follows:

1. Limitation of Service:

"Any customer taking service under a metered rate schedule who has no delinquent balances with FPL and who supports continuity of the Program is eligible to participate. Eligible customers may elect a subscription level in 1 kW units representing up to 100% of their previous 12-month total kWh usage. Increases in number of units purchased will be limited to once per year and subject to program availability."

2. Terms of Service:

"Not less than one (1) billing cycle. Participants may, at any time following their first billing cycle, terminate their participation ("Voluntary Termination") or reduce the number of subscribed units purchased. Participants may be terminated from the program by FPL if the customer becomes delinquent on the customer's electric service account or for failure to satisfy eligibility requirements ("Involuntary Termination"). Upon either Voluntary or Involuntary Termination, the account is prohibited from reenrolling for a twelve (12) month period.

QUESTION:

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

RESPONSE:

The divestiture of generation would result in the termination of the FPL SolarTogether Program because the basis for FPL's ability to offer the Program would be abolished. The FPL rates and tariffs approved by the Florida Public Service Commission that are in existence at the time of divestiture would no longer be offered to customers. Under a paradigm in which FPL no longer owns generation, the capacity of the solar centers will be owned and marketed by the new owners, and pricing would be market-based. Additionally, there would be no "clause" through which the Program Credits would be charged, and it is unclear how any such Credits would even be calculated.

QUESTION:

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.

RESPONSE:

FPL determined an allocation among customer classes would support a diversity of participants and ensure all customers have an opportunity to participate. The 25 percent allocation for residential and small business customers was established in an effort to achieve this goal while being mindful of program costs and pre-registration demand. Twenty-five percent of the 1,490 MW, or 372.5 MW, will be allocated to residential and small business, enabling 74,500 customers, assuming a subscription of 5 kW each. FPL proposes to allocate 1,117.5 MW to commercial, industrial, and government customers, an amount that reflects the high level of capacity subscribed during preregistration. As stated in Paragraph 14 of the Petition, FPL will periodically reevaluate the level of capacity subscription among these two customer groups (including waitlist) and, if warranted, reassign subscribed capacity between the groups and adjust the allocation as appropriate.

For purposes of the program allocation, customers taking service under a demand-rate rate structure will be classified as commercial, industrial, and government. Non-demand rate customers will be included in the residential and small business group.

For more information on the ability to re-allocate between customer classes, refer to FPL's response to Staff's First Data Request No. 65.

For more information on residential and small business customer interest, refer to FPL's response to Staff's First Data Request No. 53.

QUESTION:

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 subscribed 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?

RESPONSE:

The purpose of the allocation is to provide all customer classes a fair and equitable opportunity to participate. This is especially important at program launch when the program is new. The intent of FPL's request in Paragraph 14 is to allow operational flexibility to meet varying customer needs over the life of the program. It is difficult to predict the perfect allocation, as customer attitudes and behaviors vary and change with time. Allocation flexibility would allow adjustments such that if there is higher than expected demand within one group, and adoption growth in the other is such that unsubscribed capacity is sitting unused, it is reasonable and appropriate to offer that capacity to the waitlisted accounts.

- A. FPL plans to monitor program enrollment on a continuous and ongoing basis.
- B. For each customer class, FPL will track enrollment, subscribed capacity, the number of customers and total capacity waitlisted and calculate growth rates which can be used to measure demand.
- C. FPL interprets this question to mean, what notice of an allocation change would be provided. FPL does not believe it is necessary to notify customers generally should there be a change in the allocation, but would notify Commission staff of the change. An allocation adjustment would be implemented by making subscriptions available for waitlisted and/or new enrollments thereby allowing subscription enrollments to proceed. In the case of waitlisted customers, they will be notified via email or standard mail that the subscription can be fulfilled and given the opportunity to confirm or cancel enrollment activation.
- D. Approval of the Program would include approval of FPL's right to reallocate capacity among the customer groups to better provide all customers who are interested in participating the opportunity to do so. Therefore, reallocation would not require additional commission approval.

- E. Reallocation would be premised on historical behavior and trends among the customer groups. Based on customer interest to date as denoted in FPL's response to Staff's First Data Request No. 53, FPL believes it would not be necessary to allocate 100% of the capacity to one customer class at this time. However, over time, customer attitudes and behaviors change, increasing the allocation to or near 100% may be appropriate to meet the future needs of the customers and the program.

