Florida Power & Light Company Docket No. 150196-EI Staff's Third Set of Interrogatories Interrogatory No. 62 Page 1 of 3

QUESTION:

Please refer to FPL's response to Staff's First Set of Interrogatories No. 13 for the following questions:

- a. Please provide FPL's 7/27/2015 base case natural gas and light fuel oil short term and long term price forecasts (annualized and monthly).
- b. Please provide FPL's 7/27/2015 high band natural gas and light fuel oil short term and long term price forecasts (annualized and monthly).
- c. Please provide FPL's 7/27/2015 low band natural gas and light fuel oil short term and long term forecasts (annualized and monthly).
- d. Please provide CPVRR first stage analyses, similar to that provided in Exhibit SRS-4 of FPL Witness Dr. Sim's Direct Testimony, based on FPL's 7/27/2015 base case, high band, and low band natural gas and light fuel oil price forecasts.
- e. Please provide CPVRR second stage analyses, similar to that provided in Exhibit SRS-5 of FPL Witness Dr. Sim's Direct Testimony, based on FPL's 7/27/2015 base case, high band, and low band natural gas and light fuel oil price forecasts.

RESPONSE:

- a. Please see Attachment No. 1 (Table Staff-62 (Part a), (Part b), and (Part c)).
- b. Please see Attachment No. 1 (Table Staff-62 (Part a), (Part b), and (Part c)).
- c. Please see Attachment No. 1 (Table Staff-62 (Part a), (Part b), and (Part c)).
- d. Staff Interrogatory 62 d & e requested that FPL update two analyses that FPL had performed as part of its overall next planned generating unit (NPGU) analyses in 2014 and early 2015. The request was to update these analyses substituting FPL's July 27, 2015 fuel cost forecast for the fuel cost forecasts that were used at the time for each of the two analyses.

Florida Power & Light Company Docket No. 150196-EI

Staff's Third Set of Interrogatories Interrogatory No. 62

Page 2 of 3

The updated analyses utilize this July 2015 fuel cost forecast (low, base, and high bands).

However, FPL has also updated a number of other inputs to the analyses. These other

updates include:

A new October 2015 load forecast; and,

Various other assumptions that were not then available and, therefore, had not been

utilized during each stage/step in the NPGU analyses, but which were updated and

incorporated into FPL's 2015 Ten-Year Site Plan, including: (i) the 2016 PV additions,

(ii) the new schedule for GT replacements in Broward and Lee counties, (iii) the mutually

agreed upon decision with Cedar Bay to sell that generating unit to FPL and FPL's plans

to subsequently retire that unit, and (iv) the 2027/2028 in-service dates for Turkey Point 6

& 7.

Utilizing all of these updated assumptions and forecasts, FPL performed three scenario

analyses. One scenario utilizes the July 2015 base case fuel cost forecast, another

scenario utilizes the July 2015 low band fuel cost forecast, and the third scenario utilizes

the July 2015 high band fuel cost forecast.

FPL has combined key generating options analyzed in the two previous, separate stages

of analyses presented in Exhibits SRS-4 and SRS-5 into one set of analyses which

examines the following self-build generating options. Please see Attachment No. 2 (Table

Staff-62 (Parts d & e)):

The 1,622 MW OCEC Unit 1 that was designated as FPL's NPGU in the capacity RFP;

SFHHA 010945 FPL RC-16

Florida Power & Light Company Docket No. 150196-EI Staff's Third Set of Interrogatories

Interrogatory No. 62

Page 3 of 3

- An enhanced 1,633 MW version of the OCEC Unit 1 (as referenced on page 36 of FPL

witness Sim's direct testimony);

- Enhanced CT designs of 231 MW (Summer) capacity in 5 x 0, 6 x 0, and 7 x 0

configurations; and,

- The two most competitive non-GE CC units from the original analyses.

As shown in this response, the original 1,622 MW OCEC Unit 1 is still projected to be

more economic than any of the CT and non-GE generation options; thus, the overall

conclusions and recommendations reflected in the Petition for a determination of need

and the supporting pre-filed testimony remain unchanged.

e. Please see the response to subpart (d) above.

