

Keys to Marketing Bonds Strong EPC Contract with Experienced Contractors

- EPC Contract
 - Fixed price/guaranteed completion date of August 1, 2010.
 - Contractor is a joint venture of Gilbert Central Corp. (subsidiary of Kiewit), Zachary Construction, and Overland Contracting (affiliate of Black & Veatch).
 - EPC contractors are currently constructing the Nebraska City 2 project on behalf of OPPD. NC2 is of similar size and technology to Plum Point.
- Significant Liquidated Damages and penalties for non-performance
- All-risk builders' risk insurance
- Delay in Start-Up Insurance
- Total construction cost estimate: \$1,048,000,000;
 - MJMEUC portion: \$307,000,000
 - MJMEUC portion includes cost of facilities, interest during construction, funding of required reserves, and costs of issuance of bonds.



Keys to Marketing Bonds Permits / Transmission / Fuel

- Environmental
 - State-of-the-art emission controls
 - Fully permitted by Arkansas Department of Environmental Quality
 - Air permit is final and unappealable
- Transmission into Entergy/SWPP
 - Construction cost estimate includes cost of delivering power and energy to the point of interconnection with Entergy transmission system.
 - Each individual participant is responsible for transmission from that point to its own system.
- 20-year coal transportation contract
 - Burlington Northern Santa Fe Railroad will utilize an existing mainline to deliver coal.
 - EPC Contractor's scope of work includes interconnection with the railroad and construction of a facility rail loop.

Keys to Marketing Bonds Bond Security

- MJMEUC's revenues are derived from the long-term PPAs with each of seven Purchasers.
- The Unit Power Purchase Agreements require the Purchasers to pay their respective share of all Plum Point Project costs, including debt service, whether or not the Project is operating or operable ("Take-or-pay").
- These payments are not conditioned upon the performance or nonperformance of the Commission or any other person or for any cause whatsoever.
- The contracts also require each Purchaser to increase its entitlement share, up to a cap of 200 percent, in the event that a default has occurred with respect to another Purchaser.



Keys to Marketing Bonds Bond Reserve Requirements

- Debt Service Reserve Fund
 - Equal to the Maximum Annual Debt Service
 - Funded from bond proceeds
- Operating and Maintenance Reserve Requirement
 - Represents approximately 60 days' working capital requirements
 - Fully funded from bond proceeds prior to commercial operation
- Reserve and Contingency Account
 - Maintain a reserve and contingency fund with minimum amount cash to support plant operation
 - Funded from revenues at the rate of \$50,000 per month after Plum Point achieves commercial operation, up to a minimum level of \$3 million.

Keys to Marketing Bonds Ratings / Insurance / Road Show

- Ratings
 - Close collaboration with rating agencies
 - Detailed and thorough explanation of project, project participants, and contracts
- Insurance
 - Arranged four-day site visit for insurance providers to ensure complete familiarization with the project and project participants
- Investor Road Show
 - Extensive marketing and interactive Internet Road Show explaining details regarding
 - The overall transaction
 - Contract summaries
 - Bond security
 - Coordinated follow-up program to answer additional questions regarding the transaction

Financing Takeaways

- Scheduling and overall development of the Project are not always completely under your control – be flexible
 - PPEA – senior/subordinate structure
 - MJMEUC – interim financing with permanent take-out
 - MEAM – Convertible power purchase agreement
 - ETEC – RUS financing
 - Empire – combination of ownership and PPA participation



Financing Takeaways

- Relatively unknown developer with limited track record in coal projects raised questions
 - Offset with strong EPC contract and performance guarantees for reputable contractors
 - Exposure to large merchant component of overall capacity had to be isolated from individual co-owner's risk profile
- Small, unrated power purchasers within MJMEUC portion had to be shown as having sufficient economic strength to support take-or-pay and step-up obligations
- Bond insurance can be a very effective way to neutralize credit concerns
- Investors will need extra time to analyze and understand new, complex credits – allow for this

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LS Power Affiliate Signs Engineering, Procurement and Construction Contract for Arkansas Coal Plant

OSCEOLA, Ark. (January 16, 2006) – Plum Point Energy Associates, LLC ("Plum Point"), a member of the LS Power Group ("LS Power") announced today that it has executed a contract with Plum Point Power Partners, a joint venture of Zachry Construction Corporation, Black & Veatch, and Gilbert Central Corp, an affiliate of Kiewit Construction Company, for the engineering, procurement and construction ("EPC") of its 665 megawatt pulverized coal plant in northeast Arkansas.

"Each of these entities has provided EPC services on past LS Power projects and we are confident in their capabilities," said Michael Witzing, Executive Vice President of LS Power.

"We are excited about working with the LS Power organization, a leader in the power generation industry, to provide turnkey EPC services for one of the first new major coal fired plants to be built in the southeastern U.S. in years," said Tom Kaczmarek, Project Executive of Plum Point Power Partners.

Plum Point has issued a limited notice to proceed to Plum Point Power Partners to begin engineering and procurement related activities. On-site construction will begin in the spring of 2006 and the project is scheduled to begin commercial operation in early 2010.