- F. If the full 1,490 MW Phase 1 were 100% allocated to residential customers and assuming a 5 kW subscription size per residential customer, this capacity could serve 298,000 customers. However, as pre-registration demonstrated, there is strong commercial/industrial/ governmental (C&I-G) interest for this program. Allocating 100% of the program to residential customers would not meet the interests and desires of C&I-G customers and vice versa.

QUESTION:

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.

RESPONSE:

- A. FPL has not designated a specific capacity amount or percentage as “unreasonable.” Given that only one customer pre-registered for more than 10% of Phase 1 (149 MW), FPL believes that if Phase 1 is approved at 1,490 MW, a cap will likely not be necessary. However, preserving the right to implement a cap in the future ensures that no single customer amasses a disproportionate share of the program capacity in an amount that effectively prevents other customers from participating.

When evaluating “unreasonableness”, FPL will look to community solar reporting and benchmarking to establish a threshold. The 2018 National Renewable Energy Lab study, “Focusing the Sun: State Considerations for Designing Community Solar Policy” reports that as of 2017 “ten states have limited the ability of certain large customers to procure majority interests in the output of facilities, including six states that have prohibited participants from subscribing to more than 40% of a project’s capacity.”¹

- B. The following example is for illustrative purposes only.

Assuming a 10% cap, no more than 10% of the program capacity can be attributed to one subscriber. For Phase 1, that would translate to a maximum subscription of 149 MW. Customers would not be able to subscribe to more than 149 MW. Any customer who pre-registered for more than 149 MW would be notified that a cap is being implemented and their subscription is being reduced to 149 MW. Per the terms of the Pre-Registration Agreement, if the cap reduced the subscription by more than 10%, the subscriber will have 10 business days to cancel if they so choose.

As the program size increases (*i.e.*, additional Phases are added), the maximum subscription automatically increases. In other words, if a Phase 2 of 250 MW were added, the progra

¹ Cook, Jeffrey J., and Monisha Shah. 2018. Focusing the Sun: State Considerations for Designing Community Solar Policy. Golden, CO: National Renewable Energy Laboratory. NREL/TP-6A20-70663. <https://www.nrel.gov/docs/fy18osti/70663.pdf>.

m size would be 1,740 MW, and the cap would increase to 174 MW. A customer whose capacity was reduced by the cap would have the option to increase their subscription, subject to the cap.

QUESTION:

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.

RESPONSE:

FPL’s intent is to offer future Phases based on customer demand if the addition of new solar centers is determined to be cost-effective. FPL will evaluate the total number of waitlisted customers, the total requested subscription capacity, and the rate at which new customers are added to the waitlist. If demand exists, and the subscription growth rates indicate demand will continue to grow, FPL will begin to develop the next Phase.

QUESTION:

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.

RESPONSE:

Residential administrative cost estimate (\$1.36 million). The residential web-based enrollment system will enable fully automated online enrollment with user authentication and will integrate with all back office customer information systems. This facilitates the use of actual customer premise data for the establishment of the maximum subscription calculations. The web-based enrollment system and back office integration is expected to cost \$1.36 million, with no future administrative costs expected.

Commercial/Industrial/Governmental cost estimate (\$0.9 million). The system that will be utilized to handle the complexity of multi-account businesses for our Commercial/Industrial/Governmental customers will be a back office application and enrollment will be facilitated by FPL's internal customer service organization. This system will utilize actual customer data for establishing the maximum subscription and will assist with distributing the subscription over the customer's multiple accounts (if necessary). The back office application is expected to cost \$0.9 million, with no future administrative costs expected.

QUESTION:

Please refer to paragraph 18 of the Petition. Regarding renewable energy certificates (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?

