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March 13, 2015

GULF POWER
A SOUTHERN COMPANY

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

Re: Docket No. 150049-EI – Petition for approval of energy purchase agreement between Gulf Power Company and Morgan Stanley Capital Group Incorporated

Dear Ms. Stauffer:

Enclosed is Gulf Power Company's response to Commission Staff's First Data Request (Nos. 1-55) in the above-referenced docket.

Sincerely,

Robert L. McGee, Jr.

Robert L. McGee, Jr
Regulatory and Pricing Manager

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Enclosures

cc: Beggs & Lane
Jeffrey A. Stone, Esq.
Office of General Counsel
Leslie Ames
Division of Engineering
Robert Graves
Division of Economics
William McNulty
Jenny Wu
Division of Accounting & Finance
Michael Barrett
Peter Lester
Frank Trueblood



COM
AFD 1+2 cds
APA
ECO 1+CD
ENG 1+CD
GCL 1+CD
IDM 1+CD
TEL
CLK

1. At page 7 of its petition, Gulf states the Agreement was analyzed assuming the Company's 2014 and 2015 energy budget. Please complete the table below summarizing the financial assumptions associated with the two budgets.

| | 2014 Energy Budget | 2015 Energy Budget |
|---|---|---|
| Discount Rate | | |
| Capital Structure | | |
| Debt | | |
| Equity | | |
| Weighted Average Cost of Capital | | |

RESPONSE:

The financial assumptions presented in the table below are not inputs into Gulf's 2014 and 2015 Energy Budgets. However, the financial assumptions are necessary to derive the discount factor that was utilized to calculate the NPVs in the economic analyses. The same discount factor was used to evaluate the cost effectiveness of the agreement for both the 2014 and 2015 Energy Budget scenarios.

| | 2014 Energy Budget | | 2015 Energy Budget | |
|---|---|---|---|---|
| Discount Rate (After Tax WACC) | 6.7% | | 6.7% | |
| Capital Structure\Cost Rate | | | | |
| Debt | 50% | 5.8% | 50% | 5.8% |
| Preference Stock | 5% | 6.5% | 5% | 6.5% |
| Common Equity | 45% | 10.25% | 45% | 10.25% |
| Weighted Average Cost of Capital | 7.8% | | 7.8% | |

2. Please identify and discuss major differences between Gulf's 2014 and 2015 energy budget.

RESPONSE:

The major differences between the 2014 and 2015 energy budget are the underlying fuel price and load forecast assumptions. Natural gas prices and the Gulf load forecast were lower in the 2015 energy budget as compared to the 2014 energy budget.

3. Please complete the table below assuming approval of the agreement. Please provide this information assuming Gulf's 2014 energy budget and Gulf's 2015 energy budget. Please provide this information in MS Excel format.

| Year | Annual Total Revenue Requirements w/ agreement ($millions, 2015 $) | Annual Total Revenue Requirements w/o agreement ($millions, 2015 $) | Differential in Annual Total Revenue Requirements ($millions, 2015 $) | Differential in Customer Bill of 1,000 kwh ($) |
|---|---|---|---|---|
| 2016 | | | | |
| 2017 | | | | |
| 2018 | | | | |
| 2019 | | | | |
| 2020 | | | | |
| 2021 | | | | |
| 2022 | | | | |
| 2023 | | | | |
| 2024 | | | | |
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| 2031 | | | | |
| 2032 | | | | |
| 2033 | | | | |
| 2034 | | | | |
| 2035 | | | | |
| 2036 | | | | |

RESPONSE:

Confidential electronic attachments are located on the enclosed DVD labeled Docket No. 150049-EI Staff's First Data Request (Nos. 1-55) Disk 1. Please see Excel file named "DR1-3 Annual Revenue Requirements_CONF.xlsx."

4. At page 8 of its petition, Gulf states its evaluations do not assign value for capacity. Does Gulf project that approval of the agreement will defer the construction of future facilities? If yes, please identify the future facility or facilities that may be deferred. Please include the technology type, capacity (MW), and in-service date.

RESPONSE:

No.

5. Please complete the table below assuming approval of the agreement. Please provide this information in MS Excel format.

| Year | Avoided Natural Gas (MMBtu) | Avoided Coal (Tons) |
|---|---|---|
| 2016 | | |
| 2017 | | |
| 2018 | | |
| 2019 | | |
| 2020 | | |
| 2021 | | |
| 2022 | | |
| 2023 | | |
| 2024 | | |
| 2025 | | |
| 2026 | | |
| 2027 | | |
| 2028 | | |
| 2029 | | |
| 2030 | | |
| 2031 | | |
| 2032 | | |
| 2033 | | |
| 2034 | | |
| 2035 | | |
| 2036 | | |

RESPONSE:

| Year | Avoided Natural Gas (MMBtu) | Avoided Coal (Tons) |
|---|---|---|
| 2016 | 4,116,496 | 63,317 |
| 2017 | 3,963,674 | 67,275 |
| 2018 | 3,797,644 | 70,365 |
| 2019 | 4,067,704 | 54,874 |
| 2020 | 4,047,500 | 53,966 |
| 2021 | 4,048,580 | 59,707 |
| 2022 | 4,284,321 | 58,547 |
| 2023 | 4,028,928 | 61,901 |
| 2024 | 4,630,174 | 55,704 |
| 2025 | 4,130,144 | 63,980 |
| 2026 | 4,057,374 | 69,464 |
| 2027 | 4,031,719 | 73,541 |
| 2028 | 4,594,287 | 35,837 |
| 2029 | 4,526,561 | 37,088 |
| 2030 | 4,500,354 | 39,315 |
| 2031 | 4,537,810 | 36,128 |
| 2032 | 4,482,187 | 39,930 |
| 2033 | 4,502,787 | 37,966 |
| 2034 | 4,549,519 | 35,911 |
| 2035 | 4,491,827 | 39,018 |

Electronic attachments are located on the enclosed DVD labeled Docket No. 150049-EI Staff's First Data Request (Nos. 1-55) Disk 2. Please see Excel file named "DR1-5.Avoided Gas_Coal.xlsx".

6. Please complete the table below assuming approval of the agreement. Please provide this information in MS Excel format.

| Year | Avoided CO2 (Tons) | Avoided NOX and SO2 (Tons) |
|---|---|---|
| 2016 | | |
| 2017 | | |
| 2018 | | |
| 2019 | | |
| 2020 | | |
| 2021 | | |
| 2022 | | |
| 2023 | | |
| 2024 | | |
| 2025 | | |
| 2026 | | |
| 2027 | | |
| 2028 | | |
| 2029 | | |
| 2030 | | |
| 2031 | | |
| 2032 | | |
| 2033 | | |
| 2034 | | |
| 2035 | | |
| 2036 | | |

RESPONSE:

| Year | Avoided CO2 (Tons) | Avoided NOX and SO2 (Tons) |
|---|---|---|
| 2016 | 390,084 | 278 |
| 2017 | 390,475 | 296 |
| 2018 | 388,047 | 308 |
| 2019 | 367,326 | 259 |
| 2020 | 364,003 | 256 |
| 2021 | 377,601 | 284 |
| 2022 | 388,658 | 289 |
| 2023 | 381,624 | 292 |
| 2024 | 402,187 | 295 |
| 2025 | 392,446 | 299 |
| 2026 | 401,118 | 323 |
| 2027 | 409,228 | 340 |
| 2028 | 353,251 | 204 |
| 2029 | 352,240 | 208 |
| 2030 | 355,956 | 223 |
| 2031 | 350,633 | 208 |
| 2032 | 356,342 | 222 |
| 2033 | 352,918 | 213 |
| 2034 | 350,808 | 205 |
| 2035 | 354,756 | 215 |

Electronic attachments are located on the enclosed DVD labeled Docket No. 150049-EI Staff's First Data Request (Nos. 1-55) Disk 2. Please see Excel file named "DR1-6.CO2_NOX.xlsx".