The project will provide reliable, low-cost electricity to wholesale purchasers utilizing proven, pulverized coal boiler technology along with advanced emission controls – making it one of the cleanest coal-fired plants in the U.S. Plum Point is finalizing definitive arrangements with a number of municipal utilities, electric cooperatives and other entities for joint ownership in the project and/or long-term power sales agreements.

The LS Power Group

In addition to the Plum Point Energy Station, members of the LS Power Group have multiple coal fired projects in advanced development in Texas, Georgia and Nevada. Founded in 1990, the LS Power Group is a fully integrated power plant owner, developer and manager with offices in New York, New Jersey, Missouri and Florida.

Zachry Construction Corporation

Zachry Construction Corporation (ZCC) is a privately held company founded in 1924 and based in San Antonio, Texas. ZCC is one of the largest power industry contractors in the United States with over 50,000 MW of installed power in the U.S. and currently has over 2,600 MW under construction. The company's website address is www.zachry.com.

Black & Veatch

Black & Veatch Corporation is a leading global engineering, consulting and construction company specializing in infrastructure development in energy, water, information and government markets. The employee-owned company has more than 90 offices worldwide. Black & Veatch is ranked on the Forbes "500 Largest Private Companies in the United States" listing. The company's website address is www.bv.com.

Gilbert Central Corp

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Gilbert Central Corp is a subsidiary of Peter Kiewit and Sons, Inc (PKS). PKS is one of the nation's largest construction companies with extensive experience in design-build power plants. The company's website address is www.kiewit.com.

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NEW

ONGOING

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Home » Projects » Ongoing » Elm Road Generating Station

ELM ROAD GENERATING STATION

A power plant expansion on the shore of Lake Michigan is the largest private construction project in Wisconsin's history.



Coal is beginning once again to dominate the U.S. market for new electricity generation, and Bechtel is playing a major role on the Elm Road Generating Station project in eastern Wisconsin.

Working for Wisconsin Energy, Bechtel is constructing two coal-fired steam-turbine generating units and related civil works next to the existing Oak Creek power plant on the west shore of Lake Michigan. The expansion--Bechtel's largest lump sum project ever--will provide enough energy to power more than 1 million households.

The first unit is on track to begin operation in 2009; the second will follow in 2010. And at a value of \$2.15 billion, it's the biggest lump-sum turnkey project in Bechtel's history.

Elm Road will be among the most efficient coal-fired power plants in the world, in part because of its innovative cooling system. Rather than using cooling towers, in which water recirculates from condensers to the cooling tower and back, sending heat into the air, Elm Road will use a more efficient

Photo Gallery



PROJECT DETAILS

LOCATION

Oak Creek, Wisconsin

CUSTOMER

Elm Road Services LLC, a wholly owned subsidiary of Wisconsin Energy Corporation

BECHTEL BUSINESS UNIT
Power

POWER REPORT

March 2010

what's inside

- 2..... From the CEO
- 2..... WPPI Energy News in Brief
- 3-4..... Member Spotlight:
Independence, IA
- 5..... Member News
- 5..... State Updates
- 6..... Commercial & Industrial News
- 7..... Datebook: Spring
- 8..... Ask the Experts

members

Wisconsin

Algoma
Black River Falls
Boscobel
Brodhead
Cedarburg
Columbus
Cuba City
Eagle River
Evansville
Florence
Hartford
Hustisford
Jefferson
Juneau
Kaukauna
Lake Mills
Lodi
Menasha

Mount Horeb
Muscoda
New Glarus
New Holstein
New London
New Richmond
Oconomowoc
Oconto Falls
Plymouth
Prairie du Sac
Reedsburg
Richland Center
River Falls
Slinger
Stoughton
Sturgeon Bay
Sun Prairie
Two Rivers
Waterloo

Waunakee

Waupun
Westby
Whitehall

Michigan

Alger Delta CEA
Baraga
Crystal Falls
Gladstone
L'Anse
Negaunee
Norway

Iowa

Independence
Maquoketa
Preston

WPPI Energy is a regional power company serving 51 customer-owned electric utilities. Through WPPI Energy, these public power utilities share resources and own generation facilities to provide reliable, affordable electricity to more than 195,000 homes and businesses in Wisconsin, Upper Michigan and Iowa.

Elm Road Generating Station Begins Commercial Operation



On Tuesday, Feb. 2, Unit 1 of the Elm Road Generating Station (ERGS), the newest coal-fired power plant in Wisconsin, began commercial operation. WPPI Energy is a partner in the ERGS, along with We Energies and Madison Gas & Electric Company. WPPI Energy owns 8.33 percent of this 1,230-megawatt supercritical coal generation project located in Oak Creek, Wis.

The ERGS project will add diversity and low-cost energy to WPPI Energy's power supply portfolio over the long term.

