Schedule WPD-6

Power Plant Comparison Data and Backup

			Comparison of Robert's, DOE and Vantage Numbers								
Ref. #	Selected Power Plants	Capacity (MW)	Technology	Constr. Start	Constr. Complete	Schiff Harden Estimate ($/KW)	DOE Estimate ($/KW)	Vantage Calculation ($Mil)	Vantage Calculation ($/KW)	Included	Analysis
1	Nebraska City	682	PC Subcritical	Jun-05	Jul-09	$1,267	$1,282	$630	$924	yes	Vantage cost data based on the $630M construction cost estimate from the Omaha Public Power District press release to the Lincoln Journal Star newspaper dated July 10, 2009
2	Rodemacher 3	661	Fluidized Bed	N/A	2009	$1,512	N/A		N/A	No	No analysis done based on different technology applied.
3	Comanche 3	750	PC Supercritical	Sep-05	Sep-09	$1,795	$1,733	$1,300	$1,733	yes	Costs correlate
4	Prairie State Energy Campus Unit 1	800	PC Supercritical	Sep-07	Jul-10	$1,812	$2,437	$1,900	$2,375	yes	Vantage cost data based on the $1.9B construction cost estimate from the Prairie State Energy Campus press release dated May 10, 2010.
5	Prairie State Energy Campus Unit 2	800	PC Supercritical	Sep-07	Jul-10	$1,812	$2,437	$1,900	$2,375	yes	Vantage cost data based on the $1.9B construction cost estimate from the Prairie State Energy Campus press release dated May 10, 2010.
6	Plum Point	665	PC Subcritical	Mar-06	Aug-10	$1,954	$1,954	$1,300	$1,954	yes	Costs correlate
7	Lockwood IGCC	600	IGCC	N/A	2011	$2,000	N/A		N/A	No	No analysis done based on different technology applied.
8	Elm Road Unit 1	615	PC Supercritical	Jun-05	Feb-10	$2,032	N/A	$1,150	$1,870	yes	Vantage cost data based on the $1.15B construction cost estimate from the WPPI Energy press release dated March 2010.
9	Elm Road Unit 2	615	PC Supercritical	Jun-05	Jun-10	$2,032	N/A	$1,150	$1,870	yes	Vantage cost data based on the $1.15B construction cost estimate from the WPPI Energy press release dated March 2010.
10	Cliffside	825	PC Supercritical	Jan-08	2012	$2,182	N/A	$1,800	$2,182	yes	Costs correlate
11	Trimble County	750	PC Supercritical	Jul-06	May-10	$2,289	$1,467	$1,161	$1,528	yes	Vantage cost data based on the $1.2B construction cost estimate in current rate case..

Ref. #	Selected Power Plants	Capacity (MW)	Technology	Constr. Start	Constr. Complete	Schiff Harden Estimate ($/KW)	DOE Estimate ($/KW)	Vantage Calculation ($Mil)	Vantage Calculation ($/KW)	Included	Analysis
12	Oak Grove Unit 1	800	PC Supercritical	Jun-07	Dec-09	$2,289	$1,125	$900	$1,125	yes	Vantage cost data based on the $900M construction cost estimate from the Fluor press release dated June 2007. SH included both unit cost in their estimate.
13	Oak Grove Unit 2	800	PC Supercritical	Jun-07	Jun-10	$2,289	$1,125	$900	$1,125	yes	Vantage cost data based on the $900M construction cost estimate from the Fluor press release dated June 2007. SH included both unit cost in their estimate.
14	Sandy Creek	900	PC Supercritical	Aug-07	2012	$2,289	$1,111	$2,000	$2,222	No	Based on construction estimate, project will not be complete until 2012.
15	JK Spruce	750	PC Supercritical	Sep-07	2010	$2,469	N/A	$1,000	$1,333	yes	Vantage cost data based on the $1B construction cost estimate from the San Antonio Express news article dated Feb. 6, 2009.
16	JW Turk	600	PC Supercritical	In development	In development	$2,589	$3,433	$1,600	In development	No	Construction delayed due to environmental permitting issues. Costs not included in analysis
17	Longview	700	PC Supercritical	Jun-07	Mar-11	$2,600	N/A	$1,800	$2,340	yes	Costs correlate
18	Desert Rock Unit 1	750	PC Supercritical	In development	In development	$2,667	$2,000	$2,000	In development	No	Construction delayed due to environmental permitting issues. Costs not included in analysis
19	Desert Rock Unit 2	750	PC Supercritical	In development	In development	$2,667	$2,000	$2,000	In development	No	Construction delayed due to environmental permitting issues. Costs not included in analysis
20	Virginia City Energy Center	595	Fluidized Bed	N/A	2012	$3,025	N/A		N/A	No	No analysis done based on different technology applied.
21	Edwardsport IGCC	600	IGCC	N/A	2012	$3,916	N/A		N/A	No	No analysis done based on different technology applied.
22	Iatan Unit 2	850	PC Supercritical			$2,339	$2,339	$1,988	$2,339		Based on the most recent cost reforecast of $1.99B.
23	Walter Scott Unit 4	790	PC Supercritical	Sep-03	Jun-07	N/A	$1,200	$1,200	$1,519	Yes	DOE, Publication
24	Weston Power Plant Unit 4	525	PC Supercritical	Oct-04	Jun-08	N/A	$774	$774	$1,474	Yes	DOE, Trade Publication

