



September 30, 2008

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COMMISSION
CLERK

VIA HAND DELIVERY

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

Re: Petition for approval of negotiated power purchase contract for purchase of firm capacity and energy with Horizon Energy Group, LLC, by Progress Energy Florida, Inc.; Docket No. 080533-EQ

Dear Ms. Cole:

Please find enclosed for filing an original and five (5) copies of Progress Energy Florida, Inc.'s responses to Staff's data request dated September 23, 2008 in the above referenced docket.

Please call me at (727) 820-5184 should you have any questions.

Sincerely,

John T. Burnett lms
John T. Burnett

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**PROGRESS ENERGY FLORIDA, INC.'S RESPONSES TO STAFF'S DATA REQUEST
DOCKET NO. 080533-EQ**

- Q1. Has Horizon obtained financing for the proposed facility described in the Petition? If not, when will Horizon obtain financing for the proposed facility?**

Answer: As of 9/29/08, Horizon has not obtained financing. It is unknown when they will obtain financing.

- Q2. Has Horizon purchased a site for the proposed facility? If not, has Horizon set a deadline for land acquisition ?**

Answer: As of 9/29/08, Horizon has not purchased a site for the proposed facility. As of this date, PEF is not aware of any deadline set for land acquisition.

- Q3. Has Horizon entered into any fuel supply contracts? If so, with whom? What is the term of the contract(s)?**

Answer: As of this date, PEF is not aware of any such fuel supply contracts.

- Q4. Please explain how the location of the facility site may impact fuel supply costs and availability.**

Answer: The location of the facility would need to be near the municipal solid waste source thereby minimizing transportation costs. The availability of municipal solid waste and the location of the facility are not related.

- Q5. Please explain how the location of the facility site may impact transmission interconnection costs, such as any transmission system network upgrade charges.**

Answer: The location of the facility determines the impact to the transmission system which in turn results in applicable interconnection costs and transmission system network upgrade charges, if any.

- Q6. Please review the megawatts (MW) of Committed Capacity referenced in Sections 6.2 (b) and (c) of the contract and provide an explanation as to the amounts stated.**

Answer: In Sections 6.2 (b) and (c) there are typographical errors, where "Forty (60) MW," should read "Sixty (60) MW." PEF will submit corrections to this effect. Sections 6.2 (b) and

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(c) are intended to allow Horizon to increase their Committed Capacity from 36 MW to 60 MW, as they may find additional fuel sources and expand the facility.

Q7. Please explain why the Horizon Petition refers to a Committed Capacity of 60 MW, while the associated contract states that approximately 36 MW is the gross electric output expected for the facility.

Answer: Horizon's business plan allows them to increase their Committed Capacity as they may find additional fuel sources and expand the facility.

Q8. Please confirm that the type of fuel referenced in Section 7.1 of the contract is municipal solid waste or indicate what other type of fuel is referenced.

Answer: The type of fuel referenced in Section 7.1 as outlined in Section 1.1 under the defined terms as "Fuel" is Municipal Solid Waste.

Q9. Please clarify the reference to "Environmental Attributes in the form of RECs" in section 8.2(e) of the contract; do the terms "Environmental Attributes" and "RECs" have identical meanings? If not, please explain their different meanings.

Answer: An Environmental Attribute is a broad term to include without limitation, any and all positive or valued environmental characteristics associated with the production of renewable energy. A Renewable Energy Credit, (REC) is one example of an environmental attribute.

Q10. Please explain in detail whether the contract entitles PEF to own the environmental attributes and/or RECs generated by the facility.

Answer: Per Section 8.2(a) PEF retains the right, title and interest in and to all Environmental Attributes associated with the production of renewable energy from the facility, except for production tax credits and RECs. PEF has an irrevocable option to purchase renewable energy credits from this facility.

Q11. Please explain why the Capacity Cost Recovery Clause would apply to this contract when the contract between PEF and Horizon is based only on payments for energy which would be recovered through the Fuel Adjustment Clause.

Answer: The capacity and energy payments are combined into one payment; therefore the contract payment rate includes both traditional capacity and energy payments.

Q12. Please refer to the “Calculation of Costs from the Horizon Contract” set forth as Exhibit B. Please define the term “As Available Energy” and explain in detail how the rate shown was calculated.

