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July 21, 2008

Ms. Karen Webb  
Florida Public Service Commission  
2540 Shumard Oaks Boulevard  
Tallahassee FL 32399-0850

Re: Docket No.: UNDOCKETED

Dear Ms. Webb:

In response to Mark Futrell's letter dated July 14, 2008, attached are Gulf Power Company's responses to the RPS Data Collection Forms. We hope this information is helpful in your analysis of the cost and technical potential of renewable energy generation methods in Florida.

Please call me if you have any questions or need additional information.

Sincerely,

A handwritten signature in cursive script that reads "Susan D. Ritenour".

bh

Attachments

cc w/attach.: Mark Futrell

RPS Data Form 1: Renewable Generating Technologies

Company Name: Gulf Power Company

Applicable Utility Service Area: \_\_\_\_\_

Renewable Technologies	
Solar	Photovoltaic (PV)*
	Photoelectrochemical (H2)
	Thermal Electric Plant
Wind	Inland*
	Coastal*
	Offshore*
Hydroelectric	Dam (Incremental)*
	Diversion (Run of the River)
	Pumped Storage
Geothermal	Dry Steam
	Flash
	Binary
Ocean Energy	Wave Action
	Tidal Change
	Thermal Gradients (OTEC)
	Ocean Currents
Biomass -Direct Combustion	Plant Matter*
	Animal Waste
	Vegetable Oil
Biomass - Conversion to Liquid	Biodiesel/Renewable Diesel
	Ethanol - Cellulosic
	Ethanol - Non-Cellulosic
	Pyrolysis
Biomass - Conversion to Gas	Anaerobic Digester
	Gasification
	Renewable Natural Gas
Landfill Gas	Methane Combustion*
Municipal Solid Waste	Biogenic
	Non-Biogenic
Hydrogen, renewable	Fuel Cells
	Combustion
Waste Heat	Sulfuric Acid Manufacturing
Other	Other

Note: \*Gulf Power Company is providing data for the highlighted renewable technology options.

RPS Data Form 3: Commercial Availability Data

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Company Name: Gulf Power Company

Energy Resource: Solar Photovoltaic (PV)

Typical Unit Annual Capacity Rating (MW)	5
Earliest Commercial In-Service Date (Year)	2009
Typical Construction & Permitting Time (Years)	1 - 2
Useful Life of Unit (Years)	20
Fuel Type	None

Energy Resource: Wind Inland

Typical Unit Annual Capacity Rating (MW)	1.5 - 5 MW per turbine
Earliest Commercial In-Service Date (Year)	2010 - 2011
Typical Construction & Permitting Time (Years)	2 - 3 years
Useful Life of Unit (Years)	20
Fuel Type	n/a

Energy Resource: Wind Coastal

Typical Unit Annual Capacity Rating (MW)	1.5 - 5 MW per turbine
Earliest Commercial In-Service Date (Year)	2010 - 2011
Typical Construction & Permitting Time (Years)	2 - 3 years
Useful Life of Unit (Years)	20
Fuel Type	n/a

RPS Data Form 3: Commercial Availability Data

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Company Name: Gulf Power Company

**Energy Resource:** Wind Offshore

Typical Unit Annual Capacity Rating (MW)	3 - 5 MW per turbine
Earliest Commercial In-Service Date (Year)	2012-2013
Typical Construction & Permitting Time (Years)	4 - 5
Useful Life of Unit (Years)	20
Fuel Type	n/a

**Energy Resource:** Hydroelectric - Dam (Incremental)

Typical Unit Annual Capacity Rating (MW)	site specific
Earliest Commercial In-Service Date (Year)	2009-2010
Typical Construction & Permitting Time (Years)	1 - 2
Useful Life of Unit (Years)	20
Fuel Type	n/a