RESPONSE:

- A. FPL does not have an example. Paragraph 18 references the US EPA's definition of a REC, which does not include further explanation of "social attributes."
- B. FPL does not have an example. Paragraph 18 references the US EPA's definition of a REC, which does not include further explanation of "non-power attributes."
- C. No. However, a REC does represent generation for a zero-carbon source.
- D. No, FPL cannot claim the social and other non-power attributes of RECs retired on the participant's behalf.
- E. Yes, a participant who elects to have RECs retired will receive the RECs generated by the associated subscription for as long as the customer is enrolled.
- F. No, FPL plans to retire the RECs on the participant's behalf at no additional cost.
- G. The proposed tariff 8.933 makes no mention of REC retirement. Participants may elect this no cost option during enrollment as it is a no cost option participants elect during the enrollment process.
- H. RECs that are generated but not retired remain in the possession of FPL on behalf of its customers.

QUESTION:

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.

RESPONSE:

- A. There are no proceeds from REC sales.
- B. The operational costs associated with registering and retiring the RECs in the North American Renewables Registry™ is estimated to be between \$0.06 to \$0.08 per megawatt hour. These costs are part of the overall program administration costs and are included in the subscription rate.
- C. There is no active market for REC sales in Florida, and therefore there are no monetized REC related costs and/or benefits included in FPL SolarTogether.
- D. There is no active market for REC sales in Florida.

QUESTION:

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.

RESPONSE:

FPL's 2020 Solar Project that is the subject of FPL's Solar Base Rate Adjustment request in Docket 20190001-EI (the "2020 SoBRA Project") as well as the FPL SolarTogether Projects are cost effective and projected to generate significant customer savings. As described below, there is inherent variation in costs from site to site given differences in the costs of land acquisition, interconnection, specific site configurations, material needs, labor, and transportation, among other things. It is also important to note that a cost-effectiveness analysis considers both the installed cost and the performance (*i.e.*, the expected capacity factor and firm-capacity value) of the projects. As explained below, the 2020 SoBRA Project has a higher capacity factor and a correspondingly higher installed cost, while the SolarTogether Projects have a lower capacity factor and a corresponding lower installed cost.

The major factor driving the cost difference is the differences in the solar module selection and site design.

Solar Array Equipment.

Solar Modules. FPL prioritized the procurement of equipment for the 2020 SoBRA Project. For the 2020 SoBRA Project, FPL completed a design optimization process to ensure that the technology and designs selected for the SoBRA sites maximized customer savings. This process demonstrated that the use of monocrystalline solar modules created the greatest customer value. Therefore, the design and installation costs for 2020 SoBRA Project include monocrystalline solar modules.

When FPL gained enough information through pre-registration regarding the level of customer interest in SolarTogether, there was an insufficient supply of these monocrystalline modules in the solar module market. FPL elected to proceed with the Program using polycrystalline modules with a slightly lower power rating (lower wattage per module) which were available for purchase in the required quantities and on the timelines needed to support SolarTogether. Therefore, the designs and installed costs for the SolarTogether Program include polycrystalline solar modules, which have a lower power rating and lower cost.

DC/AC Ratio. The lower power rating of each module effectively means that in order to achieve the same DC/AC ratios for FPL SolarTogether sites that were achieved for the 2020 SoBRA Project, the sites would need to utilize a considerably larger number of solar modules, require more land, and higher balance of system costs. This approach was impractical given the physical constraints at the majority of the FPL SolarTogether sites coupled with additional permitting timelines that would result from the size increase. Accordingly, FPL was unable to achieve the same DC/AC ratios at the SolarTogether sites.

Module Racking System Selection. Finally, FPL SolarTogether has a higher percentage of fixed tilt sites relative to single-axis tracker sites than the 2020 SoBRA Project, as depicted in the table below. The cost of a fixed tilt site is typically lower on an installed cost basis compared to a single axis tracker, which effectively drives down the average installed cost for FPL SolarTogether.

A table which summarizes the performance characteristics of the two different site portfolios is included below for comparison.

	SolarTogether*	SoBRA
Average \$/kWAC	\$1,202	\$1,378
Average Net Capacity Factor	26.2%	28.7%
Panels Technology	Polycrystalline	Monocrystalline
Avg. Firm Capacity Value	50%	61%
DC/AC Ratio	1.26 to 1.54	1.45 to 1.50
Design	11 Fixed Tilt / 9 Tracking	2 Fixed Tilt / 2 Tracking
*Exclusive of program administration costs		

QUESTION:

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

RESPONSE:

Please refer to Attachment No. 1 to this Data Request (“FPL SolarTogether Admin Costs by Year”).

