



Dianne M. Triplett
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Duke Energy Florida, Inc.

May 19, 2015

via electronic delivery

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

*Re: Petition for Approval of Amended Standard Offer Contract (Schedule COG-2) and
Amended Interconnection Agreement; Docket No. 150106-EQ*

Dear Ms. Stauffer:

Please find enclosed for electronic filing on behalf of Duke Energy Florida, Inc., (“DEF”), DEF’S Response to Staff’s First Data Request (No. 1).

Thank you for your assistance in this matter. Should have any questions, please feel free to contact me at (727) 820-4692.

Sincerely,

s/ Dianne M. Triplett
Dianne M. Triplett

DMT/at
Enclosures

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished via electronic mail to the following this 19th day of May, 2015.

/s/ Dianne M. Triplett

Dianne M. Triplett

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**DUKE ENERGY FLORIDA, INC.'S RESPONSES TO
STAFF'S FIRST DATA REQUEST (NO. 1)
Docket No. 150106-EQ**

1. Please complete the following tables describing payments to a renewable provider based on the proposed tariffs included in the Company's revised standard offer contract. When responding, assume a renewable generator with a 50 MW output providing firm capacity with an in-service date of January 1, 2016, operating at the minimum capacity factor required for full capacity payments and a contract duration of 20 years. Please state the capacity factor assumed for the calculations. In addition, please calculate the total Net Present Value (NPV) of all payments in 2016 dollars, and provide an explanation of the method and rate used to calculate the NPV.

Please provide the completed table for the following five scenarios:

- As-available energy (energy only payments)
- Normal capacity payments
- Levelized payments
- Early payments
- Early levelized payments

| Year | Energy | Capacity Rate | Total Capacity Payments | Energy Rate | Total Energy Payments | Total Payments |
|---------------------------|--------|---------------|-------------------------|-------------|-----------------------|----------------|
| | (MWh) | (\$/kw-mo) | (\$) | (\$/MWh) | (\$) | (\$) |
| 2016 | | | | | | |
| 2017 | | | | | | |
| 2018 | | | | | | |
| 2019 | | | | | | |
| 2020 | | | | | | |
| 2021 | | | | | | |
| 2022 | | | | | | |
| 2023 | | | | | | |
| 2024 | | | | | | |
| 2025 | | | | | | |
| 2026 | | | | | | |
| 2027 | | | | | | |
| 2028 | | | | | | |
| 2029 | | | | | | |
| 2030 | | | | | | |
| 2031 | | | | | | |
| 2032 | | | | | | |
| 2033 | | | | | | |
| 2034 | | | | | | |
| 2035 | | | | | | |
| Total (nominal) | | | | | | |
| Total NPV (\$2016) | | | | | | |

Response:

The tables below are for the five scenarios. The NPV was calculated using monthly estimated payments with a rate of 6.90%.

DEF 2015 Standard Offer

Committed Capacity (MW) **50**
Capacity Factor (%) **94.0%**
Payment Type **Normal**