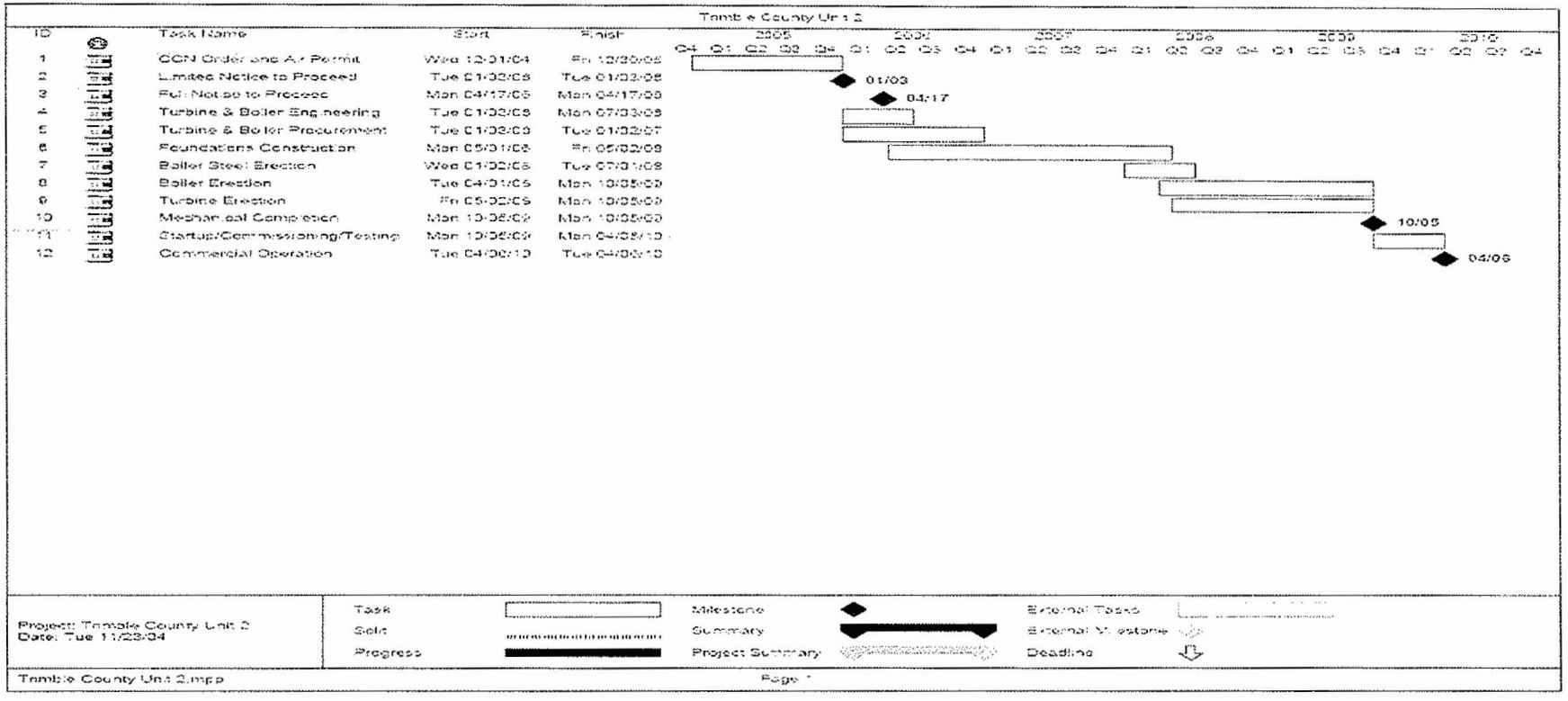
Power Plants In Vantage Peer Group Selection

Ref. #	Project	Developer	Location	Fuel	Technology	Constr. Start	Constr. Method	Size (MW)	Cost Basis ($Mil.)	$/kW	Source of Cost
1	Nebraska City Unit 2	Omaha Power Public District	Nebraska City, NE	Coal	PC Subcritical	Mid 2005 to July 2009	EPC Kiewit	682	$630	$924	$630M construction cost estimate from the Omaha Public Power District press release.
3	Comanche 3 Power Station Expansion	Xcel Energy	Comanche Station, CO	Coal	PC Supercritical	Fall 2005 to Fall 2009	EPC Shaw	750	$1,300	$1,733	DOE Data and article from Power Technologies.com web site;
4	Prairie State Energy Campus Unit 1	American Mun. Power, Southern Illinois Power Corp., Peabody Energy, Illinois Mun. Power, MJMEUC, Kentucky Muni. Power, Prairie Power, Northern Illinois Mun.	Washington County, IL	Coal	PC Supercritical	October 2007 to Mid 2010	EPC Bechtel	800	$1,900	$2,375	Vantage cost data based on the $1.9B construction cost estimate from the Prairie State Energy Campus press release dated May 10, 2010.
5	Prairie State Energy Campus Unit 2	Same as above	Washington County, IL	Coal	PC Supercritical	October 2007 to Mid 2010	EPC Bechtel	800	$1,900	$2,375	Vantage cost data based on the $1.9B construction cost estimate from the Prairie State Energy Campus press release dated May 10, 2010.
6	Plum Point Energy	EIF Plum Point LLC, Empire District Electric Co., East Texas Electric Coop, MJMEUC, Municipal Energy Agency of MS., John Hancock Life Ins., Dynegy	Osceola, AR	Coal	PC Subcritical	March 2006 to August 2010	EPC Black & Veatch	665	$1,300	$1,955	DOE
8	Elm Road Generating Station Unit 1	WPPI Energy, Madison Gas and Electric, Wisconsin Electric Power	Oak Creek, WI	Coal	PC Supercritical	June 2005 to February 2010	EPC Bechtel	615	$1,150	$1,870	Vantage cost data based on the $1.15B construction cost estimate from the WPPI Energy press release dated March 2010.