QUESTION:

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.

RESPONSE:

- A. Similar to the way all resource planning is conducted, the net benefits of FPL SolarTogether are a function of the modeled forecast and projections for fuel, sales, or capacity costs.
- B. FPL has performed sensitivities with regards to fuel and emissions forecasts. Please refer to FPL's response to Staff's First Data Request No. 78 for these results.

QUESTION:

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.

RESPONSE:

- A. Yes, the difference between the participant's FPL SolarTogether Charges and Credits is approximately \$111 million.
- B. Yes. The total CPVRR savings are estimated at \$139 million. The participant savings amount is \$111 million, resulting in non-participants CPVRR savings in the amount of \$28 million.
- C. The non-participant benefits are subject to change, either favorably or unfavorably. For example, to the extent the program is not fully subscribed in any given month, the benefits that would have accrued to this unsubscribed subscription amount would instead accrue to non-participants. In another example, although the Subscription Charge is fixed, the Subscription Credit is variable as it is dependent on the solar output. That is, as energy output increases, the Credit will increase, thereby increasing fuel clause costs for all customers. This increase will be largely mitigated as increases in solar energy output will displace non-solar generation, thereby saving fuel costs for all customers.

QUESTION:

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.

RESPONSE:

Please refer to Attachments Nos. 1-3 to this response: Attachment No. 1 shows the resource plans for the No ST Plan and FPL SolarTogether Plan, Attachment No. 2 shows the annual reserve margin data, and Attachment No. 3 shows the Schedule 9 information for the units in both resource plans.

QUESTION:

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.

RESPONSE:

FPL's Integrated Resource Planning (IRP) process consists of several steps. The first step determines the magnitude and timing of new resource needs and is based on FPL's latest load forecast. The second step identifies the resource options and plans that can meet the identified resource need. In the third step, FPL evaluates the competing options. In the fourth and final step, FPL selects the resource plan.

This IRP process was followed in the development of FPL's 2019 Ten Year Power Plant Site Plan, which evaluated a number of types of generation options, including combined cycle units, combustion turbines, solar, and batteries, that could address FPL's projected resource needs through the year 2030 absent any incremental DSM additions from 2020-on. The intent was to develop a Supply Only resource plan to which DSM could then be compared to. This IRP work was performed using EPRI's EGEAS optimization model. The most economic plan that resulted from these EGEAS analyses, shown in the FPL Ten Year Power Plant Site Plan 2019-2028 ("2019 TYSP"), included a 2026 combined cycle unit in the year 2026. It also included 7,152 MW (nameplate) of solar projects from 2019 to 2028, which includes 596 MW of SoBRA projects in 2019 and 2020.

The 2019 TYSP was the starting point in the development of the resource plans described in paragraph 21 of the Petition and used in evaluating the FPL SolarTogether project. First, all future solar resources not in-service by 2019 were removed as potential options to meet future resource needs. The EGEAS model was used to develop a new resource plan without future solar projects, which was called the No SolarTogether ("No ST") Plan. A second resource plan, called the FPL SolarTogether Plan, was developed by adding the FPL SolarTogether Projects as a future resource. The EGEAS model was again used to develop this Plan. The only assumption/input difference used in the development of the two plans described in the petition was the availability of the FPL SolarTogether Projects.

In this docket, FPL is asking for approval of the FPL SolarTogether project only, not for approval of a larger solar portfolio, FPL did not include future solar projects in the resource plans beyond the projects under consideration for approval. This is the same process that FPL has used in the economic analyses for previous solar projects, including the 2017, 2018, and 2019 SoBRA Projects.

QUESTION:

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				

RESPONSE:

Please see FPL’s response to Staff’s First Data Request No. 78.

QUESTION:

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														

RESPONSE:

Please see Attachment No. 1 to this Data Request that provides the annual revenue requirement in nominal and present values dollars, as well as CPVRR, for nine natural gas and CO₂ price scenarios. The CO₂ price scenarios considered included a low (i.e., zero) price scenario, as well as mid and high band CO₂ price scenarios.

