**Pinellas County Resource Recovery Facility** 

**Company Name:** 

**Applicable Utility Service Area:** 

**Progress Energy Florida** 

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	Installed Capacity 75 MW	
	2005-2007 Average NEL	
Hydrogen, renewable	Fuel Cells	
	Combustion	
Waste Heat	Sulfuric Acid Manufacturing	
Other	Other	

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

**Company Name:** 

Pinellas County Resource Recovery Facility

**Applicable Utility Service Area:** 

Progress Energy Florida

### FORM NOT APPLICABLE

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

# RPS Data Form 3: Commercial Availability Data

Pinellas County Resource Recovery Facility

Company Name:

Energy Resource:

MUNICIPAL SOLID WASTE

Typical Unit Annual	
Capacity Rating	
(MW)	75 MW
Earliest Commercial In-	
Service Date	
(Year)	1983
Typical Construction &	
Permitting Time	
(Years)	Construction 30-36 months ; Permiting 12-24 mo
Useful Life of Unit	
0.4	
(Years)	50 years
Fuel Type	
	MUNICIPAL SOLID WASTE

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

Company Name:

Energy Resource:

MUNICIPAL SOLID WASTE

Contribution to Summer	
Peak Demand	
(MW)	BASE LOAD FACILITY
Contribution to Winter Peak	
Demand	
(MW)	BASE LOAD FACILITY
Average Annual Heat Rate	
(BTU/kWh)	
Equivalent Availability	
Factor	
(%)	
(70)	
Average Annual	
Generation	2004-2007 Average NEL 421,867 MWhr
(MWH)	
Resulting Capacity Factor	
(%)	
( /0 )	

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

Pinellas County Resource Recovery Facility

Company Name:

**Energy Resource:** 

**MUNICIPAL SOLID WASTE** 

Emission Rates	Carbon Dioxide (CO <sub>2</sub> )		
	(lb/kWh)	Not available	
	Sulfur Dioxide (SO <sub>2</sub> )		
	(lb/kWh)	67.41 tons/year 2007 (based on stack test results) = 0.00032 lb/kwh	
	Nitrogen Oxide (NO <sub>x</sub> )		
	(lb/kWh)	1460.52 tons/year 2007 (actual measured emissions) = 0.0069 lb/kwh	
	Mercury (Hg)		
	(lb/kWh)	0.01 tons/year 2007 (based on stack test results) = 0.000000047 lb/kwh	
	Water Usage		
	(gal/kwh)	611,700,000 gallons/year (metered) = 1.45 gal/kwh	

Company Name: Energy Resource:		Pinellas County Resource Recovery Facility	
		MUNICIPAL SOLID WASTE	
		WE DO NOT BELIEVE THE INFORMATION REQUESTED BELOW TO BE APPLICABLE	
	First Year of Commercial Operation (Year)		
Installed Capital	Cost <sup>(1)</sup> (\$/kw)		
	Escalation Rate (%)		
Fixed O & M	Cost <sup>(1)</sup> (\$/kw-year)		
	Escalation Rate (%)		
Variable O & M	Cost <sup>(1)</sup> (\$/kwh)		
	Escalation Rate (%)		
Energy	Cost <sup>(1)</sup> (\$/kwh)		
	Escalation Rate (%)		
	Levelized Cost <sup>(2)</sup> - Life of Unit (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