SFHHA 010946 FPL RC-16

Table Staff-62 (Part a)

FPL July 27, 2015 Fuel Price Forecast: Base Case

L Forecast of Annual Fuel Prices:

97 LIS	6£°7\$	Z£.42	Et †\$	Dec-19
\$18°0¢	04.48	££,4\$	Et 't\$	61-von
21.81\$	\$0°7\$	10.4\$	₹1. †\$	61-10O
\$18.3¢	88.6\$	1 8.£\$	L6 E\$	91-qə2
£1.81\$	96.5\$	26.£\$	\$4.05	9I-guA
19.81\$	84.28	\$7.4\$	6E 7\$	91-lut
\$18.3¢	01.4\$	L0` †\$	12.48	61-unf
81.81\$	LI:1/5	<i>†</i> 1` <i>†</i> \$	LZ.48	91-yaM
LE.81\$	90.4\$	£0° † \$	LT"#\$	91-1qA
06.71\$	10'7\$	£6°£\$	L0.4\$	91-nsM
60 [°] LI\$	01.4 \$	\$0.48	91.4\$	Feb-19
LS.81\$	LE"#\$	££.4\$	St. t\$	61-net
(\$/MMBTU)	(UTAMM/\$)	(\$/MMBTU)	(\$WWBLU)	Month-Year
Fuel Oil	Sabal Trail Gas	Gulfstream Firm Gas	FGT Firm Gas	
Light(Distillate)	mori	Average	эдвтэүА	
	FSC Firm	Weighted	Weighted	
		Luces:	Monthly Fuel I	II, FOrecast of
				, , , <u></u>
6E'L †\$	\$1.51\$	\$7.EI\$	65.818	5046
67'97\$	£L.41\$	\$12.83	L1'E1\$	8407
12,248	\$15.33	\$15.43	\$15,75	Z 04 2
91.44\$	26.118	\$15.04	\$12.35	9707
\$1°£7\$	LS'11\$	99,11\$	96.118	2045
t1.24\$	12.118	67.11\$	82.118	707
91'17\$	98.01\$	£6.01 \$	22.118	2043
17.01\$	ZS:01\$	85.01\$	98.01\$	7042
87.68\$	61.01\$	\$2.01\$	22.018	1407
85.85\$	∠8.e\$	£6.6 \$	61.01\$	2040
67°LE\$	95.6\$	19.6\$	L8.6\$	503
£9°9£\$	97.6\$	15.6\$	55.6\$	2038
6L'SE\$	L6.8\$	10.6\$	\$7.6\$	LE07
L6.4E\$	69.8\$	£L'8\$	96.8\$	2036
LI.48\$	Z4.8\$	24.8\$	89.8\$	2035
ZE.EE\$	92,8\$	67.8\$	12.8\$	7034
64.25\$	01.8\$	£I.8\$	48.84	2033
75.15\$	78.7\$	68.7\$	01.8\$	2692
\$8.05\$	\$9°L\$	99 [.] L\$	L8.T\$	1602
\$30.03	£4.78	tt 1\$	₹9°L\$	2030
85.62\$	22.7 \$	77.7\$	74.78	6707
<i>₽L</i> .82\$	10.78	10.78	17.78	8707
\$0.82 \$	18.58	18.5\$	00 L\$	7202 7202
08.72\$	19'9\$	19.9\$	6L 9\$	9707
\$5.92\$	24.8\$	I t .8	65.9\$	2022
12.22\$	£2.8\$	£7 [.] 9\$	04.98	7024
48.EZ\$	≥0.8 ≤6.3	⊅0°9\$	17.9\$	2023
08.22\$	18.28	08.2\$	96'\$\$	707
27.12 \$	22.2 \$	02.28	99,2 \$	1202
88.02\$	£1.28	01.28	\$2,28 33,28	7070
56.71 \$	SI.48	01.48	£7.78	5000
(\$/MMBTU)	(UTBMM/\$)	(UTAMM\\2)	(\$/MMBTU)	Zear
Fuel Oil	Sab light Trail Gas	Sad mrist meantalluð		21
Light(Distillate)	mort	эдгээхА	Average	
Compagniti	mri4 O84	Weighted	Weighted Approach	
			1 - 1-7-111	