"In the history of WPPI Energy, one of the most important resource decisions our members made was to participate as owners in the new Elm Road Generating Station," said WPPI Energy President and CEO Roy Thilly. "This plant will serve our customers for decades to come at a cost

far lower than new plants being proposed today, and it will be by far the cleanest and most efficient coal plant in the Midwest."

The \$2.3 billion dollar power plant is being built in phases and is the largest private construction project in Wisconsin's history. The second ERGS unit is still under construction and scheduled to be in service later this year.

With the addition of the ERGS units, WPPI Energy will have the most modern fleet of generators in Wisconsin. This important new resource is supplemented by our existing, long-term, purchased power agreements with other utilities and a rapidly growing renewable resource base.

Elm Road Generating Station Project Highlights

- Construction began in June 2005
- Includes two new supercritical pulverized coal units
- Will produce a total of 1,230 megawatts, capable of powering more than one million homes
- The largest private construction project in Wisconsin's history
- Employed more than 2,000 workers at the peak of construction
- Constructed by Bechtel Power Corp.
- WPPI Energy owns 8.33 percent of the ERGS project



From the CEO: The State of WPPI Energy

Roy Thilly, rthilly@wppienergy.org



The past year has been especially challenging for our member communities. As members continue to recover from the worst economic downturn since the Great Depression, WPPI

Energy is focused on the need to control costs and provide excellent service while maintaining our long-term, strategic focus.

Fortunately, our shared strength and the unity of purpose and member participation that drive our joint action agency have put WPPI Energy in a very strong position today and going forward. Our business plan provides the direction that enables WPPI Energy to effectively provide our communities with reliable, affordable power for the long term.

Three critical and strategic decisions the Board has approved in recent years have positioned us with our members to provide

excellent, competitive electric service for the long term.

First, one of our most important business plan objectives is to help customers use electricity more efficiently and eliminate waste. Energy efficiency is the most cost effective solution for the long-term economic health and competitiveness of our communities, our region and our nation. By helping our customers save energy, we can:

- Help customers keep their bills down
- Defer investing in expensive new generation resources
- Reduce our carbon footprint
- Build our credibility with key regulators and legislators, and
- Limit our future costs under impending greenhouse gas regulation.

Our decision to increase efficiency program spending over the last three years is helping all of our customers—large and small—cut waste and lower their energy bills.

Second, to meet Wisconsin and Michigan renewable portfolio standard (RPS) mandates, we made the strategic decision to lock in 20-year renewable energy contracts early at favorable rates. WPPI Energy had resources in place six years early to meet the RPS requirements, which not only helps to lower costs, but it also will help us manage whatever climate change regulations Washington, D.C. enacts in the next year or two.

Finally, we have carefully planned power supply resources to affordably and reliably meet members' needs. We have sufficient resources in place to meet projected loads through at least 2020, providing valuable flexibility in a time of regulatory uncertainty. We are able to substitute beneficial, new resources but we are not being forced to act at a bad time.

Our power supply is flexible, allowing us to take advantage of attractive, short-term market energy prices.

continued on page 7

QUICK TAKES

WPPI Energy News in Brief

Federal Climate Change Legislation Process Continues

Although Senate action appears to be stalled, it is anticipated that the U.S. Congress will continue to debate climate change legislation in 2010. WPPI Energy and our members will remain fully engaged in this debate to advocate for legislation that balances the need to preserve the environment, ensure a secure energy future and mitigate costs for Midwest consumers.

Landmark Legislation Introduced in Wisconsin

On January 7, Wisconsin Governor Jim Doyle introduced the Clean Energy Jobs Act, which would implement recommendations of Governor Doyle's Global Warming Task Force and grow the state's green economy.

Public Power Fuels Economic Development

In November 2009, representatives from local, county, regional and state organizations gathered for WPPI Energy's "Sustainability in Your Community" economic development workshop. The workshop highlighted the importance of enhancing economic development through sustainability.

WPPI Energy's 51 member utilities contribute to the economic well-being of their communities by providing excellent hometown service; local control; reliable, affordable and environmentally-responsible power; and innovative energy services to meet the needs of businesses large and small.

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MEMBER SPOTLIGHT

Independence, Iowa

independence, iowa fast facts

County: Buchanan

Population: 6,014

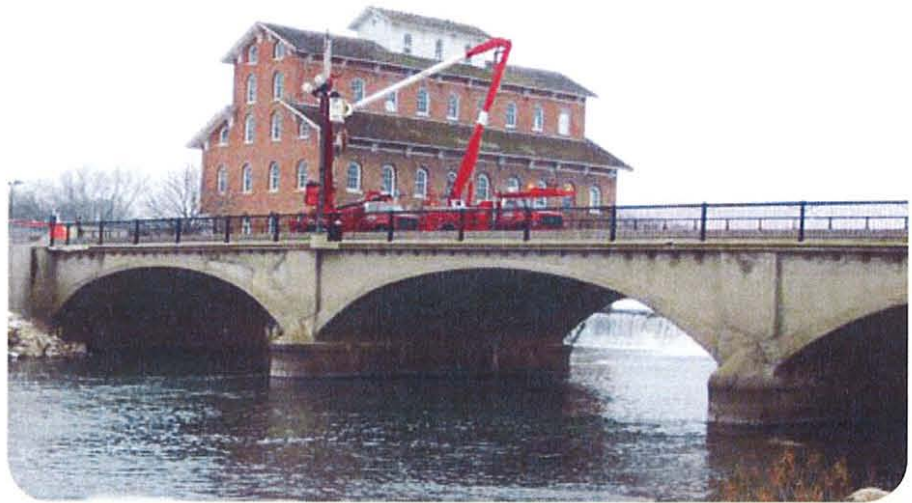
Member Website:
www.indytel.com

Did you know:

