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October 4, 2018

STAFF'S SECOND DATA REQUEST

-VIA ELECTRONIC FILING-

Ms. Carlotta Stauffer, Commission Clerk
Office of the General Counsel
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Re: Docket No. 20180155-EI - Florida Power & Light Company's Petition for Approval of
Regulatory Assets Related to the Retirements of Lauderdale Units 4 and 5 and Martin
Units 1 and 2

Dear Ms. Stauffer:

Please find enclosed for filing a copy of Florida Power & Light Company's ("FPL")
responses to Staff's Second Data Request (Nos. 3-13) in the above mentioned docket.

Thank you for your assistance. Please contact me should you or your staff have any
questions regarding this filing.

Sincerely,

s/ William P. Cox

William P. Cox
Senior Attorney
Florida Bar No. 0093531

WPC/msw
Enclosures

cc: Kurt M. Schrader, Office of the General Counsel
Jennifer Crawford, Office of the General Counsel

QUESTION:

Please complete the following table regarding the annual breakdown of the cumulative present value revenue requirement analysis (CPVRR) for the 2018 to 2067 analysis period for Martin Units 1 & 2. In this breakdown, please include any financial assumptions for capital, O&M, fuel, and emissions without CO₂ in net present value. Provide all requested data electronically in MS Excel format with all formulae intact.

RESPONSE:

Please see Attachment No. 1, sheet "Staffs 2nd DR #3" and Attachment No. 2. The costs assumed in the attached analysis may change as the project moves forward but are expected to be lower overall.

Florida Power & Light Company
Docket No. 20180155-EI
Staff's Second Data Request
Request No. 3
Attachment No. 1
Tab 1 of 9

Economic Decision Making Model

Martin 1&2 Retirement



Author:

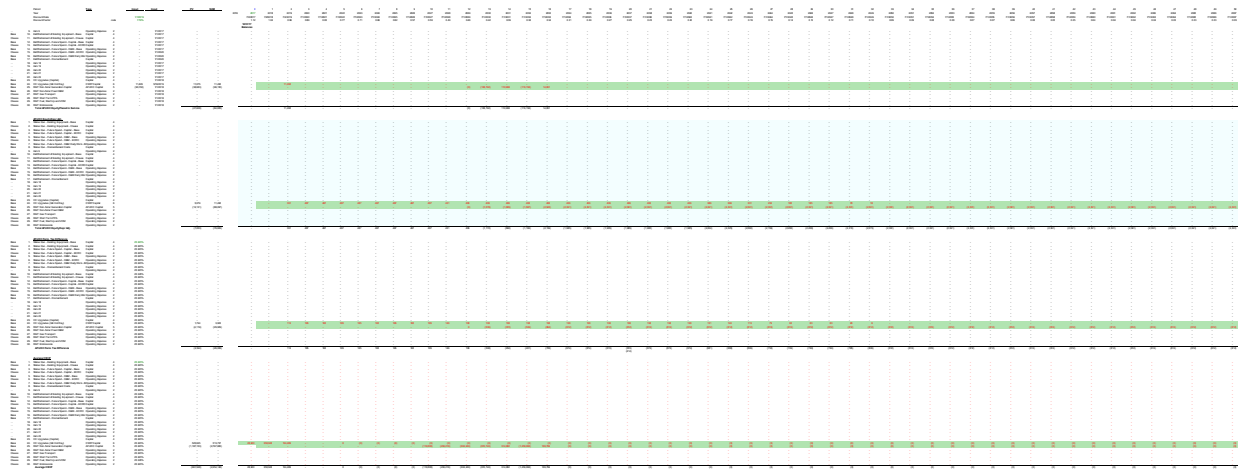
INPUTS		(490,693)																				
Period	Year	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Year	Year	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067

SCENARIO																						
Item Title	Cash Flow Type																					
Base 1	Status Quo - Existing Equipment - Base																					
Clause 2	Status Quo - Existing Equipment - Clause																					
Base 3	Status Quo - Future Spend - Capital - Base																					
Clause 4	Status Quo - Future Spend - Capital - ECRRC																					
Base 5	Status Quo - Future Spend - O&M - Base																					
Clause 6	Status Quo - Future Spend - O&M - ECRRC																					
Base 7	Status Quo - Future Spend - O&M Daily Work - Base																					
Base 8	Status Quo - Dismantlement Costs																					
Item 9	Item 9																					
Base 10	Exit/Retirement of Existing Equipment - Base																					
Clause 11	Exit/Retirement of Existing Equipment - Clause																					
Base 12	Exit/Retirement - Future Spend - Capital - Base																					
Clause 13	Exit/Retirement - Future Spend - Capital - ECRRC																					
Base 14	Exit/Retirement - Future Spend - O&M - Base																					
Clause 15	Exit/Retirement - Future Spend - O&M - ECRRC																					
Base 16	Exit/Retirement - Future Spend - O&M Daily Work - Base																					
Base 17	Exit/Retirement - Dismantlement																					
Item 18	Item 18																					
Item 19	Item 19																					
Item 20	Item 20																					
Item 21	Item 21																					
Item 22	Item 22																					
Base 23	CC Upgrades (Capital)																					
Base 24	CC Upgrades (GE Hot Day)																					
Base 25	RAP - Non-Solar Generation Capital																					
Base 26	RAP - Non-Solar Fixed O&M	(62,003)	(46,077)	(80,144)	(65,330)	(64,291)	(76,218)															
Clause 27	RAP - Gas Transport	9,245	9,245	9,245	9,245	9,245	9,245															
Clause 28	RAP - Short Term PPA	-	-	-	-	-	-															
Clause 29	RAP - Fuel, Start Up and VOM	41,290	42,066	42,856	43,660	44,479	45,313															
Clause 30	RAP - Emissions	24,050	25,884	27,857	29,982	31,481	33,013															
Total Item Title		12,582	31,117	(186)	17,557	20,914	11,353															

Item Title	Cash Flow Type	(86)	(57)	(43)	(39)	(24)	(28)	(15)	(11)	(9)	(7)	(4)	(2)	(0)	0	0	0	0	0	0	0	0
GenCap 1	Status Quo - Existing Equipment - Base	(86)	(57)	(43)	(39)	(24)	(28)	(15)	(11)	(9)	(7)	(4)	(2)	(0)	0	0	0	0	0	0	0	0
GenCap 2	Status Quo - Existing Equipment - Clause	(7)	(6)	(6)	(6)	(3)	(3)	(3)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
GenCap 3	Status Quo - Future Spend - Capital - Base	(5,620)	(4,767)	(3,951)	(3,131)	(2,375)	(1,707)	(1,091)	(468)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
GenCap 4	Status Quo - Future Spend - Capital - ECRRC	(215)	(176)	(142)	(114)	(86)	(64)	(40)	(16)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
FOM 5	Status Quo - Future Spend - O&M - Base	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FOM 6	Status Quo - Future Spend - O&M - ECRRC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FOM 7	Status Quo - Future Spend - O&M Daily Work - Base	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GenCap 8	Status Quo - Dismantlement Costs	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
GenCap 9	Item 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GenCap 10	Exit/Retirement of Existing Equipment - Base	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
GenCap 11	Exit/Retirement of Existing Equipment - Clause	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
GenCap 12	Exit/Retirement - Future Spend - Capital - Base	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
GenCap 13	Exit/Retirement - Future Spend - Capital - ECRRC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FOM 14	Exit/Retirement - Future Spend - O&M - Base	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FOM 15	Exit/Retirement - Future Spend - O&M - ECRRC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FOM 16	Exit/Retirement - Future Spend - O&M Daily Work - Base	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GenCap 17	Exit/Retirement - Dismantlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Item 18	Item 18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Item 19	Item 19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Item 20	Item 20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Item 21	Item 21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Item 22	Item 22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GenCap 23	CC Upgrades (Capital)	28,273	27,244	26,275	25,305	24,336	23,377	22,418	21,460	20,500	19,541	18,582	17,623	16,206	15,384	14,646	13,908	13,169	12,431	11,693	6,690	756
GenCap 24	CC Upgrades (GE Hot Day)	7,814	3,873	1,911	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
GenCap 25	RAP - Non-Solar Generation Capital	(116,644)	(111,956)	(107,294)	(103,032)	(99,167)	(95,302)	(91,812)	(88,632)	(85,397)	(82,162)	(78,927)	(75,692)	(72,457)	(69,222)	(65,987)	(62,752)	(59,517)	(56,282)	(53,047)	(49,812)	(46,577)
Base 26	RAP - Non-Solar Fixed O&M	(62,003)	(46,077)	(80,144)	(65,330)	(64,291)	(76,218)															
Clause 27	RAP - Gas Transport	9,245	9,245	9,245	9,245	9,245	9,245															
Other 28	RAP - Short Term PPA	-	-	-	-	-	-															
Other 29	RAP - Fuel, Start Up and VOM	41,290	42,066	42,856	43,660	44,479	45,313															
Emissions 30	RAP - Emissions	24,050	25,884	27,857	29,982	31,481	33,013															
Total		(73,903)	(54,928)	(84,336)	(63,459)	(56,415)	(62,373)	(70,542)	(67,671)	(64,908)	(62,628)	(60,349)	(58,071)	(56,251)	(53,838)	(51,341)	(48,844)	(46,732)	(44,502)	(42,392)	(44,796)	(159,124)

WORK AREA																					
Retirement Date	Base																				
Martin 1&2	12/1/2018																				
Reg Asset:	Base																				
Yrs to Amortize	10																				
Recovery Begins	1/1/2022																				
Dismantlement Accrual																					
Unit 1																					
Unit 2																					
Totals																					
Dismantlement Reserve Balance																					
Unit 1																					
Unit 2																					
Totals																					
2016 Dismantlement Study																					
Unit 1	2016																				
Unit 2	10,113																				
Totals	20,226																				

RevReq Breakout of Non-Solar Generation Capital	(109,919)	(105,428)	(100,937)	(96,851)	(93,162)	(89,473)	(86,158)	(83,154)	(80,094)	(77,035)	(73,976)	(70,916)	(67,857)	(64,798)	(61,738)	(58,679)	(56,004)	(53,212)	(50,540)	(48,101)	(45,625)
Generation Capital	(6,725)	(6,528)	(6,357)	(6,181)	(6,005)	(5,830)	(5,654)	(5,478)	(5,302)	(5,127)	(4,951)	(4,775)	(4,600)	(4,424)	(4,248)	(4,073)	(3,897)	(3,721)	(3,546)	(3,384)	(3,232)
Transmission	(116,644)	(111,956)	(107,294)	(103,032)	(99,167)	(95,302)	(91,812)	(88,632)	(85,397)	(82,162)	(78,927)	(75,692)	(72,457)	(69,222)	(65,987)	(62,752)	(59,517)	(56,282)	(53,047)	(49,812)	(46,577)
Total	(232,288)	(223,912)	(215,178)	(207,065)	(199,102)	(191,305)	(183,942)	(177,004)	(170,490)	(164,394)	(158,709)	(153,334)	(148,262)	(143,494)	(139,021)	(134,844)	(130,961)	(127,372)	(124,077)	(121,073)	(118,352)



