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August 1, 2008

Ms. Ann Cole, Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee FL 32399-0850 RECEIVED-FPSC 08 AUG-4 AM 10: 56 CUMMISSION

Dear Ms. Cole:

Enclosed for official filing in Docket No. 080001-El are an original and fifteen copies of the following:

- 1. Prepared direct testimony of H. R. Ball
- 2. Prepared direct testimony and exhibit of Richard W. Dodd.

Sincerely,

Susan D. Retendent COM 51

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Benclosures

CC W/encl.: Beggs & Lane
Jeffrey A. Stone, Esq.

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DOCUMEN NUMBER-DATE

06793 AUG-48

FPSC-COMMISSION CLERK

#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor Docket No.: 080001-EI

### **CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true copy of the foregoing was furnished by U. S. mail this  $15^{1/2}$  day of August, 2008, on the following:

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## BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

Docket No. 080001-EI

# Prepared Direct Testimony of H. R. Ball

Date of Filing: August 4, 2008



06793 AUG-48

FPSC-COMMISSION CLERK

| 1 | 1  |    | GULF POWER COMPANY   |
|---|----|----|--|
|   | 2  |    | Before the Florida Public Service Commission                             |
|   | 3  |    | Prepared Direct Testimony of   |
|   | 4  |    | H. R. Ball   |
|   | 5  |    | Docket No. 080001-EI   |
|   | 6  |    | Date of Filing: August 4, 2008   |
|   | 7  | Q. | Please state your name and business address.                             |
|   | 8  | A. | My name is H. R. Ball. My business address is One Energy Place,          |
|   | 9  |    | Pensacola, Florida 32520-0335. I am the Fuel Manager for Gulf Power      |
|   | 10 |    | Company.   |
|   | 11 |    |  |
|   | 12 | Q. | Please briefly describe your educational background and business         |
|   | 13 |    | experience.  |
|   | 14 | A. | I graduated from the University of Southern Mississippi in Hattiesburg,  |
|   | 15 |    | Mississippi in 1978 with a Bachelor of Science Degree in Chemistry and   |
|   | 16 |    | graduated from the University of Southern Mississippi in Long Beach,     |
|   | 17 |    | Mississippi in 1988 with a Masters of Business Administration. My        |
|   | 18 |    | employment with the Southern Company began in 1978 at Mississippi        |
|   | 19 |    | Power's (MPC) Plant Daniel as a Plant Chemist. In 1982, I transferred to |
|   | 20 |    | MPC's Fuel Department as a Fuel Business Analyst. I was promoted in      |
|   | 21 |    | 1987 to Supervisor of Chemistry and Regulatory Compliance at Plant       |
|   | 22 |    | Daniel. I was promoted to Supervisor of Coal Logistics with Southern     |
|   | 23 |    | Company Fuel Services in Birmingham, Alabama in 1998. My                 |
|   | 24 |    | responsibilities included administering coal supply and transportation   |
|   | 25 |    | agreements and managing the coal inventory program for the Southern      |

Electric System. I transferred to my current position as Fuel Manager for Gulf Power Company in 2003.

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Q. 4 What are your duties as Fuel Manager for Gulf Power Company? 5 A. I manage the Company's fuel procurement, inventory, transportation, 6 budgeting, contract administration, and quality assurance programs to 7 ensure that the generating plants operated by Gulf Power are supplied with an adequate quantity of fuel in a timely manner and at the lowest 8 9 practical cost. I also have responsibility for the administration of Gulf's 10 Intercompany Interchange Contract (IIC).

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Q. What is the purpose of your testimony in this docket?

A. The purpose of my testimony is to compare Gulf Power Company's 13 14 original projected fuel and net power transaction expense and purchased power capacity costs with current estimated/actual costs for the period 15 January, 2008 through December, 2008 and to summarize any 16 noteworthy developments at Gulf in these areas. The current 17 estimated/actual costs consist of actual expenses for the period January. 18 2008 through June, 2008 and newly projected fuel and net power 19 transaction costs for July, 2008 through December, 2008. Projected 20 capacity costs for July, 2008 through December, 2008 remain as originally 21 filed. It is also my intent to be available to answer questions that may 22 23 arise among the parties to this docket concerning Gulf Power Company's 24 fuel and net power transaction expenses and purchased power capacity 25 costs.