**Energy Resource:** Biomass -Direct Combustion-Plant Matter

Typical Unit Annual Capacity Rating (MW)	75 (Stoker-Fired Boiler)
Earliest Commercial In-Service Date (Year)	2012
Typical Construction & Permitting Time (Years)	4
Useful Life of Unit (Years)	40
Fuel Type	Biomass

RPS Data Form 3: Commercial Availability Data

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Company Name: Gulf Power Company

Energy Resource: Landfill Gas - Methane Combustion

Typical Unit Annual Capacity Rating (MW)	3
Earliest Commercial In-Service Date (Year)	2009
Typical Construction & Permitting Time (Years)	1
Useful Life of Unit (Years)	20
Fuel Type	landfill methane

RPS Data Form 4: Performance Characteristics Data

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Company Name: Gulf Power Company

Energy Resource: Solar Photovoltaic (PV)

Contribution to Summer Peak Demand (MW)	no data
Contribution to Winter Peak Demand (MW)	no data
Average Annual Heat Rate (Btu/kWh)	n/a
Equivalent Availability Factor (%)	93%
Average Annual Generation (MWH)	-6,570
Resulting Capacity Factor (%)	~15%

Energy Resource: Wind Inland

Contribution to Summer Peak Demand (MW)	0
Contribution to Winter Peak Demand (MW)	0
Average Annual Heat Rate (Btu/kWh)	n/a
Equivalent Availability Factor (%)	97%
Average Annual Generation (MWH)	site specific
Resulting Capacity Factor (%)	~15%

Energy Resource: Wind Coastal

Contribution to Summer Peak Demand (MW)	0
Contribution to Winter Peak Demand (MW)	0
Average Annual Heat Rate (Btu/kWh)	n/a
Equivalent Availability Factor (%)	97%
Average Annual Generation (MWH)	site specific
Resulting Capacity Factor (%)	~20%

RPS Data Form 4: Performance Characteristics Data

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Company Name: Gulf Power Company

Energy Resource: Wind Offshore

Contribution to Summer Peak Demand (MW)	0
Contribution to Winter Peak Demand (MW)	0
Average Annual Heat Rate (Btu/kWh)	n/a
Equivalent Availability Factor (%)	97%
Average Annual Generation (MWH)	site specific
Resulting Capacity Factor (%)	-25%

Energy Resource: Hydroelectric - Dam (Incremental)

Contribution to Summer Peak Demand (MW)	site specific
Contribution to Winter Peak Demand (MW)	site specific
Average Annual Heat Rate (Btu/kWh)	n/a
Equivalent Availability Factor (%)	high
Average Annual Generation (MWH)	site specific
Resulting Capacity Factor (%)	site and rainfall dependent.

Energy Resource: Biomass -Direct Combustion-Plant Matter

Contribution to Summer Peak Demand (MW)	~75 MW
Contribution to Winter Peak Demand (MW)	~75 MW
Average Annual Heat Rate (Btu/kWh)	12,500
Equivalent Availability Factor (%)	90%
Average Annual Generation (MWH)	~558,450
Resulting Capacity Factor (%)	~85%

RPS Data Form 4: Performance Characteristics Data

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Company Name: Gulf Power Company

Energy Resource: Landfill Gas - Methane Combustion

Contribution to Summer Peak Demand (MW)	3 MW
Contribution to Winter Peak Demand (MW)	3 MW
Average Annual Heat Rate (Btu/kWh)	13,500
Equivalent Availability Factor (%)	~90%
Average Annual Generation (MWH)	~23,652
Resulting Capacity Factor (%)	90%



RPS Data Form 5: Environmental Characteristics Data

Company Name: Gulf Power Company

Energy Resource: Solar Photovoltaic (PV)

Emission Rates	Carbon Dioxide (CO <sub>2</sub> ) (lb/kWh)	0
	Sulfur Dioxide (SO <sub>2</sub> ) (lb/kWh)	0
	Nitrogen Oxide (NO <sub>x</sub> ) (lb/kWh)	0
	Mercury (Hg) (lb/kWh)	0
	Water Usage (gal/kWh)	0

