## Marguerite McLean

From: Stright, Lisa [Lisa.Stright@pgnmail.com]
Sent: Thursday, September 23, 2010 11:50 AM
To: Filings@psc.state.fl.us

Cc: Tom Ballinger; Martha Brown
Subject: Supplemental Responses - Dkt\# 100346
Attachments: (Signed) Suppl Responses (Q12, 13 \& 14) - Dk\# 100346.pdf
This electronic filing is made by:
John T. Burnett
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Docket No. 100346-EQ
On behalf of Progress Energy Florida
Consisting of 4 pages.
The attached document for filing is PEF's
Supplemental Responses to Staff's Data Request \#2 in the above reference docket.

## Lisa Stright

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September 23, 2010

## VIA ELECTRONIC FILING

Ms. Ann Cole, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Petition for approval of a second negotiated purchase power contract with Hathaway Renewable Energy, Inc. by Progress Energy Florida, Inc.; Docket No. 100346-EQ

Dear Ms. Cole:

Please find enclosed for filing on behalf of Progress Energy Florida, Inc. ("PEF") the Supplemental Responses to Staff's Data Request No. 2, specifically Questions 12, 13 and 14, in the above referenced docket.

Thank you for your assistance in this matter. Please call me at (727) 820-5184 should you have any questions.

Sincerely,
Sohn T. Burnett

JTB/lms
cc: Hathaway Renewable Energy

Q12. Please complete the table assuming the 2019 Generic $\mathbf{2 x 1} \mathbf{G} \mathbf{C C}$ listed in Exhibit JL-3 of PEF witness Lyash's testimony in Docket No. 100009. Please assume the fuel forecast used in PEF's 2010 TYSP.

PEF Supplemental Response: In order to be fully responsive, PEF is completing this table as requested. However, as stated earlier, the 178 MW natural gas combustion turbine as identified in PEF's 2010 TYSP is still valid as the next and only PEF unit available to be avoided under Commission Rule 25-17.250(1).

An additional column for discount factor has been added for clarity because the WACC used in Exhibit JL-3 of PEF witness Lyash's testimony in Docket No. 100009 (6.75\%) differs from the WACC used in the 2010 Ten-Year-Site-Plan ( $8.10 \%$ ).