| Year | Energy (MWh) | Capacity Rates | Total Capacity Payments | Energy Rates | Total Energy Payments | Total Payments |
|---------------------------|---------------------|-----------------------|--------------------------------|---------------------|------------------------------|-----------------------|
| | (MWh) | (\$/kW-mo.) | (\$000) | (\$/MWh) | (\$000) | (\$000) |
| 2016 | 412,848 | \$ - | - | \$ 36.63 | 15,121 | 15,121 |
| 2017 | 411,720 | \$ - | - | \$ 37.27 | 15,344 | 15,344 |
| 2018 | 411,720 | \$ - | - | \$ 38.37 | 15,800 | 15,800 |
| 2019 | 411,720 | \$ - | - | \$ 41.91 | 17,257 | 17,257 |
| 2020 | 412,848 | \$ - | - | \$ 48.00 | 19,817 | 19,817 |
| 2021 | 411,720 | \$ - | - | \$ 49.97 | 20,573 | 20,573 |
| 2022 | 411,720 | \$ - | - | \$ 51.84 | 21,342 | 21,342 |
| 2023 | 411,720 | \$ - | - | \$ 53.99 | 22,229 | 22,229 |
| 2024 | 412,848 | \$ 4.64 | 1,624 | \$ 56.40 | 23,286 | 24,910 |
| 2025 | 411,720 | \$ 4.76 | 2,854 | \$ 58.43 | 24,057 | 26,911 |
| 2026 | 411,720 | \$ 4.87 | 2,925 | \$ 60.00 | 24,701 | 27,626 |
| 2027 | 411,720 | \$ 5.00 | 2,998 | \$ 61.29 | 25,233 | 28,231 |
| 2028 | 412,848 | \$ 5.12 | 3,073 | \$ 63.23 | 26,105 | 29,178 |
| 2029 | 411,720 | \$ 5.25 | 3,150 | \$ 64.52 | 26,564 | 29,713 |
| 2030 | 411,720 | \$ 5.38 | 3,229 | \$ 66.66 | 27,444 | 30,672 |
| 2031 | 411,720 | \$ 5.52 | 3,309 | \$ 69.24 | 28,508 | 31,817 |
| 2032 | 412,848 | \$ 5.65 | 3,392 | \$ 71.72 | 29,610 | 33,002 |
| 2033 | 411,720 | \$ 5.79 | 3,477 | \$ 74.68 | 30,745 | 34,222 |
| 2034 | 411,720 | \$ 5.94 | 3,564 | \$ 75.16 | 30,944 | 34,508 |
| 2035 | 411,720 | \$ 6.09 | 3,653 | \$ 79.99 | 32,935 | 36,588 |
| Total (Nominal) | 7,828,320 | | 33,593 | | 444,681 | 478,274 |
| Total NPV (\$2016) | | | 14,558 | | 242,338 | 256,896 |

DEF 2015 Standard Offer

Committed Capacity (MW) **50**
Capacity Factor (%) **94.0%**
Payment Type **Levelized**

| Year | Energy (MWh) | Capacity Rates | Total Capacity Payments | Energy Rates | Total Energy Payments | Total Payments |
|---------------------------|---------------------|-----------------------|--------------------------------|---------------------|------------------------------|-----------------------|
| | (MWh) | (\$/kW-mo.) | (\$000) | (\$/MWh) | (\$000) | (\$000) |
| 2016 | 412,848 | \$ - | - | \$ 36.63 | 15,121 | 15,121 |
| 2017 | 411,720 | \$ - | - | \$ 37.27 | 15,344 | 15,344 |
| 2018 | 411,720 | \$ - | - | \$ 38.37 | 15,800 | 15,800 |
| 2019 | 411,720 | \$ - | - | \$ 41.91 | 17,257 | 17,257 |
| 2020 | 412,848 | \$ - | - | \$ 48.00 | 19,817 | 19,817 |
| 2021 | 411,720 | \$ - | - | \$ 49.97 | 20,573 | 20,573 |
| 2022 | 411,720 | \$ - | - | \$ 51.84 | 21,342 | 21,342 |
| 2023 | 411,720 | \$ - | - | \$ 53.99 | 22,229 | 22,229 |
| 2024 | 412,848 | \$ 5.20 | 1,818 | \$ 56.40 | 23,286 | 25,104 |
| 2025 | 411,720 | \$ 5.21 | 3,125 | \$ 58.43 | 24,057 | 27,182 |
| 2026 | 411,720 | \$ 5.22 | 3,132 | \$ 60.00 | 24,701 | 27,834 |
| 2027 | 411,720 | \$ 5.23 | 3,140 | \$ 61.29 | 25,233 | 28,374 |
| 2028 | 412,848 | \$ 5.25 | 3,148 | \$ 63.23 | 26,105 | 29,253 |
| 2029 | 411,720 | \$ 5.26 | 3,156 | \$ 64.52 | 26,564 | 29,720 |
| 2030 | 411,720 | \$ 5.27 | 3,165 | \$ 66.66 | 27,444 | 30,608 |
| 2031 | 411,720 | \$ 5.29 | 3,173 | \$ 69.24 | 28,508 | 31,681 |
| 2032 | 412,848 | \$ 5.30 | 3,182 | \$ 71.72 | 29,610 | 32,792 |
| 2033 | 411,720 | \$ 5.32 | 3,191 | \$ 74.68 | 30,745 | 33,937 |
| 2034 | 411,720 | \$ 5.33 | 3,200 | \$ 75.16 | 30,944 | 34,144 |
| 2035 | 411,720 | \$ 5.35 | 3,210 | \$ 79.99 | 32,935 | 36,145 |
| Total (Nominal) | 7,828,320 | | 33,433 | | 444,681 | 478,113 |
| Total NPV (\$2016) | | | 14,558 | | 242,338 | 256,896 |