Ref. #	Project	Developer	Location	Fuel	Technology	Constr. Start	Constr. Method	Size (MW)	Cost Basis ($Mil.)	$/kW	Source of Cost
9	Elm Road Generating Station Unit 2	WPPI Energy, Madison Gas and Electric, Wisconsin Electric Power	Oak Creek, WI	Coal	PC Supercritical	June 2005 to February 2010	EPC Bechtel	615	$1,150	$1,870	Vantage cost data based on the $1.15B construction cost estimate from the WPPI Energy press release dated March 2010.
10	Cliffside Unit 6	Duke Energy	Cleveland County, NC	Coal	PC Supercritical	January 2008 to 2012	EPC Shaw	825	$1,800	$2,182	Duke Newsletter and Trade Publication
11	Trimble County Unit 2	EON, IMEA, IMPA	Trimble County, KY	Coal	PC Supercritical	July 2006 to Mid 2010	EPC Bechtel	760	$1,161	$1,528	2010 Rate Case, Interview with witness
12	Oak Grove Unit 1	Illuminant	Franklin, Tx	Lignite	PC Supercritical	Summer 2007 to December 2009	EPC Fluor	800	$900	$1,125	Vantage cost data based on the $900M construction cost estimate from the Fluor press release dated June 2007. SH included both unit cost in their estimate.
13	Oak Grove - Unit 2	Illuminant	Franklin, TX	Lignite	PC Supercritical	Summer 2007 to June 2010	EPC Fluor	800	$900	$1,125	Vantage cost data based on the $900M construction cost estimate from the Fluor press release dated June 2007. SH included both unit cost in their estimate.
15	J K Spruce	CPS Energy	San Antonio, TX	Coal	PC Supercritical	September 2007 to 2010	EPC Calaveras Power Partners	750	$1,000	$1,333	Vantage cost data based on the $1B construction cost estimate from the San Antonio Express news article dated Feb. 6, 2009.
17	Longview Power	Siemens Financial Services, GenPower Holdings	Morgantown. WV	Coal	PC Supercritical	June 2007 to March 2011	EPC Siemens Aker	769	$1,800	$2,341	Trade Publication/ Modern Power Systems
22	Iatan 2	KCP&L	Weston, MO	Coal	PC Supercritical	December 2005 to Late 2010	Hybrid EPC/Multi-prime	850	$1,988	$2,339	March 2010 Reforecast
23	Walter Scott Unit 4	MidAmerican Power	Council Bluffs, IA	Coal	PC Supercritical	September 2003 to June 2007	EPC Hitachi	790	$1,200	$1,519	DOE, Publication
24	Weston Power Plant, Unit 4	Wisconsin Public Service Corp	Wausau, Marathon County, WI	Coal	PC Supercritical	October 2004 to June 2008	EPC Washington Group	525	$774	$1,474	DOE, Trade Publication

Project	Iatan 2	Trimble County Unit 2
Developer	KCP&L	EON, IMEA, IMPA
Location	Weston	Trimble County
State	MO	KY
Fuel	Coal	Coal
Technology	PC Supercritical	PC Supercritical
Construction Start	Dec-05	7/1/2006
Construction Finish	Late 2010	Mid-2010
Construction Method	Hybrid EPC/Multi-prime	EPC Bechtel
Size (MW)	850	760
Cost Basis ($000, 000)	$1,988	$1,161
$/kW	$2,339	$1,525
Source of Cost	March 2010 Reforecast	2010 Rate Case
Cost/kW difference	$814	
Projected Price Differential when adjusted for size.	$691,750,000	
Initial Engineer	B&M since 1990's	B&M did estimate in 2002
Estimate for Project	B&M did PDR in 2004, with updates afterward.	Cummins and Barnard Engineering from Michigan did development of detailed process.
Commission Approval	Jul-05	Nov-05
Bid for Services	Issued RFP for Owner Engin	Issued bid in early 2005 for EPC. Three months for initial bids. Detailed negotiations on scope, schedule, price and other commercial terms then proceed through remainder of 2005. Limited notice to proceed in early 2006 timeframe.
Major Equipment Types	Alstom Boiler and AQCS, Toshiba Turbine Generator	Duscon-Babcock Boiler, Hitachi Turbine Generator, Siemens AQCS
Commercial Operation:	Late 2010	Scheduled for commercial operation in June 2010. Achieved 200MW load on May 24, 2010
Reference Testimony of Paul Thompson, LGE, Case No. 2009-00548		

Exhibit JNV-5, Summary Schedule of TC2 Project Execution



Nebraska City Unit 2 Coal-Fired Power Plant - Nebraska City, NE

As Kiewit's first modern coal-fired power plant construction project, the Nebraska City Unit 2 facility has been an exciting success. The new plant at Nebraska City more than doubles the current power output at the original facility that was built in the 1970s.

A Kiewit-led joint venture was awarded the contract to engineer, procure, construct, start-up and test a 660-megawatt coal-fired power plant with an IHI subcritical pulverized coal boiler; five IHI coal mills; a Toshiba steam turbine; TEI condenser and feedwater heaters; Flowserve condensate, circulating water, closed cooling water and boiler feedwater pumps; and an 18-cell cooling tower. The new plant incorporates state-of-the-art emission controls, including an Alstom spray dryer absorber and pulse jet fabric filter baghouse; a selective catalytic reduction system; and fly-ash and bottom-ash handling systems.

Additionally, a powdered activated carbon injection system provides a 12-day supply of powdered-activated carbon that is conveyed to the spray dryer absorber supply ducts and used for mercury control in the flue gas at the facility. All components of the system work together to feed the powdered activated carbon from a carbon silo into the spray dryer absorber inlet duct through 24 duct injection lances, thereby minimizing the mercury component in the flue gas to the client's specified levels.