Q. 2 During the period January, 2008 through December, 2008 how will Gulf Power Company's recoverable total fuel and net power transactions cost 3 compare with the original cost projection? 4

Gulf's currently projected recoverable total fuel and net power transactions Α. 5 cost for the period is \$507,032,444 which is \$73,312,851 or 16.90% above 6 the original projected amount of \$433,719,593. The resulting average fuel 7 8 cost is projected to be 3.9630 cents per KWH or 17.78% above the original 9 projection of 3.3648 cents per KWH. The higher total fuel expense and 10 average per unit fuel cost is attributed to a combination of higher than projected fuel prices for the period which are reflected in both the fuel cost 11 of generated power and the fuel cost of purchased power and lower fuel 12 revenue from power sales for the period due to a reduced quantity of sales. 13 This current projection of fuel and net purchased power transaction cost is 14 captured in the exhibit to Witness Dodd's testimony, Schedule E-1 B-1, Line 15 21.

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Q. During the period January, 2008 through December, 2008 how will Gulf Power Company's recoverable fuel cost of generated power compare with the original projection of fuel cost?

Α. Gulf's currently projected recoverable fuel cost of generated power for the period is \$657,952,970 which is \$28,402,377 or 4.51% above the original projected amount of \$629,550,593. Total generation is expected to be 16,405,522 MWH compared to the original projected generation of 17,661,300 MWH or 7.11% below projections. The resulting average fuel

cost is expected to be 4.0106 cents per KWH or 12.51% above the original projected amount of 3.5646 cents per KWH. This current projection of fuel cost of system net generation is captured in the exhibit to Witness Dodd's testimony, Schedule E-1 B-1, Line 6.

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Q. What are the reasons for the difference between Gulf's original projection of the fuel cost of generated power and the current projection?

The higher total fuel expense is due to higher than projected average per unit fuel costs. Delivered coal and natural gas prices per MMBTU are projected to remain above original projections for the remainder of the period. The quantity of contract coal shipments for the period is expected to be below original projections due to force majeure events that have occurred under Gulf's contract coal supply agreements. Geological problems and safety concerns at a contract coal source from a mine in southern Illinois make up the majority of these deferred shipments. These lower priced contract coal shipments have been replaced with spot purchases at higher market prices. These unanticipated spot coal purchases have increased the average purchase price and fuel expense for coal during the period. Market prices for natural gas and oil for the period are also expected to be higher than original projections. Worldwide supply and demand imbalances in the oil and gas markets have driven the price for these fossil fuel sources higher. The increased fuel cost has been reduced by projected gains from financial gas hedging settlements of \$13,739,856 for the period.

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- How did the total projected fuel cost of system net generation compare to the actual cost for the first six months of 2008?
- Α. 3 The total fuel cost of system net generation was \$314,405,586 which is \$11,495,812 or 3.80% higher than the projection of \$302,909,774. On a 4 fuel cost per KWH basis, the actual cost was 4.01 cents per KWH, which is 5 19.35% higher than the projected cost of 3.36 cents per KWH. This higher 6 7 cost of system generation on a cents per KWH basis is due to a combination of fuel cost in \$/MMBTU being 15.56% higher than projected 8 and heat rate (BTU/KWH) of the generating units operating being 3.49% 9 higher than projected. This information is found on Schedule A-3 of the 10 11 June, 2008 Monthly Fuel Filing.