Answer: In accordance with FPSC Rule 25-17.0825, “As-Available Energy” is energy produced and sold by a qualifying facility on an hour-by-hour basis for which contractual commitments as to the quantity, time, or reliability of delivery are not required.

A production cost model is utilized to determine a forecast of avoided energy costs. All forecasted economic PEF unit constraints and system requirements necessary for program execution are input into the model. After the production cost model is executed the first time, the model is run a second time for the same period with an increase in system load equal to the forecasted “As-Available Energy” block size. The costs from the second model minus the corresponding costs from the first model, equals the energy cost avoided by PEF as a result of the “As-Available Energy” supplied by the qualifying facility.

Q13. Please explain in detail why some of the values shown in Horizon contract differ from those shown in the Vision contract. For example, the values for “Energy” and “Capacity” costs are different in the respective contracts yet both reference the same avoided unit.

Answer: The occasional differences between the Vision and Horizon cost per unit for avoided capacity and energy are the result of the method used to summarize and present the data. The avoided costs for both contracts are calculated on a monthly basis based on the same per unit rates contained in the Standard Offer filed in July 2008. The avoided costs are applied to the monthly units (MW or MWH) and rounded to thousands of dollars. The rounded monthly amounts are summarized and presented on an annual basis. The per unit rates are the result of dividing the annual avoided cost by the units for the year. As a result, a slight \$.01 to \$.02 difference between the rates presented and the Standard Offer rates can occur. An example of this calculation for 2014 avoided capacity is shown below.

| | Horizon | Vision |
|---|----------|----------|
| 2014 Standard Offer Avoided Capacity Cost \$/KW-month | \$ 11.11 | \$ 11.11 |
| MW | 60 | 40 |
| Months | 12 | 12 |
| Monthly Cost Rounded \$000 | \$ 667 | \$ 444 |
| Sum of Monthly Cost \$000 | \$ 8,004 | \$ 5,328 |
| Calculated \$/KW-month | \$ 11.12 | \$ 11.10 |

Q14. Please explain in detail why the Horizon contract reflects a capacity factor of 89% for the avoided unit, while the capacity factor of 65% is listed in the RFP for the Suwannee River 4 avoided unit.

Answer: The Horizon contract, like many QF contracts, is a must-take contract. That is, the utility must take the energy generated by the QF. It is therefore assumed that the QF will deliver whenever it has the ability to do so. The QF will operate when it is available and that may or may not be when generation is required. Therefore, the capacity factor requirement of a QF contract reflects the anticipated availability of the avoided unit, not the capacity factor of the avoided unit.

Q15. The values shown in Exhibit B of the Horizon Contract use 60 MW for the calculations of payments to Horizon Energy. Please also provide payment calculations using 36 MW.

Answer: Please see the revised attachments for both payment calculations using 36 MW and 60 MW attached. In reviewing the data for Horizon, PEF has noticed an error in the 2035-2037 period that increases the benefit of the contract from \$86 MM to \$92 MM. The error resulted from the omission of the 2035-2037 avoided capacity payments in the analysis. PEF has corrected the error and attached a revised analysis for the 60 MW committed capacity as well as the 36 MW committed capacity.

Q16. The Petition states that under the performance provisions of the contract, the total payment rate is reduced by 10% if the twelve-month rolling capacity factor drops below 70%. Is this a sliding scale? If Horizon performs at 90%, 80% or 70% capacity factor, would payments stay the same? If not, please explain the payment calculations.

Answer: If Horizon performs at a twelve-month rolling capacity factor of less than 70%, the payment rate will be reduced. If Horizon performs at a twelve-month rolling capacity factor of 70% or greater, the payment rate remains the same. The payment rate includes both capacity and energy and the penalty for not delivering is more immediate and greater than traditional energy and capacity payment structures.

Q17. Please explain in detail how PEF plans to compensate for energy should there be reduced performance by Horizon.

Answer: Similar to any other resource, if Horizon fails to perform as anticipated, PEF will adjust its generation dispatch or existing purchase power agreements or make additional purchases to compensate.

Q18. The Petition refers to a committed capacity of 60 MW, but contract appears to states that approximately 36 MW is the gross electric output expected for the facility, but Section 6.2(b) appears to allow for the committed capacity to be greater. Please indicate if this analysis is correct or explain why is not.