Independence Light & Power,
Telecommunications:

- Is a member of the Iowa Association of Municipal Utilities, one of the largest and oldest organizations of its kind in the country.
- Employs four linemen and a line superintendent with more than 52 years of service.
- Added telecommunications to its services in 2000, including a locally owned cable and telephone system and high-speed data network.
- Received the American Public Power Association's Reliable Public Power Provider gold designation in 2007 and 2009 for providing the highest degree of reliable and safe electric service.

WPPI Energy member since 2006.



New light fixtures on the bridge near the Wapsipinicon Mill are installed.

Independence, Iowa is located on the banks of the Wapsipinicon River, nestled in Northeast Iowa. Founded in 1847 and known for its Midwestern hospitality and strong work ethic, the community's name was inspired by the signing of the Declaration of Independence. In 1893 Independence Light & Power, Telecommunications (IL&P, T) began delivering reliable electric power to the city, with a mission of providing first-class, quality service for the lowest possible cost. In 2006 the utility entered into a long-term power supply contract with WPPI Energy. Today the utility offers dependable service to nearly 3,000 homes and businesses.

Valuable Resources

The utility owns and operates eight diesel generators with a total generating capacity of 21,250 kilowatts. The generators range in vintage from 1957 to 2000 and are fully functional. WPPI Energy purchases the entire output from IL&P, T, which helps meet capacity and

reserve requirements. WPPI Energy can call upon this generation when it is economical or necessary during periods of peak electric demand in the region. The sale of energy from IL&P, T's locally owned resources helps offset the community's wholesale power costs.

Building Support for Renewable Energy

Community members in Independence voluntarily purchase electricity from clean, green resources through the utility's Renewable Energy Program. Renewable energy sold through the program for residential and business customers is Green-e Energy certified. Utility customers are able to purchase renewable energy for an additional \$3.00 per month for each block of renewable energy, the equivalent of 300 kilowatt-hours (kWh). The electricity generated for the program, provided by WPPI Energy, comes from a combination of wind, solar and organic materials. The utility's program makes investing in renewable

continued on next page

Independence, Iowa

energy easy and affordable for all community members.

The community's participation level in the program increased, in large part, thanks to an impressive response by local citizens to a utility challenge from Utility General Manager Darrel Wenzel encouraging commercial and residential utility customers to subscribe to the program. During the course of the challenge, customers increased purchases by 29 percent.

A Greener, Brighter Future

Residents and businesses in Independence are committed to preserving precious resources for future generations and improving the quality of life in their community by working with the city to make greener choices. The utility is working with the City of Independence to replace traditional incandescent traffic and walk signals with energy efficient light-emitting diode (LED) signals. The city has eight controlled intersections, with a total of 45 eight-inch stoplight signals, 162 twelve-inch signals, 57 walk signals and three arrow signals, all with traditional incandescent bulb traffic signals. The current system consumes more than 107,000 kWh, with an annual energy cost of \$12,800. Upon completion of the LED retrofit, the system will consume only 14,400 kWh per year and cost \$1,730, significantly reducing the city's energy costs. The utility was able to fund the retrofit by taking advantage WPPi Energy's zero-interest, revolving loan program for members.

In addition to improved efficiency, the new LED lights will offer improved visibility and reduce the maintenance associated with traditional traffic signals. The LED modules are expected to last 10 times longer than their incandescent counterparts, decreasing the downtime for the signals and reducing maintenance costs.

Reducing Costs

As a resource on energy efficiency and conservation, IL&P, T supports energy management programs and services that help customers save energy. Several schools in the Independence Community School District upgraded lighting fixtures by installing high efficiency



Independence Light & Power, Telecommunications office facility.

fluorescent lamps and electronic ballasts. Wapsie Valley Creamery, a large dairy in Independence, installed a quick-close door to their refrigerated storage, replacing an older leaky strip curtain. The new door prevents the escape of refrigerated 37 degree air and reduces frost in the refrigerated area while still allowing fast access to the area for movement of cold products. The energy efficiency upgrade is estimated to save the company more than \$1,800 annually. These projects illustrate the utility's commitment

to reducing energy costs and making the community a better place to live and work.

Public Power Leader

During Public Power Week IL&P, T celebrates the value of having a community-owned electric system to power local needs. Public Power Week is a national, annual event sponsored in conjunction with the American Public Power Association, the national service organization for community and state-owned electric utilities in Washington, D.C.

