HIGHWOOD GENERATING STATION
Great Falls, Montana

USDA Rural Utilities Service
Washington, D.C.

Montana Department of Environmental Quality
Helena, Montana

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Abstract

Southern Montana Electric Generation and Transmission Cooperative, Inc. (SME) proposes to build a 250-megawatt (MW) coal-fired power plant – the Highwood Generating Station (HGS) – and 6 MW of wind generation at a site near Great Falls, Montana. SME has applied for a loan guarantee to construct the HGS from the Rural Development Utilities Program (RD) of the U.S. Department of Agriculture (USDA). SME has also applied for an air quality permit and other environmental permits and licenses from the Montana Department of Environmental Quality (DEQ). In order to fulfill their respective obligations under the National Environmental Policy Act (NEPA) and the Montana Environmental Quality Act (MEPA), RD and DEQ have jointly prepared an Environmental Impact Statement (EIS). The Proposed Action includes the construction and operation of a 250-MW (net), circulating fluidized bed (CFB), coal-fired generating plant and four 1.5-MW wind turbines. The DEIS analyzes the potential environmental effects of SME's Proposed Action and alternatives to that action.

More than 20 alternatives are evaluated in Chapter Two of the DEIS but eliminated from more detailed consideration because they fail to meet the purpose and need of the Proposed Action – providing 250 MW of base load generation – on the grounds of cost, reliability, or other technical or environmental shortcomings. Alternatives eliminated include: power purchase agreements; energy conservation and efficiency; renewable non-combustible energy sources (wind energy, solar energy, hydroelectricity, geothermal energy); renewable combustible energy sources (biomass, biogas, municipal solid waste); non-renewable combustible energy sources (natural gas combined cycle, microturbines, pulverized coal, integrated gasification combined cycle coal, oil); and three alternative sites. Several alternative site-specific components also eliminated include: different railroad spur alignments, alternate methods of obtaining potable water, discharging wastewater into the Missouri River, and disposing ash at local landfills.

Alternatives assessed in detail include the: 1) No Action Alternative; 2) Proposed Action (construction/operation of the HGS and wind turbines at the Salem site eight miles from Great Falls), and 3) Industrial Park Site (construction/ operation of the power plant, but no wind generation, at an alternate site in a designated industrial park just north of Great Falls). The No Action Alternative avoids most direct adverse environmental effects, but potentially entails a number of indirect and cumulative impacts associated with other generation sources from which SME would have to purchase power if unable to generate its own. In most respects, with the exception of cultural resources, impacts from the Proposed Action (2) and Alternative Site (3) are similar, though the proximity of the Alternative Site to greater numbers of residents intensifies some of these impacts, such as traffic, noise, and air quality; still, even with these, impacts would not likely be significant. Potential air quality impacts at both locations would be reduced to non-significant levels through the application of CFB technology and other pollution controls. SME's plant would comply with proposed Montana air quality permit limits as well as Montana's draft mercury rule, which is stricter than EPA's new federal mercury rule. The only potentially significant adverse impacts would be on cultural and visual resources, because constructing the HGS at the Salem site would adversely affect the Great Falls Portage National Historic Landmark commemorating the 1805 portage the Lewis and Clark Expedition made around the Great Falls of the Missouri River.

To comment on this Draft EIS, please contact:

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