Discount Factor

1.04 0.96 0.89 0.83 0.77 0.71 0.66 0.62 0.57 0.53 0.49 0.46 0.42
2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030

Martin 1&2 Retirement

CPVRR

2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030

Martin 1 & 2 Operations

Capital Revenue Requirement - Base	<i>Base</i>	(121.9)	(3.1)	(24.1)	(23.7)	(23.7)	(0.4)	5.7	5.5	3.9	2.1	0.5	(0.9)	(2.1)	(3.6)
Capital Revenue Requirement - ECRC	<i>Environ. Clause</i>	(6.3)	(0.6)	(7.1)	(6.3)	(5.7)	7.7	7.1	6.4	5.7	5.0	4.4	3.7	3.0	2.4
Property Tax & Insurance	<i>Base</i>	(54.4)	(0.0)	(5.9)	(5.6)	(5.4)	(5.2)	(4.9)	(4.8)	(4.9)	(4.9)	(4.9)	(4.9)	(4.9)	(4.9)
Operations & Maintenance - Base	<i>Base</i>	(121.7)	(1.0)	(9.5)	(15.9)	(11.0)	(14.6)	(16.9)	(14.2)	(14.6)	(15.6)	(15.5)	(16.3)	(16.7)	(16.6)
Operations & Maintenance - ECRC	<i>Environ. Clause</i>	(12.0)	(0.2)	(2.1)	(1.2)	(1.0)	(1.2)	(1.1)	(1.6)	(1.5)	(1.4)	(1.4)	(1.5)	(1.5)	(1.6)
Dismantlement, Incremental	<i>Base</i>	15.6	-	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9
Martin 1 & 2 Operations, Incremental		(300.7)	(4.8)	(47.1)	(51.0)	(45.0)	(11.9)	(8.3)	(7.0)	(9.6)	(12.9)	(15.1)	(18.0)	(20.2)	(22.4)

System Impacts

CC Upgrades	<i>Base</i>	733.3	23.6	44.0	53.8	51.8	50.0	48.1	46.3	44.6	65.5	89.1	84.2	80.5	77.7
Non-Solar Generation Capital	<i>Base</i>	(646.6)	-	-	-	-	-	-	-	-	-	(0.0)	(0.3)	(0.7)	(112.5)
Property Tax & Insurance	<i>Base</i>	(6.0)	-	5.1	6.8	6.5	6.3	6.0	5.8	5.5	8.5	11.9	11.4	11.0	(17.5)
Non-Solar Fixed O&M	<i>Base</i>	(128.8)	-	-	-	-	-	-	-	-	-	-	-	-	(5.0)
Gas Transport	<i>Fuel Clause</i>	(53.5)	-	-	-	-	-	-	-	-	(25.8)	(37.2)	(44.9)	(48.9)	(20.4)
New Gen. Asset Fixed Costs		(101.6)	23.6	49.2	60.6	58.3	56.3	54.2	52.1	50.0	48.2	63.8	50.4	41.8	(77.7)

Short Term PPA	<i>Capacity Clause</i>	(0.3)	-	-	-	-	-	-	-	-	-	-	5.1	-	-
Fuel, Start Up, VOM	<i>Fuel Clause</i>	(137.9)	0.3	(29.1)	(16.7)	(11.1)	(11.9)	(14.0)	(19.7)	(42.9)	(54.0)	(73.8)	(82.0)	(83.1)	(3.6)
Emissions	<i>Environ. Clause</i>	49.9	0.0	(0.1)	(0.0)	0.0	0.0	0.0	0.0	(0.1)	(0.1)	(0.1)	(2.3)	(2.3)	0.2
System Fuel, VOM, and Emissions		(88.4)	0.3	(29.3)	(16.8)	(11.1)	(11.9)	(14.0)	(19.7)	(42.9)	(54.1)	(73.9)	(79.2)	(85.3)	(3.4)

Total Net Revenue Requirement

Base		(330.6)	19.5	11.3	17.1	20.1	37.9	39.9	40.3	36.3	57.4	82.9	75.0	69.0	(80.5)
Clause		(160.1)	(0.5)	(38.4)	(24.3)	(17.8)	(5.4)	(8.0)	(14.8)	(38.7)	(76.2)	(108.1)	(121.8)	(132.6)	(23.0)
Total Net Revenue Requirement		(490.7)	19.1	(27.2)	(7.2)	2.3	32.5	31.9	25.4	(2.5)	(18.8)	(25.2)	(46.8)	(63.7)	(103.5)

CPVRR (Favorable) Unfavorable
\$ millions

Total Net Revenue Requirement

Operations	\$	(300.7)
Solar / Non-Solar Generation Capital, Fixed O&M		(48.1)
Gas Transport		(53.5)
Short Term PPA		(0.3)
Fuel, Start Up, VOM		(137.9)
Emissions		49.9
Total Net Revenue Requirement		(490.7)

Total Net Revenue Requirement

Base	(330.6)
Clause	(160.1)
Total Net Revenue Requirement	(490.7)

<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	<u>2036</u>	<u>2037</u>	<u>2038</u>	<u>2039</u>	<u>2040</u>	<u>2041</u>	<u>2042</u>	<u>2043</u>	<u>2044</u>	<u>2045</u>	<u>2046</u>	<u>2047</u>	<u>2048</u>	<u>2049</u>	<u>2050</u>	<u>2051</u>	<u>2052</u>
0.39	0.36	0.34	0.31	0.29	0.27	0.25	0.23	0.22	0.20	0.19	0.17	0.16	0.15	0.14	0.13	0.12	0.11	0.10	0.09	0.09	0.08
(5.3)	(25.8)	(24.4)	(22.9)	(21.1)	(19.4)	(17.7)	(15.3)	(13.8)	(12.9)	(11.9)	(10.9)	(10.0)	(8.9)	(7.5)	(6.3)	(5.3)	(4.5)	(3.7)	(2.9)	(2.2)	(1.6)
1.7	(11.5)	(10.7)	(9.2)	(7.5)	(6.6)	(3.8)	(1.5)	(1.4)	(1.3)	(1.2)	(0.8)	(0.7)	(0.5)	(0.4)	(0.4)	(0.2)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)
(4.9)	(4.7)	(4.6)	(4.4)	(4.3)	(4.2)	(4.1)	(3.9)	(3.8)	(3.7)	(1.0)	(0.9)	(0.8)	(0.7)	(0.6)	(0.5)	(0.4)	(0.4)	(0.3)	(0.2)	(0.2)	(0.1)
(17.0)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(1.6)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(23.7)	(42.0)	(39.7)	(36.5)	(32.9)	(30.2)	(25.5)	(20.8)	(19.0)	(17.9)	(14.2)	(12.6)	(11.6)	(10.1)	(8.5)	(7.2)	(5.9)	(5.0)	(4.1)	(3.3)	(2.5)	(1.8)
74.9	72.1	69.4	66.8	64.1	61.4	58.8	56.1	53.6	51.2	48.2	45.2	42.2	37.8	34.9	33.3	31.7	27.2	23.9	22.3	21.5	20.7
(75.3)	(108.2)	(172.8)	(156.8)	(152.1)	(147.7)	(143.3)	(139.0)	(134.8)	(130.6)	(126.5)	(122.3)	(118.1)	(114.0)	(109.8)	(105.7)	(101.6)	(97.5)	(93.5)	(89.9)	(86.6)	(83.4)
11.1	(18.2)	(14.4)	(14.2)	(14.0)	(13.8)	(13.6)	(13.4)	(13.1)	(12.8)	(12.5)	(12.4)	(12.0)	(11.8)	(11.5)	(11.1)	(10.7)	(10.7)	(10.4)	(10.2)	(9.7)	(9.3)
(0.3)	(5.2)	(17.3)	(1.1)	(24.1)	(14.3)	(26.1)	(16.4)	(44.2)	(26.3)	(51.5)	(28.9)	(63.8)	(34.1)	(54.9)	(49.6)	(62.0)	(46.1)	(80.1)	(65.3)	(64.3)	(76.2)
(7.9)	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
2.5	(50.3)	(125.9)	(96.0)	(116.9)	(105.1)	(114.9)	(103.5)	(129.3)	(109.3)	(133.0)	(109.1)	(142.4)	(112.7)	(132.0)	(123.9)	(133.3)	(117.9)	(150.9)	(133.8)	(129.9)	(138.9)
(14.5)	7.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(3.8)	(18.4)	35.6	32.5	31.4	31.4	30.8	31.1	33.6	33.9	35.8	35.8	35.6	40.4	41.3	44.0	41.3	42.1	42.9	43.7	44.5	45.3
(0.4)	(1.8)	6.0	5.8	7.0	8.2	9.0	11.9	13.2	15.3	14.9	15.7	16.6	19.9	21.8	23.4	24.1	25.9	27.9	30.0	31.5	33.0
(18.7)	(12.3)	41.6	38.2	38.4	39.6	39.8	43.0	46.8	49.2	50.7	51.5	52.2	60.3	63.1	67.4	65.3	67.9	70.7	73.6	76.0	78.3
(13.4)	(90.0)	(164.1)	(132.7)	(151.6)	(137.9)	(145.9)	(132.0)	(156.2)	(135.1)	(155.2)	(130.1)	(162.5)	(131.6)	(149.4)	(140.0)	(148.3)	(131.9)	(164.1)	(146.2)	(141.5)	(149.9)
(26.4)	(14.6)	40.1	38.3	40.2	42.2	45.2	50.7	54.6	57.1	58.8	59.9	60.7	69.1	71.9	76.2	74.4	77.0	79.8	82.8	85.1	87.5
(39.9)	(104.6)	(124.0)	(94.4)	(111.4)	(95.7)	(100.7)	(81.3)	(101.6)	(78.0)	(96.4)	(70.2)	(101.8)	(62.5)	(77.5)	(63.7)	(73.9)	(54.9)	(84.3)	(63.5)	(56.4)	(62.4)

0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03
<u>2053</u>	<u>2054</u>	<u>2055</u>	<u>2056</u>	<u>2057</u>	<u>2058</u>	<u>2059</u>	<u>2060</u>	<u>2061</u>	<u>2062</u>	<u>2063</u>	<u>2064</u>	<u>2065</u>	<u>2066</u>	<u>2067</u>
(1.0)	(0.4)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	-	-	-	-	-	-	-	-
(0.0)	(0.0)	(0.0)	-	-	-	-	-	-	-	-	-	-	-	-
(0.1)	(0.0)	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(1.1)	(0.5)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	-	-	-	-	-	-	-	-
19.9	19.2	18.4	17.6	16.8	16.0	14.7	14.0	13.2	12.5	11.8	11.0	10.3	5.3	0.0
(80.5)	(77.9)	(75.3)	(72.7)	(70.1)	(67.4)	(64.8)	(62.2)	(59.6)	(57.0)	(54.4)	(51.7)	(49.1)	(46.5)	(154.9)
(8.8)	(8.4)	(8.0)	(7.5)	(7.1)	(6.6)	(6.1)	(5.6)	(5.0)	(4.4)	(4.1)	(3.8)	(3.5)	(3.6)	(4.2)
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(69.4)	(67.2)	(64.9)	(62.6)	(60.3)	(58.1)	(56.3)	(53.8)	(51.3)	(48.8)	(46.7)	(44.5)	(42.4)	(44.8)	(159.1)
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(70.5)	(67.7)	(64.9)	(62.6)	(60.3)	(58.1)	(56.3)	(53.8)	(51.3)	(48.8)	(46.7)	(44.5)	(42.4)	(44.8)	(159.1)
(0.0)	(0.0)	(0.0)	-	-	-	-	-	-	-	-	-	-	-	-
(70.5)	(67.7)	(64.9)	(62.6)	(60.3)	(58.1)	(56.3)	(53.8)	(51.3)	(48.8)	(46.7)	(44.5)	(42.4)	(44.8)	(159.1)

