

AECI selects sites for new generating unit

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Associated Electric Cooperative Inc. is proceeding with plans to build a coal-based generating plant to meet members' growing energy needs. AECI's board of directors has announced Carroll County as the preferred site, along with Holt County as an alternate location.

In Carroll County, the preferred site is northwest of Norborne. The alternate site in Holt County is in the area near Big Lake, Missouri.

Associated considered a number of potential plant sites. Criteria used to assess sites included rail access for coal deliveries; water availability for plant cooling; proximity to the transmission grid; and a location near the center of AECI's electrical load.

Associated's investment in this project will be about \$1 billion, and construction is expected to begin in 2007. During peak construction of the plant, about 900 people will be working on site. Once the plant is operational, about 130 people will work full time at the plant.

Constructing a new unit will enable AECI to continue to meet its mission of providing a reliable and economical power supply to member systems, which include its six owner generation and transmission cooperatives that serve 51 local distribution cooperatives. Those cooperatives provide electricity to about 800,000 rural electric cooperative member-owners in Missouri, southeast Iowa and northeast Oklahoma.

Those systems are growing. AECI forecasts member energy sales in its three-tiered system will grow 2.8 percent per year over the next few years. At this pace, AECI will need more generation to meet member-owner electricity demand.

AECI informed its members of this need in early 2003, and staff has researched a number of options, including purchasing power, partnering in a new unit built by others, or building a new unit.

Long-term planning, recent energy market trends and clean coal technologies show investing in new coal-based generation is expected to be the best method for meeting members' future electricity needs. AECI's board of directors decided the cooperative has the experience in operating and building coal-based units and should construct the new generating unit, which will be designed to be more efficient with lower emissions. AECI will use the best

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Missouri Public
Service Commission

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available control technology, as defined by the Environmental Protection Agency, on its new coal-based plant - making it one of the cleanest and most efficient plants in the nation at the time it is built.

Nationally, America's air is the cleanest ever in three decades, according to the EPA. Since 1970, emissions tracked because of their importance for human health have declined 51 percent - even though use of coal to generate electricity has tripled. Utilities have invested more than \$50 billion in new technologies to achieve these reductions. AECI alone has spent more than \$600 million since 1994 to reduce its sulfur dioxide emissions rate more than 90 percent and its nitrogen oxides emissions rate more than 80 percent during the summer months when nitrogen oxides contribute to smog formation.

The capital costs for Associated's new power plant will be significant; however, AECI's board of directors has taken action to meet this need and ensure AECI maintains its strong and flexible financial position. In 2003, after two years of planning and discussion with member systems, AECI's board of directors implemented a rate plan to meet the capital costs of new generation. The rate plan also will help Associated meet the significant, projected cost of meeting future environmental requirements on existing power plants.

AECI has not raised its wholesale power rate to members in 20 years. Even with a planned rate increase, AECI's member rate will remain among the lowest wholesale rates available and be at the same level as in 1983.

AECI is available to speak to community and civic organizations about the planned power plant, and AECI will participate in public meetings in both Carroll County and Holt County communities. Contact Nancy Southworth, 417-885-9246, for more information.

Associated Electric Cooperative Inc. is owned by and provides wholesale power to six regional and 51 local electric cooperative systems in Missouri, northeast Oklahoma and southeast Iowa that serve more than 800,000 customers. AECI's mission is to provide an economical and reliable power supply and support services to its members with the vision of being the nation's lowest-cost wholesale power supplier. AECI is a Touchstone Energy Cooperative.

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About Associated's new power plant

How large a generating unit will be built?

Associated has not completed the design of the plant, but the cooperative needs a unit that is about 650 megawatts. The new coal-based unit will be more efficient than existing units with lower emissions.

What will this plant cost to build?

Associated's investment in this project will be about \$1 billion.

How often will the plant run?

The new plant will be a baseload plant, meaning it will run 24 hours a day to provide low-cost energy to cooperatives served by Associated. Maintenance outages would be the only time when the unit would not be generating. Overall, Associated expects the plant to operate about 90 percent of the time.

What if the plant site is in a flood plain?

Associated will elevate the plant site above the 500-year floodplain to ensure 24-hour, seven-day-a-week operation of this valuable generating resource for member systems.

What kind of coal will the plant use and where will it come from?

The new plant will use low-sulfur coal transported by rail from Wyoming. Associated uses low-sulfur coal in its existing units after successfully converting them to burn low-sulfur coal in 1994, a conversion that resulted in a 90 percent reduction in the sulfur dioxide emissions rate and fuel savings for member systems.

What is the height of the power plant stack?

Associated estimates the stack will be 625 feet in height.

How much land is needed for the plant?

Several hundred acres of land are needed for the main plant building, rail facilities, electrical transmission components and the landfill for coal-combustion byproducts.

When will construction start and when will the plant be finished?

Construction is expected to begin in 2007 with anticipated operation by 2011 to meet members' growing energy needs.

What roads will be used during construction?

During construction, Associated projects the main highway access will be from Highway 10; however, many contractors and laborers may gain access to the site via DD at Hardin since more accommodations are available closer to Kansas City. Highway JJ is not expected to be a heavily traveled route for either personnel or equipment transport.

How long is the life of the plant?

Although power plants were once built with an estimated lifespan, today plants are efficiently maintained and updated to operate indefinitely. For example, Associated's oldest and smallest coal-based unit, Thomas Hill Unit 1, set both a net generation and continuous run record in 2003 and continues to provide reliable, low-cost energy for member systems with lower emissions rates of sulfur dioxide and nitrogen oxides.

Who will the new power plant serve?

Associated only builds new generating units to provide wholesale power to its member systems. If Associated's generating units produce more power than is needed by member systems, Associated sells that energy to bring in revenue that helps keep members' rates low and stable.

Associated and its member systems are bound by all-requirements contracts. Those contracts require Associated to provide the wholesale power supply needed by member systems, and those member systems are obligated to buy their wholesale power supply only from Associated.

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