13 Q. How did the total projected cost of coal burned compare to the actual cost 14 for the first six months of 2008?

A. The total cost of coal burned (including boiler lighter) was \$215,706,933 15 which is \$11,499,034 or 5.63% higher than our projection of \$204,207,899. 16 On a fuel cost per KWH basis, the actual cost was 3.39 cents per KWH 17 which is 23.72% higher than the projected cost of 2.74 cents per KWH. 18 19 The higher than projected cost of coal burned and cost of coal fired generation is due to actual coal prices (including boiler lighter) being 20 17.05% higher than projected on a \$/MMBTU basis and the weighted 21 average heat rate (BTU/KWH) of the coal fired generating units operating 22 being 4.31% higher than projected. This information is found on Schedule 23 A-3 of the June, 2008 Monthly Fuel Filing. Market prices for coal are higher 24 due to increased worldwide demand for coal and other fossil fuels. While 25

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Gulf has fixed price coal contracts in place for the period to limit price volatility, a significant amount of these contract coal shipments have been deferred to later periods due to force majeure events. These events have required Gulf to purchase more spot coal at higher market prices in the current period. Another factor contributing to the higher cost of coal fired generation (cents/KWH) is that weighted average coal unit heat rates are higher than projected for the period. Generating unit heat rates have been impacted by the percentage of time these units operated at lower than projected loads. When generating units operate at lower loads, unit efficiency is reduced.

- Q. How did the total projected cost of natural gas burned compare to the actual cost during the first six months of 2008?
- A. The total cost of natural gas burned for generation was \$98,643,685 which is \$58,190 or 0.06% lower than Gulf's projection of \$98,701,875. The total cost of natural gas burned for generation is lower than projected due to net generation from gas fired units being 10.24% lower than projected. On a cost per unit basis, the actual cost of gas fired generation was 8.25 cents per KWH which is 11.34% higher than the projected cost of 7.41 cents per KWH. The cost per KWH for gas fired generation is higher than projected due to higher natural gas prices. Actual natural gas prices were \$11.30 per MMBTU or 9.71% higher than the project cost of \$10.30 per MMBTU. This information is found on Schedule A-3 of the June, 2008 Monthly Fuel Filing. Market prices for natural gas are higher due to increased demand for natural gas and other fossil fuels.

|   | 1  |    |  |
|---|----|----|--|
| • | 2  | Q. | For the period in question, what volume of natural gas was actually hedged |
|   | 3  |    | using a fixed price contract or instrument?                                |
| - | 4  | A. | Gulf Power hedged 2,500,000 MMBTU of natural gas for the period            |
| _ | 5  |    | January, 2008 through June, 2008 using fixed price financial swaps.        |
| - | 6  |    |  |
| • | 7  | Q. | What types of hedging instruments were used by Gulf Power Company          |
|   | 8  |    | and what type and volume of fuel was hedged by each type of                |
| • | 9  |    | instrument?  |
|   | 10 | A. | Natural gas was hedged using financial swaps that fixed the price of gas   |
| • | 11 |    | to a certain price. These swaps settled against either a NYMEX Last Day    |
| • | 12 |    | price or Gas Daily price. The entire amount (2,500,000 MMBTU) of gas       |
|   | 13 |    | hedged was hedged using these financial instruments.                       |
| • | 14 |    |  |
|   | 15 | Q. | What was the actual total cost (e.g., fees, commission, option premiums,   |
| • | 16 |    | futures gains and losses, swap settlements) associated with each type of   |
|   | 17 |    | hedging instrument?  |
|   | 18 | A. | No fees, commission, or option premiums were paid. Gulf's gas hedging      |
| • | 19 |    | program has resulted in a net financial gain of \$4,646,856 for the period |
|   | 20 |    | January through June, 2008. This information is found on Schedule A-1,     |
| • | 21 |    | Period to Date, line 2 of the June, 2008 Monthly Fuel Filing.              |
| • | 22 |    |  |
|   | 23 | Q. | During the period January, 2008 through December, 2008 how will Gulf       |
| • | 24 |    | Power Company's recoverable fuel cost of power sold compare with the       |
|   | 25 |    | original cost projection?  |

| 1 | A. | Gulf's currently projected recoverable fuel cost and gains on power sales for |
|---|----|---|
| 2 |    | the period is \$193,883,418 or 9.17% below the original projected amount of   |
| 3 |    | \$213,447,000. Total megawatt hours of power sales is expected to be          |
| 4 |    | 4,412,082,054 KWH compared to the original projection of 5,188,854,000        |
| 5 |    | KWH or 14.97% below projections. The resulting average fuel cost and          |
| 6 |    | gains on power sales is expected to be 4.3944 cents per KWH or 6.83%          |
| 7 |    | above the original projected amount of 4.1136 cents per KWH. This current     |
| 8 |    | projection of fuel cost of power sold is captured in the exhibit to Witness   |
| 9 |    | Dodd's testimony, Schedule E-1 B-1, Line 19.                                  |
|   |    |   |