During Public Power Week, the utility hosts an open house to educate customers about energy efficiency, safety and important matters that are happening in the electric and telecommunications industries. Held each October, the event draws more than 1,000 attendees. The event features representatives from local appliance companies, including heating, ventilation and air conditioning contractors who conduct product demonstrations on energy efficient appliances and educate customers about home energy efficiency. The utility also sets up educational displays and offers giveaways and drawings for LED holiday lights and compact fluorescent lights. Public Power Week allows the utility to celebrate the value of having a community-owned electric system to power local needs and provide excellent customer service.



Routine maintenance on traffic lights.

GreenMax HOME

A little energy is all it takes.

Stoughton Homeowners Build Second GreenMax Home

Homeowners John and Rebecca Scheller are gearing up to create a net zero impact on the nation's energy supply. The Schellers recently completed construction on their net zero energy home (NZEH) in the WPPI Energy member service territory of Stoughton, Wis.

A NZEH is one that produces as much energy as it consumes. The Schellers' NZEH combines renewable energy technologies

with advanced, energy-efficient construction. For more information, visit www.greenmaxhome.com.

Plymouth Utilities' Green Fleet on Display at State Capitol

In September 2009, Plymouth Utilities' plug-in hybrid electric utility line truck was the guest of honor at a press conference at Wisconsin's State Capitol. The truck, which served as a backdrop for the event, was recognized by Wisconsin Governor Jim Doyle as an example of the types of green vehicles that will advance clean energy goals in Wisconsin. Governor Doyle announced that Wisconsin received

\$15 million in Recovery Act funds to help local governments and private businesses invest in alternative fuel and advanced technology vehicles.



Plymouth Utilities' plug-in hybrid electric utility line truck.

STATE UPDATES



michigan

Energy Optimization

WPPI Energy continues to work with its Michigan member utilities to develop energy optimization programs as required by the 2008 Public Act 295. The Michigan utilities began offering a package of energy-saving programs to customers during the first quarter of 2010.

Local Control for Alger Delta CEA

Alger Delta CEA is now regulated by its membership, thereby increasing local control for homes and businesses. As a result of a recent resolution by the Board of Directors of the Alger Delta Cooperative Electric Association and subsequent approval by the Michigan Public Service Commission, the Alger Delta Board is now responsible for establishing, maintaining and applying all rates, charges, accounting standards, billing practices and terms and conditions of service.



iowa

Energy Efficiency Plans

WPPI Energy members in Iowa filed plans with the Iowa Utilities Board in December 2009 establishing energy-saving goals and three-year strategies for meeting those goals. As part of the plans, the utilities will offer new energy-saving programs for customers beginning in 2010.



wisconsin

Wind Siting Regulations Reformed

In September 2009, Wisconsin Governor Jim Doyle signed a bill reforming wind energy siting regulations in the state, calling upon the state Public Service Commission to create uniform regulations for new wind farms in Wisconsin. The law is anticipated to prevent the previously existing patchwork of rules that restricted the development of green economy jobs and clean energy resources.



Mike Malmstead, (920) 205-9057, mmalmstead@wppienergy.org

Malmstead Serving Menasha, New London, Oconto Falls

WPPI Energy welcomes Mike Malmstead, energy services representative serving the member communities of Menasha, New London and Oconto Falls.

WPPI Energy Member Customers Receive Energy Efficiency Grants

WPPI Energy's RFP for Energy Efficiency program continues to make energy-saving projects a worthwhile business investment for large power customers by providing grant funding for energy efficiency projects.

Recent grant incentives were awarded to the following customers:

- Iron County Medical Care Facility, a customer of the municipal electric utility of the City of Crystal Falls (Mich.), received \$30,000 to upgrade the facility's air handling units and to add high efficiency variable speed drives to improve indoor air quality and save energy.
- Pride Sports Inc., a customer of Florence Utilities (Wis.), was awarded \$20,123 to upgrade its existing air compressor system with a new system that will increase storage capacity and add variable speed control to reduce energy use.

- Thilmany, LLC, a customer of Kaukauna Utilities (Wis.), will receive \$119,000 for new mixers for its wastewater lagoon to increase oxygen transfer, reduce foam spray and decrease electric costs.

- SCA Tissue North America, a customer of Menasha Utilities (Wis.), will receive \$150,000 for a new high efficiency aeration blower which will save on energy use and maintenance at its treatment plant.

WPPI Energy invites qualified customers to submit proposals for the next round of RFP bidding, which closes on March 26, and invest in energy efficient improvements. The RFP for Energy Efficiency program is open to all qualified commercial, industrial and institutional power customers served by WPPI Energy member utilities. Visit www.wppienergy.org/rfp for details.



Ahead of the Curve

Our sustainability efforts, which include energy efficiency initiatives and renewables, illustrate our commitment to provide reliable, affordable and environmentally-responsible energy for the long term. To learn more about sustainability initiatives by WPPI Energy and our 51 member utilities in Wisconsin, Upper Michigan and Iowa, visit www.wppienergystewardship.org.