LE'17\$

18.02\$

\$8,91\$

\$16.24

917.71

£0.2\$

96'7\$

70.2**\$**

14.2\$

6£.4\$

10.2\$

£6 †\$

₽0°S\$

6£,2**\$**

\$4,32

02-1qA

02-1sM

Ecb-20

Jan-20

Dec-19

LT'S\$

90.8\$

LTS\$

\$2.52

Et t\$

67.67\$	9 <i>5</i> °./\$	LS.T\$	9 <i>L</i> ° <i>L</i> \$	Feb-31
98,828	70.8\$	60.8\$	0£.8\$	I E-rist
L1.62 \$	\$8.7 \$	£8.7\$	70.8\$	Dec-30
LI'0E\$	\$8.7\$	78.78	£0.8\$	0£-voV
16.06\$	\$7.7\$	97.7\$	8t L\$	0£-12O
17.05\$	₹6°9\$	96.9\$	91.7\$	Sep-30
98'0£\$	60°L\$	11.7\$	1 <i>E"L</i> \$	0£-3uA
71.1E\$	L9°L\$	0L.T\$	76 ⁻ L\$	0£-lut
69.0£\$	9£"L\$	8£.7\$	0974\$	0£-սու
£4.0£\$	8t.7\$	05,78	7L'L\$	08-yeM
\$7.05\$	67.7 \$	18.78	ZS.7 \$	0£-1qA
£6.62 \$	61.7\$	02.7\$	8£.7\$	Mar-30
12.82\$	₽£.7 \$	SE.T\$	<i></i> ₽\$".∠\$	Eep-30
\$27.60	<i></i> ₹8.7\$	98.7\$	90.8\$	OE-asl
\$28.54	79.7\$	09°L\$	87.7 \$	Dec-29
75,62\$	£9°L\$	19.7\$	08.7\$	62-vov
99.62\$	\$0.7 \$	\$0.7\$	97.7\$	67-19O
\$0.05	t/L'9\$	SL'9\$	£6°9\$	67-dəS
61.08\$	68'9\$	06.9\$	01.7\$	62- <u>g</u> uA
02.05\$	S1.78	Lt L\$	69°L\$	6Շ-Լու
\$9.05\$	\$1.7\$	LI L\$	8E.7\$	67-unr
LL 67\$	97°L\$	87.7\$	05.78	62-yrM
60.0£\$	80.7 \$	60 L\$	0£.7\$	6 2- 1qA
67.67\$	86.9\$	66 9\$	91.7\$	92-1sM
06°L7\$	£1.7 \$	⊅I ′L\$	ZE.7\$	Feb-29
10.72\$	79 [°] L\$	£9°L\$	Z8.7\$	62-net
76°L7\$	0 ₺ .7 \$	85.7\$	9 <i>5°L</i> \$	Dec-28
88.82	I ₱.7\$	6£.7 \$	<i>LS. L</i> \$	82-voV
10.62\$	7 8.8 \$	28.9\$	\$0.7\$	82-15O
65,62\$	££.8\$	95.9\$	\$L.9\$	Sep-28
£2,62\$	69.9\$	0L'9\$	06.9\$	82-guA
\$8,62\$	\$7.7 \$	97.7 \$	Lt ⁻ L\$	8Հ-ԼոՐ
85,62\$	1 6.9\$	96 9\$	91.7\$	82-nul
\$1.67\$	\$0.7\$	Z0.7\$	87.78	82-yeM
tt 67\$	∠8.9\$	68.9\$	60,7\$	82-1qA
\$9.87\$	82.9\$	87.9\$	\$6.9\$	82-1BM
\$27.30	£6 ⁻ 9\$	£6.9 \$	01.7\$	Feb-28
£4.32\$	0 1 .7\$	11.78	65°L\$	82-nst
\$7.72\$	61.77	91.7\$	\$£.7\$	Dec-27
61.82\$	02.7\$	81.72	\$£'L\$	TS-VOV
16.82\$	79°9\$	\$9.9\$	\$8.9\$	72-12O
89'87\$	9£.9 \$	76.0\$	95.9\$	Sep-27
78.82\$	05.8	05.0\$	0L'9\$	7.2-guA
11.62\$ 79.82\$	₹0° ८\$ ₽ ८ °9\$	\$L'9\$	\$2,7\$	72-lut
29 8C\$ Et 8Z\$	28.9\$	98.9\$	\$6`9\$	72-ysM 72-aut
E7.828	89.9\$	69:9 \$	20°2\$ 88°9\$	72-1qA
L6'L7\$	65.8	8 <i>2</i> .9 \$	SL'9\$	72-raM
†9 ⁻ 97\$	εL'9\$	ε <i>Γ.</i> 9\$	06.9\$	Feb-27
08.22\$	61.7\$	61.72	7E.T\$	72-nst
\$2.528	86.98	\$6.5\$	ZI.7\$	Dec-26
\$7.74¢	66.9\$	Z6.8\$	£1.7 \$	92-voV
95.72\$	St. 9\$	S4.88	\$9 [.] 9\$	97-10O
76.72\$	81.8	81.9\$	98.38	97-dəS
\$0.82\$	15.38	18.8	08.98	9 2- 2uA
\$28.3¢	88.9\$	48.8	40.7\$	9 2-I ut
16.72\$	\$\$.9\$	95.9\$	SL:9\$	97-unf
L9 L7\$	\$9.9\$	99.9\$	98.9\$	May-26
96°L7\$	84.98	64.9\$	89.98	92-1qA
77.72\$	0 7 -9\$	68.98	55.9\$	92-7sM
£6.5Z\$	£\$.9\$	£\$.3\$	69.9\$	Feb-26
11.82\$	86.9\$	86.9\$	91.7\$	92-nst
08.22\$	81.9\$	SL 9\$	16.9\$	Dec-25
89.92\$	6L*9\$	91.9\$	76.9\$	Nov-25
08.97\$	97.9\$	97.9\$	St 9\$	Oct-25