The plant was named as one of POWER magazine's 2009 top plants.

OPPD unveils new power plant near Nebraska City
The new plant includes features that make it more energy-efficient and environmentally friendly than older power stations. But it also doubles the amount of coal being burned in OPPD's side-by-side plants
Story Discussion JOE DUGGAN / Lincoln Journal Star | Posted: Friday, July 10, 2009 12:00 am | No Comments Posted

Together, Nebraska City Station 1 (tall chimney) and Station 2 will generate more than 1,330 megawatts of electricity. (Gwyneth Roberts / Lincoln Journal Star)
NEBRASKA CITY - The Omaha Public Power District dedicated a new 682-megawatt coal-burning power plant Friday.
The new plant includes features that make it more energy-efficient and environmentally friendly than older power stations. But it also doubles the amount of coal being burned in OPPD's side-by-side plants south of Nebraska City and increases the release of greenhouse gases.
The new plant also powers 405,500 more air conditioners, a point not lost on anyone who attended the dedication ceremony on a 82-degree, 76-percent humidity day.
With all the headlines about alternative energy, cheap, abundant coal still turns on the lights in Nebraska - now and in the foreseeable future. And so the conflict between global warming and a developed world continues.
OPPD calls its new $630 million plant Nebraska City Station 2. The utility built the new project on the banks of the Missouri River right next to Station 1, which was finished in 1979. Together the two plants will generate more than 1,330 megawatts of electricity.
"Construction was long and complex, but we are exceptionally proud of the result," said W. Gary Gates, president and CEO of OPPD.
In Nebraska, only the 1,365-megawatt Gerald Gentleman Station near Sutherland, owned by the Nebraska Public Power District, has a greater generating capacity. The Nebraska City plant is the first completed in the state since 2005, when NPPD finished the 250-megawatt Beatrice Power Station.
OPPD serves a population of more than 750,000 people in 13 counties in eastern Nebraska.
The new plant includes scrubbers, high-efficiency burners and a carbon injection system to reduce such pollutants as nitrous oxide, mercury, sulfur dioxide and ash.
Tougher federal regulations on emissions mean the new plant releases one-tenth of the pollution of the 1979 station, said Ray Lynn, technical supervisor at the station.
But since OPPD switched on the new station in May, the combined stations are consuming 135 train cars of coal every 20 hours.
District officials point out that the coal is a low-sulfur variety mined from the Powder River Basin of Wyoming. Plus, they designed the new plant so that

emerging clean coal technology - perhaps carbon capture and storage - can be added in the future.
The utility broke ground on the plant in 2005. Other utilities participated, including NPPD and those in Nebraska City, Falls City, Grand Island, Missouri and Minnesota.
OPPD financed the plant through a 40-year bond, Gates said. Rate increases will be necessary to help pay off the debt.
But the utility will still offer some of the lowest electrical rates in the country, Gates said. And that wasn't lost on Gov. Dave Heineman, Friday's guest of honor, who said low public utility costs help the state attract new business.
"It's very, very important to Nebraska," Heineman said.
Reach Joe Duggan at 473-7239 or jduggan@journalstar.com.
Posted in Govt-and-politics on Friday, July 10, 2009 12:00 am
Print Email
Similar Stories
Mike Johanns says Senate won't fix bad financial bill
Hearing focuses on child welfare reform, safe haven
City of Hickman plans keno vote in November
Ben Nelson, Mike Johanns split votes on financial overhaul measure
Never certified, man spends 8 months as Sioux County sheriff
About 90 Cedars workers to lose jobs when state foster contract ends June 30
Lawmaker plans Arizona-style immigrant bill for Nebraska
Luck of the draw determines Nebraska sheriff races
Sponsored Links
57° FSponsored by:
Current Conditions
Most Popular
Most Commented
Most Read
Nebraska lawmaker plans Arizona-style immigrant bill (288) Comments
Lincoln East students suspended after 'green card' incident (162) Comments
Letters, 5/18: Shift gears on drugs (73) Comments
Letters, 5/19: The role of states (56) Comments
Lincoln drivers share their gripes and horror stories (55) Comments
Lincoln East caps perfect season with overtime win (43) Comments
Letters, 5/20: A troubling trend (34) Comments
Industrial Arts building on list of most endangered historic places (29) Comments
More Latest Comments Lincoln East students suspended after 'green card' incident
Lawmaker plans Arizona-style immigrant bill for Nebraska
Lincoln men cited for chasing squirrels with blow darts, bow
Lincoln police arrest 3 in connection with suspected arson
More to Gary Roth than bones under a Salt Creek bridge
UNL student provides LPD with new image
Lincoln business sues ex-employee
Lincoln East caps perfect season with overtime win

Marketplace
Jobs
Homes
Rentals
Wheels
Pets
Stuff
Top Jobsmore >Cheer/Dance/Sports Coach
* * * * * *

Cylinder Shipping and Receiving Team Member
LINWELD, INC.