QUESTION:

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				

RESPONSE:

Please see Attachment No. 1 to this Data Request, that provides the total (tab 1) and annual (tab 2) value for the net system savings in nominal and present values dollars for the Base Case scenario (Mid Fuel and Mid CO₂), Low Fuel scenario, High Fuel scenario, and the No CO₂ Cost scenario (the Low CO₂ scenario represents No CO₂ Costs). Along with these scenarios, FPL also provided a High CO₂ scenario.

QUESTION:

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.

RESPONSE:

Yes, FPL believes the FPL SolarTogether facilities are prudent capacity additions as they reduce overall system costs, thus benefiting all customers. These solar projects are in line with FPL’s 2019 Ten Year Site Plan which showed that solar was expected to be the most cost-effective generation for the next several years.

FPL is proposing a voluntary cost recovery program to meet the interest and needs of customers who wish to directly participate in solar and renewable generation. Many customers cannot or do not wish to install solar on their rooftop. FPL SolarTogether provides them with a viable participation alternative. FPL SolarTogether is designed to meet FPL customers’ demand for programs that help achieve their environmental, emissions reductions, and sustainability goals, while offering energy bill savings over time.

Please refer to FPL’s response to Staff’s First Data Request No. 49 for detail on solar participation and Staff’s First Data Request No. 53 for additional detail on the barriers to rooftop solar.

QUESTION:

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.

RESPONSE:

The tables below lay out the calculation of the Subscription Rate and Benefit Rate. The tables, in Excel format, are provided in Attachment No. 1 to this Data Request.

Calculation of the FPL SolarTogether Subscription Rate

CPVRR Costs = \$1,321,343,647
Subscription Rate = CPVRR Costs / Sum of Annual (Discount Factor x Total MWs x 1000) / 12 months
= CPVRR Costs / Sum of Annual (A x G x 1000) / 12 months
= \$1,321,343,647 / 16,288,753 / 12 months = \$6.76/kW-month

Calendar Year	A	B	Capacity (MW) Adj for Months of Operation					G	H	CPVRR->	\$1,321.3
	Discount Factor	ST Proj 1	ST Proj 2	ST Proj 3	ST Proj 4	ST Proj 5	Total	Sum of A x G	Subscription Rate \$/kW-Month	Annual Subscription Charge (\$MMs)	
		223.5	223.5	447.0	298.0	298.0	1,490.0	16,288.8			
2020	0.93	204.9	204.9	0.0	0.0	0.0	409.8	382.7	\$6.76	\$33.2	
2021	0.87	223.5	223.5	447.0	223.5	223.5	1,341.0	1,162.5	\$6.76	\$108.8	
2022	0.80	223.5	223.5	447.0	298.0	298.0	1,490.0	1,199.0	\$6.76	\$120.9	
2023	0.75	223.5	223.5	447.0	298.0	298.0	1,490.0	1,112.9	\$6.76	\$120.9	
2024	0.69	223.5	223.5	447.0	298.0	298.0	1,490.0	1,032.8	\$6.76	\$120.9	

Calculation of the FPL SolarTogether Benefit Rate

CPVRR System Benefits = \$1,432,320,931
Benefit Rate = CPVRR System Benefits / Sum of Annual (Discount Factor x Generation x Wgtd. Avg. Esc. Factor) x 100
= CPVRR System Benefits / Sum of Annual (A x B x D) x 100 [where 100 = convert \$/kWh to ¢/kWh]
= \$1,432,320,931 / 41,773,064,069,801 x 100 = 3.42881 ¢/kWh

Calendar Year	A	B	C	D	E	CPVRR->	\$1,432.3
	Discount Factor	Total Generation in kWh	Wgtd. Avg. Benefit Rate Escalation	Wgtd. Avg. Escalation Factor	Sum of: A x B x D = 41,773,064,070	Wgtd. Avg. Benefit Rate ¢/kWh	Subscription (Credits) (Millions)
2020	0.93	932,564,120	0.00%	1.0000	870,944,786	3.42881	\$32.0
2021	0.87	3,074,671,843	0.44%	1.0044	2,677,211,882	3.44400	\$105.9
2022	0.80	3,408,692,157	1.26%	1.0171	2,789,738,836	3.48740	\$118.9
2023	0.75	3,398,466,081	1.45%	1.0318	2,619,172,157	3.53796	\$120.2
2024	0.69	3,397,553,616	1.45%	1.0468	2,465,268,021	3.58926	\$121.9

QUESTION:

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.