Answer: PEF allowed Horizon the flexibility to designate a committed capacity between 30 and 60 MW. PEF chose to present an analysis at 60 MW to present the highest cost option. The costs and savings for a project with a lower committed capacity will be proportional.

Q19. If Horizon provides less than 60 MW, how does PEF intend to compensate for energy resulting from this lower committed capacity given its goal established in the Petition?

Answer: If Horizon provides a committed capacity of less than 60 MW, PEF will adjust its other resources to compensate.

Q20. According to Section 6.9(e) of the contract, PEF will receive 100% of the applicable security established in Section 6.9(c) of the contract, in the case of a Seller Non-Remedial Event. What does PEF intend to do with this security?

Answer: PEF will credit the security back through the Fuel Adjustment Clause and the Capacity Cost Recovery Clause thereby offsetting some of the cost of replacement energy and capacity.

Q21. Section 17.1(a)(xi) of the contract states that if the Seller fails to maintain a given Annual Capacity Billing Factor of at least (confidential) % for 12 months or more, the failure is considered a "Remediable Event of Default by Seller." Section 17.1(b)(ii) of the contract appears to indicate that, after the capacity commencement date, if the facility fails for 12 months to maintain an Annual Capacity Billing Factor of at least (confidential) %, the failure is considered a "Non-Remedial Event of Default by Seller." Please explain in detail how these sections relate to each other.

Answer: PEF is in on-going discussions to resolve this issue with Horizon. Corrections will be submitted at a later date.

Q22. Please explain in detail why PEF chose to negotiate this project with Horizon outside a request for proposal process.

Answer: Good faith contract negotiations with Horizon began in August 2007. Commission rules require PEF to negotiate in good faith with qualifying renewable energy producers in an attempt to reach a negotiated power purchase agreement without consideration of any request for proposal or similar competitive bidding process for renewable energy.

Dollars in \$000

Payments to Horizon Energy:

| | NPV | Nominal | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 |
|-----------------|------------|------------|------|------|------|------|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Months | | 300 | 0 | 0 | 0 | 0 | 0 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | |
| Capacity MW | | 36 | 0 | 0 | 0 | 0 | 0 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | |
| Energy MWh | 2,091,916 | 7,021,439 | - | - | - | - | - | 280,673 | 280,673 | 280,673 | 281,442 | 280,673 | 280,673 | 280,673 | 281,442 | 280,673 | 280,673 | 280,673 | 281,442 | 280,673 | 280,673 | 280,673 | 281,442 | 280,673 | 280,673 | 280,673 | 281,442 | 280,673 | 280,673 | 280,673 | 281,442 | 280,673 |
| Energy \$/MWh | \$ 64.00 | \$ 64.00 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | \$ 64.00 | |
| Energy Payments | \$ 133,889 | \$ 449,394 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 17,964 | \$ 17,964 | \$ 17,964 | \$ 18,013 | \$ 17,964 | \$ 17,964 | \$ 17,964 | \$ 18,013 | \$ 17,964 | \$ 17,964 | \$ 17,964 | \$ 18,013 | \$ 17,964 | \$ 17,964 | \$ 17,964 | \$ 18,013 | \$ 17,964 | \$ 17,964 | \$ 17,964 | \$ 18,013 | \$ 17,964 | \$ 17,964 | \$ 17,964 | \$ 18,013 | \$ 17,964 |
| Total Payments | \$ 133,889 | \$ 449,394 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 17,964 | \$ 17,964 | \$ 17,964 | \$ 18,013 | \$ 17,964 | \$ 17,964 | \$ 17,964 | \$ 18,013 | \$ 17,964 | \$ 17,964 | \$ 17,964 | \$ 18,013 | \$ 17,964 | \$ 17,964 | \$ 17,964 | \$ 18,013 | \$ 17,964 | \$ 17,964 | \$ 17,964 | \$ 18,013 | \$ 17,964 | \$ 17,964 | \$ 17,964 | \$ 18,013 | \$ 17,964 |