Dental Lab Tech
* * * * * *

Top Homesmore >$131,900 4 Beds, 3 Baths

$129,900 2+2 Beds, 1.75 Baths

Top Rentalsmore >
$895-995

3 Beds, 2 Baths

$1,100

2+ Beds, Baths

Top Wheels
more >
0000 Top Pets
more >
Advertise Here
MALTI-POO
Top Stuff
more >
Advertise Here

Connect with Us
Text Alerts Community Email AlertsRSSTwitterFacebook
Latest Journal Star Blogs
Spitballing: Orioles cursed? Or just plain bad?
GZO: And then there were two 'Idols'
Homefront: Octomom gives advice on responsibility
Biz Buzz: Big Apple Bagels at Braeda
Lincoln Life: Peace Pie
Spitballing: The Reds reborn
GZO: Lee's the only thing saving 'Idol' season nine
Biz Buzz: New Gateway tenant
Biz Buzz: More coffee news
Homefront: Study links pesticides to ADHD

Sections
Homepage
News
Sports
Entertainment
Obituaries
Classified
Jobs
Cars
Homes
Services

Comanche 3 Power Station Expansion, CO, USA

Email Article Print Link To Us Related Projects

Key Data

Announcement of contract	April 2004
Site preparation work started	September 2005
Construction to begin on Unit 3	January 2006
Start of operation	Autumn 2009
Output	750MW
Plant type	Super-critical pulverized coal
Location	Comanche Station near Pueblo, Colorado

Full specifications

Xcel Energy has begun constructing its first new coal-fired electric generating unit in nearly 30 years. The Comanche Station near Pueblo, Colorado, is the site for a new 750MW supercritical pulverised coal-generating unit. This adds to two existing units that generate about 660MW. When the Comanche 3 unit is complete, the site will provide nearly 1,400MW of electricity, sufficient for about one third of Colorado's communities. The project is estimated to cost about $1.3bn.

Alstom won the contract from Public Service Co. of Colorado, doing business as Xcel Energy. Alstom will design, supply, erect and commission a high-efficiency, supercritical boiler for the unit. Mitsubishi Heavy Industries (MHI) will supply the supercritical steam turbine for the plant, MHI's first such order from the US. Delivery is planned for June 2007. MHI's Nagasaki Shipyard and Machinery Works will design and manufacture the turbine. Construction and installation work will be done locally.

The plant is planned to go into commercial operation in 2009, and will provide Xcel Energy customers with reliable electricity from the United States' large domestic coal resources.

Comanche Unit 3 will feature advanced emission controls, with extra controls being fitted on the two existing units at the plant. These will help reduce overall emissions of sulphur dioxide (SO_2, by 65%) and nitrogen oxide (NO_x, by 30%) emissions, even despite the

Expand Image
Comanche Station at dusk.

Expand Image
Comanche Station site.

Expand Image
Comanche steam blow.

doubling in overall electric generation. The Colorado Public Utilities Commission has approved construction.

Expand Image
Comanche transmission towers.

Construction progress

"Construction of all the road works proposed under the project have been completed and has cost $7.5m."

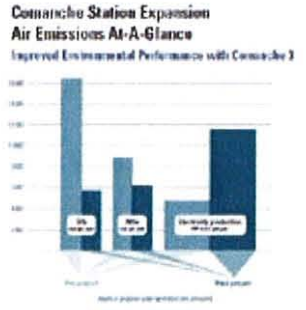
By mid 2009, the construction on the Comanche Unit 3 was 73% complete. Nearly 98% of the engineering works were completed. All the important equipment and components have been made available on the site, while 90% of the materials were procured.

Due to labour shortages, the construction went slightly behind the original schedule. However, the cooling tower has been constructed and the scrubbers and emission controls have been installed at Unit 1 and Unit 2 to reduce emissions of sulphur dioxide and nitrogen oxide by 65% and 30% respectively, Scrubbers have been installed to control sulphur dioxide and new burners have been installed for nitrogen oxide control. The insulation and its aluminium protection cover remains to be completed.

Construction has been completed on the flooring, sides and roof of the building that accommodates the steam turbine generator, while the generator rotor has been set.

Comanche Unit 2 is scheduled to be operational by 2009 end. Power will be transported between the Comanche Station and the Unit 3, via a new transmission line. The line will have two separate circuits that will be strung on one tower, besides a path that runs parallels to the existing facilities. Nearly 67% woks on the line were complete until the end of 2008. The line has the capacity to transport 345KV power.

Construction of all the road works proposed under the project have been completed and has cost $7.5m.



Expand Image
Comanche Unit 3 will feature advanced emission controls reducing sulphur dioxide (SO_2, by 65%) and nitrogen oxide (NO_x, by 30%) emissions, even despite the doubling in overall electric generation.

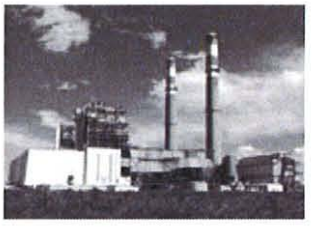
Low-sulphur coal

Alstom's boiler is the core of one of the most advanced steam plants to have been built in the US. It will burn low-sulphur Powder River Basin coal and has Alstom's TFS 2000 firing system. This system, coupled with a selective catalytic reduction system, will have some of the lowest nitrogen oxide emissions in the USA.

Supercritical units operate at higher temperatures and pressures than sub-critical units (Comanche 1 and 2 are sub-critical). The higher pressures increase turbine efficiency and power output, so less coal is used to produce the same amount of electricity. While initial capital costs of a supercritical unit are slightly higher than sub-critical units, the total cost is much less over a unit's life.

The high pressure, high temperature advanced steam cycle also significantly increases plant efficiency, minimising emissions and fuel costs. Similar ALSTOM boilers already operate in Europe and Asia.

"The high pressure, high temperature advanced steam cycle also significantly increases plant efficiency, minimising emissions and fuel costs."



Expand Image
When Comanche Unit 3 is

finished, the whole site will provide electricity for a third of Colorado's communities.