RESPONSE:

The formulas used to establish the monthly charges and credits can be found in the Petition; Exhibit B - Subscription Rate and Participant Monthly Subscription Charge, and Exhibit C - Benefit Rate and Participant Monthly Subscription Credit. See also FPL's answer to Staff's First Data Request No. 81. The formulas are not embedded in the Tariff.

QUESTION:

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.

RESPONSE:

The Subscription Rate required in order to cover the full revenue requirements, excluding the avoided system impact savings of avoided generation, is \$9.46/kW-month.

Subscription Rate With and Without Accounting for Avoided Generation Savings

	Including System Impacts		Excluding System Impacts	
	\$MMs	\$/kW-Month	\$MMs	\$/kW-Month
Total Program Costs	\$1,849.2	\$9.46	\$1,849.2	\$9.46
System Impacts - Avoided Generation Savings	(479.0)	(2.45)	na	na
Net Revenue Requirements	\$1,370.2	\$7.01	\$1,849.2	\$9.46
Participant Allocation of Revenue Requirements	96.4%	96.4%	100%	100%
Subscription Revenues & Rate	\$1,321.3	\$6.76	\$1,849.2	\$9.46

QUESTION:

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

RESPONSE:

The Benefit Rate escalation was determined through an iterative process that targeted a simple payback within 7 years, which is the period sought by C&I customers who participate in similar programs. As the Subscription Rate of \$6.76/kW-month that participants pay is fixed and does not escalate, the Benefit Rate and the escalation rate were varied such that participants achieved the targeted payback. The 1.45% escalation rate achieved this goal while providing participants approximately 80% of the overall project benefits.

QUESTION:

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.

RESPONSE:

FPL is seeking inclusion of all FPL SolarTogether centers in rate base as they benefit all FPL customers by providing cost-effective solar and displacing higher cost fossil-fuel generation, which lowers fuel expenses for all customers. FPL will recover the program revenue requirements from the participants through the levelized subscription fees in base rates. Although the subscription fees will not cover the entire declining revenue requirement at the program onset, over time, when fully subscribed, the subscription fees will exceed the declining revenue requirements and FPL will recover 96.4% of the program revenue requirements from the participants through the levelized subscription fees. However, it is important to note that there will be no change in base rates associated with these additions to rate base until the next base rate review. All Program costs and expenses will be reflected as base rate recoverable costs, and subscription fees will be reflected as base revenues offsetting program costs. Accordingly, the FPL SolarTogether costs and expenses will be reflected in FPL's monthly earnings surveillance report.

QUESTION:

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.

RESPONSE:

Paragraph 27 refers to unsubscribed FPL SolarTogether capacity that will benefit the general body of customers, while paragraph 28(c) addresses how FPL SolarTogether program costs will be recovered. The FPL SolarTogether Program is designed such that, over the life of the Program, FPL will recover the Program revenue requirements from the participants through the levelized subscription fees. At the time of FPL's next base rate review, the difference between the levelized and declining revenue requirement as well as any unsubscribed capacity would then be recovered through base rates.

QUESTION:

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?

RESPONSE:

FPL solar energy centers are designed to meet or exceed the local and state building codes, including extreme wind loading associated with hurricane events. If any damage to an FPL SolarTogether site nevertheless results, repair costs would be recovered through insurance to the extent it exceeds FPL's deductibles. Any costs not covered by insurance would be recovered from the general body of customers consistent with Rule No. 25-6.0143, Use of Accumulated Provision Accounts 228.1, 228.2, and 228.4, or through the storm cost recovery mechanism set forth in FPL's current base rate settlement agreement (PSC-2016-0560-AS-EI), as may be applicable.

QUESTION:

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.

RESPONSE:

No, the revenue received from participants through the FPL SolarTogether Charge would not be eligible for FPL's Incentive Mechanism, and therefore would not be included in determining what amount, if any, will be retained by FPL. Instead, *all revenues* received from the participants through the FPL SolarTogether Charge will be included as base rate revenue.

QUESTION:

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?