\$38.14	<i>₽L</i> '01\$	87.01\$	⊅ 0'I1\$	Dec-41
84.95\$	94.01\$	08.01\$	90.11\$	I4-voV
99.68\$	₹6 .6\$	10.01\$	87.01\$	I 4-15O
61.04 \$	£5.6\$	85.6\$	\$8.6\$	I 1∕-q∍2
6£.04 \$	£7.6\$	64.6\$	90.01\$	I4-guA
08.04\$	£8.01\$	09.01\$	06.01\$	I 1/-Inf
LI'07\$	01.01\$	71.01 \$	St.01\$	լ թ-սուլ
\$39.85	97.01\$	\$6.01\$	79.01\$	May-41
\$40.25	00.01\$	90.01\$	\$10.3¢	I4-₁qA
91 68\$	98.6\$	16.6\$	91.01\$	14-16M
LT'LE\$	TO.01\$	\$1.01\$	86.01\$	Feb-41
L0.9£\$	94.01\$	\$8.01\$	60'11\$	[p-as(
97.7£\$	14.01\$	<i>tt</i> :01\$	69.01\$	Dec-40
LS.8E\$	24.01\$	94.01\$	17.01\$	0 ⊁- voV
\$2.85\$	£9'6 \$	69.6\$	96.6\$	04-15O
97.68\$	£7.6\$	87.6\$	₽ \$.6\$	Sep-40
\$39.45	Z4.6\$	87 6\$	trL'6\$	0 4 -guA
98 68\$	\$10.20	LZ.01\$	\$2.01\$	01-լու
\$39.24	87.6\$	\$8.6\$	21,01\$	0 1 -αnς
06.85\$	7 6'6\$	10.01\$	81.01\$	0 1 -√al√l
\$39.35	69.6\$	SL 6\$	20.01\$	0 1 -1qA
92.86\$	\$5.6\$	09.6\$	<i>t</i> 8'6\$	Mar-40
24.9E\$	94.6\$	18.6\$	\$0.01\$	Eep-40
\$35.24	24.01\$	64.01\$	<i>₽</i> ∠'01\$	O4-nsl
14.95\$	60.01\$	11.01\$	\$6.01\$	Dec-39
89.75\$	01.01\$	\$1.01\$	Z£'01\$	6E-von
\$37.85	££.6\$	8E'6\$	\$9.6\$	Oct-39
838.36	₹ 6.8\$	66'8\$	1 7.6\$	66-qə2
\$38.54	£1.6\$	81.6\$	tt 6\$	e£-guA
\$38.94	88.6\$	t6.6\$	22.01\$	6£-Int
\$38.34	8t [.] 6\$	£\$'6\$	08.6\$	6 દ- սոՐ
10.85\$	£9 [.] 6\$	69.6\$	96.6\$	May-39
\$38.45	8£.6\$	tt`6\$	07.6\$	9£-1qΑ
88.78	\$7.6\$	0£.9\$	£\$.6 \$	6£-1₽M
83.25\$	St. 6\$	0⊊`6\$	£L.6\$	Feb-39
£4,45\$	01.01\$	\$1.01\$	04.01\$	ee-art
LS.SE\$	LL.6\$	6L.6\$	\$10.03	Dec-38
18,36\$	87.6\$	18.6\$	to:01\$	86-voV
86.35\$	⊅ 0.6 \$	60.6\$	\$ 6.34	Oct-38
L7.7.E\$	99.8\$	0L 8\$	\$6.8\$	Sep-38
99.T£\$	\$8.8 \$	68.8\$	b1.6\$	85-guA
\$38.04	LS:6\$	£9·6\$	06.6\$	86-lut
97.7E\$	81.6\$	£7.6\$	61.6\$	86-aut
ET.TE\$	££6\$	85.6\$	\$9.6\$	85-yaM
£2.7£\$	60'6\$	ÞI 6\$	01.6\$	8£-1qA
\$36.52	96'8\$	00.6\$	22.6\$	8E-rsM
9L 7E\$	91.6\$	07.6\$	£4.9\$	Feb-38
49.55\$	8L.6\$	88.6\$	\$0.01\$	St-ast
ST 4E\$	Lħ.6\$	87.6\$	17.98	Dec-37
76.25\$	84.6\$	0⊊.6\$	£L.6\$	TE-voV
\$1.95\$	94.8\$	08.8\$	\$0.6\$	Vct-33V
19.95\$	6£.8 \$	£1.8\$	L9'8\$	Sep-37
6L'9E\$	LS.8\$	19 8\$	≥8,8\$	7ε-guA
71.7E\$	L7.6\$	££.9\$	65.6\$	7.E-Iul
09.9£\$	68.8\$	76.8 \$	61.6\$	7£-mul
82.36\$	† 0.6 \$	60.6\$	⊅£6 \$	TE-yeM
L9.8E\$	18.8\$	28.8\$	01.6\$	₹£-1qA
89.25\$	89.8\$	27.8\$	£6.8 \$	78-rsM
76.EE\$	∠8*8\$	16.8\$	£1.6 \$	Feb-37
78.2£\$	81-6\$	28.9\$	94.6\$	76-nst
96.55\$	L1.6\$	81.6\$	04.6\$	Dec-36
\$35.14	81'6\$	02.6\$	77·6\$	9£-voV
835.30	84.8\$	\$8.52	94.8\$	9£-10O
LL'98\$	£1.8\$	91.8\$	68.8\$	96 - q98
49.35.84	0£.8\$	££.8 \$	72.8 \$	∂£-yuA