Residential, business and wholesale customers

Xcel Energy is a major US electricity and natural gas energy company based in Minneapolis, Minnesota. The company proposes to own 500MW of the 750MW unit. Two wholesale customers - Intermountain Rural Electric Association of Sedalia, and Holy Cross Energy of Glenwood Springs- may take ownership of the remaining 250MW.

Xcel Energy serves residential and business customers as well as wholesale customers. These include Aquila in Pueblo, Holy Cross Energy in Glenwood Springs, Grand Valley Power in Grand Junction, Yampa Valley Electric in Steamboat Springs, Intermountain REA in Sedalia, and the cities of Julesburg, Burlington and Center.

Comanche Station is located a quarter mile from Rocky Mountain Steel Mills in Pueblo. The steel mill is the single largest commercial account for Xcel Energy in Colorado, and the only direct electric customer in the immediate area. All other electricity that Comanche generates is transported to the power grid or sold to the Pueblo-area electric distribution company, Aquila. Aquila is one of Xcel Energy's largest wholesale customers, purchasing two-thirds of its power from Xcel Energy.

Union-only construction

Over 1,000 workers will be needed over three to four years, with around 40 extra full -time employees once the unit is online. Only union labour are being utilised to complete the Comanche 3 project according to an agreement reached between Xcel Energy and the Colorado Building Trades Council. The council represents 23 unions across the state including carpenters, labourers and others. Preference has been given to local workers, even if contractors are based out of state.

A low water-use system for Comanche Unit 3 will use both water and air for cooling, reducing water use by about half. The Pueblo Water Board has determined that water supplies are adequate. Road improvements make it easier for equipment, materials and workers to travel to Comanche Station. The road project has cost approximately $4m.

Coal supplier and railroad provider have not yet been determined. Fuel will be delivered using the existing rail spur. The plant currently uses about 75 railcars of coal a day. That should double when the new unit is in service. Additional transmission is needed to link the Comanche Station to the Daniels Park substation, south of Denver.

As part of a Least-Cost Plan Settlement agreement, Xcel Energy will make donations to the local Pueblo community.

Related Projects:

Conventional Thermal
- Kusile Power Station
- Medupi Coal-Fired Power Station
- Fiume Santo Power Station
- Wayang Windu Geothermal Plant
- Riverside Coal Fired Plant

Post to: Delicious Digg reddit Facebook StumbleUpon

News Stories

Area Businesses are Getting a Boost from Workers Building Prairie State Energy Campus

New Study Finds Cleaner Coal Projects Can Create Thousands of New Jobs and Economic Opportunities in Illinois

Coal Mine Employment Update

A beacon of hope in Southern Illinois

2009 Year In Review: Southwestern Illinois Developments

Coal Fired Plant Fuels Debate

Good News on Mercury

Metro East benefits from growing biofuels industry

Metro East has energy AND jobs

Prairie State coal plant provides economic power to the economy

Prairie State Energy Campus shows energy = jobs!

Applications for Power Plant Technicians Now Being Accepted

Prairie State officials say emissions restrictions would increase costs for consumers

Prairie State Unit 1 Transformer Delivery

Overview: Staffing of the Prairie State Generating Company Mine

Prairie State's Transmission and Specialty Contract Manager honored for over 30 years dedication to region's construction industry

Talk of the town: Prairie State generator part makes low-speed journey through Lenzburg

Prairie State Unit 1 Stator Delivery

Prairie State Boon for Local Economy

State Projects, 'green' future touted at energy summit

Route 4 Bridge Letter to the Editor

Solving a Crucial Problem

Operating Engineers at work at Prairie State

Prairie State Energy Campus Reaching New Heights

News

Area Businesses are Getting a Boost from Workers Building Prairie State Energy Campus

Click here for a printable version of this article.

Jamie Forsythe
May 10, 2010
For the News-Democrat

LIVELY GROVE - At 9 a.m., the phones start ringing at Waller's Market in Lively Grove with lunch orders from workers at the Prairie State Energy Campus under construction just a few miles away.

Two employees man the phones at Waller's for the next three hours, writing down orders on top of Styrofoam containers and totaling bills. Another half-dozen workers prepare the meals in the full kitchen, which owner Dave Waller said he added two years ago along with a sitting area in preparation for the influx of construction workers.

The place is hopping until well past noon as Waller mans the meat counter and his sister, Marilyn Wienstoer, stocks shelves, prepares pizzas ordered and rings out customers. Another sister Donna Waller-Weber keeps everything running smoothly in the kitchen.

At 11 a.m., Prairie State employees in training start arriving from the mining school set up just two miles northwest of Waller's Market.

They are among 2,300 working at the $3.9-billion energy campus that is under construction. It will include a 1,600-megawatt pulverized coal power plant, which will be powered by the adjacent underground Lively Grove Coal Mine spanning 200 acres. The first 800-megawatt generating unit at Prairie State is expected to be complete in June 2011 with the second 800-megawatt generating unit to be completed 10 months after Unit 1. At least 500 permanent skilled jobs are expected at the energy campus.

"Long term, we are hoping the county will have the skill set necessary to fill the permanent jobs at Prairie State and the coal mine that will be feeding Prairie State," said Bob Myerscough, interim coordinator for Randolph County Department of Economic Development.

Rob McCramie, of Belleville, a shift supervisor at the power plant, said a new school opened back in October and currently has 25 students enrolled with another 19 expected to be added in the next few weeks.

The trainees and their instructors flood the cafeteria window at Waller's where they order up lunch one at a time. The kitchen staff work fast and have lunches prepared in a few minutes.

McCramie said he frequents Waller's a couple times a week. On Friday, he ordered chicken tenders with a side of barbecue sauce.

