RPS Data Form 1: Renewable Generating Technologies

Company Name:

Wheelabrator South Broward Inc.

FPL

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	Installed Capacity - 66 MW	
YES	2004-7 Net Generation - 442,697MW	
Hydrogen, renewable	Fuel Cells	
	Combustion	
Waste Heat	Sulfuric Acid Manufacturing	
Other	Other	

RPS Data Form 2: Conventional Generating Technologies

Company Name:

Wheelabrator South Broward Inc.

٦

Applicable Utility Service Area:

FPL

FORM NOT APPLICABLE

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

Wheelabrator South Broward Inc.

Energy Resource:

Typical Unit Annual Capacity Rating (MW)	66 (gross) , 59 (net)
Earliest Commercial In- Service Date (Year)	Existing plant; currently operating; began operating 1991
Typical Construction & Permitting Time (Years)	Permitting: Approx. 24 months; Construction: 24-30 months
Useful Life of Unit (Years)	50 years
Fuel Type	MUNICIPAL SOLID WASTE

Wheelabrator South Broward Inc.

Energy Resource:

Contribution to Summer Peak Demand (MW)	BASE LOAD FACILITY
Contribution to Winter Peak Demand (MW)	BASE LOAD FACILITY
Average Annual Heat Rate	
Equivalent Availability Factor	
Average Annual Generation (MWH)	2004-2007 data: 442,697 MWh (net)
Resulting Capacity Factor (%)	

Company Name: Energy Resource:		Wheelabrator South Broward Inc. MUNICIPAL SOLID WASTE
	Carbon Dioxide (CO ₂)	- 4.0 (approx) (negative
	(lb/kWh)	emissions denotes avoided emissions)
ates	Sulfur Dioxide (SO ₂)	
ц Ц Ц	(lb/kWh)	4 ppmdv @ 7%O2
issic	Nitrogen Oxide (NO _X)	
Em	(lb/kWh)	140 ppmdv @ 7%O2
	Mercury (Hg)	
	(lb/kWh)	3.0E-09
	Water Usage	0.003
	(gal/kwh)	

RPS Data Form 5: Environmental Characteristics Data

Wheelabrator South Broward Inc. **Company Name: MUNICIPAL SOLID WASTE Energy Resource:** WE DO NOT BELIEVE THE INFORMATION **REQUESTED BELOW TO BE APPLICABLE** First Year of Commercial

1

	Operation (Year)	
- q	Cost ⁽¹⁾	
alle pita	(\$/kw)	
Inst Ca	Escalation Rate	
	(%)	
Σ	Cost ⁽¹⁾	
80	(\$/kw-year)	
ixed	Escalation Rate	
Щ	(%)	
& ⊠	Cost ⁽¹⁾	
е О	(\$/kwh)	
riable	Escalation Rate	
Va	(%)	
Energy	Cost ⁽¹⁾	
	(\$/kwh)	
	Escalation Rate	
	(%)	
	Levelized Cost ⁽²⁾	
	(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

RPS Data Form 1: Renewable Generating Technologies

Company Name:

Wheelabrator North Broward Inc.

FPL

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	Installed Capacity - 68 MW	
YES	2004-7 Net Generation - 435,024 MWh	
Hydrogen, renewable	Fuel Cells	
	Combustion	
Waste Heat	Sulfuric Acid Manufacturing	
Other	Other	

RPS Data Form 2: Conventional Generating Technologies

Company Name:

Wheelabrator North Broward Inc.

٦

Applicable Utility Service Area:

FPL

FORM NOT APPLICABLE

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

Energy Resource:

Wheelabrator North Broward Inc.

Typical Unit Annual	
Capacity Rating	
(MW)	68 (gross) , 60 (net)
Earliest Commercial In-	
Service Date	Existing plant; currently operating;
(Year)	began operating 1991
Typical Construction &	
Permitting Time	Permitting: Approx. 24 months;
(Years)	Construction: 24-30 months
Useful Life of Unit	
	EQ vicero
(Years)	50 years
Fuel Ture	
гие Туре	
	WUNICIPAL SULID WASTE

Wheelabrator North Broward Inc.