Energy Resource: Wind Inland

Emission Rates	Carbon Dioxide (CO <sub>2</sub> ) (lb/kWh)	0
	Sulfur Dioxide (SO <sub>2</sub> ) (lb/kWh)	0
	Nitrogen Oxide (NO <sub>x</sub> ) (lb/kWh)	0
	Mercury (Hg) (lb/kWh)	0
	Water Usage (gal/kWh)	0

Energy Resource: Wind Coastal

Emission Rates	Carbon Dioxide (CO <sub>2</sub> ) (lb/kWh)	0
	Sulfur Dioxide (SO <sub>2</sub> ) (lb/kWh)	0
	Nitrogen Oxide (NO <sub>x</sub> ) (lb/kWh)	0
	Mercury (Hg) (lb/kWh)	0
	Water Usage (gal/kWh)	0

RPS Data Form 5: Environmental Characteristics Data

Company Name: Gulf Power Company

Energy Resource: Wind Offshore

Emission Rates	Carbon Dioxide (CO <sub>2</sub> ) (lb/kWh)	0
	Sulfur Dioxide (SO <sub>2</sub> ) (lb/kWh)	0
	Nitrogen Oxide (NO <sub>x</sub> ) (lb/kWh)	0
	Mercury (Hg) (lb/kWh)	0
	Water Usage (gal/kWh)	0

Energy Resource: Biomass -Direct Combustion-Plant Matter

Emission Rates	Carbon Dioxide (CO <sub>2</sub> ) (lb/kWh)	carbon neutral **
	Sulfur Dioxide (SO <sub>2</sub> ) (lb/kWh)	0.0013
	Nitrogen Oxide (NO <sub>x</sub> ) (lb/kWh)	0.0019
	Mercury (Hg) (lb/kWh)	negligible
	Water Usage (gal/kWh)	no data

\*\* CO2 emissions are ~ 2.75 lb/kwh. However, these emissions are absorbed by vegetation growth and released in biomass power generation in a closed-loop process.

Energy Resource: Landfill Gas - Methane Combustion

Emission Rates	Carbon Dioxide (CO <sub>2</sub> ) (lb/kWh)	1.5795
	Sulfur Dioxide (SO <sub>2</sub> ) (lb/kWh)	0.000432
	Nitrogen Oxide (NO <sub>x</sub> ) (lb/kWh)	0.00135
	Mercury (Hg) (lb/kWh)	negligible
	Water Usage (gal/kWh)	0

RPS Data Form 6: Estimated Cost Data

Company Name: Gulf Power Company

Energy Resource: Solar Photovoltaic (PV)

		First Year of Commercial Operation (Year)	2009
Installed Capital	Cost <sup>(1)</sup>		\$5,610/kw *
	Escalation Rate (%)		4%
Fixed O&M	Cost <sup>(1)</sup>		\$12/kw-yr (A/C)
	Escalation Rate (%)		2%
Variable O&M	Cost <sup>(1)</sup>		0
	Escalation Rate (%)		n/a
Fuel	Cost <sup>(1)</sup>		0
	Escalation Rate (%)		
Levelized cost <sup>(2)</sup> - Life of Unit			34 - 53 cents/kwh (with and w/o Federal and FL State ITC)

(1) Expressed in year dollars associated with the first year of commercial operations

(2) Cumulative Present Value Total Revenue Requirements levelized over the life of the unit expressed in year dollars associated with the first year of commercial operation

\* reflects estimated total in-service cost - i.e., includes total nominal capital expenditures and AFUDC