T.J. Prazer, of St. Louis, a student at the training center, said he comes to Waller's practically every day. "I give them most of my paycheck," he joked.

Bob Jarrett of Coulterville, an electrician at the power plant, said he eats at Waller's at least three times a week. "I know these are good people," he said. "The food is excellent and very reasonable."

Once the 11 a.m. crowd dies down, workers from Prairie State Energy Campus start pouring in. "Those who can get away come in here and eat," Waller said.

"Everyone who comes in here is super nice," Wienstoer said. "We meet a lot of good people," Waller added, noting a lot of workers originate from Chicago, Michigan or other places around the country where work is hard to find.

Construction workers who can't get away can still enjoy lunch from Waller's, which delivers to the campus at 11:30 a.m. every weekday.

Mascoutah Hotel May Profit from New Power Plant Guests

Prairie State Air Permit Review Process Successfully Concludes

Peabody Closes on Agreement With American Municipal Power-Ohio to Purchase 368 Megawatts of the Prairie State Energy Campus

Prairie State Energy Campus Completes Financial Closing

AMP-Ohio Joins Prairie State Energy Campus Partner Group With Commitment to 300 Megawatts of the Project

Prairie State Energy Campus Advances To Full-Scale Construction

Lively Grove businesses aren't the only ones benefiting from Prairie State Energy Campus. The economic effects of the $3.9 billion project expand far beyond Washington County and into Randolph and St. Clair counties.

"They are going to our restaurants, shopping at our stores and buying fuel and other necessities," Myerscough said. "It has been a positive impact."

Renee Smith, owner of the Butcher's Block in Sparta, said the energy campus has brought business to her fresh meat and deli shop. "There's a lot of nice people working out there," she said.

Holly Perry, manager at Pistol City in Coulterville, said the restaurant has seen a "steady increase" in customers. "We get quite a few of them in here," she said of the construction workers, "usually they come in and eat in the afternoon."

"A lot of time when they get rained out they come in and drink," she added.

Construction workers not only need a place to eat, but a place to stay as well. Myerscough said the energy campus has "positively" impacted housing in Randolph County. "The rental units are full," he said, and individuals have taken the opportunity to provide temporary housing for workers by setting up camp ground areas.

Mike Minks, president of the Marissa Chamber of Commerce, said every home previously vacant in town is now rented out. "It's helped our housing market in town," he said.

Mike Patel, owner of the Sparta Motel, said he's usually over 50 percent capacity due to long-term occupants from the energy campus. "Everybody is doing good," he said of businesses in town. "There are slow economies elsewhere but here it (Prairie State Energy Campus) is a plus."

Minks agrees. "I would have hate to see what this area would have been like without Prairie State," he said. "I think it would have been really ugly this recession we went through without Prairie State. It made things better for our little community."

Click here to visit the Illinois Chamber of Commerce Energy Council Blog to read Executive Director Tom Wolf's thoughts on this article.

Site Map Owner Login RSS Feeds

Case Study: Plum Point Energy Project

Financing a Public Power Minority Investment in a Developer Sponsored Merchant Coal Plant

Edward P. Meyers
Goldman, Sachs & Co.