Martin Units 1 & 2 CPVRR ¹ Analysis (\$millions)								
Incremental Revenue Requirement Costs (Savings) ²								
Year	Generation Capital	Transmission Capital	Other Capital	Fixed O&M	Fuel & Variable O&M	Emissions w/o CO ₂ ³	Other ⁴	Total
CPVRR-->	(\$43.0)	(\$43.3)	\$0.0	(\$262.6)	(\$137.9)	\$0.3	(\$53.8)	(\$540.2)
2018	\$19.9	\$0.0	\$0.0	(\$1.2)	\$0.3	\$0.0	\$0.0	\$19.1
2019	\$13.7	\$0.0	\$0.0	(\$11.6)	(\$29.1)	(\$0.1)	\$0.0	(\$27.2)
2020	\$26.7	\$0.0	\$0.0	(\$17.1)	(\$16.7)	(\$0.0)	\$0.0	(\$7.2)
2021	\$25.3	\$0.0	\$0.0	(\$12.0)	(\$11.1)	\$0.0	\$0.0	\$2.3
2022	\$60.2	\$0.0	\$0.0	(\$15.8)	(\$11.9)	\$0.0	\$0.0	\$32.5
2023	\$63.9	\$0.0	\$0.0	(\$18.0)	(\$14.0)	\$0.0	\$0.0	\$31.9
2024	\$60.9	\$0.0	\$0.0	(\$15.8)	(\$19.7)	\$0.0	\$0.0	\$25.4
2025	\$56.6	\$0.0	\$0.0	(\$16.1)	(\$42.9)	(\$0.1)	\$0.0	(\$2.5)
2026	\$78.0	\$0.0	\$0.0	(\$16.9)	(\$54.0)	(\$0.1)	(\$25.8)	(\$18.8)
2027	\$102.7	\$0.0	\$0.0	(\$16.9)	(\$73.8)	(\$0.1)	(\$37.2)	(\$25.2)
2028	\$95.1	(\$0.0)	\$0.0	(\$17.8)	(\$82.0)	(\$0.1)	(\$39.8)	(\$44.7)
2029	\$88.7	(\$0.0)	\$0.0	(\$18.2)	(\$83.1)	(\$0.1)	(\$48.9)	(\$61.5)
2030	(\$48.3)	(\$8.2)	\$0.0	(\$23.1)	(\$3.6)	\$0.1	(\$20.4)	(\$103.5)
2031	\$9.9	(\$4.3)	\$0.0	(\$18.9)	(\$3.8)	\$0.1	(\$22.4)	(\$39.4)
2032	(\$88.4)	(\$7.9)	\$0.0	(\$5.2)	(\$18.4)	\$0.1	\$17.2	(\$102.6)
2033	(\$146.1)	(\$11.4)	\$0.0	(\$17.3)	\$35.6	\$0.2	\$9.2	(\$129.7)
2034	(\$130.3)	(\$10.4)	\$0.0	(\$1.1)	\$32.5	\$0.2	\$9.2	(\$99.9)
2035	(\$124.9)	(\$10.1)	\$0.0	(\$24.1)	\$31.4	\$0.2	\$9.2	(\$118.3)
2036	(\$120.4)	(\$9.8)	\$0.0	(\$14.3)	\$31.4	\$0.2	\$9.2	(\$103.7)
2037	(\$114.1)	(\$9.5)	\$0.0	(\$26.1)	\$30.8	\$0.2	\$9.2	(\$109.5)
2038	(\$107.9)	(\$9.2)	\$0.0	(\$16.4)	\$31.1	\$0.2	\$9.2	(\$93.0)
2039	(\$104.5)	(\$8.9)	\$0.0	(\$44.2)	\$33.6	\$0.2	\$9.2	(\$114.6)
2040	(\$101.5)	(\$8.6)	\$0.0	(\$26.3)	\$33.9	\$0.2	\$9.2	(\$93.1)
2041	(\$96.6)	(\$8.3)	\$0.0	(\$51.5)	\$35.8	\$0.1	\$9.2	(\$111.2)
2042	(\$94.0)	(\$8.0)	\$0.0	(\$28.9)	\$35.8	\$0.1	\$9.2	(\$85.8)
2043	(\$91.7)	(\$7.7)	\$0.0	(\$63.8)	\$35.6	\$0.1	\$9.2	(\$118.3)
2044	(\$90.5)	(\$7.4)	\$0.0	(\$34.1)	\$40.4	\$0.1	\$9.2	(\$82.3)
2045	(\$87.8)	(\$7.2)	\$0.0	(\$54.9)	\$41.3	\$0.1	\$9.2	(\$99.2)
2046	(\$83.8)	(\$7.0)	\$0.0	(\$49.6)	\$44.0	\$0.1	\$9.2	(\$87.0)
2047	(\$79.8)	(\$6.7)	\$0.0	(\$62.0)	\$41.3	\$0.1	\$9.2	(\$97.9)
2048	(\$79.5)	(\$6.5)	\$0.0	(\$46.1)	\$42.1	\$0.1	\$9.2	(\$80.7)
2049	(\$77.8)	(\$6.4)	\$0.0	(\$80.1)	\$42.9	\$0.1	\$9.2	(\$112.1)
2050	(\$74.8)	(\$6.2)	\$0.0	(\$65.3)	\$43.7	\$0.1	\$9.2	(\$93.3)
2051	(\$71.3)	(\$6.0)	\$0.0	(\$64.3)	\$44.5	\$0.1	\$9.2	(\$87.8)
2052	(\$67.9)	(\$5.8)	\$0.0	(\$76.2)	\$45.3	\$0.1	\$9.2	(\$95.2)
2053	(\$64.9)	(\$5.7)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$70.5)
2054	(\$62.2)	(\$5.5)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$67.7)
2055	(\$59.6)	(\$5.3)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$64.9)
2056	(\$57.5)	(\$5.1)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$62.6)
2057	(\$55.4)	(\$5.0)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$60.3)
2058	(\$53.3)	(\$4.8)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$58.1)
2059	(\$51.7)	(\$4.6)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$56.3)
2060	(\$49.4)	(\$4.4)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$53.8)
2061	(\$47.1)	(\$4.2)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$51.3)
2062	(\$44.8)	(\$4.1)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$48.8)
2063	(\$42.8)	(\$3.9)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$46.7)
2064	(\$40.8)	(\$3.7)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$44.5)
2065	(\$38.8)	(\$3.5)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$42.4)
2066	(\$41.4)	(\$3.4)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$44.8)
2067	(\$155.9)	(\$3.2)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$159.1)

1) Discount rate of 7.76% based on the following capital/tax assumptions:
- Interest expense assumes 4.88% cost of debt and 40.4% debt to investor capital ratio.
- Return on Equity assumes 10.55% cost of equity and 59.6% equity to investor capital ratio.
- Income tax assumes blended state and federal tax rate of 25.345%.

2) Incremental Revenue Requirement represents the difference between the Revenue Requirement with and without Martin 1&2.

3) Per Staff's 2nd Data Request, CO₂ emission costs have been deleted from this table. Remaining costs are for NO_x control.

4) Other includes incremental Gas Transport and Short-Term PPA's.

Estimated Customer Bill Impact if Martin 1 & 2 are Retired				
Year	TYSP Sales Forecast (MWh)	RevReq Cost (Savings), Excluding CO ₂ Costs (\$mms)	\$/Month @ 1,000 kWh/Month	\$/Month @ 1,200 kWh/Month
2018	112,457,194	\$19.1	\$0.170	\$0.204
2019	113,839,281	(\$27.2)	(\$0.239)	(\$0.286)
2020	114,480,493	(\$7.2)	(\$0.063)	(\$0.076)
2021	114,477,139	\$2.3	\$0.020	\$0.024
2022	114,785,442	\$32.5	\$0.283	\$0.340
2023	115,118,282	\$31.9	\$0.277	\$0.332
2024	115,933,835	\$25.4	\$0.219	\$0.263
2025	116,428,854	(\$2.5)	(\$0.021)	(\$0.025)
2026	117,344,384	(\$18.8)	(\$0.160)	(\$0.192)
2027	118,208,963	(\$25.2)	(\$0.214)	(\$0.256)
2028	119,314,615	(\$44.7)	(\$0.374)	(\$0.449)
2029	120,518,213	(\$61.5)	(\$0.510)	(\$0.613)
2030	121,944,542	(\$103.5)	(\$0.849)	(\$1.019)
2031	123,306,058	(\$39.4)	(\$0.319)	(\$0.383)
2032	124,706,250	(\$102.6)	(\$0.823)	(\$0.988)
2033	125,690,658	(\$129.7)	(\$1.032)	(\$1.239)
2034	126,820,362	(\$99.9)	(\$0.788)	(\$0.946)
2035	127,949,176	(\$118.3)	(\$0.924)	(\$1.109)
2036	129,176,886	(\$103.7)	(\$0.803)	(\$0.963)
2037	130,115,410	(\$109.5)	(\$0.841)	(\$1.010)
2038	131,256,859	(\$93.0)	(\$0.709)	(\$0.850)
2039	132,409,570	(\$114.6)	(\$0.866)	(\$1.039)
2040	134,043,814	(\$93.1)	(\$0.695)	(\$0.834)
2041	135,252,659	(\$111.2)	(\$0.822)	(\$0.987)
2042	136,443,563	(\$85.8)	(\$0.629)	(\$0.754)
2043	137,630,004	(\$118.3)	(\$0.859)	(\$1.031)
2044	138,811,863	(\$82.3)	(\$0.593)	(\$0.711)
2045	139,987,497	(\$99.2)	(\$0.708)	(\$0.850)
2046	141,159,797	(\$87.0)	(\$0.616)	(\$0.740)
2047	142,330,284	(\$97.9)	(\$0.688)	(\$0.825)
2048	143,457,525	(\$80.7)	(\$0.563)	(\$0.675)
2049	144,626,962	(\$112.1)	(\$0.775)	(\$0.930)
2050	145,794,402	(\$93.3)	(\$0.640)	(\$0.768)
2051	146,961,951	(\$87.8)	(\$0.597)	(\$0.717)
2052	148,129,643	(\$95.2)	(\$0.643)	(\$0.772)
2053	149,297,523	(\$70.5)	(\$0.472)	(\$0.567)
2054	150,465,637	(\$67.7)	(\$0.450)	(\$0.540)
2055	151,634,031	(\$64.9)	(\$0.428)	(\$0.514)
2056	152,802,751	(\$62.6)	(\$0.410)	(\$0.492)
2057	153,971,846	(\$60.3)	(\$0.392)	(\$0.470)
2058	155,141,363	(\$58.1)	(\$0.374)	(\$0.449)
2059	156,311,351	(\$56.3)	(\$0.360)	(\$0.432)
2060	157,481,859	(\$53.8)	(\$0.342)	(\$0.410)
2061	158,652,939	(\$51.3)	(\$0.324)	(\$0.388)
2062	159,824,641	(\$48.8)	(\$0.306)	(\$0.367)
2063	160,997,018	(\$46.7)	(\$0.290)	(\$0.348)
2064	162,177,994	(\$44.5)	(\$0.274)	(\$0.329)
2065	163,367,633	(\$42.4)	(\$0.259)	(\$0.311)
2066	164,565,998	(\$44.8)	(\$0.272)	(\$0.327)
2067	165,773,154	(\$159.1)	(\$0.960)	(\$1.152)