RESPONSE:

- A. The cost of the credits will be included in total fuel costs and allocated to all customers on the basis of kWh sales.
- B. No. As explained in response to subsection (A) above, credit costs are allocated to all customers based on kWh sales. Participants receive credits based on their subscription.
- C. Yes.

QUESTION:

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"?

RESPONSE:

The FPL SolarTogether Program has limited capacity (kW) available for customers. It would be unfair to allow non-supporters or any customer who takes steps intended to terminate the Program to consume capacity that would otherwise be available to customers who support and wish to participate in the long-term benefits of the Program. With regard to the eligibility requirement that the customers must support continuity of the program, FPL will treat a customer's enrollment and continued participation in the Program as evidence of such support until such time FPL becomes aware that a participant takes affirmative actions that demonstrate its disapproval of the Program or affirmative actions that could lead to termination of the Program. If FPL is aware that a customer does not support the continuity of the Program, that customer will not be permitted to enroll. Likewise, if FPL becomes aware that a participant (*i.e.*, customer already enrolled) does not support the continuity of the Program, that participant's enrollment will be terminated.

QUESTION:

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?

RESPONSE:

Customer subscriptions will be assigned on a first come first serve basis and assigned to projects as they become available, this is referred to as the customer's effective enrollment year and represents the initiation of the program billing process.

- A. A participant whose effective enrollment year is calendar year 2020 will earn a credit rate of 3.42881 cents/kWh for a full 12-month period after which the credit rate will escalate 1.45% to 3.47853 cents/kWh. Annual escalation will continue as established and as represented on proposed tariff sheet 8.934.
- B. A participant whose effective enrollment year is calendar year 2023 will earn a credit rate of 3.42881 cents/kWh for a full 12-month period after which the credit rate will escalate 1.45% to 3.47853 cents/kWh. Annual escalation will continue as established and as represented on proposed tariff sheet 8.934.
- C. A participant who exits the program (voluntarily or involuntarily) is restricted from rejoining the program for a full 12-month period and is subject to subscription availability. If after the 12 month wait there are subscriptions available, the participant is re-enrolled and new effective enrollment date is established; that participant will earn the credit rate of a new participant, earning at the year one credit rate which for the 2020 Solar Projects would be \$3.42881 cents per kWh.

QUESTION:

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.

RESPONSE:

Please see Attachment No. 1 to this Data Request, which provides the monthly generation estimated for each of the SolarTogether project sites over the life of the projects.

Energy production projections of the facilities were developed using industry-accepted PVsyst software. Windlogics (NextEra Analytics) utilized 20+ years of historical satellite irradiance data, including the layout specifications (module type, inverter type, ratio of total module capacity to the point of interconnection capacity (DC/AC ratio), and ground coverage ratio) as inputs for energy production modeling using PVsyst.

QUESTION:

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

RESPONSE:

Please see Attachment No. 1 to this Data Request.