00.94\$	£8.£1\$	t6°E1\$	LZ.41\$	Dec-49
£9°L†\$	78.51\$	96.£1\$	05.41\$	67-von
\$8.74\$	\$12.83	\$15.94	67.81\$	61-15O
6t'8t\$	67.21\$	\$15.39	£1.2.73	6 ⊁- dəS
£7,84\$	\$15.55	99.21\$	00.51\$	6⊁-3n∀
\$46°54	65.51\$	17.51\$	80.41\$	6 †- lnf
Lt 8t\$	\$13.03	\$1.51\$	05.51\$	6⊅-unſ
to 8t\$	\$13.24	95.51\$	27.51\$	64-yaM
LS:87\$	\$15.90	10.51\$	LE.EI\$	64-1qA
\$47.24	\$15.72	\$12.82	EI:EI\$	64-18M
t6°tt\$	66.21\$	01.518	24.EI\$	Feb-49
∠ <i>†</i> ′€ <i>†</i> \$	88.51\$	00.41\$	45.41\$	64-ast
£6.44\$	24,818	02.51\$	28.51\$	Dec-48
25.94\$	\$13°44	22.51\$	813.85	84-voV
EL 97\$	\$12,43	\$15.53	18.21\$	84-15O
9£.7 4 \$	06.11\$	\$15.00	\$15.35	8t-q52
09°L†\$	\$12,15	97.21\$	817.59	8⊁-guA
60.84\$	91.51\$	87.51\$	£9,£1 \$	8 Ի -Լու
<i>†ξ'L†</i> \$	\$15,62	\$15.73	70.51\$	8 1 -anr
76.94\$	\$12.83	t6.21\$	62.81\$	84-ysM
£4.74\$	\$15.50	917.60	\$15.94	84-1qA
t1.3t\$	\$15.32	17.21\$	\$15,72	Mar-48
06.E 4 \$	\$15.59	89.21\$	66'71\$	Ecp-48
Lt [.] 7t\$	24.518	95.51\$	68.51\$	84-art
68.£ 1 \$	00.£1\$	70.51\$	85,51\$	Dec-47
<i>\$</i> 42.44	\$13.05	60.51\$	14,818	∠ b -∧oN
\$9.24\$	\$12.04	\$12.13	\$15.46	74-15O
97.94\$	\$111.53	29.11\$	76'II\$	7 ⊁- q∍8
64.94\$	LL'11\$	78.11\$	61,21\$	√ 1 -guA
L6.94\$	\$15.75	98.21\$	813,20	71-Iul
\$46.24	\$12.23	\$12.33	99.21\$	L+-unf



Results of Updated Analyses of TPL Self-Build Generating Options (Using Updated Assumptions Including new Forecasts for Fuel Cost and Load)

I. Results Using July 2015 Fuel Cost Forecast: Base Case

Difference From Lowest Cost Resource Plan (CPVRR, millions)	With Peak Firing and Wet Compression?	With Duct Firing?	Summer Capacity (MW)	\ nerwiselunsM. IeboM	CC/CT Type	Капк
	Дes	οN	1,633	GE 7HA.02	3 x 1 CC	L
6†\$	Yes	οN	1,622	GE 7HA 02	3×1 CC	7
878	οN	οN	1,386	GE 7FA.05	130x9	٤
76\$	οN	οM	L19°1	GE JEV 02	7 x 0 CT	†
EII\$	οM	οM	1,155	GE 7FA,05	2 × 0 CL	ç
967\$. 0N	səλ	1,418	U irlaiduatiM	3 × I CC	9
562\$	οM	Yes	1,322	Siemens H	3×1 CC	L

