

FutureGen 2.0 Project at Meredosia

June 7-9, 2011

Public Scoping Meetings: Taylorville, Christian County, IL
Tuscola, Douglas County, IL
Jacksonville, Morgan County, IL



Presentation Overview

- Ameren Energy Resources – Who We Are
- Meredosia Project Overview
- Description of Oxy-combustion Technology

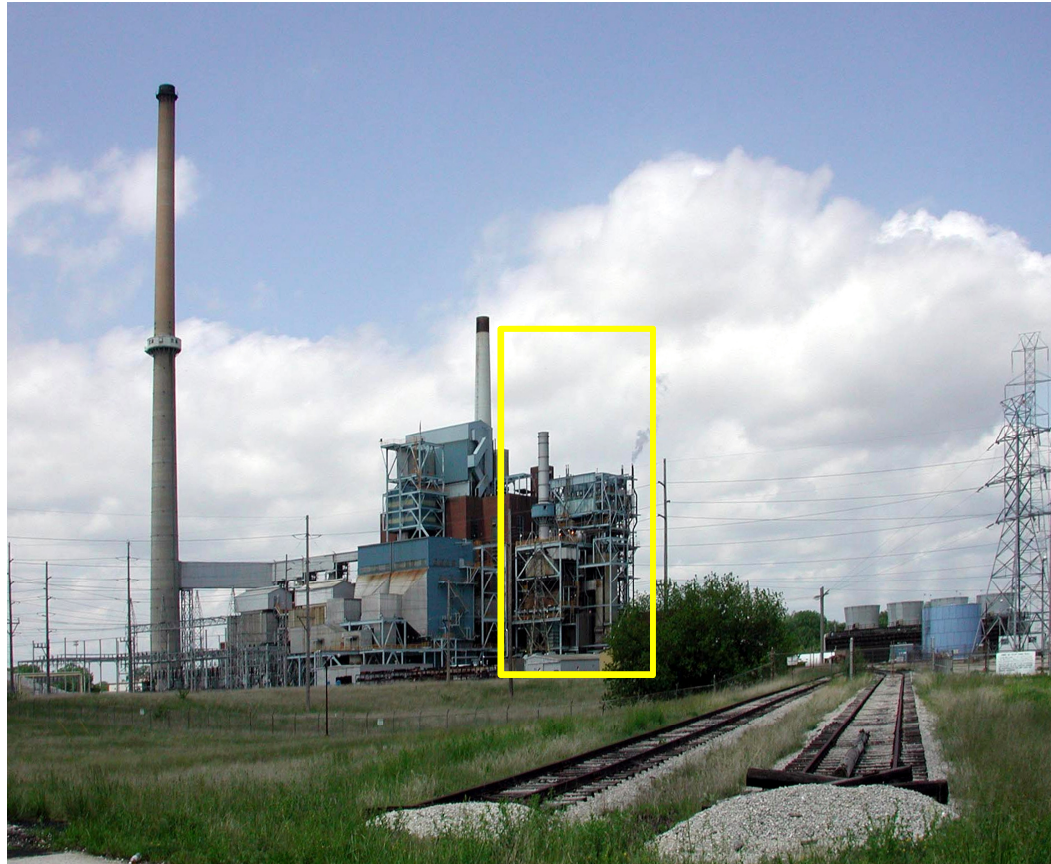
Ameren Energy Resources - Who We Are

- Merchant Generation Fleet (Independent Power Producer)
 - 6,250 MW of total generation capacity
 - 29.6 TWh of electricity produced in 2010
 - Ameren Energy Marketing Company sells output to wholesale and retail customers
 - Municipals
 - Cooperatives
 - Small to large C&I customers
 - Retail suppliers
 - Investor-owned utilities
 - Power Marketers

Meredosia Project Team

- Ameren Energy Resources – Meredosia Plant Owner/Operator
- Babcock and Wilcox – Boiler Island and Gas Quality Control System
- Air Liquide – Air Separation Unit (ASU) and Compression and Purification Unit (CPU)
- URS – Balance of Plant and interconnect to existing plant facilities