Roundy's Receives \$190,000 Energy Award

Officials from Oconomowoc Utilities and WPPI Energy joined Governor Jim Doyle and Focus on Energy (Focus) for the presentation of a \$190,570 grant for Roundy's Supermarkets to help complete energy efficient lighting projects at its distribution facility in Oconomowoc.

Roundy's recently replaced nearly 2,000 metal halide fixtures with high bay fluorescent fixtures. Nearly 1,600 of them have occupancy sensor controls to dim when the area is not in use. The project will significantly reduce carbon emissions, save Roundy's nearly \$400,000 annually in energy costs and conserve enough energy to power 450 homes each year.

The funding was provided by Focus, which works with eligible Wisconsin residents and businesses to install cost-effective energy efficiency and renewable energy projects. Through Oconomowoc Utilities' and WPPI Energy's participation in the

Focus program, Wisconsin customers, like Roundy's, have access to energy-saving information, resources and financial incentives. Residential and business customers of WPPI Energy members in Michigan and Iowa have access to similar opportunities through their local utilities.



L-r: Peggy Jesion, WPPI Energy; Robert Duffy, City of Oconomowoc; Dennis Bednarski, Oconomowoc Utilities; Don Rosanova, Roundy's; Wis. Governor Jim Doyle; Warren Graham, Focus on Energy; Greg Hoffmann, WPPI Energy; and Richard Axt, Roundy's.

DATEBOOK: Spring 2010

Mark your calendar for these upcoming events, conferences and technical workshops for commercial and industrial utility customers:

Commercial Practical Energy Management

Focus on Energy, www.focusonenergy.com/training
• March 23, 2010 | Eau Claire, WI

Schools Practical Energy Management

Focus on Energy, www.focusonenergy.com/training
• March 26, 2010 | Eau Claire, WI
• April 14, 2010 | Madison, WI
• April 20, 2010 | Brookfield, WI
• April 27, 2010 | Green Bay, WI

Demand Control: Your Action Plan to Savings

The Energy Center of Wisconsin, www.ecw.org/university/
• March 31, 2010 | Eau Claire, WI

The Right Way to Go Geo: Residential and Commercial Buildings

The Energy Center of Wisconsin, www.ecw.org/university/
• April 7, 2010 | Rothschild, WI
• April 8, 2010 | Green Bay, WI

Renewable Energy Options: Applications for Commercial-scale Development

The Energy Center of Wisconsin, www.ecw.org/university/
• April 21, 2010 | Green Bay, WI
• April 22, 2010 | Rothschild, WI

Industrial Practical Energy Management

Focus on Energy, www.focusonenergy.com/training
• May 6, 2010 | Eau Claire, WI



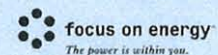
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From the CEO: The State of WPPI Energy: continued from page 2

In recent months, this has made a tremendous difference in helping offset upward cost pressures related to the economic recession.

Furthermore, our power supply will be among the cleanest and most efficient in the Midwest. Our strategic investment in the new Elm Road Generating Station will pay dividends for years to come. As these two units come online over the next 12 months, WPPI Energy's generation fleet will position us well going forward, as older, less clean plants will face higher carbon regulation costs and the possibility of early retirement.

We also continue to work hard to provide leadership and have a seat at the table in policy and legislative arenas. Our engagement in our state capitols and Washington, D.C. this year has been predicated on protecting our customers. The Midwest relies heavily on coal to power our factories and offices, which makes us a carbon-intensive region. We must ensure that any climate change legislation is shaped to mitigate costs to the maximum extent

possible for Midwestern consumers and that our members have the tools they need to help customers through the transition ahead. We will continue to strongly advocate policies that work for our small electric systems and public power utilities.

Going forward, we must plan ahead for a carbon-constrained future. The electric industry is moving toward technological change on all fronts, from new renewable applications, energy storage, carbon sequestration and new nuclear plant designs to smart grid mechanisms that will give customers more control of their energy consumption. These research and development efforts are promising, but expensive. We must make the right choices, providing customers with new services while maintaining affordability.

At the end of the day, our shared strength and the collective leadership of our staff and our 51 members have put WPPI Energy in a good position to maintain the strong, locally controlled public power advantage that is so beneficial to our communities and to meet the difficult challenges ahead.

Ask the Experts

Q: "What does it mean to build green, and how can my business take advantage of the benefits of sustainable design and incorporate energy efficiency measures?"

A: Building green results in improved performance, efficiency and comfort. Green building features can be incorporated in a building at any stage, but the most significant benefits can be achieved during initial design.

WPPI Energy's New Construction Design Assistance program works with prospective building owners and developers, design professionals, and construction contractors to deliver high-performance, non-residential buildings that provide improved energy efficiency, peak load reduction, improved systems performance, and greater comfort. Energy savings are accomplished by increasing efficiency improvements in lighting, HVAC, and other building systems. The program seeks to capture holistic energy savings by encouraging the design and construction of buildings as integrated systems.