II. Results Using July 2015 Fuel Cost Forecast: Low Band

Difference From Lowest Cost Resource Plan (CPVRR, millions)	With Peak Firing and Wet Compression?	tənd difW ÇgniviA	Summer Capacity (MW)	Manufacturer Model	CC/CL Lype	Kank
	Σez	οM	1,633	GE 7HA.02	3×1 CC	I
75\$	хэД	οVI	779*1	CH 7HA.02	3 × 1 CC	7
EI\$	oM	οN	986,1	GE 7FA.05	TD 0 x 0	٤
87\$	οN	οM	L19*I	GE 7FA.05	7 × 0 CT	7
LSS	oN	οN	1,155	GE 7FA.05	5 x 0 CT	ç
L8†\$	οN	Yes	814,1	l idaidustiM	3 × 1 CC	9
SIS\$	οN	Yes	1,322	Siemens H	3×1 CC	L

III. Results Using July 2015 Fuel Cost Forecast: High Band

Difference From Lowest Cost Resource Plan (CPVRR, millions)	With Peak Firing and Prescion?	With Duct Firing?	Summer Capacity (MW)	Manufacturer / Model	CC/CT Type	Капк
	Χes	οN	££9,I	GE 7HA 02	3 x 1 CC	ſ
0 <i>L</i> \$	Xes.	οN	229°I	GE 7HA_02	3 × 1 CC	7
651\$	οN	οM	9 8 £°I	GE 7FA.05	TO 0 x 9	3
081\$	٥N	οM	Z19°I	GE JEV 02	7 x 0 CT	ħ
\$81\$	οM	οN	1,155	GE 7FA.05	5 x 0 CT	Ş
605\$	οN	Yes	817'1	U idaiduatiM	3 × 1 GC	9
795\$	οV	zə Y	1,322	Бієтепа Н	3×1 CC	L

Notes: - CPVRR values are in 2015\$.

- All generating options are assumed to be sited at FPL's Okeechobee site.
- All analyses were performed using FPL's most current planning assumptions as presented in FPL's 2015 Site Plan.
 A pumber of these assumptions are provided to the NECTL module of the property of the provided to the provided to
- A number of these assumptions are updates to input a tribical in the WGU analysis which preceded the July 2015 firel In addition, two additions updates have been used in these analyses: the Oct.2001 load forecast and the July 2015 firel to addition to the July 2015 firely and the July 2015 firely and the season to the July 2015 firely and the J
- The CC unit in the first row of each table represents an enhanced design 1,633 MW version of OCEC Unit 1 (as referred to on page 36 of FPL witness Shn's direct testimony).
- The CC unit in the second row of each table represents the 1,622 MW OCEC Unit 1 design that was designated as FPL's MPGU and which was discussed in FPL's direct and rebuttal testimonies as OCEC Unit 1.
- The generating options in rows 3 through 7 represent enhanced designs of CT options and/or the best non-GE CC designs
- identified in Exhibits SRS-4 or Exhibit SRS-5, 2nd Step, of FPL witness Sim's direct testimony.

Table Staff-62 (Part d & e)

Results of Updated Analyses of FPL Self-Build Generating Options (Using Updated Assumptions Including new Forecasts for Fuel Cost and Load)

L Results Using July 2015 Fuel Cost Forecast: Base Case

Difference From Lowest Cost Resource Plan (CPVRR, millions)	With Peak Firing and Wet Compression?	With Duct Firing?	Summer Capacity (MW)	Manufacturer / Model	CC/CT Type
	Σθχ	οM	££9°I	GE 7HA 02	3 x 1 CC
55\$	Χes	οN	1,622	GE 7HA.02	3 × 1 CC
7L\$	οN	οN	986,1	GE 7FA 05	130×9
06\$	οN	οM	L19'I	CE 1FA 05	7×0 CT
901\$	oN	οM	551,1	CE 7FA 05	2 × 0 CL
787\$	οN	Yes	1,418	U ideidustiM	3×1 CC
ZZS\$	οM	Yes	1,322	Siemens H	3×1 CC