7. Please complete the table below assuming approval of the agreement.

| Energy Generation by Fuel Type (%) | | | | | |
|---|---|---|---|---|---|
| | Natural Gas | Oil | Coal | Renewable | Other |
| 2013 | | | | | |
| 2014 | | | | | |
| 2015 | | | | | |
| 2016 | | | | | |
| 2017 | | | | | |
| 2018 | | | | | |
| 2019 | | | | | |
| 2020 | | | | | |

RESPONSE:

| Energy Generation by Fuel Type (%) | | | | | |
|---|---|---|---|---|---|
| | Natural Gas | Oil | Coal | Renewable | Other |
| 2013 | 59.99% | 0.00% | 38.04% | 0.44% | 1.53% |
| 2014 | 51.90% | 0.01% | 46.76% | 0.41% | 0.92% |
| 2015 | 64.68% | 0.00% | 33.36% | 0.24% | 1.72% |
| 2016 | 60.83% | 0.00% | 32.31% | 5.14% | 1.72% |
| 2017 | 57.26% | 0.00% | 36.45% | 4.69% | 1.60% |
| 2018 | 54.53% | 0.00% | 39.20% | 4.65% | 1.62% |
| 2019 | 51.37% | 0.00% | 42.38% | 4.61% | 1.64% |
| 2020 | 47.32% | 0.00% | 46.58% | 4.48% | 1.62% |

8. Please complete the table below without the agreement.

| Energy Generation by Fuel Type (%) | | | | | |
|---|---|---|---|---|---|
| | Natural Gas | Oil | Coal | Renewable | Other |
| 2013 | | | | | |
| 2014 | | | | | |
| 2015 | | | | | |
| 2016 | | | | | |
| 2017 | | | | | |
| 2018 | | | | | |
| 2019 | | | | | |
| 2020 | | | | | |

RESPONSE:

| Energy Generation by Fuel Type (%) | | | | | |
|---|---|---|---|---|---|
| | Natural Gas | Oil | Coal | Renewable | Other |
| 2013 | 59.99% | 0.00% | 38.04% | 0.44% | 1.53% |
| 2014 | 51.90% | 0.01% | 46.76% | 0.41% | 0.92% |
| 2015 | 64.68% | 0.00% | 33.36% | 0.24% | 1.72% |
| 2016 | 64.43% | 0.00% | 33.58% | 0.27% | 1.72% |
| 2017 | 60.46% | 0.00% | 37.70% | 0.24% | 1.60% |
| 2018 | 57.62% | 0.00% | 40.52% | 0.24% | 1.62% |
| 2019 | 54.71% | 0.00% | 43.41% | 0.24% | 1.64% |
| 2020 | 50.57% | 0.00% | 47.58% | 0.23% | 1.62% |

9. Please identify terms within the proposed agreement that are intended to ensure the adequacy and reliability of electric service will not be adversely affected by the wind farm associated with the proposed agreement.

RESPONSE:

The Energy Purchase Agreement contains a variety of provisions that are intended to ensure that adequacy and reliability of electric service will not be affected. Such provisions include: § 4.1(requiring that Seller exercise contractual rights to require others to operate Generation Facilities in accordance with Prudent Industry Practices, Legal Requirements and Operating Procedures to be developed by the parties) § 5.1 (requiring provision of Seller performance security); § 6.5 (providing for cover damages in the event of Seller's failure to deliver energy); § 7.1.2 (requiring Seller to utilize firm transmission for all deliveries with limited exceptions) § 7.3-7.4 (allowing Buyer to curtail or cease energy deliveries under various circumstances including emergencies or other operational reasons) § 12.1.13 (providing for an Event of Default in the event that Seller fails to deliver a specified percentage of energy in any given 12 month period); and § 12.1.17 (providing for an Event of Default in the event that Seller fails to comply with any material obligation under the agreement).

The following questions relate to Gulf's renewable attributes/credits received by Gulf from the proposed agreement.

10. At page 5 of its petition, Gulf states the sale of renewable attributes will be credited to Gulf's customers through the Fuel and Purchased Power Cost Recovery Clause. Please complete the table below projecting anticipated proceeds that may result from the sale of renewable attributes. Please provide this information in MS Excel format.

| Year | Credit from the Sale of Renewable Attributes ($millions, 2015 $) | Impact on Customer Bill of 1,000 kwh ($) |
|---|---|---|
| 2016 | | |
| 2017 | | |
| 2018 | | |
| 2019 | | |
| 2020 | | |
| 2021 | | |
| 2022 | | |
| 2023 | | |
| 2024 | | |
| 2025 | | |
| 2026 | | |
| 2027 | | |
| 2028 | | |
| 2029 | | |
| 2030 | | |
| 2031 | | |
| 2032 | | |
| 2033 | | |
| 2034 | | |
| 2035 | | |
| 2036 | | |

RESPONSE:

| Year | Credit from the Sale of Renewable Attributes ($millions, 2015 $) | Impact on Customer Bill of 1,000 kwh ($) |
|---|---|---|
| 2016 | 0.54 | $0.047 |
| 2017 | 0.50 | $0.044 |
| 2018 | 0.47 | $0.041 |
| 2019 | 0.44 | $0.038 |
| 2020 | 0.42 | $0.035 |
| 2021 | 0.39 | $0.032 |
| 2022 | 0.36 | $0.030 |
| 2023 | 0.34 | $0.028 |
| 2024 | 0.32 | $0.026 |
| 2025 | 0.30 | $0.024 |
| 2026 | 0.28 | $0.022 |
| 2027 | 0.26 | $0.020 |
| 2028 | 0.25 | $0.019 |
| 2029 | 0.23 | $0.018 |
| 2030 | 0.22 | $0.016 |
| 2031 | 0.20 | $0.015 |
| 2032 | 0.19 | $0.014 |
| 2033 | 0.18 | $0.013 |
| 2034 | 0.17 | $0.012 |
| 2035 | 0.16 | $0.011 |

Electronic attachments are located on the enclosed DVD labeled Docket No. 150049-EI Staff's First Data Request (Nos. 1-55) Disk 2. Please see Excel file named "DR1-10 REC sales.xlsx".

11. How many renewable energy credits (RECs) will be associated with the Morgan Stanley Agreement?

RESPONSE:

The anticipated sum of the renewable energy credits over the life of the contract for the Morgan Stanley Agreement is 13,494,540.

12. Gulf states, in paragraph 11 of its petition, "Green-e wind renewable energy credits are selling on the voluntary market for approximately $0.85 per credit." Please identify what information Gulf relied on when making this statement.

RESPONSE:

The price quoted in Gulf's petition was sourced from ICAP Energy LLC's daily Emissions & REC Recap market pricing communication distributed at the end of each business day outlining daily market prices for each specific Renewable Energy Credit (RECs) type.