WPPI Energy's new office and operations center is the end result of successful planning, something customers can achieve through the New Construction Design Assistance program. The new facility, which was built to achieve Leadership in Energy and Environmental Design New Construction Gold standards

for energy efficiency and sustainability, uses a number of green technologies, including:

- Daylighting
- Geothermal heating and cooling system
- Reused and recycled content building materials, including cellulose insulation
- Pervious paving systems
- Direct digital control and automation system for HVAC, and more.

Like WPPI Energy, business customers can achieve energy savings and demand reduction in new buildings, additions or major renovations. For more information on WPPI Energy's New Construction Design Assistance program and energy efficient technologies for your business, visit www.wppienergy.org.



your questions answered

Have a question you'd like answered by one of WPPI Energy's experts? E-mail your inquiry to PowerReport@wppienergy.org.

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Cover Story - June 2009

Southeast's Top Projects - 1

Cliffside Steam Station Modernization

Project Cost: \$1.8 billion

The \$1.8 billion modernization of Duke Energy's Cliffside Steam Station on the Rutherford/Cleveland county line in North Carolina will add capacity to the coal-fired electrical power plant and reduce emissions through the introduction of cleaner coal technologies.



The Shaw Group of Baton Rouge, La., began construction on the project in January 2008 and was more than 30% complete in April. The company provides engineering, procurement and construction services. Approximately 1,000 workers were onsite this spring, with peak expected at between 1,600 and 1,800. The project is scheduled for completion in 2012.

Duke is adding an 825-megawatt advanced cleaner-coal unit, number 6, and a flue gas desulfurization scrubber to its existing Unit 5. It will retire four 1940s-era, 200-megawatt units once the new unit comes online.

The modernization will increase the plant's output by 80%, from 760 to 1,360 megawatts and reduce most emissions. Duke Energy adds between 40,000 and 60,000 new customers each year. It serves approximately 4 million U.S. customers and has approximately 36,000 megawatts of electric generating capacity in the Midwest and the Carolinas.

Sulfur dioxide emissions will decrease by half, if the new unit is operated at maximum capacity. Air emissions systems will remove 99% of the sulfur dioxide emissions and 90% of the nitrogen oxide emission from the flue gas.

The plant currently emits approximately 150 lbs of mercury annually, but once the new facilities are operational and the old units offline, the equipment will remove up to 90% of the mercury.

The unit's closed-loop cooling towers will require less water and decrease thermal effects on the Broad River. The plant currently withdraws 420 cu ft of water per second to cool the plant, but once the new units are operational and the old retired, it will draw about 50 cu ft of water per second.

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The company selected the new supercritical pulverized coal unit because it is able to use a variety of high- and low-sulfur fuels.

Duke received \$125 million in federal clean coal tax credits for the project. The power company has committed to making Cliffside Unit 6 carbon neutral by 2018.

Key Facts:

Location: Rutherford/Cleveland county line, N.C.
 Owner: Duke Energy, Charlotte, N.C.

Construction Outlook 2009 Spring Update

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Project Overview



Cliffside Steam Station located on the Rutherford/Cleveland County line in North Carolina.

On March 13, 2009, Duke Energy received a final revised air permit for the new, state-of-the-art Cliffside Unit 6 from the North Carolina Department of Environment and Natural Resources, Division of Air Quality. The permit designates that the unit is a minor source of hazardous air pollutants.

This designation confirms Cliffside Unit 6 will have among the strictest, most effective air emission controls available to protect public health and the environment. The Cliffside Steam Station is located on the Rutherford/Cleveland County line in North Carolina.

Construction began on January 30, 2008, and is on schedule for completion in 2012.

Once Cliffside Unit 6 comes on line in 2012, and units 1-4 are retired, the facility will generate more than double the electricity available for customers than the current units, with significantly lower emissions. Duke has committed to retiring 800 additional megawatts of older coal-fired generation, making Unit 6 carbon neutral by 2018.

The project ensures Duke Energy will continue to meet our customers' need for clean, affordable and reliable electricity in the future.

Cliffside Unit 6

- 825-megawatt advanced clean-coal unit
- 4-year construction period
- \$1.8 billion estimated cost for construction
- 2,200 new construction jobs
- \$100 million annual construction payroll
- 20-30 permanent jobs
- \$125 million in federal clean-coal tax credits to benefit customers

Cleaner Air

- An innovative arrangement of proven air emission control systems will remove 99 percent of sulfur dioxide emissions, 90 percent of nitrogen oxide emissions and 90 percent of mercury.
- Total plant mercury emissions will be cut by 50 percent.
- Duke Energy will retire Cliffside units 1-4 (200 megawatts) before the new unit comes on line.
- Retirement of additional 800 megawatts of older, less efficient coal-fired generation will make Cliffside Unit 6 carbon neutral by 2018.