FutureGen 2.0 – Meredosias Project Description



Meredosias Plant

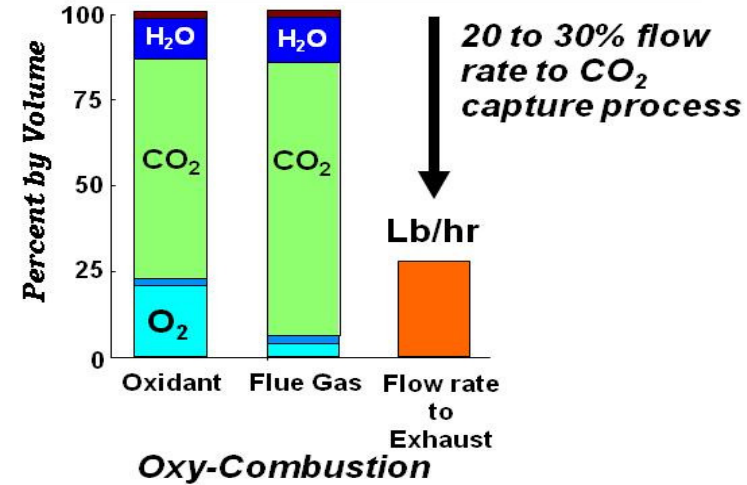
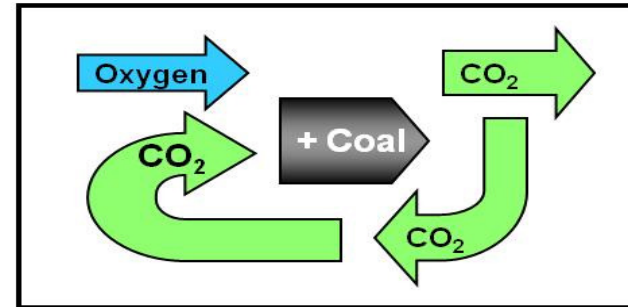
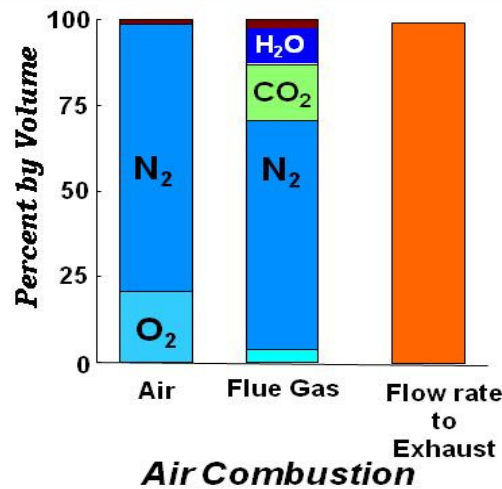
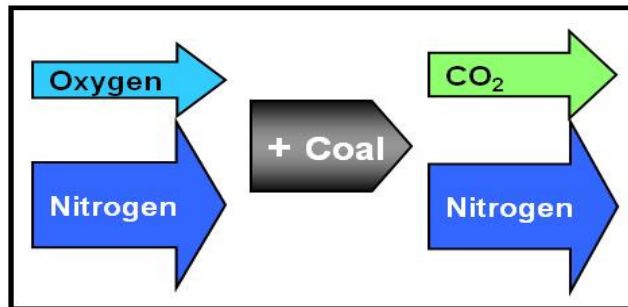
- Location - Meredosias, IL
- Operated by Ameren Energy Resources
- 4 existing units, 3-coal fired (2 suspended), 1-oil-fired
- Illinois and Western Coal
- Truck & barge unloading facilities for coal
- Unit 4 is an excellent plant to repower with Oxy-Combustion technology:
 - Built in 1975
 - Currently idle
 - Appropriate scale; 200 MWe, 2400psig, 1000F, 1000F
 - Turbine/generator have low operating hours and can be placed in service as part of repowered plant

Performance Overview

Design Gross Output (MWe)	202
Target CO ₂ Capture (%)	90

FutureGen 2.0 - Oxy-Combustion Large Scale Test

Oxy-combustion burns coal with a mixture of oxygen and recycled flue gas instead of air to produce a concentrated CO₂ stream suitable for storage or beneficial use.



FutureGen 2.0 - Oxy-Combustion Large Scale Test

Oxy-combustion Plant Configuration