13. In its petition at page 5, Gulf states that it will receive all environmental attributes. Please define or describe "environmental attributes." Please include an explanation of how the value of these items is determined, and how these interests are bought and sold.

RESPONSE:

The term "environmental attributes" is a defined term in the Energy Purchase Agreement ("EPA") and, in short, refers to all environmental, social, and other nonpower qualities associated with the renewable energy purchased under the EPA. The environmental attributes associated with one (1) megawatt hour of electricity generated from a renewable resource are commonly referred to as "renewable energy credits," or "RECs." The U.S. Federal Trade Commission defines Renewable Energy Credits ("RECs") as commodities representing

> the property rights to the environmental, social, and other nonpower qualities of renewable electricity generation. A REC, and the attributes and benefits it represents, can be "unbundled" from the underlying renewable electricity and sold separately. If the physical electricity and the associated RECs are sold to separate buyers, the electricity is no longer considered renewable ("The REC product is what conveys the attributes and benefits of the renewable electricity, not the electricity itself."). All renewable energy is based on RECs, even when the marketer purchased renewable energy directly from a utility or other provider.[1]

The value of a REC is determined in the open market and is based on supply and demand. In the U.S., there are currently two types of REC markets:

1. "Voluntary" REC markets, in which RECs are ultimately sold to end-users of electricity who do not have a legal obligation to use a certain amount of renewable energy but wish to purchase renewable energy for personal or corporate reasons or goals.

2. REC markets in jurisdictions with laws or regulations requiring utilities to meet a certain portion of their demand with renewable energy. Some states, for example, have enacted such laws, commonly called "renewable portfolio standards" ("RPS"). Some, though not all, RPS laws allow utilities to purchase RECs to meet the requirements as an alternative to building

[1] FTC, The Green Guides, Statement of Basis and Purpose at 201 n. 684, *available at*: http://www.ftc.gov/os/fedreg/2012/10/greenguidesstatement.pdf.

renewable generation or actually purchasing renewable energy ("renewable energy," as used here, means the bundled product of energy and RECs). RPS laws or regulations may specify characteristics of renewable energy that must be met in order to qualify for RPS compliance. Such characteristics may include: type of renewable energy (solar, wind, biomass, etc.); geographic location of the renewable energy generator (e.g. within the state); and vintage of the renewable energy generator (e.g. commercial operation after some date certain).

In the voluntary REC market, large quantities of RECs are traded through trading platforms that match buyers and sellers at a market clearing price. One such platform is the North American Renewables Registry ("NARR"). RECs can also be sold directly to end use customers at negotiated rates. Finally, in some states without legal requirements to meet customer demand with a certain amount of renewable energy, voluntary rates are available to customers who wish to "green" their energy usage.

In jurisdictions with RPSs that allow for the trading of RECs to satisfy the laws' requirements, trading platforms are often established, either through or with the oversight of state agencies, to buy and sell RECs for compliance purposes. In some regions of the country where multiple states have RPS laws that allow for out-of-state REC trading, multi-state exchanges have been established that allow for interstate trading of RECs for compliance purposes. The value of such RECs are established by the "market" and demand is driven by the utilities' need to meet the RPS requirements. In addition, in certain states that have such an RPS, the state establishes an "alternative compliance payment," which is usually an amount of money (per megawatt-hour) that a utility can pay to comply with the RPS in lieu of procuring a REC to match such megawatt-hour. As a practical matter, an alternate compliance payment established by a state sets a price ceiling on the value of RECs that can be purchased to satisfy the RPS requirement.

14. In its petition at page 5, Gulf asserts that if it sells renewable attributes, the proceeds from such sales would be credited to Gulf's retail customers in the form of credits to the Fuel Clause. Identify the specific A and E schedule(s) where such adjustments would be recorded.

RESPONSE:

At this early stage, Gulf has not made a final determination of where the proceeds from REC sales would be reflected in the A and E schedules. As noted in response to Item No. 16, at least initially, Gulf intends to collect and retire RECs rather than sell them. However, in the event that RECs from these facilities are sold, one approach which would appropriately credit the proceeds to Gulf's retail customers would be to include the proceeds in the "Adjustment to Fuel Cost" line item on schedules A-1, A-1a, A-2, E-1b, E-1B-1, and E-2.

15. Did Gulf include the value of renewable energy credits in its economic evaluations? Please explain why or why not.

RESPONSE:

No. The renewable energy credits (RECs) are bundled with the energy purchased and are acquired under the contract at no cost. Moreover, current market values for RECs are low. Therefore, Gulf did not believe it was necessary to assign a value to the RECs for purposes of its economic evaluations. It is certainly possible that the RECs will increase in value (either for compliance or sales purposes) in the future. However, as mentioned in paragraph 16 of Gulf's petition, Gulf's economic evaluations are conservative and omitting REC values from those evaluations is consistent with Gulf's conservative approach.

16. What are the strategic benefits, if any, for Gulf having renewable energy credits? Please explain.

RESPONSE:

There are several benefits associated with Gulf Power's ownership of renewable energy credits (RECs) associated with this Energy Purchase Agreement. At least initially, Gulf intends to collect and retire the RECs by providing renewable energy to all of its customers. Gulf's ownership of RECs also has the potential to assist the Company in complying with Renewable Portfolio Standards or similar compliance obligations should they arise in the future. Finally, should the value of RECs increase significantly in the marketplace, Gulf has the flexibility to sell RECs and return the proceeds from such sales to its customers. All of the foregoing benefits of REC ownership are significant in and of themselves. The fact that Gulf is receiving RECs at no cost under the Energy Purchase Agreement further highlights the value of this agreement to Gulf's customers.

17. What are the strategic benefits, if any, for the Southern Company having renewable energy credits? Please explain.

RESPONSE:

Given that the renewable energy credits (RECs) generated pursuant to the Energy Purchase Agreement belong exclusively to Gulf Power, the Company is not aware of any benefits that inure to the Southern Company.

The following questions (18-20) relate to how Gulf will account for the RECs, associated with the energy purchase agreement in the instant docket, on its books.

18. If applicable, please identify what Gulf's journal entries will be, including all account names and numbers, to record the RECs initially on its books.

RESPONSE:

These RECs are bundled with the purchase of energy and provided at no cost. One hundred percent of the purchase price is allocated to energy and zero percent allocated to the RECs. The purchase price will be recorded in FERC account 555 (Purchased Power).

19. Please identify what Gulf's journal entries will be, including all account names and numbers, to record any subsequent sale of the RECs to another entity.

RESPONSE:

The subsequent sale of these RECs will be debited to FERC account 131 (Cash) and credited to FERC account 555 (Purchased Power).

20. How will Gulf report and record RECs on A and E schedules? Please explain each change or new entry.

RESPONSE:

At this early stage, Gulf does not propose to report any REC-specific data in its A or E schedules since the RECs are bundled with the purchase of energy and provided at no cost. As noted in Gulf's response to Item No. 14, Gulf has not made a final determination of where the proceeds from REC sales would be reflected in the A and E schedules. The suggested approach to include REC sale proceeds in "Adjustments to Fuel Cost" would not result in any changes or new entries to the A or E schedules.