2013 CC Avoided Costs:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|-----------|-----------|------|------|------|------|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Months | | 295 | 0 | 0 | 0 | 0 | 0 | 7 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | |
| Energy MWh | 2,091,916 | 7,021,439 | - | - | - | - | - | 280,673 | 280,673 | 280,673 | 281,442 | 280,673 | 280,673 | 280,673 | 281,442 | 280,673 | 280,673 | 280,673 | 281,442 | 280,673 | 280,673 | 280,673 | 281,442 | 280,673 | 280,673 | 280,673 | 281,442 | 280,673 | 280,673 | 280,673 | 281,442 | 280,673 |
| Capacity Factor | | | 0 | 0 | 0 | 0 | 0 | 89% | 89% | 89% | 89% | 89% | 89% | 89% | 89% | 89% | 89% | 89% | 89% | 89% | 89% | 89% | 89% | 89% | 89% | 89% | 89% | 89% | 89% | 89% | 89% | 89% |
| Heat Rate | | | - | - | - | - | - | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 | 7,134 |
| Capacity \$/kw-mo. | \$ | 17.44 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 10.69 | \$ 11.11 | \$ 11.56 | \$ 12.00 | \$ 12.47 | \$ 12.94 | \$ 13.47 | \$ 13.97 | \$ 14.53 | \$ 15.11 | \$ 15.69 | \$ 16.31 | \$ 16.94 | \$ 17.61 | \$ 18.31 | \$ 19.03 | \$ 19.78 | \$ 20.56 | \$ 21.36 | \$ 22.19 | \$ 23.06 | \$ 23.97 | \$ 24.92 | \$ 25.89 | \$ 26.92 |
| Energy \$/MWh | \$ | 72.85 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 61.49 | \$ 63.24 | \$ 66.23 | \$ 62.97 | \$ 59.24 | \$ 60.58 | \$ 61.94 | \$ 63.33 | \$ 64.76 | \$ 66.22 | \$ 67.70 | \$ 69.22 | \$ 70.78 | \$ 72.38 | \$ 74.00 | \$ 75.67 | \$ 77.36 | \$ 79.11 | \$ 80.89 | \$ 82.71 | \$ 84.58 | \$ 86.48 | \$ 88.43 | \$ 90.41 | \$ 92.45 |
| Total \$/MWh | \$ | 90.35 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 70.08 | \$ 80.35 | \$ 84.01 | \$ 81.39 | \$ 78.44 | \$ 80.50 | \$ 82.67 | \$ 84.78 | \$ 87.12 | \$ 89.47 | \$ 91.86 | \$ 94.25 | \$ 96.86 | \$ 99.48 | \$ 102.18 | \$ 104.88 | \$ 107.81 | \$ 110.75 | \$ 113.77 | \$ 116.78 | \$ 120.06 | \$ 123.37 | \$ 126.78 | \$ 130.15 | \$ 133.87 |
| Capacity Cost | \$ | 47,138 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 2,695 | \$ 4,800 | \$ 4,992 | \$ 5,184 | \$ 5,388 | \$ 5,592 | \$ 5,820 | \$ 6,036 | \$ 6,276 | \$ 6,528 | \$ 6,780 | \$ 7,044 | \$ 7,320 | \$ 7,608 | \$ 7,908 | \$ 8,220 | \$ 8,544 | \$ 8,880 | \$ 9,228 | \$ 9,588 | \$ 9,960 | \$ 10,356 | \$ 10,764 | \$ 11,184 | \$ 11,628 |
| Energy Cost | \$ | 141,860 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 16,974 | \$ 17,751 | \$ 18,588 | \$ 17,723 | \$ 16,627 | \$ 17,003 | \$ 17,384 | \$ 17,824 | \$ 18,176 | \$ 18,585 | \$ 19,002 | \$ 19,481 | \$ 19,866 | \$ 20,314 | \$ 20,770 | \$ 21,298 | \$ 21,714 | \$ 22,205 | \$ 22,703 | \$ 23,278 | \$ 23,738 | \$ 24,272 | \$ 24,819 | \$ 25,445 | \$ 25,947 |
| Total Avoided Cost | \$ | 188,998 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 19,669 | \$ 22,551 | \$ 23,580 | \$ 22,907 | \$ 22,015 | \$ 22,595 | \$ 23,204 | \$ 23,860 | \$ 24,452 | \$ 25,113 | \$ 25,782 | \$ 26,525 | \$ 27,186 | \$ 27,922 | \$ 28,678 | \$ 29,518 | \$ 30,258 | \$ 31,085 | \$ 31,931 | \$ 32,866 | \$ 33,698 | \$ 34,628 | \$ 35,583 | \$ 36,629 | \$ 37,575 |
| Net Benefit (Cost) | \$ | 55,109 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,705 | \$ 4,587 | \$ 5,616 | \$ 4,894 | \$ 4,051 | \$ 4,631 | \$ 5,240 | \$ 5,847 | \$ 6,488 | \$ 7,149 | \$ 7,818 | \$ 8,512 | \$ 9,222 | \$ 9,958 | \$ 10,714 | \$ 11,505 | \$ 12,294 | \$ 13,121 | \$ 13,967 | \$ 14,853 | \$ 15,734 | \$ 16,664 | \$ 17,619 | \$ 18,616 | \$ 19,611 |