Environmental Benefits

- Cooling towers on Cliffside Unit 6 will require less withdrawal from Broad River and will significantly minimize thermal impacts to the river.
 - To the extent possible, the new unit is being built to accommodate the installation and operation of future carbon control technologies.
 - The wet scrubber will generate, as a by-product, wall board quality gypsum for the building industry.
-

[Cliffside Modernization Fact Sheet \(/pdfs/NG-Cliffside-fact-sheet.pdf\)](/pdfs/NG-Cliffside-fact-sheet.pdf)

(pdf, 138 KB)

[IGCC Fact Sheet \(/pdfs/igcc-fact-sheet.pdf\)](/pdfs/igcc-fact-sheet.pdf) (pdf, 315 KB)

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Fluor Awarded Full Notice to Proceed for TXU's Oak Grove Project.

Publication: Business Wire

Date: Thursday, June 21 2007

You are viewing page 1

TCEQ Approves Oak Grove Air Permit

IRVING, Texas -- Fluor Corporation (NYSE: FLR) announced today that it has received a full notice to proceed from a subsidiary of TXU Corp., Oak Grove Management Company LLC, to complete engineering, procurement, construction and commissioning (EPC) services

for the estimated \$1.8 billion Oak Grove power plant project.

As announced in June 2006, Fluor began engineering and procurement services from its Greenville, South Carolina, project execution office awaiting approval of the air permit from the Texas Commission on Environmental Quality (TCEQ), which was received on June 13, 2007. The company booked approximately \$80 million for this work in the second quarter of 2006. Fluor's remaining portion of this fixed-price contract award will be booked in the second quarter of 2007.

"Fluor looks forward to completing a world-class facility at Oak Grove that will help TXU provide a new, reliable energy source to its customers with state-of-the-art emissions controls," said David Constable, president of Fluor's Power Group.

"TXU has partnered with Fluor on many projects over the years because of its expertise, reliability and project management skills. Working together on this project, we will drive industry-leading quality and efficiency in the development of Oak Grove in order to help meet Texas' near-term energy needs," said Chuck Enze, CEO of TXU Generation Construction.

The Oak Grove project, a nominal 1,600 MW super-critical lignite power plant, which will include best available control technology to minimize emissions, will be located in Robertson County, Texas. The new plant will have among the lowest sulfur dioxide, nitrogen oxide and mercury emissions in the nation and will be 75 percent cleaner than the average U.S. coal plant.

Oak Grove will be constructed at the site of a previously planned power plant that has significant infrastructure already in place. Both Unit 1 and Unit 2 at Oak Grove are expected to be substantially complete and generating electricity in late 2009 and mid-2010 respectively. This will help address

> [News & Publications](#) > [News Release](#)

BLACK & VEATCH PROVIDING SUSTAINABLE ENVIRONMENTAL TECHNOLOGY FOR SANDY CREEK ENERGY PROJECT

Overland Park, Kan. (December 12, 2007) — Black & Veatch, a leading global engineering, consulting and construction company, and its joint venture partners have been awarded a contract for the development of the Sandy Creek Energy Station, a 900-megawatt facility that will deploy some of the most efficient and reliable technology for coal-fueled plants.

The project, which represents one of the largest single coal-fueled power generation plants ever undertaken by Black & Veatch, is among the largest utilizing supercritical steam generators in the United States. The plant will have advanced technology solutions that are designed for sustainability through enhanced efficiency and environmentally friendly systems, processes and components.

"Supercritical technology enables plant owners to produce more electricity with less fuel, making it more efficient with lower emissions than plants with subcritical boilers," said Myron Brase, Project Director for Black & Veatch. "This project will provide much needed electric capacity for the immediate Waco, Texas, area as well as being an additional wholesale electricity source for the surrounding regions."

Sandy Creek Power Partners, the engineering, procurement and construction contractor, is a joint venture among Overland Contracting Inc., a wholly-owned subsidiary of Black & Veatch, Zachry Construction and Gilbert Central Corporation, an affiliate of Kiewit Construction Company. The Sandy Creek Energy Station project is being managed by Dynegy.

"In addition to the Sandy Creek Energy Station, we are working with this team of companies for the engineering, procurement and construction of the new Plum Point Energy Station currently under construction in Arkansas," said Mike Herfurth, Project Director for Dynegy. "We believe this team's experience and capabilities are well-suited for this type and size of project."

Dean Oskvig, President and CEO of Black & Veatch's global energy business added, "Our established relationships with proven partners are an advantage that we bring to the industry, helping further ensure that a high-level of technical expertise and the best technology solutions are aligned to meet our client's complex challenges."

About Black & Veatch

Black & Veatch is a leading global engineering, consulting and construction company specializing in infrastructure development in energy, water, telecommunications, management consulting, federal and environmental markets. Founded in 1915, Black & Veatch develops tailored infrastructure solutions that meet clients' needs and provide sustainable benefits. Solutions are provided from the broad line of service expertise available within Black & Veatch, including conceptual and preliminary engineering services, engineering design, procurement, construction, financial management, asset management, program management, construction management, environmental, security design and consulting, management consulting and infrastructure planning. With more than \$2 billion in revenue, the employee-owned company has more than 100 offices worldwide and has completed projects in more than 100 countries on six continents. The company's Web site address is www.bv.com.

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