Energy Resource: Wind Inland

		First Year of Commercial Operation (Year)	2011
Installed Capital	Cost <sup>(1)</sup>		\$2900/kw *
	Escalation Rate (%)		4%
Fixed O&M	Cost <sup>(1)</sup>		\$37/kw-yr
	Escalation Rate (%)		2%
Variable O&M	Cost <sup>(1)</sup>		0
	Escalation Rate (%)		
Fuel	Cost <sup>(1)</sup>		0
	Escalation Rate (%)		
Levelized cost <sup>(2)</sup> - Life of Unit			32 - 35 cents/kwh (with and w/o Federal PTC)

(1) Expressed in year dollars associated with the first year of commercial operations

(2) Cumulative Present Value Total Revenue Requirements levelized over the life of the unit expressed in year dollars associated with the first year of commercial operation

\* reflects estimated total in-service cost - i.e., includes total nominal capital expenditures and AFUDC

RPS Data Form 6: Estimated Cost Data

Company Name: Gulf Power Company

Energy Resource: Wind Coastal

		First Year of Commercial Operation (Year)	2011
Installed Capital	Cost <sup>(1)</sup>		\$2,900/kw *
	Escalation Rate (%)		4%
Fixed O&M	Cost <sup>(1)</sup>		\$37/kw-yr
	Escalation Rate (%)		2%
Variable O&M	Cost <sup>(1)</sup>		0
	Escalation Rate (%)		
Fuel	Cost <sup>(1)</sup>		0
	Escalation Rate (%)		
Levelized cost <sup>(2)</sup> - Life of Unit			24 - 27 cents/kwh (with and w/o Federal PTC)

(1) Expressed in year dollars associated with the first year of commercial operations

(2) Cumulative Present Value Total Revenue Requirements levelized over the life of the unit expressed in year dollars associated with the first year of commercial operation

\* reflects estimated total in-service cost - i.e., includes total nominal capital expenditures and AFUDC

Energy Resource: Wind Offshore

		First Year of Commercial Operation (Year)	2013
Installed Capital	Cost <sup>(1)</sup>		\$4,700/kw *
	Escalation Rate (%)		4%
Fixed O&M	Cost <sup>(1)</sup>		\$80/kw-yr
	Escalation Rate (%)		2%
Variable O&M	Cost <sup>(1)</sup>		0
	Escalation Rate (%)		
Fuel	Cost <sup>(1)</sup>		0
	Escalation Rate (%)		
Levelized cost <sup>(2)</sup> - Life of Unit			33 - 37 cents/kwh (with and w/o Federal PTC)

(1) Expressed in year dollars associated with the first year of commercial operations

(2) Cumulative Present Value Total Revenue Requirements levelized over the life of the unit expressed in year dollars associated with the first year of commercial operation

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RPS Data Form 6: Estimated Cost Data

Company Name: Gulf Power Company

Energy Resource: Hydroelectric - Dam  
(Incremental improvement to existing dam)

		First Year of Commercial Operation (Year)	2010
Installed Capital	Cost <sup>(1)</sup>		\$850/kw *
	Escalation Rate (%)		4%
Fixed O&M	Cost <sup>(1)</sup>		\$7.65/kw-yr
	Escalation Rate (%)		2%
Variable O&M	Cost <sup>(1)</sup>		0.16 cents/kwh
	Escalation Rate (%)		2%
Fuel	Cost <sup>(1)</sup>		n/a
	Escalation Rate (%)		
Levelized cost <sup>(2)</sup> - Life of Unit			5 - 6 cents/kwh

(1) Expressed in year dollars associated with the first year of commercial operations

(2) Cumulative Present Value Total Revenue Requirements levelized over the life of the unit expressed in year dollars associated with the first year of commercial operation

\* reflects estimated total in-service cost - i.e., includes total nominal capital expenditures and AFUDC