21. Please provide the following documents in MS Excel format (with formulae intact):
    a. Gulf's 2014 fuel price forecasts (system-wide and in nominal $/MMBtu) for the years 2014-2043, shown as commodity, transportation, and delivered fuel prices;
    b. Gulf's 2015 fuel price forecasts (system-wide and in nominal $/MMBtu) for the years 2015-2043, shown as commodity, transportation, and delivered fuel prices;
    c. The Gulf's actual annual fuel prices (system-wide and in nominal $/MMBtu) for the years 2008-2014, shown as commodity, transportation, and delivered prices;
    d. The relevant portion of Gulf's 2014 energy budget that was used in evaluating the cost-effectiveness of the proposed Agreement with the interpretation of the information provided;
    e. The relevant portion of the Gulf's 2015 energy budget that was used in evaluating the cost-effectiveness of the proposed Agreement with the interpretation of the information provided;
    f. Each alternative fuel price forecast (in nominal $/MMBtu) sourced from third party forecasting entities, not specifically prepared by SES or Gulf's third party forecasting consultant, which Gulf used to compare to it's 2014 and 2015 fuel price forecasts, respectively, as a test for reasonableness.
    g. In your response to 21.f. above, please include, if available, an alternative coal price forecast (commodity) sourced from third party forecasting entities, not specifically prepared by SES or the company's forecasting consultant, to compare to Gulf's 2014 and 2015 coal price forecasts as a test for reasonableness. If alternative coal price forecasts are not available, please explain why not.

RESPONSE:

a. The Company's confidential 2014 fuel price forecasts for years 2014-2043 are shown in electronic attachments located on the enclosed DVD labeled Docket No. 150049-EI Staff's First Data Request (Nos. 1-55) Disk 1. Please see Excel file named "DR1-21a 2014 Fuel Price Forecasts yrs 2014-2043_CONF.xlsx."

   Forecasts include commodity, transportation, and delivered coal prices to the Company's Plant Crist and natural gas commodity (at Henry Hub), transportation, and delivered prices to Plant Smith.

b. The Company's confidential 2015 fuel price forecasts for years 2015-2043 are shown in electronic attachments located on the enclosed DVD labeled Docket No. 150049-EI Staff's First Data Request (Nos. 1-55) Disk 1. Please see Excel file named "DR1-21b 2015 Fuel Price Forecasts yrs 2014-2043_CONF.xlsx."

Forecasts include commodity, transportation, and delivered coal prices to the Company's Plant Crist and natural gas commodity (at Henry Hub), transportation, and delivered prices to Plant Smith.

c. Due to the large size of the data being provided, electronic attachments are located on the enclosed DVD labeled Docket No. 150049-EI Staff's First Data Request (Nos. 1-55) Disk 2. Please see Excel file named "DR1-21c.Actual Fuel Prices 2008-2014.xlsx".

d.- e. Confidential electronic attachments are located on the enclosed DVD labeled Docket No. 150049-EI Staff's First Data Request (Nos. 1-55) Disk 1. Please see Excel file named "DR1-21d-21e 2014-2015 Energy budget_CONF.xlsx."

f. Confidential alternative fuel price forecasts from third party forecasting entities are shown in electronic attachments located on the enclosed DVD labeled Docket No. 150049-EI Staff's First Data Request (Nos. 1-55) Disk 1. Please see Excel file named "DR1-21f Alternative Fuel Price forecasts from 3rd party_CONF.xlsx."

g. Alternative coal price forecasts from third party forecasting entities are included in Gulf's response to Item No. 21f. There are four sets of third party commodity fuel price forecasts. The workbook has a set of third party forecasts for each of 2014 and 2015, for each of coal and natural gas. There is one set of forecasts on each of four workbook tabs.

22. Please explain how each of the fuel price forecasts included in Gulf's referenced 2014 and 2015 energy budgets were developed.

RESPONSE:

Southern Electric System (SES) Fuel Forecast Process

SES develops short-term (current year +2) and long-term (year 4 and beyond) fuel price forecasts which extend through the Company's 10-year planning horizon and longer for resource planning. The short-term forecasts are developed by SCS Fuel Services for use in the system's fuel budgeting process and marginal pricing dispatch procedures. The long-term forecasts are developed in the spring of each year for use in system planning activities. Charles River Associates (CRA) is the modeling vendor used by the system to develop the long-term forecasts. This process is a collaborative effort between CRA and members of cross-functional SES planning teams, including Gulf Power personnel, and is governed by an SES executive team.

Fuel market-driving assumptions, developed in collaboration between CRA and SES personnel, are integrated into CRA's model to develop commodity forecast prices. Transportation prices are developed by SES personnel and are combined with the CRA commodity prices to produce the total delivered prices.

The delivered price of any fuel consists of a variety of components. The main components are commodity price and transportation cost. Domestic coal commodity prices are forecast on either a mine-mouth basis or free on board (FOB) barge basis, while import coals are forecast on an FOB ship basis at the port of import. Natural gas prices are forecast at the Henry Hub, Louisiana benchmark delivery point. Because mine-mouth coal prices vary by source, sulfur content, and Btu level, SES prepares commodity price forecasts for different coal classifications used on the SES. Because natural gas does not possess the same quality variations as coal, SES prepares a single commodity price forecast for natural gas at Henry Hub, and applies a basis differential between Henry Hub and the various pipelines serving SES plants.

Transportation costs, to be used in the delivered price forecast, are developed for potential sites when modeling generic unit additions in the resource planning process. Site-specific transportation costs are developed for existing units to produce delivered price forecasts for both the process and the fuel budget process. Similarly, when site-specific unit additions are under consideration, site-specific transportation costs are developed for each option.

23. For each of Gulf's 2014 and 2015 fuel price forecasts used to support the proposed energy purchase agreement, please identify the sources and the dates of the forecast inputs and assumptions.

RESPONSE:

As described in the Gulf's response to Item No. 22, the fuel price forecasts are produced by third-party consultant CRA working collaboratively with SES personnel using inputs as described in response to Item No. 22. The long-term forecasts (year 4 and beyond) used in Gulf's analyses were developed annually in the spring of each year. The short-term forecast (current year +2) used in Gulf's analyses were developed in November 2013 and September 2014.

24. Please identify all third party consultants relied upon in developing Gulf's 2014 and 2015 fuel price forecast.

RESPONSE:

As described in the Gulf's response to Item No. 22, Charles River Associates (CRA) is the third party consultant used in developing the long-term fuel price forecasts.

25. Did Gulf consider different scenarios (e.g. high, medium, and low) in developing its 2014 and 2015 fuel price forecasts? Please explain.

RESPONSE:

A range of scenario forecasts was developed for the 2014 and 2015 SES planning process. Each long-term forecast is developed using different views of fuel market drivers, environmental regulations, and other factors which produces a range of independent fuel price forecasts.

26. If the response to data request 25 is affirmative, please specify which fuel pricing scenario[s] were selected in developing the energy budget to evaluate the economics of the proposed agreement, and provide the rationale for the selection. If the response is negative, please explain why not.

RESPONSE:

From the range of high to low fuel price forecasts, one scenario is chosen to produce the Company's energy budget. That forecast represents a moderate view (neither the highest nor the lowest) of fuel prices and current $CO_2$ policy pressure.

27. If Gulf has developed a range of fuel price scenario forecasts for the 2014 and 2015 Southern Electric System (SES) planning process, please provide the range of natural gas and coal price scenario forecasts developed for the 2014 and 2015 SES planning process and, for each such forecast, the related views of market drivers, environmental regulations, and other factors used to develop the forecasts.