Payments To Horizon:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|----|---------|---|---|---|---|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Annual NPV | \$ | 133,889 | - | - | - | - | - | 12,038 | 11,097 | 10,229 | 9,453 | 8,691 | 8,011 | 7,385 | 6,825 | 6,274 | 5,784 | 5,332 | 4,927 | 4,530 | 4,175 | 3,849 | 3,557 | 3,270 | 3,014 | 2,779 | 2,568 | 2,361 | 2,176 | 2,006 | 1,854 | 1,704 |
| Cumulative NPV | | | - | - | - | - | - | 12,038 | 23,135 | 33,364 | 42,818 | 51,508 | 59,520 | 66,905 | 73,729 | 80,004 | 85,787 | 91,119 | 96,046 | 100,575 | 104,751 | 108,600 | 112,157 | 115,427 | 118,441 | 121,220 | 123,788 | 126,149 | 128,325 | 130,331 | 132,185 | 133,889 |

2013 CC Avoided Costs:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|----|---------|---|---|---|---|---|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Annual NPV | \$ | 188,998 | - | - | - | - | - | 13,181 | 13,930 | 13,427 | 12,022 | 10,650 | 10,077 | 9,539 | 9,040 | 8,540 | 8,085 | 7,652 | 7,255 | 6,855 | 6,490 | 6,145 | 5,829 | 5,508 | 5,216 | 4,939 | 4,685 | 4,428 | 4,195 | 3,974 | 3,770 | 3,565 |
| Cumulative NPV | | | - | - | - | - | - | 13,181 | 27,111 | 40,538 | 52,560 | 63,211 | 73,287 | 82,826 | 91,867 | 100,407 | 108,492 | 116,144 | 123,399 | 130,254 | 136,744 | 142,889 | 148,717 | 154,225 | 159,442 | 164,381 | 169,066 | 173,495 | 177,690 | 181,663 | 185,433 | 188,998 |
| Net Benefit (Cost): | \$ | 55,109 | - | - | - | - | - | 1,143 | 2,834 | 3,198 | 2,568 | 1,960 | 2,065 | 2,154 | 2,215 | 2,266 | 2,302 | 2,320 | 2,328 | 2,325 | 2,315 | 2,296 | 2,272 | 2,238 | 2,202 | 2,160 | 2,117 | 2,068 | 2,019 | 1,968 | 1,916 | 1,861 |
| Annual NPV | | | - | - | - | - | - | 1,143 | 3,976 | 7,174 | 9,742 | 11,702 | 13,768 | 15,922 | 18,137 | 20,403 | 22,705 | 25,025 | 27,353 | 29,679 | 31,993 | 34,289 | 36,561 | 38,799 | 41,000 | 43,161 | 45,278 | 47,346 | 49,365 | 51,332 | 53,248 | 55,109 |
| Cumulative NPV | | | - | - | - | - | - | 1,143 | 5,952 | 13,146 | 22,888 | 34,590 | 48,358 | 64,280 | 82,417 | 102,820 | 125,525 | 150,550 | 177,903 | 207,528 | 239,521 | 273,814 | 310,415 | 349,314 | 390,513 | 434,013 | 480,811 | 530,917 | 584,450 | 641,559 | 702,383 | 766,972 |