LOOKUP TABLES

DEPRECIABLE LIFE

Capital Class	Book	Tax
Solar	30	5
Oil / Gas Production	49	20
Coal Production	49	20
Combined Cycle Production	40	20
Combustion Turbine Production	30	15
Gas Turbine Production	35	20
Nuclear Production	40	15
Transmission, Substation	40	15
Transmission, Lines	47	15
Transmission, Clearing	60	20
Transmission, Easements	75	67
Distribution, Substation	43	20
Distribution, Lines	39	20
Distribution, Clearing	60	20
Communications	7	7
Fiber Optics	10	7
Real, Office Buildings	50	39
Real, Stores	7	7
Real, Office Furniture	7	7
Automobiles	6	5
Light Trucks	9	5
Heavy Trucks	12	5
Information, Mainframe	5	5
Information, PC	3	5
Office Access	7	7
Office Equipment	7	7
Office, Duplicating	5	5
user 1	30	20
user 2	30	20
user 3	30	20
user 4	30	20
user 5	30	20

TAX DEPRECIATION SCHEDULES

LIFE	sum	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	100.00%	100.00%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5	100.00%	20.00%	32.00%	19.20%	11.52%	11.52%	5.76%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7	100.00%	14.29%	24.49%	17.49%	12.49%	8.93%	8.92%	8.93%	4.46%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10	100.00%	10.00%	18.00%	14.40%	11.52%	9.22%	7.37%	6.55%	6.55%	6.56%	6.55%	3.28%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
15	100.00%	5.00%	9.50%	8.55%	7.70%	6.93%	6.23%	5.90%	5.90%	5.91%	5.90%	5.91%	5.90%	5.91%	5.90%	2.95%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
20	100.00%	3.75%	7.22%	6.68%	6.18%	5.71%	5.29%	4.89%	4.52%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	2.23%	-	-	-	-	-	-	-	-	
39	100.00%	1.39%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	2.56%	
67	100.00%	0.75%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	
custom 1	0.00%																														
custom 2	0.00%																														
custom 3	0.00%																														
custom 4	0.00%																														
custom 5	0.00%																														
custom 6	0.00%																														
custom 7	0.00%																														
custom 8	0.00%																														
custom 9	0.00%																														
custom 10	0.00%																														

INFLATION TABLES

RATE	mean	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2.39%	0.00%	1.99%	2.49%	2.63%	2.49%	2.72%	2.26%	2.57%	2.68%	2.50%	2.32%	2.26%	2.25%	2.27%	2.24%	2.24%	2.33%	2.29%	2.33%	2.36%	2.34%	2.33%	2.36%	2.39%	2.44%	2.43%	2.45%	2.46%	2.47%	2.49%	2.49%
1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	
1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
custom 1	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	
custom 2	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
custom 3	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%

MODEL LOOKUPS

Cash Flow Type	Code
Operating Savings	1
Operating Expense	2
Land	3
Capital	4
AFUDC Capital	5
CWIP Capital	6

Denomination	factor
\$ dollars	1
\$ thousands	1,000
\$ millions	1,000,000
\$ billions	1,000,000,000

Florida Power & Light Company

Docket No. 20180155-EI

Staff's Second Data Request

Request No. 3

Attachment No. 1

Tab 9 of 9

List of units for inclusion in FPL's resource plan with and without Martin Units 1&2:

"without Retirement"

Year	New Unit Upgrades (MW)	Retirements (by Summer)	Unit Additions (by Summer)
2018	54		596 MW Solar SoBRA; 200 MW PPA
2019	90	Fort Lauderdale 4&5	298 MW Solar SoBRA; Okeechobee Energy Center
2020			298 MW Solar SoBRA
2021	18		1,267 MW Solar
2022			Dania Beach Energy Center
2023			
2024			
2025			
2026			
2027			
2028			283 MW PPA
2029			1 Greenfield Combined Cycle
2030		Martin 1&2	1 Greenfield Combined Cycle
2031			244 MW PPA
2032		TP 3	1 Greenfield Combined Cycle
2033		TP 4	1,352 MW Equalizing Combined Cycle

"with Retirement"

Year	New Unit Upgrades (MW)	Retirements (by Summer)	Unit Additions (by Summer)
2018	54		596 MW Solar SoBRA; 200 MW PPA
2019	855	Fort Lauderdale 4&5; Martin 1&2	298 MW Solar SoBRA; Okeechobee Energy Center
2020			298 MW Solar SoBRA
2021	18		1,267 MW Solar
2022			Dania Beach Energy Center
2023			
2024			
2025			
2026	355		
2027	406		
2028			383 MW PPA
2029			1 Greenfield Combined Cycle
2030			
2031			1 Greenfield Combined Cycle
2032		TP 3	127 MW PPA
2033		TP 4	1,577 MW Equalizing Combined Cycle



Martin 1&2 Retirement Financial Analysis

**FPL Financial Analysis
August 14, 2018**

A December 1, 2018 retirement of Martin 1&2 provides long term customer savings of \$491 MM

Executive Summary

- **Martin 1&2 replaced with 1,526 MW of CC fleet upgrades**
 - 765 MW in 2019, including 720 MW of GE 'hot day' upgrades
 - 761 MW between 2026-2027
- **Surplus utilization of \$92.2 MM through January 1, 2022**
- **Capital recovery of Base and ECRC assets is deferred until FPL resets base rates (assumed Jan 1, 2022) and is then amortized over a 10 year period**

A December 1, 2018 retirement of Martin 1&2 provides long term customer savings of \$491 MM

CPVRR Summary⁽¹⁾

CPVRR (Favorable) Unfavorable

\$ millions

Total Net Revenue Requirement

Operations	\$ (300.7)
Solar / Non-Solar Generation Capital, Fixed O&M	(48.1)
Gas Transport	(53.5)
Short Term PPA	(0.3)
Fuel, Start Up, VOM	(137.9)
Emissions	49.9
Total Net Revenue Requirement	(490.7)

Total Net Revenue Requirement

Base	(330.6)
Clause	(160.1)
Total Net Revenue Requirement	(490.7)

Surplus Utilization (Contribution)

2018	21.3
2019	16.4
2020	24.5
2021	30.0
Total Surplus Utilization (Contribution)	92.2

1) Assumes perfect rate making



Resource plan

Resource Plans with Load Forecast Sensitivity

Reference Case

Year	New Unit Upgrades	Retirements (by summer)	Additions (by summer)	Reserves over Requirement MW
2018	54		596 MW Solar SoBRA; 200 MW PPA signed	157
2019	90	FL 4; FL 5	298 MW Solar SoBRA; OCEC	863
2020			298 MW Solar SoBRA	1,050
2021	18		1266.5 MW Solar	1,525
2022			Dania Beach CC	2,418
2023				2,024
2024				1,548
2025				1,160
2026				677
2027				207
2028			283 MW PPA	0
2029			1 GFCC	830
2030		MR 1; MR 2	1 GFCC	340
2031			244 MW PPA	0
2032		TP 3	1 GFCC	99
2033		TP 4	1,352 MW Eq Filler	0

162 <-- West County Kai Upgrades Only

Martin Exit - December 1, 2018

New Unit Upgrades	Retirements (by summer)	Additions (by summer)	Reserves over Requirement MW
54		596 MW Solar SoBRA; 200 MW PPA signed	157
855	FL 4; FL 5; MR 1 & 2	298 MW Solar SoBRA; OCEC	2
0		298 MW Solar SoBRA	189
18		1266.5 MW Solar	664
0		Dania Beach CC	1,557
0			1,163
0			687
0			299
355			171
406			107
0		383 MW PPA	0
0		1 GFCC	730
0			115
0		1 GFCC	1,282
0	TP 3	127 MW PPA	1
0	TP 4	1,577 MW Eq Filler	0

1,688 <-- 1,526 MW Excluding West County Kai Upgrades



Incremental revenue requirements and bill impact assuming an December 1, 2018 retirement