Energy Resource: Biomass -Direct Combustion-Plant Matter

		First Year of Commercial Operation (Year)	2012
Installed Capital	Cost <sup>(1)</sup>		\$3,650/kw *
	Escalation Rate (%)		4%
Fixed O&M	Cost <sup>(1)</sup>		\$99.55/kw-yr
	Escalation Rate (%)		2%
Variable O&M	Cost <sup>(1)</sup>		0.4 cents/kwh
	Escalation Rate (%)		2%
Fuel	Cost <sup>(1)</sup>		4.25 cents/kwh
	Escalation Rate (%)		2%
Levelized cost <sup>(2)</sup> - Life of Unit			12 - 14 cents/kwh

(1) Expressed in year dollars associated with the first year of commercial operations

(2) Cumulative Present Value Total Revenue Requirements levelized over the life of the unit expressed in year dollars associated with the first year of commercial operation

\* reflects estimated total in-service cost - i.e., includes total nominal capital expenditures and AFUDC

RPS Data Form 6: Estimated Cost Data

Company Name: Gulf Power Company

Energy Resource: Landfill Gas - Methane Combustion

	First Year of Commercial Operation (Year)	2009
Installed Capital	Cost <sup>(1)</sup>	\$1,700/kw *
	Escalation Rate (%)	4%
Fixed O&M	Cost <sup>(1)</sup>	\$55/kw-yr
	Escalation Rate (%)	2%
Variable O&M	Cost <sup>(1)</sup>	1.35 cents/kwh
	Escalation Rate (%)	2%
Fuel	Cost <sup>(1)</sup>	1.40 cents/kwh
	Escalation Rate (%)	2%
Levelized cost <sup>(2)</sup> - Life of Unit		5 - 7 cents/kwh

(1) Expressed in year dollars associated with the first year of commercial operations

(2) Cumulative Present Value Total Revenue Requirements levelized over the life of the unit expressed in year dollars associated with the first year of commercial operation

\* reflects estimated total in-service cost - i.e., includes total nominal capital expenditures and AFUDC

RPS Data Form 2: Conventional Generating Technologies

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Company Name: Gulf Power Company

Applicable Utility Service Area: \_\_\_\_\_

<b>Conventional Technologies</b>	
Natural Gas	Combustion Turbine
	Combined Cycle
Coal	Integrated Gasification Combined Cycle
	Supercritical Pulverized Coal

RPS Data Form 3: Commercial Availability Data

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Company Name: Gulf Power Company

Energy Resource: Natural Gas Combustion Turbine

Typical Unit Annual Capacity Rating (MW)	170 (GE 7FA)
Earliest Commercial In-Service Date (Year)	2012
Typical Construction & Permitting Time (Years)	4
Useful Life of Unit (Years)	40
Fuel Type	Natural Gas

Energy Resource: Natural Gas Combined Cycle

Typical Unit Annual Capacity Rating (MW)	840 MW (G Technology 2 X 1)
Earliest Commercial In-Service Date (Year)	2013-2014
Typical Construction & Permitting Time (Years)	5 - 6
Useful Life of Unit (Years)	40
Fuel Type	Natural Gas

Energy Resource: Coal - Integrated Gasification Combined Cycle

Typical Unit Annual Capacity Rating (MW)	560 (IGCC Air-Blown TRIG)
Earliest Commercial In-Service Date (Year)	2014 - 15
Typical Construction & Permitting Time (Years)	6 - 7
Useful Life of Unit (Years)	40
Fuel Type	Coal



RPS Data Form 3: Commercial Availability Data

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Company Name: Gulf Power Company

Energy Resource: Coal - Supercritical Pulverized Coal

Typical Unit Annual Capacity Rating (MW)	830
Earliest Commercial In-Service Date (Year)	2017 - 18
Typical Construction & Permitting Time (Years)	9 - 10
Useful Life of Unit (Years)	40
Fuel Type	Coal

RPS Data Form 4: Performance Characteristics Data

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Company Name: Gulf Power Company