- 11 Q. What are the reasons for the difference between Gulf's original projection of 12 the fuel cost and gains on power sales and the current projection?
- 13 A. The lower total credit to fuel expense from power sales is attributed to a
  14 lower quantity of power sales than originally projected. Higher market
  15 prices for coal and natural gas during the period have increased the fuel
  16 reimbursement rate (cents/KWH) for power sales, however, the net impact
  17 of higher fuel prices is a reduction of kilowatt hours sold as buyers find
  18 more economical sources of energy. The higher fuel reimbursement rate
  19 offsets some of the revenue lost from reduced sales.

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- Q. How did the total projected fuel cost of power sold compare to the actual cost for the first six months of 2008?
- A. The total fuel cost of power sold was \$82,916,418 which is \$35,281,582 or 29.85% less than our projection of \$118,198,000. On a fuel cost per KWH basis, the actual cost was 3.5505 cents per KWH which is 8.72% below the

|          | 1  |    | projected cost of 3.0036 certis per NVVH. This information is found on        |
|----------|----|----|---|
| -        | 2  |    | Schedule A-1, Period to Date, line 19 of the June, 2008 Monthly Fuel Filing.  |
|          | 3  |    |   |
| -        | 4  | Q. | During the period January, 2008 through December, 2008 how will Gulf          |
|          | 5  |    | Power Company's recoverable fuel cost of purchased power compare with         |
| •        | 6  |    | the original cost projection?   |
| -        | 7  | A. | Gulf's currently projected recoverable fuel cost of purchased power for the   |
|          | 8  |    | period is \$42,962,892 or 143.89% above the original projected amount of      |
| -        | 9  |    | \$17,616,000. The total amount of purchased power is expected to be           |
|          | 10 |    | 800,830,118 KWH compared to the original projection of 417,436,000 KWH        |
| -        | 11 |    | or 91.85% above projections. The resulting average fuel cost of purchased     |
| _        | 12 |    | power is expected to be 5.3648 cents per KWH or 27.13% above the              |
|          | 13 |    | original projected amount of 4.2200 cents per KWH. This current projection    |
| -        | 14 |    | of fuel cost of purchased power is captured in the exhibit to Witness Dodd's  |
|          | 15 |    | testimony, Schedule E-1 B-1, Line 13.   |
| -        | 16 |    |   |
|          | 17 | Q. | What are the reasons for the difference between Gulf's original projection of |
|          | 18 |    | the fuel cost of purchased power and the current projection?                  |
| -        | 19 | A. | The higher total fuel cost of purchased power is attributed to a              |
|          | 20 |    | combination of Gulf purchasing a greater amount of energy to supplement       |
| -        | 21 |    | its own generation to meet load demands at a higher price per KWH than        |
| <b>-</b> | 22 |    | originally projected. Replacement fuel costs for purchased power are          |
|          | 23 |    | higher as a result of the estimated/actual natural gas market prices being    |

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greater than originally projected for the period. Most purchases of energy