Net Customer Bill Impact (Base and Clause)⁽¹⁾

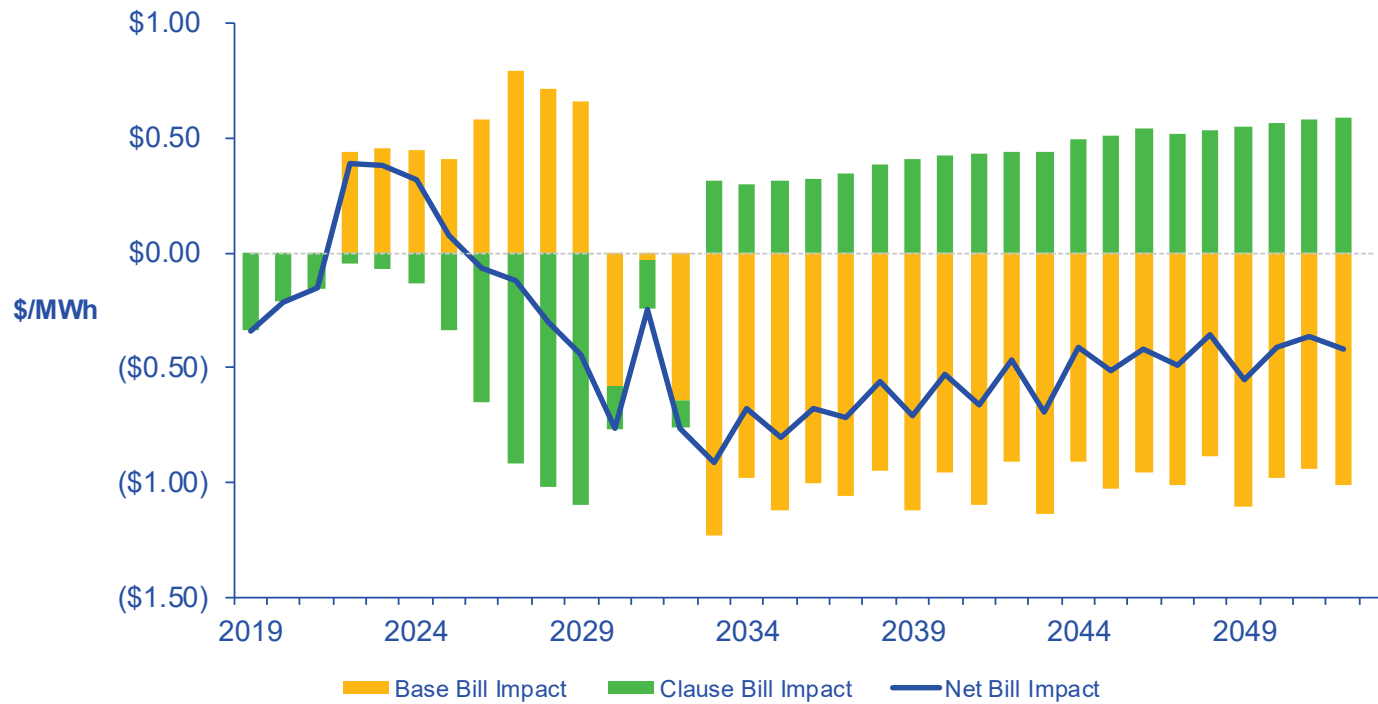
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>
<u>Net Bill Impact - Revenue Requirements</u>										
Base	Settlement Period			50.6	52.2	52.3	48.0	68.8	94.0	85.8
Clause	(38.4)	(24.3)	(17.8)	(5.4)	(8.0)	(14.8)	(38.7)	(76.2)	(108.1)	(121.8)
Total Revenues	(38.4)	(24.3)	(17.8)	45.2	44.2	37.5	9.2	(7.4)	(14.2)	(36.0)
<u>\$/MWh Bill Impact</u>										
Base Bill Impact	Settlement Period			0.441	0.454	0.451	0.412	0.586	0.795	0.719
Clause Bill Impact	(0.338)	(0.212)	(0.155)	(0.047)	(0.069)	(0.128)	(0.333)	(0.649)	(0.915)	(1.021)
Net Bill Impact	(0.338)	(0.212)	(0.155)	0.394	0.384	0.323	0.079	(0.063)	(0.120)	(0.302)
<u>Net Bill Impact - Revenue Requirements</u>										
Base	79.4	(70.4)	(3.7)	(80.5)	(154.9)	(123.8)	(143.1)	(129.7)	(138.0)	(124.4)
Clause	(132.6)	(23.0)	(26.4)	(14.6)	40.1	38.3	40.2	42.2	45.2	50.7
Total Revenues	(53.3)	(93.4)	(30.1)	(95.1)	(114.8)	(85.5)	(102.9)	(87.5)	(92.8)	(73.8)
<u>\$/MWh Bill Impact</u>										
Base Bill Impact	0.659	(0.577)	(0.030)	(0.646)	(1.233)	(0.976)	(1.118)	(1.004)	(1.061)	(0.948)
Clause Bill Impact	(1.101)	(0.188)	(0.214)	(0.117)	0.319	0.302	0.314	0.327	0.348	0.386
Net Bill Impact	(0.442)	(0.766)	(0.244)	(0.763)	(0.914)	(0.674)	(0.804)	(0.677)	(0.713)	(0.562)

1) The Base revenue requirements include the impact from surplus utilization (i.e. the revenue requirements on the net surplus utilization)



Martin 1&2 net bill impact: Base vs. Clause

Net Customer Bill Impact (Base vs. Clause)



A December 1, 2018 retirement of Martin 1&2 results in long-term customer CPVRR savings of \$491 MM

Detailed CPVRR Analysis⁽¹⁾

	CPVRR	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
<u>Martin 1 & 2 Operations</u>													
Capital Revenue Requirement - Base	Base	(121.9)	(3.1)	(24.1)	(23.7)	(23.7)	(0.4)	5.7	5.5	3.9	2.1	0.5	(0.9)
Capital Revenue Requirement - ECRC	Environ. Clause	(6.3)	(0.6)	(7.1)	(6.3)	(5.7)	7.7	7.1	6.4	5.7	5.0	4.4	3.7
Property Tax & Insurance	Base	(54.4)	(0.0)	(5.9)	(5.6)	(5.4)	(5.2)	(4.9)	(4.8)	(4.9)	(4.9)	(4.9)	(4.9)
Operations & Maintenance - Base	Base	(121.7)	(1.0)	(9.5)	(15.9)	(11.0)	(14.6)	(16.9)	(14.2)	(14.6)	(15.6)	(15.5)	(16.3)
Operations & Maintenance - ECRC	Environ. Clause	(12.0)	(0.2)	(2.1)	(1.2)	(1.0)	(1.2)	(1.1)	(1.6)	(1.5)	(1.4)	(1.4)	(1.5)
Dismantlement, Incremental	Base	15.6	-	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.9	1.9
Martin 1 & 2 Operations, Incremental		(300.7)	(4.8)	(47.1)	(51.0)	(45.0)	(11.9)	(8.3)	(7.0)	(9.6)	(12.9)	(15.1)	(18.0)
<u>System Impacts</u>													
Solar Generation Capital	Base	-	-	-	-	-	-	-	-	-	-	-	-
CC Upgrades	Base	284.6	-	2.9	2.8	2.7	2.6	2.5	2.4	25.0	50.2	48.7	
GE Hot Day Upgrades (AFUDC)	Base	448.7	23.6	41.2	51.0	49.1	47.3	45.6	43.9	42.2	40.6	38.9	35.5
Non-Solar Generation Capital	Base	(646.6)	-	-	-	-	-	-	-	-	(0.0)	(0.3)	
Property Tax & Insurance	Base	(6.0)	-	5.1	6.8	6.5	6.3	6.0	5.8	5.5	8.5	11.9	11.4
Solar / Non-Solar Fixed O&M	Base	(128.8)	-	-	-	-	-	-	-	-	-	-	-
Gas Transport	Fuel Clause	(53.5)	-	-	-	-	-	-	-	(25.8)	(37.2)	(44.9)	
New Gen. Asset Fixed Costs		(101.6)	23.6	49.2	60.6	58.3	56.3	54.2	52.1	50.0	48.2	63.8	50.4
Short Term PPA	Capacity Clause	(0.3)	-	-	-	-	-	-	-	-	-	-	5.1
Fuel, Start Up, VOM	Fuel Clause	(137.9)	0.3	(29.1)	(16.7)	(11.1)	(11.9)	(14.0)	(19.7)	(42.9)	(54.0)	(73.8)	(82.0)
Emissions	Environ. Clause	49.9	0.0	(0.1)	(0.0)	0.0	0.0	0.0	(0.1)	(0.1)	(0.1)	(0.1)	(2.3)
System Fuel, VOM, and Emissions		(88.4)	0.3	(29.3)	(16.8)	(11.1)	(11.9)	(14.0)	(19.7)	(42.9)	(54.1)	(73.9)	(79.2)
<u>Total Net Revenue Requirement</u>													
Base		(330.6)	19.5	11.3	17.1	20.1	37.9	39.9	40.3	36.3	57.4	82.9	75.0
Clause		(160.1)	(0.5)	(38.4)	(24.3)	(17.8)	(5.4)	(8.0)	(14.8)	(38.7)	(76.2)	(108.1)	(121.8)
Total Net Revenue Requirement		(490.7)	19.1	(27.2)	(7.2)	2.3	32.5	31.9	25.4	(2.5)	(18.8)	(25.2)	(46.8)
Surplus Utilization (Contribution)	Cumulative -->	92.2	21.3	16.4	24.5	30.0	-	-					

1) Assumes perfect rate making and Load Forecast Sensitivity



QUESTION:

Please explain how the 2018 to 2067 analysis period was selected for the CPVRR analysis.

RESPONSE:

A 50-year analysis period was selected for the CPVRR analysis in the model to account for the 40-year book life of the combined cycle plant upgrades. The last year of expenditures for the upgrades occurs in 2027.

QUESTION:

Please provide the estimated annual residential bill impact (at 1,000 kWh and 1,200 kWh) for the 2018 to 2067 analysis period for Martin Units 1 & 2.

RESPONSE:

Please see Attachment No. 1 to FPL's Response to Staff's Second Data Request No. 3, sheet "Staffs 2nd DR #5" and Attachment No. 2 to FPL's Response to Staff's Second Data Request No. 3. The customer bill impact excludes CO₂ related emissions costs (consistent with Staff's Second Data Request No. 3). The costs assumed in the attached analysis may change as the project moves forward but are expected to be lower overall.

QUESTION:

Please provide the fuel impact in the format of Schedules 6.1 and 6.2 of Florida Power & Light Company's (FPL or Utility) Ten-Year Site Plan, with and without the retirement of Martin Units 1 & 2, considered over the same analysis period as in the CPVRR analysis. Please provide all requested data electronically in MS Excel format with all formulae intact.

RESPONSE:

Please see Attachment No. 1 for the fuel impacts in the format of Schedules 6.1 and 6.2 with and without the retirement of Martin Units 1 & 2.

QUESTION:

Please provide a reserve margin calculation in the format of Schedules 7.1 and 7.2 of FPL's Ten-Year Site Plan, with and without the retirement of Martin Units 1 & 2, considered over the same analysis period as in the CPVRR analysis. Provide all requested data electronically in MS Excel format with all formulae intact.

RESPONSE:

Please see Attachment No. 1 for the reserve margin calculation in the format of Schedules 7.1 and 7.2 with and without the retirement of Martin Units 1 & 2 covering the same analysis period as the CPVRR analysis.