**Example of FPL SolarTogether Participant Bill Charges and Credit
Participant with a 5 kW Subscription**

Month	Enrollment Year 1				Enrollment Year 5				Enrollment Year 10			
	kWh	Charge \$6.76 \$/kw-month	Credit \$0.0342881 \$/kWh	Net Charge (Benefit)	kWh	Charge \$6.76 \$/kw-month	Credit \$0.0363205 \$/kWh	Net Charge (Benefit)	kWh	Charge \$6.76 \$/kw-month	Credit \$0.0390313 \$/kWh	Net Charge (Benefit)
Jan	820	\$33.80	(\$28.11)	\$5.69	810	\$33.80	(\$29.42)	\$4.38	798	\$33.80	(\$31.15)	\$2.65
Feb	807	\$33.80	(\$27.67)	\$6.13	797	\$33.80	(\$28.96)	\$4.84	785	\$33.80	(\$30.65)	\$3.15
Mar	1,034	\$33.80	(\$35.45)	(\$1.65)	1,022	\$33.80	(\$37.10)	(\$3.30)	1,006	\$33.80	(\$39.28)	(\$5.48)
Apr	1,088	\$33.80	(\$37.30)	(\$3.50)	1,075	\$33.80	(\$39.04)	(\$5.24)	1,059	\$33.80	(\$41.33)	(\$7.53)
May	1,161	\$33.80	(\$39.81)	(\$6.01)	1,147	\$33.80	(\$41.67)	(\$7.87)	1,130	\$33.80	(\$44.11)	(\$10.31)
Jun	1,014	\$33.80	(\$34.77)	(\$0.97)	1,002	\$33.80	(\$36.39)	(\$2.59)	987	\$33.80	(\$38.52)	(\$4.72)
Jul	1,059	\$33.80	(\$36.32)	(\$2.52)	1,047	\$33.80	(\$38.01)	(\$4.21)	1,031	\$33.80	(\$40.24)	(\$6.44)
Aug	1,022	\$33.80	(\$35.05)	(\$1.25)	1,010	\$33.80	(\$36.68)	(\$2.88)	995	\$33.80	(\$38.83)	(\$5.03)
Sep	925	\$33.80	(\$31.71)	\$2.09	914	\$33.80	(\$33.19)	\$0.61	900	\$33.80	(\$35.14)	(\$1.34)
Oct	949	\$33.80	(\$32.54)	\$1.26	938	\$33.80	(\$34.06)	(\$0.26)	924	\$33.80	(\$36.06)	(\$2.26)
Nov	836	\$33.80	(\$28.65)	\$5.15	826	\$33.80	(\$29.99)	\$3.81	813	\$33.80	(\$31.75)	\$2.05
Dec	764	\$33.80	(\$26.20)	\$7.60	755	\$33.80	(\$27.42)	\$6.38	744	\$33.80	(\$29.03)	\$4.77
Total	11,479	\$405.60	(\$393.59)	\$12.01	11,342	\$405.60	(\$411.94)	(\$6.34)	11,173	\$405.60	(\$436.08)	(\$30.48)
Average	957	\$33.80	(\$32.80)	\$1.00	945	\$33.80	(\$34.33)	(\$0.53)	931	\$33.80	(\$36.34)	(\$2.54)

QUESTION:

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.

RESPONSE:

Third party developers of solar facilities that are Qualifying Facilities may obtain fixed pricing through FPL's Standard Offer Contract. The Standard Offer Contract provides the option of fixed energy prices for all or a portion of the energy deliveries throughout the term of the contract, at the QF's selection. This is stated as Option D on tariff Sheet No. 10.304, which reads as follows:

Option D- Fixed Firm Energy Payments Starting as early as the In-Service Date of the QS Facility

The calculation of payments to the QS for energy delivered to FPL may include an adjustment at the election of the QS in order to implement the provisions of Rule 25-17.250 (6) (b), F.A.C. Subsequent to the determination of full avoided cost and subject to the provisions of Rule 25-17.0832(3) (a) through (d), F.A.C., a portion of the base energy costs associated with the avoided unit, mutually agreed upon by the utility and renewable energy generator, shall be fixed and amortized on a present value basis over the term of the contract starting, at the election of the QS, as early as the in-service date of the QS. "Base energy costs associated with the avoided unit" means the energy costs of the avoided unit to the extent the unit would have operated. The portion of the base energy costs mutually agreed to by the Company and the QS shall be specified in Appendix E. The Company will provide the QS with a schedule of "Fixed Energy Payments" over the term of the Standard Offer Contract based on the applicable information specified in Appendix E.

FPL also has agreed to fixed energy prices with renewable energy providers under Power Purchase Agreements. For example, in Docket No. 110018-EU, the Commission approved a PPA between FPL and the Solid Waste Authority of Palm Beach County (SWA) for the output of a new waste to energy facility. The SWA chose to fix 50% of their energy payment rates throughout the life of the contract (22 years), based upon the following clause in the contract:

6.2.1 The fraction of the energy rates to be fixed ("Fixed Fraction" or "FF") shall be the product of the Annual Capacity Factor as of the end of the previous calendar year and [TBD] %. *[The Authority, in its discretion, shall choose and insert the percentage, not to exceed 50%, prior to execution of this Agreement.]* For each month of the calendar year, the payment for the FF shall be the total net generation for each hour of each month times the FF times the forecast energy rate shown in Appendix C summed over all hours of the month. For the purpose of calculating the FF, and up until such time as an entire calendar year has elapsed since the Commercial Operation Date, each then complete calendar month shall be included in a cumulative average of the partial calendar year.