## Question 12

Hathaway Contract 2
2019 CC with 2010 Standard Offer Energy Costs

| Discount Rate |  | $6.75 \%$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$000 | (7) | (8) | (9) | (10) | (11) |
|  | Avolded Capacity Payments | Avolded Energy Payments | (7) $+(8)$ <br> Avoided <br>  <br> Capacity <br> Payments | Avolded Cumulative Payments | Discount Factor |
| Units | \$ | \$ | \$ | S |  |
| Year |  |  |  |  |  |
| 2010 | 5 | 5 | \$ | 5 | 1.000 |
| 2011 | \$ | \$ | \$ | \$ | 0.937 |
| 2012 | 5 | 5 | S | \$ | 0.877 |
| 2013 | S | \$ 5,691 | \$ 5,691 | \$ 5 , 691 | 0.822 |
| 2014 | \$ | 5 9,617 | \$ 9,617 | \$ 15,308 | 0.770 |
| 2015 | \$ | \$ 11,155 | \$ 11,155 | \$ 26,463 | 0.721 |
| 2016 | \$ | \$ 11,685 | \$ 11,685 | \$ 38,148 | 0.678 |
| 2017 | \$ | \$ 12,514 | \$ 12,514 | \$ 50,662 | 0.633 |
| 2018 | \$ | \$ 13,253 | \$ 13,253 | \$ 63,915 | 0.593 |
| 2019 | \$ 1,085 | \$ 11,931 | \$ 13,016 | \$ 76,931 | 0.555 |
| 2020 | \$ 1,896 | \$ 11,167 | \$ 13,063 | 5 89,994 | 0.520 |
| 2021 | \$ 1,944 | \$ 11,233 | \$ 13,177 | \$ 103,171 | 0.487 |
| 2022 | \$ 1,980 | \$ 11,613 | \$ 13,593 | \$ 116,764 | 0.456 |
| 2023 | \$ 2,016 | \$ 12,087 | \$14,103 | \$ 130,857 | 0.428 |
| 2024 | \$ 2,052 | \$ 12,708 | \$ 14, 760 | \$ 145,627 | 0.400 |
| 2025 | \$ 2,100 | \$ 13,204 | \$ 15,304 | \$ 160,931 | 0.376 |
| 2026 | \$ 2,136 | \$ 13,442 | \$ 15,578 | \$ 176,509 | 0.351 |
| 2027 | \$ 2,184 | \$ 13,784 | \$ 15,968 | \$ 192,477 | 0.328 |
| 2028 | \$ 2,232 | \$ 14,060 | \$ 16,292 | \$ 208,769 | 0.308 |
| 2029 | \$ 2,268 | \$ 14,556 | \$ 16,824 | \$ 225,593 | 0.288 |
| 2030 | \$ 2,316 | \$ 14,961 | S 17.277 | \$ 242,870 | 0.271 |
| 2031 | \$ 2,364 | \$ 15,375 | \$ 17,739 | \$ 260,609 | 0.253 |
| 2032 | \$ 2,412 | \$ 15,844 | \$ 18,256 | \$ 278,865 | 0.237 |
| 2033 | \$ 2,460 | \$ 16,246 | S 18,706 | 5 297,571 | 0.222 |
| 2034 | \$ 2,508 | \$ 16,701 | \$ 19,209 | 5 316,780 | 0.208 |
| 2035 | \$ 2.556 | \$ 17,168 | \$ 19,724 | \$ 336,504 | 0.195 |
| 2036 | \$ 2,604 | \$ 17,696 | \$ 20,300 | \$ 356,804 | 0.183 |
| 2037 | \$ 2,664 | \$ 18,147 | \$ 20,811 | \$ 377,635 | 0.171 |
| 2038 | \$ 1,130 | \$ 7,353 | \$ 8,483 | \$ 386,098 | 0.160 |
| Total | \$ 42,907 | \$ 343,191 | 5386,098 |  |  |
| NPV 2010\$ | 513.203 | \$ 129,679 | \$142,883 |  |  |

Q13. Please complete the table assuming the $\mathbf{2 0 1 9}$ Generic $2 \times 1$ G CC listed in Exhibit Jl-3 of PEF witness Lyash's testimony in Docket No. 100009. Please assume a fuel forecast that is 15 percent above PEF's 2010 TYSP.

PEF Supplemental Response: In order to be fully responsive, PEF is completing this table as requested. However, as stated earlier, the 178 MW natural gas combustion turbine as identified in PEF's 2010 TYSP is still valid as the next and only PEF unit available to be avoided under Commission Rule 25-17.250(1).

An additional column for discount factor has been added for clarity because the WACC used in Exhibit JL-3 of PEF witness Lyash's testimony in Docket No. 100009 (6.75\%) differs from the WACC used in the 2010 Ten-Year-Site-Plan (8.10\%).

Question 13
Hathaway Contract 2
2019 CC with 15\% Increase in 2010 Standard Offer Energy Costs