Schedule 7.1 with Retirement

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

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
August of Year	Firm Installed Capacity MW	Firm Capacity Import MW	Firm Capacity Export MW	Firm QF MW	Total Firm Capacity Available MW	Total Demand MW	DSM MW	Firm Summer Peak Demand MW	Total Reserve Margin Before Maintenance MW	% of Peak	Scheduled Maintenance MW	Total Reserve Margin After Maintenance MW	% of Peak	Generation Only Reserve Margin After Maintenance MW	% of Peak
2018	26,302	110	0	204	26,616	23,955	1,906	22,049	4,567	20.7	0	4,567	20.7	2,661	11.1
2019	26,629	110	0	104	26,843	24,317	1,950	22,367	4,476	20.0	0	4,476	20.0	2,526	10.4
2020	26,937	110	0	104	27,151	24,462	1,994	22,468	4,683	20.8	0	4,683	20.8	2,689	11.0
2021	27,637	110	0	4	27,750	24,610	2,038	22,572	5,178	22.9	0	5,178	22.9	3,140	12.8
2022	28,796	110	0	4	28,909	24,865	2,083	22,782	6,127	26.9	0	6,127	26.9	4,044	16.3
2023	28,791	110	0	4	28,905	25,220	2,130	23,090	5,814	25.2	0	5,814	25.2	3,685	14.6
2024	28,787	110	0	4	28,900	25,648	2,177	23,472	5,428	23.1	0	5,428	23.1	3,252	12.7
2025	28,782	110	0	4	28,896	25,997	2,224	23,773	5,123	21.5	0	5,123	21.5	2,899	11.2
2026	29,133	110	0	4	29,247	26,432	2,271	24,162	5,085	21.0	0	5,085	21.0	2,814	10.6
2027	29,535	110	0	0	29,645	26,853	2,318	24,535	5,110	20.8	0	5,110	20.8	2,792	10.4
2028	29,530	493	0	0	30,023	27,294	2,364	24,930	5,094	20.4	0	5,094	20.4	2,730	10.0
2029	31,277	110	0	0	31,387	27,870	2,411	25,460	5,927	23.3	0	5,927	23.3	3,517	12.6
2030	31,273	110	0	0	31,383	28,426	2,457	25,969	5,414	20.8	0	5,414	20.8	2,957	10.4
2031	33,019	110	0	0	33,129	28,952	2,457	26,495	6,635	25.0	0	6,635	25.0	4,177	14.4
2032	32,184	237	0	0	32,421	29,473	2,457	27,016	5,405	20.0	0	5,405	20.0	2,948	10.0
2033	32,915	110	0	0	33,025	29,978	2,457	27,521	5,504	20.0	0	5,504	20.0	3,047	10.2
2034	33,787	0	0	0	33,787	30,464	2,457	28,007	5,780	20.6	0	5,780	20.6	3,323	10.9
2035	34,658	0	0	0	34,658	30,949	2,457	28,492	6,166	21.6	0	6,166	21.6	3,709	12.0
2036	35,424	0	0	0	35,424	31,435	2,457	28,978	6,446	22.2	0	6,446	22.2	3,989	12.7
2037	35,420	0	0	0	35,420	31,909	2,457	29,452	5,968	20.3	0	5,968	20.3	3,511	11.0
2038	36,291	0	0	0	36,291	32,403	2,457	29,946	6,345	21.2	0	6,345	21.2	3,888	12.0
2039	37,162	0	0	0	37,162	32,897	2,457	30,440	6,722	22.1	0	6,722	22.1	4,265	13.0
2040	37,158	0	0	0	37,158	33,391	2,457	30,934	6,224	20.1	0	6,224	20.1	3,767	11.3
2041	38,029	0	0	0	38,029	33,727	2,457	31,270	6,760	21.6	0	6,760	21.6	4,302	12.8
2042	38,025	0	0	0	38,025	34,064	2,457	31,607	6,419	20.3	0	6,419	20.3	3,962	11.6
2043	38,932	0	0	0	38,932	34,401	2,457	31,944	6,988	21.9	0	6,988	21.9	4,531	13.2
2044	38,928	0	0	0	38,928	34,739	2,457	32,282	6,646	20.6	0	6,646	20.6	4,189	12.1
2045	39,799	0	0	0	39,799	35,078	2,457	32,620	7,179	22.0	0	7,179	22.0	4,722	13.5
2046	39,795	0	0	0	39,795	35,417	2,457	32,960	6,835	20.7	0	6,835	20.7	4,378	12.4
2047	40,667	0	0	0	40,667	35,757	2,457	33,300	7,367	22.1	0	7,367	22.1	4,910	13.7
2048	40,663	0	0	0	40,663	36,098	2,457	33,640	7,022	20.9	0	7,022	20.9	4,565	12.6
2049	41,534	0	0	0	41,534	36,439	2,457	33,981	7,553	22.2	0	7,553	22.2	5,095	14.0
2050	41,530	0	0	0	41,530	36,780	2,457	34,323	7,207	21.0	0	7,207	21.0	4,750	12.9
2051	42,402	0	0	0	42,402	37,119	2,457	34,662	7,740	22.3	0	7,740	22.3	5,282	14.2
2052	42,397	0	0	0	42,397	37,458	2,457	35,001	7,396	21.1	0	7,396	21.1	4,939	13.2
2053	43,269	0	0	0	43,269	37,798	2,457	35,341	7,928	22.4	0	7,928	22.4	5,471	14.5
2054	43,265	0	0	0	43,265	38,139	2,457	35,682	7,583	21.3	0	7,583	21.3	5,126	13.4
2055	43,261	0	0	0	43,261	38,480	2,457	36,023	7,238	20.1	0	7,238	20.1	4,781	12.4
2056	44,133	0	0	0	44,133	38,823	2,457	36,365	7,767	21.4	0	7,767	21.4	5,310	13.7
2057	44,129	0	0	0	44,129	39,165	2,457	36,708	7,420	20.2	0	7,420	20.2	4,963	12.7
2058	45,000	0	0	0	45,000	39,509	2,457	37,052	7,948	21.5	0	7,948	21.5	5,491	13.9
2059	44,996	0	0	0	44,996	39,853	2,457	37,396	7,600	20.3	0	7,600	20.3	5,143	12.9
2060	45,868	0	0	0	45,868	40,198	2,457	37,741	8,127	21.5	0	8,127	21.5	5,670	14.1
2061	45,864	0	0	0	45,864	40,544	2,457	38,087	7,777	20.4	0	7,777	20.4	5,320	13.1
2062	46,735	0	0	0	46,735	40,890	2,457	38,433	8,302	21.6	0	8,302	21.6	5,845	14.3
2063	46,732	0	0	0	46,732	41,238	2,457	38,780	7,951	20.5	0	7,951	20.5	5,494	13.3
2064	47,603	0	0	0	47,603	41,588	2,457	39,131	8,473	21.7	0	8,473	21.7	6,015	14.5
2065	47,599	0	0	0	47,599	41,941	2,457	39,484	8,116	20.6	0	8,116	20.6	5,658	13.5
2066	48,471	0	0	0	48,471	42,297	2,457	39,840	8,631	21.7	0	8,631	21.7	6,174	14.6
2067	48,956	0	0	0	48,956	42,656	2,457	40,199	8,757	21.8	0	8,757	21.8	6,299	14.8

Schedule 7.1 without Retirement

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

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
August of Year	Firm Installed Capacity MW	Firm Capacity Import MW	Firm Capacity Export MW	Firm QF MW	Total Firm Capacity Available MW	Total Demand MW	DSM MW	Firm Summer Peak Demand MW	Total Reserve Margin Before Maintenance MW	% of Peak	Scheduled Maintenance MW	Total Reserve Margin After Maintenance MW	% of Peak	Generation Only Reserve Margin After Maintenance MW	% of Peak
	2018	26,302	110	0	204	26,616	23,955	1,906	22,049	4,567	20.7	0	4,567	20.7	2,661
2019	27,490	110	0	104	27,704	24,317	1,950	22,367	5,337	23.9	0	5,337	23.9	3,387	13.9
2020	27,798	110	0	104	28,012	24,462	1,994	22,468	5,544	24.7	0	5,544	24.7	3,550	14.5
2021	28,498	110	0	4	28,611	24,610	2,038	22,572	6,039	26.8	0	6,039	26.8	4,001	16.3
2022	29,657	110	0	4	29,770	24,865	2,083	22,782	6,988	30.7	0	6,988	30.7	4,905	19.7
2023	29,652	110	0	4	29,766	25,220	2,130	23,090	6,675	28.9	0	6,675	28.9	4,546	18.0
2024	29,648	110	0	4	29,761	25,648	2,177	23,472	6,289	26.8	0	6,289	26.8	4,113	16.0
2025	29,643	110	0	4	29,757	25,997	2,224	23,773	5,984	25.2	0	5,984	25.2	3,760	14.5
2026	29,639	110	0	4	29,753	26,432	2,271	24,162	5,591	23.1	0	5,591	23.1	3,320	12.6
2027	29,635	110	0	0	29,745	26,853	2,318	24,535	5,210	21.2	0	5,210	21.2	2,892	10.8
2028	29,630	393	0	0	30,023	27,294	2,364	24,930	5,094	20.4	0	5,094	20.4	2,730	10.0
2029	31,377	110	0	0	31,487	27,870	2,411	25,460	6,027	23.7	0	6,027	23.7	3,617	13.0
2030	31,498	110	0	0	31,608	28,426	2,457	25,969	5,639	21.7	0	5,639	21.7	3,182	11.2
2031	31,493	354	0	0	31,847	28,952	2,457	26,495	5,353	20.2	0	5,353	20.2	2,895	10.0
2032	32,409	110	0	0	32,519	29,473	2,457	27,016	5,503	20.4	0	5,503	20.4	3,046	10.3
2033	32,915	110	0	0	33,025	29,978	2,457	27,521	5,504	20.0	0	5,504	20.0	3,047	10.2
2034	33,787	0	0	0	33,787	30,464	2,457	28,007	5,780	20.6	0	5,780	20.6	3,323	10.9
2035	34,658	0	0	0	34,658	30,949	2,457	28,492	6,166	21.6	0	6,166	21.6	3,709	12.0
2036	35,424	0	0	0	35,424	31,435	2,457	28,978	6,446	22.2	0	6,446	22.2	3,989	12.7
2037	35,420	0	0	0	35,420	31,909	2,457	29,452	5,968	20.3	0	5,968	20.3	3,511	11.0
2038	36,291	0	0	0	36,291	32,403	2,457	29,946	6,345	21.2	0	6,345	21.2	3,888	12.0
2039	37,162	0	0	0	37,162	32,897	2,457	30,440	6,722	22.1	0	6,722	22.1	4,265	13.0
2040	37,158	0	0	0	37,158	33,391	2,457	30,934	6,224	20.1	0	6,224	20.1	3,767	11.3
2041	38,029	0	0	0	38,029	33,727	2,457	31,270	6,760	21.6	0	6,760	21.6	4,302	12.8
2042	38,025	0	0	0	38,025	34,064	2,457	31,607	6,419	20.3	0	6,419	20.3	3,962	11.6
2043	38,932	0	0	0	38,932	34,401	2,457	31,944	6,988	21.9	0	6,988	21.9	4,531	13.2
2044	38,928	0	0	0	38,928	34,739	2,457	32,282	6,646	20.6	0	6,646	20.6	4,189	12.1
2045	39,799	0	0	0	39,799	35,078	2,457	32,620	7,179	22.0	0	7,179	22.0	4,722	13.5
2046	39,795	0	0	0	39,795	35,417	2,457	32,960	6,835	20.7	0	6,835	20.7	4,378	12.4
2047	40,667	0	0	0	40,667	35,757	2,457	33,300	7,367	22.1	0	7,367	22.1	4,910	13.7
2048	40,663	0	0	0	40,663	36,098	2,457	33,640	7,022	20.9	0	7,022	20.9	4,565	12.6
2049	41,534	0	0	0	41,534	36,439	2,457	33,981	7,553	22.2	0	7,553	22.2	5,095	14.0
2050	41,530	0	0	0	41,530	36,780	2,457	34,323	7,207	21.0	0	7,207	21.0	4,750	12.9
2051	42,402	0	0	0	42,402	37,119	2,457	34,662	7,740	22.3	0	7,740	22.3	5,282	14.2
2052	42,397	0	0	0	42,397	37,458	2,457	35,001	7,396	21.1	0	7,396	21.1	4,939	13.2
2053	43,269	0	0	0	43,269	37,798	2,457	35,341	7,928	22.4	0	7,928	22.4	5,471	14.5
2054	43,265	0	0	0	43,265	38,139	2,457	35,682	7,583	21.3	0	7,583	21.3	5,126	13.4
2055	43,261	0	0	0	43,261	38,480	2,457	36,023	7,238	20.1	0	7,238	20.1	4,781	12.4
2056	44,133	0	0	0	44,133	38,823	2,457	36,365	7,767	21.4	0	7,767	21.4	5,310	13.7
2057	44,129	0	0	0	44,129	39,165	2,457	36,708	7,420	20.2	0	7,420	20.2	4,963	12.7
2058	45,000	0	0	0	45,000	39,509	2,457	37,052	7,948	21.5	0	7,948	21.5	5,491	13.9
2059	44,996	0	0	0	44,996	39,853	2,457	37,396	7,600	20.3	0	7,600	20.3	5,143	12.9
2060	45,868	0	0	0	45,868	40,198	2,457	37,741	8,127	21.5	0	8,127	21.5	5,670	14.1
2061	45,864	0	0	0	45,864	40,544	2,457	38,087	7,777	20.4	0	7,777	20.4	5,320	13.1
2062	46,735	0	0	0	46,735	40,890	2,457	38,433	8,302	21.6	0	8,302	21.6	5,845	14.3
2063	46,732	0	0	0	46,732	41,238	2,457	38,780	7,951	20.5	0	7,951	20.5	5,494	13.3
2064	47,603	0	0	0	47,603	41,588	2,457	39,131	8,473	21.7	0	8,473	21.7	6,015	14.5
2065	47,599	0	0	0	47,599	41,941	2,457	39,484	8,116	20.6	0	8,116	20.6	5,658	13.5
2066	48,471	0	0	0	48,471	42,297	2,457	39,840	8,631	21.7	0	8,631	21.7	6,174	14.6
2067	48,956	0	0	0	48,956	42,656	2,457	40,199	8,757	21.8	0	8,757	21.8	6,299	14.8