DEF 2015 Standard Offer

Committed Capacity (MW) 50
Capacity Factor (%) 94.0%
Payment Type Early

| Year | Energy (MWh) | Capacity Rates | Total Capacity Payments | Energy Rates | Total Energy Payments | Total Payments |
|---------------------------|---------------------|-----------------------|--------------------------------|---------------------|------------------------------|-----------------------|
| | (MWh) | (\$/kW-mo.) | (\$000) | (\$/MWh) | (\$000) | (\$000) |
| 2016 | 412,848 | \$ - | - | \$ 36.63 | 15,121 | 15,121 |
| 2017 | 411,720 | \$ - | - | \$ 37.27 | 15,344 | 15,344 |
| 2018 | 411,720 | \$ - | - | \$ 38.37 | 15,800 | 15,800 |
| 2019 | 411,720 | \$ - | - | \$ 41.91 | 17,257 | 17,257 |
| 2020 | 412,848 | \$ - | - | \$ 48.00 | 19,817 | 19,817 |
| 2021 | 411,720 | \$ - | - | \$ 49.97 | 20,573 | 20,573 |
| 2022 | 411,720 | \$ 3.46 | 2,074 | \$ 51.84 | 21,342 | 23,416 |
| 2023 | 411,720 | \$ 3.54 | 2,125 | \$ 53.99 | 22,229 | 24,354 |
| 2024 | 412,848 | \$ 3.63 | 2,179 | \$ 56.40 | 23,286 | 25,464 |
| 2025 | 411,720 | \$ 3.72 | 2,233 | \$ 58.43 | 24,057 | 26,290 |
| 2026 | 411,720 | \$ 3.81 | 2,289 | \$ 60.00 | 24,701 | 26,990 |
| 2027 | 411,720 | \$ 3.91 | 2,346 | \$ 61.29 | 25,233 | 27,579 |
| 2028 | 412,848 | \$ 4.01 | 2,405 | \$ 63.23 | 26,105 | 28,510 |
| 2029 | 411,720 | \$ 4.11 | 2,465 | \$ 64.52 | 26,564 | 29,028 |
| 2030 | 411,720 | \$ 4.21 | 2,526 | \$ 66.66 | 27,444 | 29,970 |
| 2031 | 411,720 | \$ 4.32 | 2,590 | \$ 69.24 | 28,508 | 31,097 |
| 2032 | 412,848 | \$ 4.42 | 2,654 | \$ 71.72 | 29,610 | 32,265 |
| 2033 | 411,720 | \$ 4.53 | 2,721 | \$ 74.68 | 30,745 | 33,466 |
| 2034 | 411,720 | \$ 4.65 | 2,789 | \$ 75.16 | 30,944 | 33,733 |
| 2035 | 411,720 | \$ 4.76 | 2,858 | \$ 79.99 | 32,935 | 35,794 |
| Total (Nominal) | 7,828,320 | | 31,395 | | 444,681 | 476,075 |
| Total NPV (\$2016) | | | 14,558 | | 242,338 | 256,896 |