II. Results Using July 2015 Fuel Cost Forecast: Low Band

Difference From Lowest Cost Resource Plan (CPVRR, millions)	With Peak Firing and Yet Compression?	With Duct Firing?	Summer Capacity (MW)	Manufacturer Model	CC/CT Type
	Χes	οN	££9,1	GE 7HA.02	3 x I CC
87\$	χes	οN	1,622	CE THA 02	3 × I CC
8\$	οN	οN	98£,1	GE 7FA.05	TO 0 x 9
\$2\$	oN	oN	L19'I	GE 7FA.05	7×0 CT
0\$\$	οN	οN	SSI"I	GE 7FA.05	5 × 0 CT
<i>†L†</i> \$	oN	Yes	814,1	U idziduztiM	3 × 1 CC
105\$	oN	Yes	1,322	H snamai2	3 × 1 CC

III. Results Using July 2015 Fuel Cost Forecast: High Band

Difference From Lowest Cost Resource Plan (CPVRR, millions)	With Peak Firing and Wet Compression?	With Duct Firing?	Summer Capacity (IVIV)	Manufacturer / Model	CC/CT Type
	Yes	οM	££9'I	GE 7HA.02	35 I X E
95\$	χes	οN	779'[GE 7HA.02	3×1 CC
£51\$	0M	οN	98£,1	GE 7FA.05	TD 0 x 9
LLI\$	οM	οN	۲۱9 ʻ ۱	GE 7FA.05	TX 0 CT
871\$	οN	οN	221,1	GE 7FA.05	5 × 0 CT
\$67\$	οN	Yes	1,418	UidsidustiM	3×1 CC
675\$	oM	zə¥	1,322	H ansmail	3×1 CC

- CPVRR values are in 2015\$.

:sətoN

- All generating options are assumed to be sited at FPL's Okeechobee site.

⁻ All analyses were performed using FPL's most current planning assumptions as presented in FPL's 2015 Site Plan. A number of these assumptions are updates to inputs utilized in the WPGU analysis which preceded the 2015 Site Plan. In addition, two additional updates have been used in these analyses: the Oct.2015 load forecast and the July 2015 fitell cost forecast.

⁻ The CC unit in the first row of each table represents an enhanced design I,633 MW version of OCEC Unit I (as referred to on page 36 of FPL witness Sim's direct testimony).

On the Early of the which was discussed in PPL's direct and rebuttal testimonies as OCEC Unit 1 design that was designated as PPL's NPGU and which was discussed in PPL's direct and rebuttal testimonies as OCEC Unit 1.

⁻ The generating options in rows 3 through 7 represent enhanced designs of CT options and/or the best non-QE CC designs identified in Exhibits SRS-4 or Exhibit SRS-5, 2nd Step, of FPL witness Sim's direct testimony.

Update to Exhibit SRS - 2

Q
2
N
- Fi
Ξ
t
3
0
ç
9
Ž
9
Ĭ
ō
3
S
-2
2
\equiv
of FPL's Resource Needs: 2015 through 2020
Projection
Ş
Ö
7

Ξ

	(11)	= ((4)-(5)) / (5)	Projected	Generation-Only	Reserve Margin (GRIV	w/o Additions	in 2019 & 2020	() 5
	(10)	=((7)*1.20)-(4)		Summer Total Projected Total Generation-Only	Projected Projected Projected Reserve Margin MW Needed to	Meet 20% Total	in 2019 & 2020 Reserve Margin***	Change
apabilities)	(6)	=(5) - (6) = (4) - (7) = (8) / (7)	Projected	Summer Total	Reserve Margin	w/o Additions	in 2019 & 2020	()6)
st and Unit C	8)	= (4) - (7)			Projected	Summer	Reserves	CAFTE
Load Foreca	(6) (7) (8)	=(5)-(6)			Projected	Firm	Peak Load	CAPTION
with updated assumptions (Load Forecast and Unit Capabilities)	(9)				Projected	Summer DSM	Capability **	CAMIN
with update	(5)	<u> </u>			Projected	Peak	Load	CAMA
	(4)	=(1)+(2)-(3)			Projected	Total	Capacity	0.000
	(3)				Projected	Scheduled	Maintenance	O CHILD
	(2)				Projected	Firm Capacity 5	* Purchases * Maintenance	CITIES COMP

=((5)*1.10)-(4)