RESPONSE:

The Company's confidential range of 2014 and 2015 natural gas and coal price scenario forecasts are shown in electronic attachments located on the enclosed DVD labeled Docket No. 150049-EI Staff's First Data Request (Nos. 1-55) Disk 1. Please see Excel file named "DR1-27 2014-2015 fuel price forecasts_CONF.xlsx."

This range of forecasts reflects different views of supply and demand drivers. These include different views of shale gas production volumes, shale gas production costs (including costs addressing environmental concerns related to natural gas production), exports of LNG, US economic growth and growth in electricity demand.

28. Please identify the probability associated with each of the fuel price scenario forecasts produced using Gulf's process. Please explain how these probabilities were determined.

RESPONSE:

The Company designs its scenario forecasts to span a plausible range of outcomes. Through its scenario analysis, the Company attempts to construct a set of long-term forecasts that reflect the range of plausible outcomes based on a plausible range of views of key input assumptions in several areas. Such areas include long-term shale gas availability, long-term shale gas production cost (including addressing future environmental concerns), long-term LNG exports and long-term US GDP growth. The Company works with its modeling consultant, Charles River Associates (CRA), to identify these values based on current data and analytical thinking. The Company believes that future fuel price uncertainty is helpfully reflected in the range of prices identified by its forecasting process. Neither the Company nor CRA ascribes probability values to the individual factors which produce the range of forecasts or to the forecasts themselves. The Company does not believe doing so would add useful information.

29. If, in its response to 28, Gulf indicates that the range of the possible outcomes of each factor which produces the range of forecasts have equal likelihood, please explain, and quantify any differences in the likelihood of the outcomes of each factor to the extent such differences exist.

RESPONSE:

Please see Gulf's response to Item No. 28.

30. Are the likelihood estimates of Gulf's factors used to produce the forecasts and the likelihood of the forecasts provided in part or in whole by the Company's third party forecasting consultant? Please explain.

RESPONSE:

Please see Gulf's response to Item No. 28.

31. Please complete the table below assuming approval of the agreement, but exclusive of REC sales.

| **Net Present Value of Savings ($millions, 2015$)** | | |
|---|---|---|
| **Fuel Forecast Scenario** | **2014 Budget** | **2015 Budget** |
| Low (Question 14.c.) | | |
| Base | | |
| High (Question 14.c.) | | |

RESPONSE:

| **Net Present Value of Savings ($millions, 2015$)** | | |
|---|---|---|
| **Fuel Forecast Scenario** | **2014 Budget** | **2015 Budget** |
| Low (Question 14.c.) | -7 | -31 |
| Base | 48 | 11 |
| High (Question 14.c.) | 139 | 108 |

32. Refer to Gulf's Petition, Paragraph 16, Page 8. Please explain why fuel price projections used in the 2015 energy budget are lower than the fuel price projections used in the 2014 energy budget?

RESPONSE:

Forecast commodity prices of natural gas in 2015 were generally lower than in 2014 largely because views of drivers of natural gas supply and exports became more favorable due to low-cost natural gas availability. Forecast commodity prices of coal in 2015 were generally lower than in 2014 largely because natural gas prices were down which caused demand for coal to decline which suppressed coal prices.

33. Please identify when Gulf completed its 2014 and 2015 fuel price forecasts used in the economic analysis of this Petition?

RESPONSE:

The Company's energy budgets are developed annually and typically released in the final months of the year so that they are available for use in the upcoming year. For example, the 2014 energy budget was released in fall of 2013, and the 2015 energy budget was released in the fall of 2014. The long-term fuel forecasts are one component of developing the energy budgets and must be completed earlier in the year, typically the previous spring, in order to support the development of other energy budget inputs (See the Gulf's response to Item No. 42a). Accordingly, the long-term fuel forecasts used in the 2014 and 2015 analyses were developed in the spring of 2013 and 2014, respectively. As described in Gulf's response to Item No. 22, the short-term fuel price forecasts are developed monthly and are typically available closer to the release of the energy budget. Accordingly, the short-term fuel forecasts for the 2014 and 2015 energy budgets were completed in November 2013 and September 2014, respectively.

34. Please list the differences in the methodology and results of the fuel price forecasts used in this docket compared to the fuel price forecasts provided to the Commission in the Company's latest rate case, used in support Gulf's 2014 Ten Year Site Plan, and Gulf's petition filed in Docket No. 150035-EI.

RESPONSE:

The same methodology described in Gulf's response to Item No. 22 was used for all fuel price forecasts. Any difference in the fuel price forecast results is due to the date the forecast was produced.

35. In light of Gulf's latest available actual 2014 fuel prices, how accurate are the Company's 2014 fuel price forecasts? Please provide work papers (in MS Excel format with formula intact) to support your response.

RESPONSE:

Gulf's short term fuel price forecast is typically a market futures price. Market commodity prices are volatile due to changing conditions that influence supply and demand for fuel. In addition, actual weighted average coal prices are subject to changes in the generation mix between coal and natural gas fired plants. Shown below is the comparison of Gulf's forecast price for natural gas and coal and the actual prices by month.

Electronic attachments are located on the enclosed DVD labeled Docket No. 150049-EI Staff's First Data Request (Nos. 1-55) Disk 2. Please see Excel file named "DR1-35.Forecast vs Actual fuel purchases.xlsx".

Gas Purchases
Commodity Weighted Average

| | 2014 Gulf Forecast $/MMBtu | Gulf Actual $/MMBtu | Variance $/MMBtu | Variance % |
|---|---|---|---|---|
| Jan-14 | $3.98 | $4.74 | $0.75 | 15.9% |
| Feb-14 | $3.99 | $6.25 | $2.26 | 36.2% |
| Mar-14 | $3.92 | $4.93 | $1.02 | 20.6% |
| Apr-14 | $3.88 | $4.40 | $0.52 | 11.9% |
| May-14 | $3.88 | $4.55 | $0.66 | 14.5% |
| Jun-14 | $3.94 | $4.66 | $0.72 | 15.4% |
| Jul-14 | $3.98 | $4.10 | $0.12 | 3.0% |
| Aug-14 | $3.99 | $3.99 | $0.00 | 0.0% |
| Sep-14 | $3.97 | $3.98 | $0.01 | 0.3% |
| Oct-14 | $3.97 | $3.83 | -$0.14 | -3.7% |
| Nov-14 | $4.04 | $4.07 | $0.02 | 0.6% |
| Dec-14 | $4.23 | $3.54 | -$0.69 | -19.5% |
| **TOTAL** | **$3.98** | **$4.36** | **$0.37** | **8.6%** |

Coal Purchases
Delivered Weighted Average

| | 2014 Gulf Forecast $/Ton | Gulf Actual $/Ton | Variance $/Ton | Variance % |
|---|---|---|---|---|
| Jan-14 | $93.85 | $84.65 | -$9.20 | -10.9% |
| Feb-14 | $94.60 | $99.14 | $4.54 | 4.6% |
| Mar-14 | $92.91 | $83.70 | -$9.21 | -11.0% |
| Apr-14 | $94.63 | $82.31 | -$12.32 | -15.0% |
| May-14 | $88.48 | $81.00 | -$7.48 | -9.2% |
| Jun-14 | $95.84 | $87.18 | -$8.66 | -9.9% |
| Jul-14 | $84.28 | $82.35 | -$1.93 | -2.3% |
| Aug-14 | $85.43 | $78.43 | -$7.00 | -8.9% |
| Sep-14 | $83.23 | $81.32 | -$1.91 | -2.3% |
| Oct-14 | $93.72 | $85.20 | -$8.52 | -10.0% |
| Nov-14 | $95.59 | $83.27 | -$12.32 | -14.8% |
| Dec-14 | $93.53 | $84.56 | -$8.97 | -10.6% |
| **TOTAL** | **$90.33** | **$83.92** | **-$6.41** | **-7.6%** |

36. Please identify and explain any deviations Gulf employed in its forecasting process used to develop its 2015 fuel price forecast relative to the forecasting process identified on pages 46 and 47 of Gulf's 2014 Ten Year Site Plan.