Occur at peak periods when the marginal fuel utilized to generate this

| 1  |    | energy is natural gas.  |
|----|----|---|
| 2  |    |   |
| 3  | Q. | How did the total projected fuel cost of purchased power compare to the     |
| 4  |    | actual cost for the first six months of 2008?                               |
| 5  | Α. | The total fuel cost of purchased power was \$19,966,892 which is            |
| 6  |    | \$12,910,892 or 182.98% higher than our projection of \$7,056,000. The      |
| 7  |    | higher than anticipated purchased power expense is due to the actual        |
| 8  |    | quantity of purchases being 202.91% higher than projected. On a fuel cost   |
| 9  |    | per KWH basis, the actual cost was 3.7097 cents per KWH which is 6.58%      |
| 10 |    | lower than the projected cost of 3.9710 cents per KWH. This information     |
| 11 |    | is found on Schedule A-1, Period to Date, line 12 of the June, 2008 Monthly |
| 12 |    | Fuel Filing.  |
| 13 |    |   |
| 14 | Q. | Were there any other significant developments in Gulf's fuel procurement    |
| 15 |    | program during the period?  |
| 16 | Α. | No.   |
| 17 |    |   |
| 18 | Q. | Were Gulf Power's actions through June 30, 2008 to mitigate fuel and        |
| 19 |    | purchased power price volatility through implementation of its financial    |
| 20 |    | and/or physical hedging programs prudent?                                   |
| 21 | Α. | Yes, Gulf's physical and financial fuel hedging programs have resulted in   |
| 22 |    | more stable fuel prices. Over the long term, Gulf anticipates less volatile |

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had not been utilized.

Witness: H. R. Ball

future fuel costs than would have otherwise occurred if these programs

Q. Should Gulf's fuel and net power transactions cost for the period be accepted as reasonable and prudent?

Α. Yes, Gulf's coal supply program is based on a mixture of long-term contracts and spot purchases at market prices. Coal suppliers are selected using procedures that assure reliable coal supply, consistent quality, and competitive delivered pricing. The terms and conditions of coal supply agreements have been administered appropriately. Natural gas is purchased using agreements that tie price to published market index schedules and is transported using a combination of firm and interruptible gas transportation agreements. Natural gas storage is utilized to assure that supply is available during times when gas supply is curtailed or unavailable. Gulf's fuel oil purchases were made from qualified vendors using an open bid process to assure competitive pricing and reliable supply. Gulf makes sales of power when available and gets reimbursed at the marginal cost of replacement fuel. This fuel reimbursement is credited back to the fuel cost recovery account so that lower cost fuel purchases made on behalf of Gulf's customers remain to the benefit of those customers. Gulf purchases power when necessary to meet customer load requirements and when the cost of purchased power is expected to be less than the cost of system generation. The fuel cost of purchased power is the lowest cost available in the market at the time of purchase to meet Gulf's load requirements.

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Q. During the period January 2008 through December 2008, what is Gulf's projection of actual / estimated net purchased power capacity transactions

| 1  |    | and how does it compare with the company's original projection of net      |
|----|----|--|
| 2  |    | capacity transactions?   |
| 3  | A. | As shown on Line 3 of Schedule CCE-1b in the exhibit to Witness Dodd's     |
| 4  |    | testimony, Gulf's total current net capacity payment projection for the    |
| 5  |    | January 2008 through December 2008 recovery period is \$30,086,908.        |
| 6  |    | Gulf's original projection for the period was \$30,043,645 and is shown on |
| 7  |    | Line 3 of Schedule CCE-1 filed in September, 2007. The difference          |
| 8  |    | between these projections is \$43,263 or 0.14% higher than the original    |
| 9  |    | projection of net capacity payments.                                       |
| 10 |    |  |
| 11 | Q. | Mr. Ball, does this complete your testimony?                               |
| 12 | A. | Yes.   |
| 13 |    |  |
| 14 |    |  |
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### **AFFIDAVIT**

| STATE OF FLORIDA   | ) | Docket No. 080001-E! |
|--------------------|---|----------------------|
|                    | ) |                      |
| COUNTY OF ESCAMBIA | ) |                      |

Before me the undersigned authority, personally appeared H. R. Ball, who being first duly sworn, deposes, and says that he is the Fuel Manager at Gulf Power Company, a Florida corporation, and that the foregoing is true and correct to the best of his knowledge, information, and belief. He is personally known to me.

H. R. Ball Fuel Manager

Sworn to and subscribed before me this 1st day of August, 2008

Notary Public, State of Florida at Large

Commission Number: DD 7/9/29

Commission Expires: 25 fanuary 2012