

Progress Energy Florida Renewable Energy Update

Florida Public Service Commission

September 7, 2011



PEF's Balanced Solution for the Future

- Cost-Effective Alternative and Renewable Energy Sources Should Play a Role in Developing a Balanced Energy Future
 - Energy efficiency
 - Modernize existing resources
 - Renewable/Alternative energy sources

PEF is Committed to Cost-Effective Renewables and Alternative Energy Sources

- PEF has over 1,500 MW under contract from QFs
 - 682 MW are firm, built and interconnected



PEF's purchased more Renewable energy in 2010 than of any other Florida utility

PEF's Renewable Resources

- 378 MW of firm renewable energy under contract
 - 173 MW in operation
 - 145 MW approved and under development
 - 60 MW executed and Docketed for FPSC review
 - Four renewable suppliers have executed as-available agreements

PEF's Renewable capacity has more than doubled since 2009

PEF's Request for Renewables (RFR)

- PEF Maintains an Open “RFR”
- The Open RFR allows for:
 - A Renewable Contact Database
 - Understanding Renewable Project requirements
 - Sharing PEF's requirements
- Targets In-State Renewable Energy Sources

PEF's Renewable Project Development

- Characteristics of Viable Large Utility-Scale Projects
 - Straight forward technology
 - Financing expertise
 - Interconnection ability
 - Permitting and public affairs
 - Ability to operate and perform

PEF's Renewable Project Progression

- Meaningful information to measure progress includes:
 - Real Estate Acquisition
 - Grid Interconnection
 - Permitting
 - Deposits

PEF's Solar Contracts - Update

- As-Available Tariff-type contracts are Non-firm
- Two suppliers have executed solar contracts
 - National Solar (~400 MW)
 - Blue Chip Energy (~50 MW)

PEF has more solar under contract than any other Florida utility

National Solar – Status Update

- Nine Solar As-Available contracts
 - Land broker and Short List of Counties
 - Gadsden, Hardee, Osceola, Suwannee
 - Hardee County land purchase, (~400 MW)
- Facilities are expected to be on-line by the end of 2014
- Hansel Phelps Construction Co. is under contract for the design, construction and O&M of the facilities
- Established financing relationships with multiple large US commercial banks

Blue Chip Energy - Status Update

- Two Solar As-Available contracts
- Rinehart Facility, Seminole County – (~10 MW)
 - Located at solar panel manufacturing plant in Lake Mary
 - Installed 1.2 MW on roof top; utilizing Net Metering Tariff
 - Remaining 8 MW will be ground mounted



Blue Chip Energy – Status Update, Cont.

- Sorrento Facility, Lake County (~40 MW)
 - Land purchased
 - Zoning completed
 - System Impact Study is underway
 - Anticipated ground breaking 3Q 2011
- Blue Chip Energy will act as EPC contractor
- Self-funded and anticipating DOE's Section 1603 tax credits

Blue Chip Energy – Sorrento Facility



PEF's Biomass Contracts - Update

- Biomass facilities delivering renewable energy
 - Lake County MSW – 12.75 MW
 - Metro-Dade County MSW – 43 MW
 - Pasco County MSW – 23 MW
 - Pinellas County MSW – 54.75 MW
 - Ridge Generating Station Waste Wood – 39.6 MW

PEF has more Biomass online than any other Florida utility

PEF's Biomass - Update, Cont.

- Biomass contracts under development:
 - Biomass Gas & Electric – 45 MW
 - FB Energy – 60 MW
 - Trans World Energy – 40 MW
 - US EcoGen – 60 MW

**PEF has more biomass under development
than any other Florida utility**

Biomass Gas & Electric - Status Update

- Rentech is new Project owner, NWFREC (45 MW)
- Land has been acquired
 - Port St. Joe
- Air permit has been received
- Term sheets in place with fuel suppliers, additional contracts expected soon
- EPC negotiations underway
- System Impact Study near completion



Biomass Gas & Electric – Update Cont.

- Financing Challenges:
 - Expected loan guarantees from the DOE under the Section 1705 program
 - DOE gave BG&E the opportunity to move to the Section 1703 program
 - No word has been received from the DOE since May
- Alternative financing structures are being pursued
 - Term sheet with a Korean investor

FB Energy - Status

- 60 MW Project
- Land has been acquired
- Permitted in underway
- EPC contractor has been identified
- Financing negotiations are underway

TransWorld Energy – Status Update

- A site for the 40 MW Facility has been identified and the purchase is being finalized
- Received positive response and favorable pricing from potential fuel suppliers in the area
- Received interest in financing this project and is evaluating potential financing offers

PEF's As-Available Biomass Contracts

- Eliho Energy, (~8 MW)
- E2E2, (~30 MW)
- Financial closing is expected soon for both projects