RESPONSE:

There were no deviations in the methodology or process the Company employed in developing the 2015 fuel price forecast relative to the process described in the Company's 2014 Ten Year Site Plan and in the Company's response to Item No. 22.

37. Please refer to Data Request 21.f. Describe the conclusions Gulf may have drawn from each such test of reasonableness.

RESPONSE:

As described in Gulf's response to Item No. 26, the Company takes a moderate view when selecting the fuel forecast to use for its energy budget. As shown in the Confidential Attachment to Item No. 21f, the Company believes that its moderate natural gas and coal forecasts are reasonably within the range of these alternative third-party fuel price forecasts.

38. What are the appropriate discount factors to apply to the nominal forecasts provided in response to this data request that convert Gulf's fuel price forecasts to 2012 dollars? Please explain the derivation of each.

RESPONSE:

The discount factors for the 2014 and 2015 forecasts are shown in the table on page 2 for years 2012-2043. The discount factor is derived by dividing the GDP Deflator for the constant reference year (2012) by the GDP Deflator for the projected year.

For example, the discount factor for 2020 in the 2014 Forecast (0.8543) equals the GDP deflator for 2012 (115.36) divided by the GDP deflator for 2020 (135.03).

| Year | Discount Factor for 2014 Forecast | GDP Deflators for 2014 Forecast* | | Discount Factor for 2015 Forecast | GDP Deflators for 2015 Forecast* |
|---|---|---|---|---|---|
| **2012** | 1 | 115.36 | | 1 | 105.00 |
| **2013** | 0.9808 | 117.62 | | 0.9851 | 106.59 |
| **2014** | 0.9608 | 120.06 | | 0.9722 | 108.00 |
| **2015** | 0.9427 | 122.37 | | 0.9529 | 110.19 |
| **2016** | 0.9252 | 124.69 | | 0.9336 | 112.47 |
| **2017** | 0.9076 | 127.10 | | 0.9141 | 114.87 |
| **2018** | 0.8889 | 129.78 | | 0.8956 | 117.24 |
| **2019** | 0.8713 | 132.39 | | 0.8790 | 119.46 |
| **2020** | 0.8543 | 135.03 | | 0.8642 | 121.50 |
| **2021** | 0.8373 | 137.79 | | 0.8495 | 123.60 |
| **2022** | 0.8204 | 140.62 | | 0.8348 | 125.78 |
| **2023** | 0.8036 | 143.55 | | 0.8202 | 128.02 |
| **2024** | 0.7869 | 146.59 | | 0.8057 | 130.32 |
| **2025** | 0.7708 | 149.67 | | 0.7916 | 132.64 |
| **2026** | 0.7553 | 152.73 | | 0.7779 | 134.98 |
| **2027** | 0.7404 | 155.81 | | 0.7644 | 137.36 |
| **2028** | 0.7260 | 158.89 | | 0.7509 | 139.84 |
| **2029** | 0.7121 | 162.00 | | 0.7372 | 142.43 |
| **2030** | 0.6986 | 165.13 | | 0.7237 | 145.09 |
| **2031** | 0.6855 | 168.28 | | 0.7103 | 147.82 |
| **2032** | 0.6727 | 171.48 | | 0.6970 | 150.64 |
| **2033** | 0.6603 | 174.72 | | 0.6839 | 153.53 |
| **2034** | 0.6481 | 177.99 | | 0.6712 | 156.44 |
| **2035** | 0.6362 | 181.33 | | 0.6590 | 159.34 |
| **2036** | 0.6246 | 184.70 | | 0.6474 | 162.18 |
| **2037** | 0.6132 | 188.14 | | 0.6364 | 164.99 |
| **2038** | 0.6018 | 191.68 | | 0.6259 | 167.76 |
| **2039** | 0.5907 | 195.31 | | 0.6161 | 170.43 |
| **2040** | 0.5796 | 199.04 | | 0.6070 | 172.99 |
| **2041** | 0.5689 | 202.79 | | 0.5984 | 175.48 |
| **2042** | 0.5585 | 206.56 | | 0.5901 | 177.95 |
| **2043** | 0.5483 | 210.40 | | 0.5822 | 180.35 |

* Source: Moody's Analytics

39. For each natural gas price forecast provided in response to these data requests, please explain how Gulf accounted for the basis differential in its forecast and identify the basis for each forecast year.

RESPONSE:

The projected annual average basis differentials between Henry Hub and various pipeline pricing points as derived from published data in Platts Gas Daily and relevant to the Company for the 2014 and 2015 Energy Budgets is located as a confidential electronic attachment on the enclosed DVD labeled Docket No. 150049-EI Staff's First Data Request (Nos. 1-55) Disk 1. Please see Excel file named "DR1-39.Annual average base differentials_CONF.xlsx".

40. Please provide a detailed description of how Gulf's fuel price forecasts were used in developing the Company's energy budgets for the corresponding years.

RESPONSE:

The Company's projection of fuel prices is one of several components of projecting each generating unit's dispatch cost. Other components include, heat rates, variable O&M costs, etc. Each generating unit's dispatch cost then becomes an input to PROSYM, an hourly production cost model used to simulate system unit commitment and dispatch. PROSYM seeks to minimize the production cost of the system through simulated economic dispatch. The results of this modelling process are used to develop the energy budget which includes marginal cost projections for the system as well as unit specific burn, fuel costs and operating costs.

41. Refer to your response to question Nos. 5 and 21. In Gulf's cost analysis for the wind project, is the avoided fuel coal? If the response to this question is affirmative, please provide detailed information regarding the analysis. If the response is negative, please explain why not.

RESPONSE:

Not entirely, the avoided fuel is both coal and natural gas depending on the hour. This is determined through production cost modeling and evaluating the fuel type of the hourly avoided costs the analysis was based on.

42. Gulf Power Company indicates that (see page 7 of the Petition):
The Agreement was analyzed, negotiated and executed under Gulf Power's 2014 energy budget which included 2014 fuel price forecasts. [...] Following the negotiation and execution of the Agreement, the Company's 2015 energy budget was released. For informational purposes, Gulf performed a second economic evaluation based in the 2015 forecasts.
a. Please explain the purpose of Gulf's annual energy budgets, which data is included in the budget, and the number of years of the projected data.
b. Please explain in greater detail how each of Gulf's 2014 and 2015 energy budget was used in evaluating the cost-effectiveness of the proposed Agreement for each year of the Agreement.

