

**RPS Data Form 1: Renewable Generating Technologies**

Company Name: Renewable Fuels Tallahassee, LLC  
 Applicable Utility Service Area: City of Tallahassee, Electric Utility

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

\* Biomass - Conversion to Gas, Gasification should include Company's plasma arc gasification technology.

**RPS Data Form 2: Conventional Generating Technologies**

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**Company Name:** Renewable Fuels Tallahassee, LLC  
**Applicable Utility Service Area:** City of Tallahassee, Electric Utility

<b>Conventional Technologies</b>	
<b>Natural Gas</b>	Combustion Turbine
	Combined Cycle
<b>Coal</b>	Integrated Gasified Combined Cycle
	Supercritical Pulverized Coal
<b>Nuclear</b>	Steam Generation
<b>Other</b>	Other

**RPS Data Form 3: Commercial Availability Data**

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**Company Name:** Renewable Fuels Tallahassee, LLC  
**Energy Resource:** Biomass - Conversion to Gas (Gasification via Plasma Arc )

Typical Unit Annual Capacity Rating (MW)	42
Earliest Commercial In-Service Date (Year)	2010
Typical Construction & Permitting Time (Years)	3
Useful Life of Unit (Years)	40
Fuel Type	Biomass

**RPS Data Form 4: Performance Characteristics Data**

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**Company Name:** Renewable Fuels Tallahassee, LLC  
**Energy Resource:** Biomass - Conversion to Gas (Gasification via Plasma Arc )

Contribution to Summer Peak Demand (MW)	35
Contribution to Winter Peak Demand (MW)	35
Average Annual Heat Rate (BTU/kWh)	13,500
Equivalent Availability Factor (%)	95%
Average Annual Generation (MWH)	275,940
Resulting Capacity Factor (%)	90%

**RPS Data Form 5: Environmental Characteristics Data**

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**Company Name:** Renewable Fuels Tallahassee, LLC  
**Energy Resource:** Biomass - Conversion to Gas (Gasification via Plasma Arc)

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

**RPS Data Form 6: Estimated Cost Data**

**Company Name:** Renewable Fuels Tallahassee, LLC  
**Energy Resource:** Biomass - Conversion to Gas (Gasification via Plasma Arc )

	First Year of Commercial Operation (Year)	2010
Installed Capital	Cost <sup>(1)</sup> (\$/kw)	\$3000/kW
	Escalation Rate (%)	2%
Fixed O & M	Cost <sup>(1)</sup> (\$/kw-year)	Unknown
	Escalation Rate (%)	Unknown
Variable O & M	Cost <sup>(1)</sup> (\$/kwh)	Unknown
	Escalation Rate (%)	Unknown
Energy	Cost <sup>(1)</sup> (\$/kwh)	Unknown
	Escalation Rate (%)	Unknown
	Levelized Cost <sup>(2)</sup> - Life of Unit (cents/kwh)	Unknown

(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