Overview of Florida’s Regulatory Environment

October 21st, 2011

Eduardo Balbis, P.E.
Commissioner
Florida Public Service Commission
Florida Public Service Commission
Gubernatorial Appointees Confirmed by Senate

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Eduardo E. Balbis
West Palm Beach

COMMISSIONER
Lisa Polak Edgar
Tallahassee

CHAIRMAN
Art Graham
Jacksonville

COMMISSIONER
Ronald A. Brisé
Miami

COMMISSIONER
Julie Imanuel Brown
Tampa
The PSC was established in 1887 and regulates:

- Electric
- Natural Gas
- Water & Wastewater
- Telecommunications
PSC’s Regulatory Authority:

- **5 investor-owned electric companies**
  (all aspects of operations, including rates and safety)

- **35 municipally owned electric companies**
  (limited to safety, rate structure, territorial boundaries, bulk power supply, operations, and planning)

- **18 rural electric cooperatives**
  (limited to safety, rate structure, territorial boundaries, bulk power supply, operations, and planning)
Investor-Owned Electric Utilities

Approximate Company Service Areas
Florida Power Plants

89 Power Plant Sites
Source: Department of Environmental Protection
All facilities shown are greater than 25 MW
Statewide Generating Fuel Portfolio – 2010

- Natural Gas: 46.8%
- Coal: 32.5%
- Nuclear: 12.5%
- Interchange: 5.6%
- Oil: 1.5%
- Renewable: 1.2%
State of Florida

Generation Fuel Mix (% Total Net Energy for Load)

Energy Generation by Fuel Type (% NEL)

- Nuclear: 9.8% (2000 Actual), 13.4% (2010 Actual), 15.6% (2020 Projected)
- Coal: 24.8% (2000 Actual), 25.1% (2010 Actual), 36.4% (2020 Projected)
- Natural Gas: 2.4% (2000 Actual), 55.5% (2010 Actual), 17.6% (2020 Projected)
- Oil: 0.7% (2000 Actual), 15.7% (2010 Actual), 14.7% (2020 Projected)
- Interchange, NUG, Renewables (1.2%), Other: 5.4% (2010 Actual), 12.2% (2020 Projected)
Florida’s Renewable Capacity in MW (2009)

Current Florida Reliability Coordinating Council data expected in mid to late July

- Landfill Gas: 35.9 MW (2.9%)
- Hydro: 54.5 MW (4.5%)
- Solar: 34.5 MW (2.8%)
- Waste Heat: 288.9 MW (23.7%)
- Municipal Solid Waste: 398.1 MW (32.6%)
- Biomass: 408.0 MW (33.4%)

Total Florida Renewable Capacity: 1,219.9 MW
Total Florida Electric Generation Capacity: 58,420 MW (Summer)
There are three paths to increasing renewable generation:

- Utility-Owned
- Third Party-Owned
- Customer-Owned
Utility-owned renewables are the smallest portion of the total:
- Represents 13 percent of existing renewables.
- Hydroelectric generation is limited by Florida’s geography.
Utility-owned renewable generation has three paths:

- **Power Plant Site Act (PPSA)** – Facilities > 75 MW of steam or solar capacity; cost recovery through base rates.
- **Non-PPSA units** – Facilities < 75 MW of steam or solar capacity; cost recovery through base rates.
- **Enabling Legislation** – e.g., Section 366.92(4), F.S., allowed recovery for up to 110 MW through Environmental Cost Recovery Clause.
Third Party Generators

A majority of renewable generation is from purchased power:

- Represents 87 percent of renewable energy generated.
- Roughly 2/3 of purchases are non-firm.
Florida statutes require utilities to interconnect with and purchase electricity from renewable and alternative generators.

Utilities purchase capacity and energy via two methods:

- Standard offer contract with flexible pricing options, including levelized capacity payments and fixed energy payment options.

- Negotiated contracts at rates that do not exceed the utility’s cost to produce electricity (avoided cost).

### Recent Examples of Negotiated Contracts

<table>
<thead>
<tr>
<th>Purchasing Utility</th>
<th>Renewable Provider</th>
<th>MW</th>
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<tr>
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<td>SWA</td>
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280
Standard interconnection, net metering, and other policies have resulted in a steady growth of smaller customer-owned renewable resources.

Net Metering Connections: 2,833 Total

Net Metering Capacity (MW): 20.4 MW

- Investor-Owned: 1,876
- Municipal: 463
- Rural Electric Cooperatives: 494

- Investor-Owned: 13.032
- Municipal: 3.269
- Rural Electric Cooperatives: 4.103
CRITICAL ISSUES

Electric

- Fuel Diversity
- Nuclear
- Conservation Goals
- Natural Gas Price Stability
- EPA Regulations
  ($4.4B to $6.7B)
Natural Gas
PSC’s Regulatory Authority:

- **7 investor-owned natural gas utilities**
  (all aspects of operations, including safety)

- **27 municipally owned natural gas utilities**
  (limited to safety and territorial boundaries)

- **4 special gas districts**
  (limited to safety and territorial boundaries)

Safety jurisdiction also applies to housing authorities and sales laterals off of interstate pipelines. (Interstate pipelines are subject to the direct jurisdiction of the U.S. Dept. of Transportation.)
Natural Gas Companies in Florida

INVESTOR-OWNED

- Chesapeake Utilities Corp.
- Florida City Gas
- Florida Public Utilities Company
- Indiantown Gas Company
- Peoples Gas System
- Sebring Gas System, Inc.
- St. Joe Natural Gas Company

- Municipals
- Gas Districts
Shale Gas Development
Shale Gas Developments – Location of Shale Gas

Current Major Shale Plays:
- Barnett
- Fayetteville
- Haynesville
- Marcellus
- Eagle Ford
- Woodford
Shale Gas Developments – Estimated Growth by Basin

Estimated growth of nearly 15 Bcf/d from 2005 to 2011

Source: Wood Mackenzie
How About Shale Production by Itself?
EIA projects shale gas will offset declining base and conventional production and meet growing U.S. natural gas demand.

U.S. Demand Trends – Projected Growth

U.S. Natural Gas Demand

2010 Total
60.2 Bcf/day

2020 Total
~72.5 Bcf/day

Power generation is projected to be the driver for gas demand growth

Source: El Paso
Shale Gas Developments – Production Efficiency and Gas Rig Count

Total production has increased while the rigwell count has decreased. The percentage of horizontal rigs of total grew from ~10% in Jan 2005 to ~70% in May 2011.

Source: Smith International, EIA 914 Production Report
CRITICAL ISSUES

Natural Gas

- Interstate Pipeline Capacity
- Natural Gas Vehicles
- Fuel Diversity
- Environmental Regulations
WATER & WASTEWATER
158 investor-owned water and/or wastewater utilities in 36 Florida counties.
CRITICAL ISSUES

Water & Wastewater

- Aging Systems
- Conservation
- High Cost Systems (Private vs. Government-Owned)
TELECOMMUNICATIONS
Incumbent Local Exchange Telephone Companies
CRITICAL ISSUES

Telecommunications

- New Legislation
- Changing PSC Authority
Questions?