RESPONSE:

a. Gulf's annual energy budgets result from an analysis of production costs using the PROSYM model. The budget's purpose is to forecast Gulf and Southern electric system (collectively SES) generating unit performance, energy output, and the resulting avoided costs, comprised of: fuel, variable O&M, fuel handling, and emission costs required to serve SES customers' loads. Major inputs include SES operating company load forecasts, SES unit operating and performance assumptions, including planned and unplanned maintenance outage information, and forecasted prices for contract and spot fuels (coal, natural gas, uranium, and distillate). Gulf's Energy Budget is used for a variety of planning purposes including economic analyses, internal reporting, regulatory cost recovery, and generation performance filings. For this analysis avoided cost projections were evaluated over a 20 year period.

b. The energy budget provides a unique avoided cost for each hour of a calendar year which is used to determine the annual wind weighted avoided cost. The annual wind weighted avoided cost is simply the annual average avoided cost when there is scheduled wind energy.

The wind weighted avoided cost is calculated by following the four steps below:
1. Multiply each hour's scheduled wind energy (MWh) by that same hour's avoided cost ($/MWh) to get the total avoided cost ($) for that hour
2. Sum the hourly total avoided cost for the year to calculate total annual avoided cost
3. Sum the scheduled wind energy for each hour of the year to calculate total annual wind production
4. Divide the total annual avoided cost by the total annual scheduled wind energy to get the annual wind weighted avoided cost ($/MWh)

The wind weighted avoided cost is then compared to the Energy Purchase Agreement price to determine if the project is economic in that year. This calculation is performed for all 20 years.

The hourly avoided cost is the only input that changes from the 2014 to 2015 analysis.

43. Please explain in greater detail whether and how the proposed energy purchase agreement is cost-effective under Gulf's 2014 energy budget and throughout the 20 year contract life. Please provide supporting workpapers (in MS Excel format with formula intact).

RESPONSE:

The contract pricing is below wind weighted avoided cost in all years. Therefore, the energy purchase agreement is cost-effective in each year over the 20 year contract life.

Confidential electronic attachments are located on the enclosed DVD labeled Docket No. 150049-EI Staff's First Data Request (Nos. 1-55) Disk 1. Please see Excel file named "DR1-43 Cost Effectiveness 2014 budget_CONF.xlsx."

44. Please explain in greater detail how the proposed energy purchase agreement is cost effective, under Gulf's 2015 energy budget, throughout the 20 year contract life. Please provide supporting workpapers (in MS Excel format with formulae intact).

RESPONSE:

The contract pricing is below wind weighted avoided cost in all years. Therefore, the energy purchase agreement is cost-effective in each year over the 20 year contract life.

Confidential electronic attachments are located on the enclosed DVD labeled Docket No. 150049-EI Staff's First Data Request (Nos. 1-55) Disk 1. Please see Excel file named "DR1-44 Cost Effectiveness 2015 budget_CONF.xlsx."

45. How will Gulf report and record the purchased power from this project for fuel cost recovery? Please explain how this will be reported by line item on the A and E schedules including A1, A2, A3, A7, A8, A9 and corresponding E schedules. Please explain each change or new entry.

RESPONSE:

Energy purchased under this Agreement will be reported on Schedule A-9 in line 8 "Purchased Power Agreement Energy" and on Schedule E-9 in "Other Purchases".

46. Will any of the costs of this purchased power and associated costs from this project be recovered through any cost recovery clauses besides the fuel clause? Please explain.

RESPONSE:

At this time, Gulf does not anticipate that any such costs will be recovered through a mechanism other than the fuel clause. The fuel clause has been the traditional mode of recovery for expenditures under energy-only purchase power agreements.

47. Will any of the costs of this purchased power and associated costs from this project be recovered through base rates? Please explain.

RESPONSE:

Please see Gulf's response to Item No 46.

48. How will Gulf project the cost to be recovered in the fuel clause? Please explain the response, and state all assumptions and inputs.

RESPONSE:

The Energy Purchase Agreement contains fixed annual pricing (Appendix B, Table B-1) and a fixed energy delivery commitment (Appendix A) for every year of the agreement. For any given year, Gulf would multiply the pricing for that year by the delivery commitment to reach an annual cost projection.

49. Please explain how Gulf assessed the financial creditworthiness of the counterparty. What were the results of this assessment?

RESPONSE:

Morgan Stanley Capital Group is not publicly traded or rated by major credit rating agencies. Therefore, it is difficult to assess the financial credit worthiness of the entity. Instead, Gulf insisted on including robust performance security requirements in the Energy Purchase Agreement. These performance security requirements are intended to make Gulf and its customers whole in the event of non-performance and/or breach by Morgan Stanley Capital Group. In order to secure its performance security obligations, Morgan Stanley Capital Group has provided Gulf Power with a guaranty from its parent company, Morgan Stanley. Morgan Stanley is a publicly traded and rated company. The parent company is presently rated "Baa2" and "A-" by Moody's and S&P, respectively.

50. Article 9.2 of the Agreement states, in part, that "each Party shall pay all amounts due from such Party pursuant to the other provisions of this Agreement." Identify with specificity all "other provisions of this Agreement" that Article 9.2 is referencing.

RESPONSE:

Please see: § 2.3 (termination payment by Buyer in the event of a Buyer Fault Determination); § 3.3.3 (Daily Liquidated Damages from Seller for failure of Seller to achieve Full Commercial Operation by the Required Commercial Operation Date);§ 3.3.4 (liquidated damages from Seller if Total Hourly Energy is reduced) § 3.3.5 (termination payment from Seller if Partial Commercial Operation is not achieved by Final Required Commercial Operation Date and no Equivalent Facility is accepted); § 5.1-5.2 (performance security due from Seller or Buyer in the event of a Security Posting Condition);§ 6.5 (cover costs from Seller in the event Seller fails to deliver energy); § 6.6 (cover costs from Buyer in the event Buyer fails to receive energy); § 8.6.8 (costs due from Seller associated with loading RECs into tracking system); § 10.2.3 (reimbursements due from one party to another as a result of billing errors); § 12.2 (damages owed by either party upon an Event of Default); § 14 (indemnity owed by either party); and § 17.2 (taxes).

51. Please explain how the "Energy Price" as shown on Appendix B, Page 1 of 2, was developed or determined. If the "Energy Price" was a product of negotiation, what were the considerations in negotiating the price?

RESPONSE:

The Energy Price was the product of negotiation. Gulf's primary consideration was obtaining pricing that provided the greatest possible savings to its customers relative to Gulf's projected avoided costs. Morgan Stanley, in turn, required pricing that would cover its risk and cost of providing energy and RECs and provide a return on investment.

52. Did Gulf include CO2 costs in its analysis of the proposed agreement?
    a. If no, please explain why not.
    b. If yes, please explain the basis for the CO2 costs assumed.
    c. If yes, please complete the table below summarizing the Net Present Value savings of the proposed agreement assuming no CO2 costs.

| **Net Present Value Savings ($millions, 2015 $) w/o CO2 Costs** | |
|---|---|
| **2014 Budget** | **2015 Budget** |
| | |

RESPONSE:

a. No. At the present time there are no rules or regulations governing Gulf's CO2 emissions. It is certainly possible that the Energy Purchase Agreement could provide future value in terms of CO2 compliance. However, as mentioned in paragraph 16 of Gulf's petition, Gulf's economic evaluations are conservative and omitting CO2 values from those evaluations is consistent with Gulf's conservative approach.

b. N/A

c. N/A

53. At page 4 of its petition, Gulf states that Morgan Stanley's energy delivery commitment is shaped to match the projected hourly and monthly output of a 178 megawatt portion of a wind electric generation facility. Please provide documentation to support this assertion.

