

Dogwood Energy

Educational Session Introduction and Plant Tour



August 31, 2011



► Welcome

- Agenda Overview Plant Tour and Presentations
- Special Guest Presenters
 - ▶ Nick Puga, MSc, Partner, Bates White: Economic Consulting
 - ► Jerry Morris, President & CEO, Southern Star Central Gas Pipeline
- Roundtable Introduction



Dogwood Energy

PLANT TOUR PRESENTATION

Presentation Overview



- Dogwood Energy Who We Are
- Selected Policy Issues of Importance
- Electric Industry Where Do We Fit In?
- Plant Equipment Overview
- Plant Operations
- Plant Tour



- Dogwood Energy is an Independent Power Producer (IPP) and an Exempt Wholesale Generator (EWG)
- Not an Affiliate of Any Existing Missouri Utility and No Monopoly Status
- Authorized by FERC to Sell Power to Wholesale Customers at Market Based Rates; Market for Interstate Wholesale Power Generation is Competitive
- Bought Dogwood Facility in Bankruptcy Auction in 2007 From Another IPP and have Heavily Invested in the Facility
- Our Goal: Buy "Distressed" Assets, Improve Them, and Enter Into Long-Term Agreements with Wholesale Power Customers to Realize Value for Our Owners
- Our Values: Be Good Corporate Citizens in Our Community, Be Good Representatives of Our Industry, Do The Right Thing



- Ability to fairly compete to sell power to wholesale customers fair and impartial competitive bidding processes, integrated resource planning issues, regional electricity markets.
- Access to customers transmission grid construction and operation, policies and procedures for granting transmission service.
- Plant-specific operations and personnel issues, environmental compliance, reliability standards.
- As a result, Dogwood has been, and will continue to be, active in local, state and regional forums where these policy issues are debated and implemented.







Electricity supply is a vast, complex, interconnected realtime machine.

It is critical to the quality of life enjoyed by most Americans and the businesses that power our economy.

The Southwest Power Pool (SPP) covers part or all of nine states, but contains 47,000 miles of transmission lines, which could almost circle the Earth twice.

SPP also contains ~65,000 MW of generating capacity at ~500 power plants, which is 100 times more power than Dogwood can produce.





What is a power plant? Any equipment above a certain size that turns a generator to make electricity.





What is a combined cycle power plant? A power plant with both a steam engine and an internal combustion engine.





What is a steam engine? Technically, it is a device that converts thermal energy to mechanical work using steam as its working fluid.





What is an internal combustion engine? Technically, it is a device that converts thermal energy to mechanical work by combusting fuel mixed with an oxidizer in a combustion chamber.











- ► What does it take to operate this facility?
- Dogwood is much more complicated than its smaller counterparts
 - Size of equipment
 - Need to synchronize to electric grid and move output to meet demand from customers and regional market in real time
 - Industry regulations and reliability standards
- Requires:
 - 24/7 Operations staff
 - Maintenance staff
 - Management and Administrative staff
 - Extensive controls technology



PLANT TOUR