Energy Resource: Natural Gas Combustion Turbine

Contribution to Summer Peak Demand (MW)	170
Contribution to Winter Peak Demand (MW)	200
Average Annual Heat Rate (Btu/kWh)	10,711 - 11,120
Equivalent Availability Factor (%)	94% - 95%
Average Annual Generation (MWH)	81,030
Resulting Capacity Factor (%)	5%

Energy Resource: Natural Gas Combined Cycle

Contribution to Summer Peak Demand (MW)	840 MW
Contribution to Winter Peak Demand (MW)	900 MW
Average Annual Heat Rate (Btu/kWh)	6,554 - 6,760
Equivalent Availability Factor (%)	87% - 90%
Average Annual Generation (MWH)	4,953,780
Resulting Capacity Factor (%)	65%

Energy Resource: Coal - Integrated Gasification Combined Cycle

Contribution to Summer Peak Demand (MW)	560 MW
Contribution to Winter Peak Demand (MW)	622 MW
Average Annual Heat Rate (Btu/kWh)	8,700
Equivalent Availability Factor (%)	78% - 92%
Average Annual Generation (MWH)	4,400,586
Resulting Capacity Factor (%)	85%

RPS Data Form 4: Performance Characteristics Data

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Company Name: Gulf Power Company

Energy Resource: Coal - Supercritical Pulverized Coal

Contribution to Summer Peak Demand (MW)	830 MW
Contribution to Winter Peak Demand (MW)	830 MW
Average Annual Heat Rate (Btu/kWh)	9,000 - 9,500
Equivalent Availability Factor (%)	85% - 90%
Average Annual Generation (MWH)	6,543,720
Resulting Capacity Factor (%)	90%

RPS Data Form 5: Environmental Characteristics Data

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Company Name: Gulf Power Company

Energy Resource: Natural Gas Combustion Turbine

Emission Rates	Carbon Dioxide (CO <sub>2</sub> ) (lb/kWh)	1.28
	Sulfur Dioxide (SO <sub>2</sub> ) (lb/kWh)	0.0000065
	Nitrogen Oxide (NOx) (lb/kWh)	0.00036
	Mercury (Hg) (lb/kWh)	0
	Water Usage (gal/kWh)	n/a

Energy Resource: Natural Gas Combined Cycle

Emission Rates	Carbon Dioxide (CO <sub>2</sub> ) (lb/kWh)	0.7789
	Sulfur Dioxide (SO <sub>2</sub> ) (lb/kWh)	0.00000399
	Nitrogen Oxide (NOx) (lb/kWh)	0.0000466
	Mercury (Hg) (lb/kWh)	0
	Water Usage (gal/kWh)	0.2036

Energy Resource: Coal - Integrated Gasification Combined Cycle

Emission Rates	Carbon Dioxide (CO <sub>2</sub> ) (lb/kWh)	1.85
	Sulfur Dioxide (SO <sub>2</sub> ) (lb/kWh)	0.000148
	Nitrogen Oxide (NOx) (lb/kWh)	0.000348
	Mercury (Hg) (lb/kWh)	0.00000001
	Water Usage (gal/kWh)	0.4699

Energy Resource: Coal - Supercritical Pulverized Coal (PRB)

RPS Data Form 5: Environmental Characteristics Data

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Company Name:

Gulf Power Company

Emission Rates	Carbon Dioxide (CO <sub>2</sub> ) (lb/kWh)	2.0022
	Sulfur Dioxide (SO <sub>2</sub> ) (lb/kWh)	0.000376
	Nitrogen Oxide (NO <sub>x</sub> ) (lb/kWh)	0.000470
	Mercury (Hg) (lb/kWh)	0.0000000705
	Water Usage (gal/kWh)	0.6024