Schedule 7.2 with Retirement

**Schedule 7.2
Forecast of Capacity, Demand, and Scheduled
Maintenance At Time Of Winter Peak**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
January of Year	Firm Installed Capacity MW	Firm Capacity Import MW	Firm Capacity Export MW	Firm QF MW	Total Firm Capacity Available MW	Total Peak Demand MW	DSM MW	Firm Winter Peak Demand MW	Total Reserve Margin Before Maintenance MW	% of Peak	Scheduled Maintenance MW	Total Reserve Margin After Maintenance MW	% of Peak	Generation Only Reserve Margin After Maintenance MW	% of Peak
	2018	27,512	110	0	334	27,956	19,604	1,382	18,222	9,734	53.4	0	9,734	53.4	8,351
2019	25,033	110	0	74	25,217	19,989	1,418	18,571	6,646	35.8	0	6,646	35.8	5,228	26.2
2020	27,777	110	0	74	27,961	20,182	1,462	18,720	9,241	49.4	0	9,241	49.4	7,779	38.5
2021	27,777	110	0	4	27,890	20,430	1,496	18,934	8,956	47.3	0	8,956	47.3	7,460	36.5
2022	27,789	110	0	4	27,902	20,489	1,523	18,966	8,937	47.1	0	8,937	47.1	7,413	36.2
2023	28,965	110	0	4	29,078	20,774	1,551	19,222	9,856	51.3	0	9,856	51.3	8,305	40.0
2024	28,965	110	0	4	29,078	21,067	1,580	19,486	9,592	49.2	0	9,592	49.2	8,012	38.0
2025	28,965	110	0	4	29,078	21,283	1,610	19,674	9,405	47.8	0	9,405	47.8	7,795	36.6
2026	28,965	110	0	4	29,078	21,579	1,639	19,940	9,138	45.8	0	9,138	45.8	7,499	34.8
2027	29,320	110	0	0	29,430	21,867	1,668	20,199	9,231	45.7	0	9,231	45.7	7,563	34.6
2028	30,109	110	0	0	30,219	22,161	1,698	20,464	9,755	47.7	0	9,755	47.7	8,058	36.4
2029	31,478	110	0	0	31,588	22,462	1,727	20,735	10,853	52.3	0	10,853	52.3	9,126	40.6
2030	31,478	110	0	0	31,588	22,766	1,756	21,010	10,578	50.3	0	10,578	50.3	8,822	38.7
2031	31,478	110	0	0	31,588	23,059	1,786	21,273	10,314	48.5	0	10,314	48.5	8,529	37.0
2032	32,498	110	0	0	32,608	23,322	1,786	21,537	11,071	51.4	0	11,071	51.4	9,285	39.8
2033	31,503	110	0	0	31,613	23,585	1,786	21,799	9,813	45.0	0	9,813	45.0	8,028	34.0
2034	31,503	110	0	0	31,613	23,847	1,786	22,062	9,551	43.3	0	9,551	43.3	7,765	32.6
2035	31,503	0	0	0	31,503	24,108	1,786	22,323	9,180	41.1	0	9,180	41.1	7,395	30.7
2036	30,500	0	0	0	30,500	24,369	1,786	22,584	7,916	35.1	0	7,916	35.1	6,130	25.2
2037	30,500	0	0	0	30,500	24,630	1,786	22,845	7,655	33.5	0	7,655	33.5	5,869	23.8
2038	30,500	0	0	0	30,500	24,891	1,786	23,105	7,394	32.0	0	7,394	32.0	5,609	22.5
2039	30,500	0	0	0	30,500	25,151	1,786	23,366	7,134	30.5	0	7,134	30.5	5,348	21.3
2040	30,500	0	0	0	30,500	25,412	1,786	23,626	6,874	29.1	0	6,874	29.1	5,088	20.0
2041	30,500	0	0	0	30,500	25,672	1,786	23,887	6,613	27.7	0	6,613	27.7	4,828	18.8
2042	30,500	0	0	0	30,500	25,933	1,786	24,147	6,352	26.3	0	6,352	26.3	4,567	17.6
2043	29,640	0	0	0	29,640	26,194	1,786	24,408	5,232	21.4	0	5,232	21.4	3,446	13.2
2044	29,640	0	0	0	29,640	26,455	1,786	24,669	4,970	20.1	0	4,970	20.1	3,185	12.0
2045	29,917	0	0	0	29,917	26,716	1,786	24,931	4,986	20.0	0	4,986	20.0	3,200	12.0
2046	30,793	0	0	0	30,793	26,978	1,786	25,193	5,600	22.2	0	5,600	22.2	3,815	14.1
2047	30,793	0	0	0	30,793	27,240	1,786	25,455	5,338	21.0	0	5,338	21.0	3,553	13.0
2048	31,669	0	0	0	31,669	27,502	1,786	25,717	5,952	23.1	0	5,952	23.1	4,167	15.2
2049	31,669	0	0	0	31,669	27,764	1,786	25,979	5,690	21.9	0	5,690	21.9	3,904	14.1
2050	31,669	0	0	0	31,669	28,027	1,786	26,241	5,428	20.7	0	5,428	20.7	3,642	13.0
2051	32,545	0	0	0	32,545	28,289	1,786	26,504	6,041	22.8	0	6,041	22.8	4,255	15.0
2052	32,545	0	0	0	32,545	28,552	1,786	26,767	5,778	21.6	0	5,778	21.6	3,993	14.0
2053	32,545	0	0	0	32,545	28,815	1,786	27,029	5,516	20.4	0	5,516	20.4	3,730	12.9
2054	33,421	0	0	0	33,421	29,077	1,786	27,292	6,129	22.5	0	6,129	22.5	4,343	14.9
2055	33,421	0	0	0	33,421	29,340	1,786	27,555	5,866	21.3	0	5,866	21.3	4,081	13.9
2056	33,421	0	0	0	33,421	29,603	1,786	27,818	5,603	20.1	0	5,603	20.1	3,817	12.9
2057	34,297	0	0	0	34,297	29,867	1,786	28,081	6,216	22.1	0	6,216	22.1	4,430	14.8
2058	34,297	0	0	0	34,297	30,131	1,786	28,345	5,952	21.0	0	5,952	21.0	4,166	13.8
2059	35,173	0	0	0	35,173	30,394	1,786	28,609	6,564	22.9	0	6,564	22.9	4,778	15.7
2060	35,173	0	0	0	35,173	30,659	1,786	28,873	6,300	21.8	0	6,300	21.8	4,514	14.7
2061	35,173	0	0	0	35,173	30,923	1,786	29,138	6,035	20.7	0	6,035	20.7	4,250	13.7
2062	36,049	0	0	0	36,049	31,188	1,786	29,402	6,646	22.6	0	6,646	22.6	4,861	15.6
2063	36,049	0	0	0	36,049	31,453	1,786	29,667	6,381	21.5	0	6,381	21.5	4,596	14.6
2064	36,049	0	0	0	36,049	31,715	1,786	29,930	6,119	20.4	0	6,119	20.4	4,333	13.7
2065	36,925	0	0	0	36,925	31,979	1,786	30,194	6,731	22.3	0	6,731	22.3	4,945	15.5
2066	36,925	0	0	0	36,925	32,243	1,786	30,458	6,467	21.2	0	6,467	21.2	4,682	14.5
2067	36,925	0	0	0	36,925	32,507	1,786	30,722	6,203	20.2	0	6,203	20.2	4,418	13.6