RESPONSE:

The table on page 2 of this response depicts the current engineering estimates for the hourly output (in MWh) of the entire Kingfisher Wind facility which is expected to consist of 149 turbines having a combined nameplate capacity of 298 MW. Eighty-nine of the Kingfisher units (178 MW) have been designated for Gulf Power under the Energy Purchase Agreement. Morgan Stanley's delivery commitment to Gulf under the Energy Purchase Agreement is slightly lower than the expected output of the 89 Designated Units. This provides Morgan Stanley with a degree of insulation against forecasting error in the wind profile over the course of the Agreement.

Staff's First Data Request
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GULF POWER COMPANY
March 16, 2015
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| Hour | Month | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| 0 | 151.81 | 139.23 | 189.56 | 174.10 | 161.40 | 177.21 | 159.91 | 162.78 | 136.45 | 158.81 | 162.63 | 146.30 |
| 1 | 157.63 | 135.15 | 193.84 | 176.44 | 149.17 | 168.18 | 160.90 | 146.51 | 129.66 | 158.87 | 165.82 | 150.58 |
| 2 | 165.04 | 129.03 | 186.78 | 170.68 | 157.16 | 165.49 | 156.03 | 141.26 | 133.11 | 158.61 | 171.95 | 147.02 |
| 3 | 168.15 | 138.32 | 193.26 | 166.96 | 142.47 | 139.76 | 136.37 | 125.44 | 129.88 | 170.12 | 170.01 | 147.68 |
| 4 | 166.57 | 120.08 | 192.23 | 177.98 | 145.62 | 137.11 | 129.79 | 111.84 | 127.04 | 168.23 | 162.11 | 135.91 |
| 5 | 164.00 | 119.37 | 181.37 | 176.60 | 139.02 | 136.00 | 131.53 | 99.47 | 116.79 | 170.38 | 168.86 | 129.14 |
| 6 | 165.35 | 126.08 | 163.61 | 148.59 | 142.82 | 135.36 | 118.19 | 92.70 | 113.47 | 168.67 | 168.48 | 123.53 |
| 7 | 145.62 | 107.06 | 147.05 | 140.38 | 120.72 | 127.67 | 94.09 | 78.02 | 92.41 | 153.13 | 157.83 | 130.06 |
| 8 | 130.52 | 107.06 | 134.10 | 138.36 | 115.21 | 129.00 | 89.32 | 71.41 | 88.76 | 150.42 | 138.67 | 122.38 |
| 9 | 118.36 | 97.02 | 134.16 | 138.38 | 113.43 | 141.14 | 81.13 | 74.77 | 90.84 | 151.01 | 133.95 | 111.05 |
| 10 | 112.96 | 108.64 | 126.05 | 131.60 | 111.49 | 130.06 | 87.80 | 78.70 | 105.08 | 148.20 | 148.17 | 113.37 |
| 11 | 112.78 | 116.92 | 123.64 | 133.21 | 116.19 | 136.64 | 83.85 | 65.41 | 102.73 | 148.06 | 147.62 | 116.81 |
| 12 | 118.29 | 119.95 | 122.36 | 138.27 | 131.04 | 138.44 | 75.88 | 57.76 | 96.37 | 142.68 | 149.13 | 114.89 |
| 13 | 119.08 | 128.16 | 127.91 | 132.10 | 126.29 | 133.43 | 88.20 | 57.84 | 93.95 | 138.91 | 146.07 | 113.06 |
| 14 | 121.71 | 139.34 | 127.64 | 131.60 | 126.36 | 137.24 | 101.86 | 64.04 | 91.53 | 134.48 | 144.15 | 111.69 |
| 15 | 117.68 | 142.24 | 129.60 | 132.26 | 130.43 | 140.53 | 119.43 | 73.09 | 89.79 | 132.06 | 149.13 | 103.40 |
| 16 | 108.31 | 135.22 | 134.45 | 130.84 | 137.07 | 158.17 | 126.49 | 88.59 | 84.47 | 125.71 | 128.92 | 92.78 |
| 17 | 103.76 | 147.17 | 140.34 | 135.22 | 139.32 | 152.82 | 128.06 | 95.13 | 90.32 | 110.10 | 126.51 | 89.06 |
| 18 | 118.59 | 151.51 | 145.26 | 151.95 | 123.11 | 150.34 | 132.33 | 104.70 | 88.64 | 133.21 | 140.83 | 90.85 |
| 19 | 124.46 | 147.92 | 156.28 | 168.30 | 132.79 | 161.75 | 132.00 | 145.61 | 117.55 | 151.84 | 160.06 | 114.15 |
| 20 | 129.11 | 157.29 | 172.12 | 179.66 | 144.86 | 181.39 | 154.00 | 171.80 | 146.67 | 158.40 | 177.87 | 127.12 |
| 21 | 148.80 | 156.70 | 170.26 | 176.75 | 159.53 | 186.27 | 174.25 | 177.06 | 154.65 | 165.62 | 187.29 | 139.90 |
| 22 | 155.96 | 149.08 | 177.88 | 166.90 | 166.80 | 189.93 | 191.36 | 180.96 | 150.72 | 167.44 | 189.37 | 142.81 |
| 23 | 150.37 | 129.15 | 187.54 | 177.43 | 166.07 | 181.49 | 178.71 | 175.02 | 153.98 | 163.73 | 177.01 | 143.62 |

54. At page 4 of its petition, Gulf states that the Agreement obligates Morgan Stanley to deliver to Gulf a fixed number of megawatt hours ("MWh") in each hour of each month of each year throughout the term of the Agreement. Does Gulf believe that the obligation of energy delivery is characteristic of a contract that would additionally contain capacity payments?
    a. If yes, please quantify what the avoided capacity payments would be.
    b. If no, please explain why not?

RESPONSE:

a. Given the fixed energy delivery obligations under the Energy Purchase Agreement, it is possible that the Agreement will provide a capacity benefit for Gulf and its customers. However, Gulf currently does not have a need for capacity and is not paying for capacity under the Agreement. Therefore, Gulf did not include a capacity value in its economic evaluations and has not calculated any avoided capacity payments or benefits associated with the Agreement. As mentioned in paragraph 16 of Gulf's petition, Gulf's economic evaluations are conservative and Gulf believes excluding potential capacity benefits from the economic evaluations is consistent with this conservative approach.

b. N/A

55. At page 4 of its petition, Gulf states it is only required to pay for energy which is received on the Southern Companies Transmission System. Please explain how Gulf customers will benefit from energy received on Southern Company Transmission Systems.

RESPONSE:

Energy delivered under the contract to the Southern Transmission System will be assigned/delivered to Gulf Power to serve its firm obligations. The benefits to Gulf Power from receiving this energy has been described in the original filing with the Commission.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: **Petition for approval of energy purchase agreement between Gulf Power Company and Morgan Stanley Capital Group, Incorporated**

Docket No.: **150049-EI**

**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true copy of the foregoing was furnished by overnight mail this 13th day of March, 2015 to the following:

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