RPS Data Form 6: Estimated Cost Data

Company Name: Gulf Power Company

Energy Resource: Natural Gas Combustion Turbine

		First Year of Commercial Operation (Year)	2012
Installed Capital	Cost <sup>(1)</sup>		\$605/kw *
	Escalation Rate (%)		2%
Fixed O&M	Cost <sup>(1)</sup>		\$7.55/kw-yr
	Escalation Rate (%)		2%
Variable O&M	Cost <sup>(1)</sup>		1.95 cents/kwh
	Escalation Rate (%)		2%
Fuel	Cost <sup>(1)</sup>		12.75 cents/kwh
	Escalation Rate (%)		2%
		Levelized cost <sup>(2)</sup> - Life of Unit	40 - 50 cents/kwh @ 5% capacity factor

- (1) Expressed in year dollars associated with the first year of commercial operations  
 (2) Cumulative Present Value Total Revenue Requirements levelized over the life of the unit expressed in year dollars associated with the first year of commercial operation  
 \* reflects estimated total in-service cost - i.e., includes total nominal capital expenditures and AFUDC

Energy Resource: Natural Gas Combined Cycle

		First Year of Commercial Operation (Year)	2014
Installed Capital	Cost <sup>(1)</sup>		\$806/kw *
	Escalation Rate (%)		2%
Fixed O&M	Cost <sup>(1)</sup>		\$7.45/kw-yr
	Escalation Rate (%)		2%
Variable O&M	Cost <sup>(1)</sup>		0.3 cents/kwh
	Escalation Rate (%)		2%
Fuel	Cost <sup>(1)</sup>		8.9 cents/kwh
	Escalation Rate (%)		2%
		Levelized cost <sup>(2)</sup> - Life of Unit	13 - 16 cents/kwh @ 65% capacity factor

- (1) Expressed in year dollars associated with the first year of commercial operations  
 (2) Cumulative Present Value Total Revenue Requirements levelized over the life of the unit expressed in year dollars associated with the first year of commercial operation  
 \* reflects estimated total in-service cost - i.e., includes total nominal capital expenditures and AFUDC

RPS Data Form 6: Estimated Cost Data

Company Name: Gulf Power Company

Energy Resource: Coal - Integrated Gasification Combined Cycle

		First Year of Commercial Operation (Year)	2014
Installed Capital	Cost <sup>(1)</sup>		\$3,500/kw *
	Escalation Rate (%)		2%
Fixed O&M	Cost <sup>(1)</sup>		\$15/kw-yr
	Escalation Rate (%)		2%
Variable O&M	Cost <sup>(1)</sup>		0.6 cents/kwh
	Escalation Rate (%)		2%
Fuel	Cost <sup>(1)</sup>		3.45 cents/kwh
	Escalation Rate (%)		2%
		Levelized cost <sup>(2)</sup> - Life of Unit	12 - 14 cents/kwh @ 85% capacity factor

(1) Expressed in year dollars associated with the first year of commercial operations

(2) Cumulative Present Value Total Revenue Requirements levelized over the life of the unit expressed in year dollars associated with the first year of commercial operation

\* reflects estimated total in-service cost - i.e., includes total nominal capital expenditures and AFUDC

Energy Resource: Coal - Supercritical Pulverized Coal

		First Year of Commercial Operation (Year)	2017
Installed Capital	Cost <sup>(1)</sup>		\$3,700/kw *
	Escalation Rate (%)		2%
Fixed O&M	Cost <sup>(1)</sup>		\$12.40/kw-yr
	Escalation Rate (%)		2%
Variable O&M	Cost <sup>(1)</sup>		0.27 cents/kwh
	Escalation Rate (%)		2%
Fuel	Cost <sup>(1)</sup>		3.7 cents/kwh
	Escalation Rate (%)		2%
		Levelized cost <sup>(2)</sup> - Life of Unit	11 - 14 cents/kwh @ 90% capacity factor

(1) Expressed in year dollars associated with the first year of commercial operations

(2) Cumulative Present Value Total Revenue Requirements levelized over the life of the unit expressed in year dollars associated with the first year of commercial operation

\* reflects estimated total in-service cost - i.e., includes total nominal capital expenditures and AFUDC