| PV Ote Discount Rate |  | $\begin{array}{r} 6 / 30 / 10 \\ 6.75 \% \end{array}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$000 | (7) | (8) | (9) | (10) | (11) |
|  | Avoided Capacity Payments | Avoided Energy Payments | (7) + (8) <br> Avoided <br>  <br> Capacity <br> Payments | Avoided Cumulative Payments | Discount Factor |
| Units | \$ | \$ | 5 | \$ |  |
| Year |  |  |  |  |  |
| 2010 | \$ | 5 | \$ | \$ | 1.000 |
| 2011 | S | 5 | 5 | S | 0.937 |
| 2012 | 5 | S | 5 | \$ | 0.877 |
| 2013 | \$ | 5 6,545 | \$ 6.545 | \$ 6,545 | 0.822 |
| 2014 | 5 | \$ 11,060 | \$ 11.060 | \$ 17,604 | 0.770 |
| 2015 | \$ | \$ 12.828 | \$ 12,828 | \$ 30,432 | 0.721 |
| 2016 | \$ | \$ 13,438 | \$ 13,438 | \$ 43,870 | 0.676 |
| 2017 | 5 | \$ 14,391 | \$ 14,391 | \$ 58,261 | 0.633 |
| 2018 | 5 | \$ 15,241 | \$ 15,241 | \$ 73,502 | 0.583 |
| 2019 | \$ 1,085 | \$ 13,721 | \$ 14,806 | \$ 88,308 | 0.553 |
| 2020 | \$ 1,896 | \$ 12,842 | \$ 14,738 | \$ 103,046 | 0.520 |
| 2021 | \$ 1,944 | \$ 12,918 | \$ 14,862 | \$ 117,908 | 0.487 |
| 2022 | \$ 1,980 | \$ 13,355 | \$ 15,335 | S 133,243 | 0.456 |
| 2023 | \$ 2,016 | \$ 13,900 | \$ 15,916 | \$ 149,159 | 0.428 |
| 2024 | \$ 2,052 | \$ 14,614 | \$ 16,666 | \$ 165,825 | 0.400 |
| 2025 | \$ 2,100 | \$ 15,185 | \$ 17,285 | \$ 183,110 | 0.375 |
| 2026 | \$ 2,136 | \$ 15,458 | \$ 17,594 | \$ 200,704 | 0.351 |
| 2027 | \$ 2,184 | \$ 15,852 | \$ 18,036 | \$ 218,740 | 0.329 |
| 2028 | \$ 2,232 | \$ 16,169 | \$ 18,401. | \$ 237,341 | 0.308 |
| 2029 | \$ 2,268 | \$ 16,739 | \$ 19,007 | \$ 256,148 | 0.289 |
| 2030 | \$ 2,316 | S 17,205 | \$ 19,521 | \$ 275,669 | 0.271 |
| 2031 | \$ 2,364 | \$ 17,681 | \$ 20,045 | \$ 295,714 | 0.253 |
| 2032 | \$ 2.412 | \$ 18,221 | \$ 20,633 | \$ 316,347 | 0.237 |
| 2033 | \$ 2,460 | \$ 18,683 | \$ 21,143 | \$ 337,490 | 0.222 |
| 2034 | \$ 2,508 | \$ 19,206 | \$ 21,714 | \$ 359,204 | 0.208 |
| 2035 | \$ 2,556 | \$ 19,743 | \$ 22.299 | \$ 381,503 | 0.185 |
| 2036 | \$ 2,604 | \$ 20,350 | \$ 22,954 | \$ 404,458 | 0.183 |
| 2037 | \$ 2,664 | \$ 20,869 | \$ 23,533 | \$ 427,991 | 0.179 |
| 2038 | \$ 1,130 | \$ 8,456 | \$ 9,586 | \$ 437,577 | 0.180 |
| Total | \$ 42,907 | \$ 394,670 | \$437,577 |  |  |
| NPV 2010S | \$ 13,203 | \$ 149,131 | \$162,335 |  |  |

Q14. Please complete the table assuming the 2019 Generic $2 \times 1 \mathrm{G}$ CC listed in Exhibit JL-3 of PEF witness Lyash's testimony in Docket No. 100009. Please assume a fuel forecast that is 15 percent below PEF's 2010 TYSP.

PEF Supplemental Response: In order to be fully responsive, PEF is completing this table as requested. However, as stated earlier, the 178 MW natural gas combustion turbine as identified in PEF's 2010 TYSP is still valid as the next and only PEF unit available to be avoided under Commission Rule 25-17.250(1).

An additional column for discount factor has been added for clarity because the WACC used in Exhibit Jl-3 of PEF witness Lyash's testimony in Docket No. 100009 (6.75\%) differs from the WACC used in the 2010 Ten-Year-Site-Plan (8.10\%).