January 18, 2007

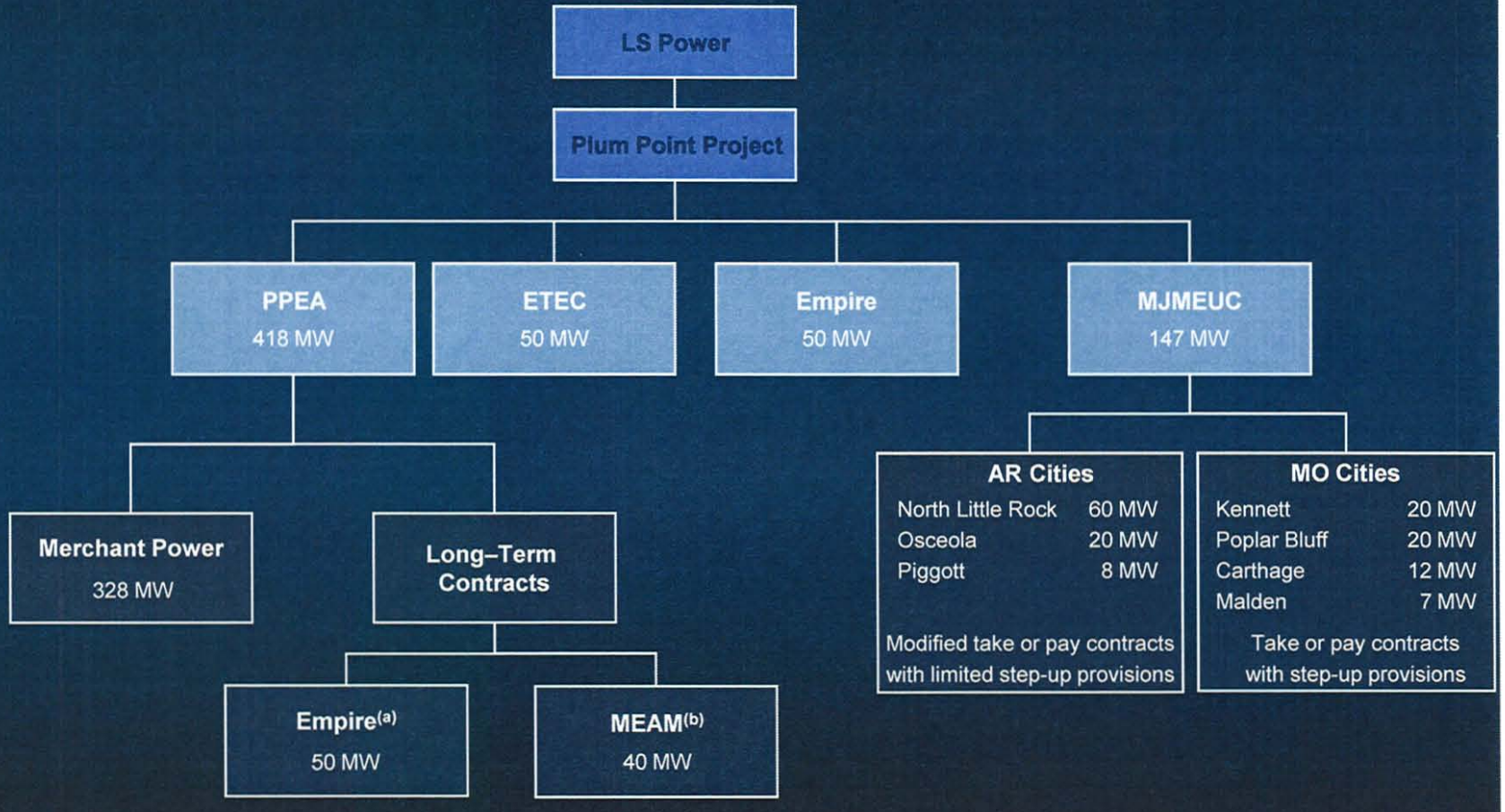
Goldman Sachs

Plum Point Project Overview

- The Plum Point Project is a conventionally [illegible] 665 MW (net) electric generating station using a single pulverized coal fired boiler with steam turbine technology.
- The Project is designed to burn low-sulfur, sub-bituminous Powder River Basin Coal, with the flexibility to blend alternate coals.
- The Project is located on the Mississippi River near Osceola, Arkansas.
- Plum Point Energy Associates ("PPEA"), a wholly owned subsidiary of LS Power Development, LLC ("LS Power"), is the Project developer.
  - LS Power is a privately held company, whose principal business is the development, ownership, management, and operation of generation assets in the United States.

Goldman Sachs

Plum Point Project Ownership Structure at Financial Close



(a) At Empire's option, the long-term contract can be converted into an additional 7.52% ownership interest in Plum Point from PPEA.
(b) MEAM's long-term contract converted into an ownership interest in May 2006 from PPEA.

Goldman Sachs

Plum Point Project Financing Structure – PPEA

- PPEA retained Goldman Sachs, CSFB, and Merrill Lynch as Joint Lead Arrangers.
  - The PPEA total financing package consisted of:
    - $423 million First Lien Term Loan
    - $50 million First Lien Revolving Credit Facility
    - $102 million First Lien Synthetic Letter of Credit Facility
    - $175 million Second Lien Term Loan
    - ~$225 million in equity
  - The Synthetic Letter of Credit facility will back up $100 million of tax-exempt notes.
- PPEA entered into a five-year gas hedge agreement with J. Aron, to hedge approximately 84% of the on-peak output for 328 MW of net capacity.
  - 90% correlation between on-peak power prices and natural gas prices in Entergy
  - PPEA purchased a put spread, whereby they are protected if natural gas prices fall to levels within a predetermined cellar

Goldman Sachs

Plum Point Project Financing Structure – MJMEUC

- MJMEUC entered into an Interim Financing Facility with Goldman Sachs of up to $215 million to finance its ownership interest until the public offering of their bonds, which occurred in May 2006. The Interim Financing Facility consisted of:
  - A bridge loan up to $50 million, and
  - A put option to place up to $215 million in bonds to Goldman Sachs.
- MJMEUC issued $278.8 million Fixed Rate Tax-Exempt Bonds with a final maturity in 2036.
  - MBIA Insured; underlying ratings of Baa1/BBB-/A-
  - MJMEUC will issue ~$30 million Tax-Exempt Notes to complete financing its ownership interest in the Project.

Goldman Sachs

Plum Point Financing Structure – Other Owners

- ETEC, Empire and MEAM each individually provided financing for their respective ownership interests.
  - ETEC raised its capital through the National Rural Utilities Cooperative Finance Corporation ("CFC").
  - Empire used capital available from general corporate sources.
    - The remaining 50 MW in Empire's long-term PPA is not eligible for buyout until five years after commercial operation.
  - MEAM issued $103.5 million in Special Obligation Bonds to finance the acquisition, construction, and equipping of a 6% undivided interest.

Goldman Sachs

Plum Point Project Financing Highlights

- Plum Point will be among the lowest variable cost resources in the Southeast United States. The Project has completed and received all Federal, state, and local permits, and has all approvals necessary to begin construction.
- Significant leverage achieved despite construction risk
- Pro forma for the offering, total debt / kW of $1,732. At the end of the hedge period, Plum Point is projected to have total debt / kW of $1,481.
- PPEA initially entered into two long-term power purchase contracts, one with Empire for 50 MW, and the other with MEAM for 40 MW.
  - MEAM converted its contract into an ownership interest in May 2006.
  - In additional to its original ownership interest, Empire has an option to convert its long-term power purchase contract into an additional ownership interest at a future date.
- PPEA has subsequently sold the remainder of its merchant capacity under long-term contracts, and the output for Plum Point is fully subscribed.

Goldman Sachs

Keys to Marketing the Bonds
Attributes of the Project

- MJMEUC, in considering several power supply alternatives for its members in Southern Missouri and Northeast Arkansas, decided to participate in Plum Point because of the following attributes:
  - Proximity to member load
  - Fully permitted status of project
  - Attractive all-in cost of power
  - Proven technology
  - Likelihood of meeting schedule