	Projected Total	MW Needed to	Meet 10%	GRM***	(MW)	1		1	ŀ	ŀ	904	1,249
Projected	Generation-Only	Reserve Margin (GRM)	w/o Additions	in 2019 & 2020	(%)		1	ŀ		1	6.4%	5.0%
	Projected Total	MW Needed to		Reserve Margin***	(MM)		(1,813)	(259)	(91)	(1)	826	1,144
Projected	Summer Total	Reserve Margin	w/o Additions	in 2019 & 2020	(%)		28.6%	21.2%	20.4%	20.0%	16.4%	15.0%
		Projected	Summer		(MW)		6,014	4,693	4,549	4,504	3,725	3,460
		Projected	Firm	Peak Load	(MW)		21,008	22,170	22,290	22,514	22,753	23,018
		Projected	Summer DSM	Capability **	(MM)		1,951	2,000	2,046	2,092	2,140	2,188
		Projected	Peak	Load	(MW)		22,959	24,170	24,336	24,606	24,893	25,206
		Projected	Total	Capacity	(MW)		27,022	26,863	26,840	27,018	26,478	26,478
		Projected	Scheduled	Maintenance	(MW)		0	0	0	0	0	0
		Projected	Firm Capacity	Purchases *	(MM)		2,015	837	837	1,014	455	455
		Projected	FPL Unit	Capability *	(MW)		25,008	26,027	26,003	26,004	26,024	26,023
			August	of the	Year		2015	2016	2017	2018	2019	2020

* MW values shown in Columns (1) & (2) include, but are not limited to, the following: the completion of the Port Everglades modernization project in 2016, the retirement of 44 of the 48 existing GTs in late 2016, the addition of 5 new CTs at the Lauderdale site and 2 CTs at the Ft. Myers site in late 2016, the addition of 116 MW of from PV in late 2016, the upgraded capacity of Ft. Myers 3A & 3B in late 2016, and the addition of an unspecified one-year 177 MW PPA in 2018.

** The DSM values shown in Column (6) account for incremental DSM additions as per the 2014 DSM Goals docket for 2015 through 2020, and for projected annual participant attrition in FPL's existing residential load management program.

*** MW values shown in Column (10) represent new generating capacity needed to meet the 20% total reserve margin criterion.

**** MW values shown in Column (12) represent new generating capacity needed to meet the 10% generation-only reserve margin criterion (GRM) which must be met beginning in 2019.

Projection of FPL's Resource Needs: 2015 through 2020

													I
= ((5)*1.10)+(4)		Projected Total	MW Needed to	Meet 10%	GRM^{****}	(MW)		1	1	1111	-	1,052	1,409
(11) = ((4)-(5)) / (5)	Projected	Generation-Only	Reserve Margin (GRM)	w/o Additions	in 2019 & 2020	(%)		I	The state of the s	1	1	5.8%	4.4%
(10) = ((7)*1.20)-(4)		Projected Total	MW Needed to			(MW)		(1,421)	(287)	(190)	Ξ	988	1,320
(9) = (8) / (7)	Projected	Summer Total	Reserve Margin	w/o Additions	in 2019 & 2020	V) (%)	arm trains	26.7%	21.3%	20.9%	20.0%	15.7%	14.3%
(7) (8) $(5) - (6) = (4) - (7)$			Projected	Summer	Reserves	(MM)		5,688	4,643	4,632	4,512	3,593	3,316
(7) = (5) - (6)			Projected	Firm	Peak Load	(MW)		21,335	21,779	22,207	22,555	22,905	23,181
(9)			Projected	Summer DSM		(MW)	Li minini m	1,951	2,000	2,046	2,092	2,140	2,188
(5)			Projected			(MW)	***************************************	23,286	23,778	24,252	24,648	25,045	25,369
(4) = (1) + (2) - (3)			_			(MW)							
(3)			Projected	Scheduled	Maintenance	(MW)		0	0	0	0	0	0
(2)			Projected	Firm Capacity	Purchases *	(MW)	-	2,015	837	837	1,044	455	455
(1)			Projected	FPL Unit	Capability *	(MW)	-	25,008	25,585	26,002	26,023	26,043	26,043
				44									

August of the Year Year 2015 2016 2017 2018 2019 2020

addition of 5 new CTs at the Lauderdale site and 2 CTs at the FkMyers site in late 2016, the addition of 116 MW of firm PV in late 2016, the upgraded capacity of FkMyers 3A & 3B in late 2016, and the addition of * MW values shown in Columns (1) & (2) include, but are not limited to, the following: the completion of the Port Everglades modernization project in 2016, the retirement of 44 of the 48 existing GTs in late 2016, the an unspecified one-year 207 MW PPA in 2018.

** The DSM values shown in Column (6) account for incremental DSM additions as per the 2014 DSM Goals docket for 2015 through 2020, and for projected annual participant attrition in PPL's existing residential

load management program.

**** MW values shown in Column (12) represent new generating capacity needed to meet the 10% generation-only reserve margin criterion (GRM) which must be met beginning in 2019. *** MW values shown in Column (10) represent new generating capacity needed to meet the 20% total reserve margin criterion.