## Question 10

Hathaway Contract 2
2019 CC with 15\% Decrease in 2010 Standard Offer Energy Costs

| PV Date Discount Rate |  | $\begin{array}{r} 6 / 30 / 10 \\ 6.75 \% \\ \hline \end{array}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (7) | (8) | (9) | (10) | (11) |
|  | Avoided <br> Capacity <br> Payments | Avoided Energy Payments | (7) $+(8)$ <br> Avoided <br>  <br> Capacity <br> Payments | Avoided Cumulative Payments | $\begin{array}{\|c\|} \hline \text { Dlscount } \\ \text { factor } \\ \hline \end{array}$ |
| Units | S | \$ | \$ | \$ |  |
| Year |  |  |  |  |  |
| 2010 | S | \$ | S | \$ | 1.000 |
| 2011 | s | \$ | \$ | \$ | 0.937 |
| 2012 | S | \$ | \$ | \$ | 0.877 |
| 2013 | S | S 4,837 | \$ 4,837 | \$ 4,837 | 0.822 |
| 2014 | \$ | \$ 8,174 | \$ 8,174 | \$ 13,012 | 0.770 |
| 2015 | S | \$ 9,482 | \$ 9,482 | \$ 22,494 | 0.721 |
| 2016 | \$ | \$ 9,932 | \$ 9,932 | \$ 32,426 | 0.678 |
| 2017 | \$ | \$ 10,637 | \$ 10,637 | \$ 43,063 | 0.833 |
| 2018 | \$ | \$ 11,265 | \$ 11,265 | \$ 54,328 | 0.583 |
| 2019 | \$ 1,085 | \$ 10,141 | \$ 11,226 | 5 65,554 | 0.555 |
| 2020 | \$ 1,896 | \$ 9,492 | \$ 11,388 | 5 76,942 | 0.520 |
| 2021 | \$ 1,944 | \$ 9,548 | \$ 11,492 | \$ 88,434 | 0.487 |
| 2022 | \$ 1,980 | \$ 9,871 | \$ 11,851 | \$ 100,285 | 0.458 |
| 2023 | \$ 2.016 | \$ 10,274 | \$ 12,290 | \$ 112,575 | 0.428 |
| 2024 | \$ 2,052 | \$ 10,802 | \$ 12,854 | \$ 125,429 | 0.400 |
| 2025 | \$ 2,100 | \$ 11,223 | \$ 13,323 | $\begin{array}{lll}5 & 138,752\end{array}$ | 0.375 |
| 2026 | 5 2, 313 | \$ 11,426 | \$ 13,562 | \$ 152,314 | 0.351 |
| 2027 | S 2,184 | \$ 11,716 | \$ 13,900 | \$ 166,214 | 0.329 |
| 2028 | \$ 2,232 | \$ 11,951 | \$ 14,183 | \$ 180,397 | 0.308 |
| 2029 | 5 2,268 | \$ 12,373 | \$ 14,641 | \$ 195,038 | 0.289 |
| 2030 | \$ 2,316 | \$ 12,717 | \$ 15,033 | \$ 210,071 | 0.271 |
| 2031 | \$ 2,364 | \$ 13,069 | \$ 15,433 | \$ 225,504 | 0.253 |
| 2032 | \$ 2,412 | \$ 13,467 | \$ 15,879 | \$ 241,383 | 0.237 |
| 2033 | \$ 2,460 | \$ 13,809 | \$ 16,269 | \$ 257,652 | 0.222 |
| 2034 | \$ 2,508 | \$ 14,196 | \$ 16,704 | \$ 274,356 | 0.208 |
| 2035 | \$ 2,556 | \$ 14,593 | 517,149 | \$ 291,505 | 0.195 |
| 2036 | \$ 2,604 | \$ 15,042 | \$ 17,646 | \$ 309,150 | 0.183 |
| 2037 | \$ 2,664 | \$ 15,425 | \$ 18,089 | \$ 327,239 | 0.171 |
| 2038 | \$ 1,130 | \$ 6,250 | \$ 7,380 | \$ 334,619 | 0.100 |
| Total | \$ 42,907 | \$ 291,712 | \$334,619 |  |  |
| NPV 2010S | \$ 13,203 | \$110,228 | \$123,431 |  |  |