Energy Resource:

Contribution to Summer Peak Demand (MW)	BASE LOAD FACILITY
Contribution to Winter Peak Demand (MW)	BASE LOAD FACILITY
Average Annual Heat Rate	
Equivalent Availability Factor	
(⁄⁄/) Average Annual Generation (MWH)	2004-2007 data: 435,024 MWh (net)
Resulting Capacity Factor (%)	

Company Name:		Wheelabrator North Broward Inc.
Energy Resource:		MUNICIPAL SOLID WASTE
	TYPICAL EMISSION F	RATES
	Carbon Dioxide (CO ₂)	- 4.0 (approx) (negative
	(lb/kWh)	emissions denotes avoided emissions)
ates	Sulfur Dioxide (SO ₂)	
n R	(lb/kWh)	4 ppmdv @ 7%O2
issic	Nitrogen Oxide (NO _X)	
Em	(lb/kWh)	140 ppmdv @ 7%O2
	Mercury (Hg)	
	(lb/kWh)	3.0E-09
	Water Usage	0.003
	(gal/kwh)	

RPS Data Form 5: Environmental Characteristics Data

Company Name: Wi Energy Resource: Mi

Wheelabrator North Broward Inc.

MUNICIPAL SOLID WASTE

WE DO NOT BELIEVE THE INFORMATION REQUESTED BELOW TO BE APPLICABLE

	First Year of Commercial Operation (Year)	
Installed Capital	Cost ⁽¹⁾ (\$/kw)	
	Escalation Rate (%)	
Fixed O & M	Cost ⁽¹⁾ (\$/kw-year)	
	Escalation Rate (%)	
Variable O & M	Cost ⁽¹⁾ (\$/kwh)	
	Escalation Rate (%)	
Energy	Cost ⁽¹⁾ (\$/kwh)	
	Escalation Rate (%)	
	Levelized Cost ⁽²⁾ - 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

RPS Data Form 1: Renewable Generating Technologies

Company Name:

Wheelabrator Ridge Energy Inc.

Lakeland Electric

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 - YES (wood)	
	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 - YES	
Municipal Solid Waste	- YES (tires)	
Hydrogen, renewable	Fuel Cells	
	Combustion	
Waste Heat	Sulfuric Acid Manufacturing	
Other	Other	

RPS Data Form 2: Conventional Generating Technologies

Company Name:

Wheelabrator Ridge Energy Inc.

1

Applicable Utility Service Area:

Lakeland Electric

FORM NOT APPLICABLE

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

Wheelabrator Ridge Energy Inc.

Energy Resource:

Biomass

Typical Unit Annual	
Capacity Rating	
(MW)	50 (gross) , 45 (net)
Earliest Commercial In-	
Service Date	Existing plant; currently operating;
(Year)	began operating 1994
Typical Construction &	
Permitting Time	Permitting: Approx. 24 months;
(Years)	Construction: 24-30 months
Useful Life of Unit	
(Years)	50 years
Fuel Type	
	Biomass

Wheelabrator Ridge Energy Inc.

Energy Resource:

Biomass

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	
Average Annual Generation (MWH)	2004-2007 data: 192,885 MWh (net)
Resulting Capacity Factor (%)	

Company Name:		Wheelabrator Ridge Energy Inc.	
Energy Resource:		Biomass	
	TYPICAL EMISSION F	RATES UNAVAILABLE AT THIS TI	ME
	Carbon Dioxide (CO ₂)		
	(lb/kWh)	(Avoided CO2 Emissions)	
ates	Sulfur Dioxide (SO ₂)		
u K	(lb/kWh)		
issic	Nitrogen Oxide (NO _X)		
ш Ш	(lb/kWh)		
	Mercury (Hg)		
	(lb/kWh)		
	Water Usage		
	(gal/kwh)		

RPS Data Form 5: Environmental Characteristics Data

Wheelabrator Ridge Energy Inc.

