Regulatory Perspective

Presentation to the Energy Consortium
September 27, 2011

Eduardo Balbis, P.E.
Commissioner
Florida Public Service Commission
PSC is charged by the Legislature to ensure that Florida’s consumers receive safe, adequate, and reliable electrical service at the lowest cost possible.
Achieve a balance between the cost of providing service and the reliability of the service provided.

**Cost**
- Conservation
- Renewables
- Purchased Power
- Generation
- Fuel
- Transmission
- Distribution

**Service**
- Safe
- Adequate
- Reliable
State of Florida

Generation Fuel Mix (% Total Net Energy for Load)

<table>
<thead>
<tr>
<th>Fuel Type</th>
<th>2000 Actual</th>
<th>2010 Actual</th>
<th>2020 Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear</td>
<td>15.6%</td>
<td>9.8%</td>
<td>13.4%</td>
</tr>
<tr>
<td>Coal</td>
<td>36.4%</td>
<td>24.8%</td>
<td>25.1%</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>17.6%</td>
<td>50.8%</td>
<td>55.5%</td>
</tr>
<tr>
<td>Oil</td>
<td>15.7%</td>
<td>2.4%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Interchange, NUG, Renewables, Other</td>
<td>14.7%</td>
<td>12.2%</td>
<td>5.4%</td>
</tr>
</tbody>
</table>

2000 Actual  | 2010 Actual  | 2020 Projected

The bar chart illustrates the energy generation by fuel type in the State of Florida, showing the percentage of total net energy for load in 2000, 2010, and the projected figures for 2020.
Existing policies have contributed to the development of primarily:

- Municipal Solid Waste
- Biomass
- Waste Heat

Existing Renewable Resources (MW) - 1,282.4 MW Total

- Solar
- Biomass
- Municipal Solid Waste
- Waste Heat
- Landfill Gas
- Hydro
There are 3 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 the state’s geography.

Existing Utility-Owned Renewable Resources (MW) - 165.9 MW Total
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 (i.e. Section 366.92(4), F.S.) – Allowed recovery for up to 110 MW through Environmental Cost Recovery Clause.
A majority of renewable generation is from purchased power:

- Represents 87 percent of renewable energy generated.
- Roughly 2/3 of purchases are non-firm.

### Existing Renewable Purchases (MW) - 1,116.5 MW Total

- Solar: 408.6 MW
- Biomass: 285.9 MW
- Municipal Solid Waste: 285.9 MW
- Waste Heat: 41.4 MW
- Landfill Gas: 378.6 MW
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>
</tr>
</thead>
<tbody>
<tr>
<td>PEF</td>
<td>Trans World</td>
<td>40</td>
</tr>
<tr>
<td>PEF</td>
<td>BG&amp;E</td>
<td>45</td>
</tr>
<tr>
<td>PEF</td>
<td>FB Energy</td>
<td>60</td>
</tr>
<tr>
<td>FPL</td>
<td>SWA</td>
<td>55</td>
</tr>
<tr>
<td>FPL</td>
<td>SWA</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td>280</td>
</tr>
</tbody>
</table>

Purchased Power Agreements
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
FPSC rules adopted in 2008 require the investor-owned utilities to net meter excess energy the customer delivers to the grid.

The excess energy is carried forward to the next month’s bill, for up to 12 months at the retail rate, thus reducing future bills.
Florida’s utilities plan to construct or purchase an additional 765 MW of renewable generation for 2011-2020.

While solar may be the largest planned resource in terms of capacity (MW), the expected major contributor to energy generation (MWH) is biomass.
QUESTIONS?