Schedule 7.2 without Retirement

**Schedule 7.2
Forecast of Capacity, Demand, and Scheduled
Maintenance At Time Of Winter Peak**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
January of Year	Firm Installed Capacity MW	Firm Capacity Import MW	Firm Capacity Export MW	Firm QF MW	Total Firm Capacity Available MW	Total Peak Demand MW	DSM MW	Firm Winter Peak Demand MW	Total Reserve Margin Before Maintenance MW	% of Peak	Scheduled Maintenance MW	Total Reserve Margin After Maintenance MW	% of Peak	Generation Only Reserve Margin After Maintenance MW	% of Peak
2018	27,512	110	0	334	27,956	19,604	1,382	18,222	9,734	53.4	0	9,734	53.4	8,351	42.6
2019	26,671	110	0	74	26,855	19,989	1,418	18,571	8,284	44.6	0	8,284	44.6	6,866	34.3
2020	28,650	110	0	74	28,834	20,182	1,462	18,720	10,114	54.0	0	10,114	54.0	8,652	42.9
2021	28,650	110	0	4	28,763	20,430	1,496	18,934	9,829	51.9	0	9,829	51.9	8,333	40.8
2022	28,662	110	0	4	28,775	20,489	1,523	18,966	9,810	51.7	0	9,810	51.7	8,286	40.4
2023	29,838	110	0	4	29,951	20,774	1,551	19,222	10,729	55.8	0	10,729	55.8	9,178	44.2
2024	29,838	110	0	4	29,951	21,067	1,580	19,486	10,465	53.7	0	10,465	53.7	8,885	42.2
2025	29,838	110	0	4	29,951	21,283	1,610	19,674	10,278	52.2	0	10,278	52.2	8,668	40.7
2026	29,838	110	0	4	29,951	21,579	1,639	19,940	10,011	50.2	0	10,011	50.2	8,372	38.8
2027	29,838	110	0	0	29,948	21,867	1,668	20,199	9,749	48.3	0	9,749	48.3	8,081	37.0
2028	30,121	110	0	0	30,231	22,161	1,698	20,464	9,767	47.7	0	9,767	47.7	8,070	36.4
2029	31,590	110	0	0	31,700	22,462	1,727	20,735	10,965	52.9	0	10,965	52.9	9,238	41.1
2030	31,704	110	0	0	31,814	22,766	1,756	21,010	10,804	51.4	0	10,804	51.4	9,048	39.7
2031	31,948	110	0	0	32,058	23,059	1,786	21,273	10,784	50.7	0	10,784	50.7	8,999	39.0
2032	31,704	110	0	0	31,814	23,322	1,786	21,537	10,277	47.7	0	10,277	47.7	8,491	36.4
2033	32,597	110	0	0	32,707	23,585	1,786	21,799	10,907	50.0	0	10,907	50.0	9,122	38.7
2034	31,729	110	0	0	31,839	23,847	1,786	22,062	9,777	44.3	0	9,777	44.3	7,991	33.5
2035	31,729	0	0	0	31,729	24,108	1,786	22,323	9,406	42.1	0	9,406	42.1	7,621	31.6
2036	30,726	0	0	0	30,726	24,369	1,786	22,584	8,142	36.1	0	8,142	36.1	6,356	26.1
2037	30,726	0	0	0	30,726	24,630	1,786	22,845	7,881	34.5	0	7,881	34.5	6,095	24.7
2038	30,726	0	0	0	30,726	24,891	1,786	23,105	7,620	33.0	0	7,620	33.0	5,835	23.4
2039	30,726	0	0	0	30,726	25,151	1,786	23,366	7,360	31.5	0	7,360	31.5	5,574	22.2
2040	30,726	0	0	0	30,726	25,412	1,786	23,626	7,100	30.1	0	7,100	30.1	5,314	20.9
2041	30,726	0	0	0	30,726	25,672	1,786	23,887	6,839	28.6	0	6,839	28.6	5,054	19.7
2042	30,726	0	0	0	30,726	25,933	1,786	24,147	6,578	27.2	0	6,578	27.2	4,793	18.5
2043	29,866	0	0	0	29,866	26,194	1,786	24,408	5,458	22.4	0	5,458	22.4	3,672	14.0
2044	29,866	0	0	0	29,866	26,455	1,786	24,669	5,196	21.1	0	5,196	21.1	3,411	12.9
2045	29,917	0	0	0	29,917	26,716	1,786	24,931	4,986	20.0	0	4,986	20.0	3,200	12.0
2046	30,793	0	0	0	30,793	26,978	1,786	25,193	5,600	22.2	0	5,600	22.2	3,815	14.1
2047	30,793	0	0	0	30,793	27,240	1,786	25,455	5,338	21.0	0	5,338	21.0	3,553	13.0
2048	31,669	0	0	0	31,669	27,502	1,786	25,717	5,952	23.1	0	5,952	23.1	4,167	15.2
2049	31,669	0	0	0	31,669	27,764	1,786	25,979	5,690	21.9	0	5,690	21.9	3,904	14.1
2050	31,669	0	0	0	31,669	28,027	1,786	26,241	5,428	20.7	0	5,428	20.7	3,642	13.0
2051	32,545	0	0	0	32,545	28,289	1,786	26,504	6,041	22.8	0	6,041	22.8	4,255	15.0
2052	32,545	0	0	0	32,545	28,552	1,786	26,767	5,778	21.6	0	5,778	21.6	3,993	14.0
2053	32,545	0	0	0	32,545	28,815	1,786	27,029	5,516	20.4	0	5,516	20.4	3,730	12.9
2054	33,421	0	0	0	33,421	29,077	1,786	27,292	6,129	22.5	0	6,129	22.5	4,343	14.9
2055	33,421	0	0	0	33,421	29,340	1,786	27,555	5,866	21.3	0	5,866	21.3	4,081	13.9
2056	33,421	0	0	0	33,421	29,603	1,786	27,818	5,603	20.1	0	5,603	20.1	3,817	12.9
2057	34,297	0	0	0	34,297	29,867	1,786	28,081	6,216	22.1	0	6,216	22.1	4,430	14.8
2058	34,297	0	0	0	34,297	30,131	1,786	28,345	5,952	21.0	0	5,952	21.0	4,166	13.8
2059	35,173	0	0	0	35,173	30,394	1,786	28,609	6,564	22.9	0	6,564	22.9	4,778	15.7
2060	35,173	0	0	0	35,173	30,659	1,786	28,873	6,300	21.8	0	6,300	21.8	4,514	14.7
2061	35,173	0	0	0	35,173	30,923	1,786	29,138	6,035	20.7	0	6,035	20.7	4,250	13.7
2062	36,049	0	0	0	36,049	31,188	1,786	29,402	6,646	22.6	0	6,646	22.6	4,861	15.6
2063	36,049	0	0	0	36,049	31,453	1,786	29,667	6,381	21.5	0	6,381	21.5	4,596	14.6
2064	36,049	0	0	0	36,049	31,715	1,786	29,930	6,119	20.4	0	6,119	20.4	4,333	13.7
2065	36,925	0	0	0	36,925	31,979	1,786	30,194	6,731	22.3	0	6,731	22.3	4,945	15.5
2066	36,925	0	0	0	36,925	32,243	1,786	30,458	6,467	21.2	0	6,467	21.2	4,682	14.5
2067	36,925	0	0	0	36,925	32,507	1,786	30,722	6,203	20.2	0	6,203	20.2	4,418	13.6

QUESTION:

Please provide any studies that led to the decision to retire Martin Units 1 & 2. As part of this response, please identify other alternatives that were considered prior to the decision to retire Martin Units 1 & 2, and explain why those alternatives were ultimately dismissed.

RESPONSE:

FPL analyzed whether it was economic to retire Martin 1 & 2 in 2019 versus continuing to operate the units through the planned retirement date of 2030. The alternative considered for replacement was the upgrade of FPL existing units, which was deemed to be the most cost effective option. Please see Attachment Nos. 1 and 2 to FPL's Response to Staff's Second Data Request No. 3 for the economic analysis that determined that retiring Martin 1 & 2 in 2019 is more cost effective for customers than continuing to operate through the 2030 planned retirement date. FPL also evaluated repowering Martin 1 & 2 and found it to be less economic for FPL and its customers than upgrading the existing units. Please see FPL's Response to Staff's Second Data Request No. 9.

QUESTION:

Please explain whether or not Martin Units 1 & 2 can be repowered to improve the efficiency of the units.

RESPONSE:

Martin Units 1 & 2 could be repowered, which would improve their efficiency. Repowering denotes first retiring, then removing the existing generating units, followed by building new generating capacity on the same site that the existing units had occupied. At Martin, there is sufficient land so that new combined cycle capacity could be built without first retiring the existing units. Once the new generating capacity was in place, the existing Martin Units 1 & 2 could be retired and removed. FPL evaluated this scenario and found it to be less economic for FPL and its customers than upgrading FPL's existing combined cycle units. The repowering evaluation was not included in the final Martin 1 & 2 retirement analysis since the costs of the unit upgrades were significantly lower than the cost of repowering and the upgrade of the units would clearly be the lowest cost alternative by a significant margin.

QUESTION:

Please explain how the Utility plans to utilize the site once Martin Units 1 & 2 are retired.

RESPONSE:

Following the retirement of Martin Units 1 & 2, the Martin site will continue to have a significant amount of natural gas-fired capacity, as Martin combined cycle Units 3, 4, and 8 will remain in service with a total capacity of approximately 2,100 MW (summer). The Martin Units 1 & 2 site would remain a potential site for future FPL generation resources, such as PV solar.

QUESTION:

Please provide a list of units for inclusion in the Utility’s resource plan with and without Martin Units 1 & 2.

- a. Please indicate whether or not retiring Martin Units 1 & 2 will accelerate the need for any of FPL’s planned units. If so, please identify which and provide the expected in-service date for those units.
- b. Please indicate whether or not retiring Martin Units 1 & 2 will accelerate the need for firm natural gas transport capacity. If so, please provide the quantity and expected in-service date for expansions.

RESPONSE:

Please see Attachment No. 1 to FPL’s response to Staff’s Second Data Request No. 3, specifically the “Resource Plan” tab for the tables showing “without” and “with” the Martin 1 & 2 units.

- a. The retirement of Martin 1 & 2 will not accelerate the need for any of FPL’s planned units such as the Okeechobee Clean Energy Center, Dania Beach Clean Energy Center or the solar generating units
- b. The retirement of Martin 1 & 2 will defer the need for firm natural gas transport capacity in the years 2026 thru 2029, but will cause an increase in the needed gas transport capacity in the years 2030 thru 2032. See table below for quantity and in-service dates.

Year	Million Cubic Feet (MMCF) of Natural Gas Transport Capacity	
	"without Retirement"	"with Retirement"
	MMCF	MMCF
2018	---	---
2019	---	---
2020	---	---
2021	---	---
2022	---	---
2023	---	---
2024	---	---
2025	---	---
2026	35	---
2027	15	---
2028	10	---
2029	55	50
2030	---	35
2031	---	15
2032	195	215

QUESTION:

Please identify which units' combustion turbine components will be upgraded to help account for the retirement of Martin Units 1 & 2, and provide the amount of additional capacity (megawatts) expected from and the estimated cost for each of these upgrades.

RESPONSE:

The list of units being upgraded to help account for the retirement of Martin Units 1 & 2 and the amount of the MW upgrades is shown below. These upgrades were assumed to take place from 2019 to 2027 and total 1,526 MW. All these MW increases are due to upgrades to the combustion turbines of these units, with the exception of 22 MW for a steam turbine upgrade at Turkey Point 5. The costs of these upgrades was estimated to be \$ 490 per kW, for a total cost of approximately \$750 million.

	Total Upgraded Capacity MW
Cape Canaveral Unit 3	80
Ft Myers 3A-3B Units	20
Ft Myers Combined Cycle	338
Manatee Unit 3	156
Martin Unit 8	141
Port Everglades Unit 5	80
Riviera Unit 5	80
Sanford Unit 4	204
Sanford Unit 5	204
Turkey Point 5	88
West County Units 1-3	135
Total	1526

QUESTION:

Provide any additional sources of capacity that FPL anticipates acquiring to help account for the retirement of Martin Units 1 & 2.

RESPONSE:

The capacity of the Martin 1 & 2 units totals 1,626 MW. Upgrades to existing units, as described by FPL in response to Staff's Second Data Request No. 12, replace 1,526 MW of this capacity. After accounting for these upgrades, there is sufficient capacity in the system with already planned resource additions that no other sources of capacity are required, except for a short term purchase power agreement in 2028.