Energy Resource:

Biomass

All cost information is proprietary & confidential

	First Year of Commercial Operation (Year)	
Installed Capital	Cost ⁽¹⁾ (\$/kw)	
	Escalation Rate (%)	
O & M	Cost ⁽¹⁾ (\$/kw-year)	
Fixed	Escalation Rate (%)	
Variable O & M	Cost ⁽¹⁾ (\$/kwh)	
	Escalation Rate (%)	
rgy	Cost ⁽¹⁾ (\$/kwh)	
Ene	Escalation Rate (%)	
	Levelized Cost ⁽²⁾ - 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

RPS Data Form 1: Renewable Generating Technologies

Company Name:

Wheelabrator McKay Bay Inc.

TECO

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	
	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 - 22 MW	
YES	2004-7 Net Generation - 169,917 MWh	
Hydrogen, renewable	Fuel Cells	
	Combustion	
Waste Heat	Sulfuric Acid Manufacturing	
Other	Other	

RPS Data Form 2: Conventional Generating Technologies

Company Name:

Wheelabrator McKay Bay Inc.

٦

Applicable Utility Service Area:

TECO

FORM NOT APPLICABLE

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

Energy Resource:

Wheelabrator McKay Bay Inc.

Typical Unit Annual	
Capacity Rating	
(MW)	22 (gross) . 18 (net)
Earliest Commercial In-	
Service Date	Existing plant; currently operating;
(Year)	began operating 1985
Typical Construction &	
Permitting Time	Permitting: Approx. 24 months;
(Years)	Construction: 24-30 months
Useful Life of Unit	
(Veere)	50 years
(rears)	JU years
Evel Type	
гие Туре	
	WUNUTAL SULID WASTE

Wheelabrator McKay Bay Inc.

Energy Resource:

Contribution to Summer Peak Demand (MW)	BASE LOAD FACILITY
Contribution to Winter Peak Demand (MW)	BASE LOAD FACILITY
Average Annual Heat Rate	
Equivalent Availability Factor	
Average Annual Generation (MWH)	2004-2007 data: 160,917 MWh (net)
Resulting Capacity Factor (%)	

Company Name:		Wheelabrator McKay Bay Inc.
Energy Resource:		MUNICIPAL SOLID WASTE
	TYPICAL EMISSION F	RATES
	Carbon Dioxide (CO ₂)	- 4.0 (approx) (negative emissions denotes avoided
	(lb/kWh)	emissions)
ates	Sulfur Dioxide (SO ₂)	
n R	(lb/kWh)	4 ppmdv @ 7%O2
iissic	Nitrogen Oxide (NO _X)	
Em	(lb/kWh)	140 ppmdv @ 7%O2
	Mercury (Hg)	
	(lb/kWh)	3.0E-09
	Water Usage	0.003
	(gal/kwh)	

RPS Data Form 5: Environmental Characteristics Data

Wheelabrator McKay Bay Inc.

Energy Resource:

MUNICIPAL SOLID WASTE

WE DO NOT BELIEVE THE INFORMATION REQUESTED BELOW TO BE APPLICABLE

	First Year of Commercial	
	Operation	
	(Year)	
alled oital	Cost ⁽¹⁾	
	(\$/kw)	
Inst Ca	Escalation Rate	
	(%)	
Σ	Cost ⁽¹⁾	
0 &	(\$/kw-year)	
ixed	Escalation Rate	
Ϊ.	(%)	
& M	Cost ⁽¹⁾	
e O	(\$/kwh)	
riabl	Escalation Rate	
Va	(%)	
Energy	Cost ⁽¹⁾	
	(\$/kwh)	
	Escalation Rate	
	(%)	
	Levelized Cost ⁽²⁾	
	- 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