

FOR FURTHER INFORMATION CONTACT: For information regarding the Project or to receive a copy of the draft EIS for review when it is issued, contact Mr. Lloyd Lorenzi as described above. Those seeking general information on the DOE NEPA process, contact: Ms. Carol M. Borgstrom, Director, Office of NEPA Policy and Compliance (EH-42), U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585-0119, Telephone: (202) 586-4600, Facsimile: (202) 586-7031, or leave a toll-free message at 1-800-472-2756.

SUPPLEMENTARY INFORMATION:

Background and Need for Agency Action

Since the early 1970s, DOE and its predecessor agencies have supported research and development programs for a wide variety of innovative coal technologies through the proof-of-concept stage. However, the availability of a technology at the proof-of-concept stage is not sufficient to ensure continued development and subsequent commercialization. Before any technology can be considered seriously for commercialization, it must be demonstrated. The financial risk associated with technology demonstration is, in general, too high for the private sector to assume in the absence of strong incentives. The Clean Coal Power Initiative (CCPI) was established in 2002 as a government/industry partnership to implement the President's National Energy Policy recommendation to increase investment in clean coal technology. That recommendation addresses a national challenge of ensuring the reliability of electric supply while simultaneously protecting the environment.

The goal of the CCPI program is to accelerate commercial deployment of advanced coal technologies that provide the United States with clean, reliable, and affordable energy. Through cooperative agreements established pursuant to the CCPI program, DOE would accelerate deployment of innovative technologies to meet near-term energy and environmental goals; to reduce technological risk to the business community to an acceptable level; and to provide private sector incentives required for continued activity in innovative research and development directed at providing solutions to long-range energy supply problems.

Proposed Action

The proposed action is for DOE to provide, through a cooperative agreement with Colorado Springs Utilities, financial assistance for the

proposed Project. The CFB Generating Unit to be constructed under the Project would be designed for long-term commercial operation following completion of an approximately 12-month period of operation to demonstrate performance of advanced technologies under the cooperative agreement with DOE. The cost of the Project is approximately \$301 million; DOE's share would be approximately \$30 million (10%).

The CFB Generating Unit would produce approximately 150 MW of electricity, at extremely high environmental performance levels, for export to the local grid. The primary fuel for the plant would be subbituminous coal from the Powder River Basin (PRB) in Wyoming. During the demonstration phase of operation for DOE, other fuels would be tested, including bituminous coals from Illinois and Pennsylvania and blends of PRB coal with waste coal and forest biomass (non-commercial timber removed during forest thinning and fire risk reduction activities on National Forest lands). Colorado Springs Utilities would also consider combustion of PRB coal in blends with other fuels, including pelletized or shredded rubber from waste tires and processed sludge from wastewater treatment activities of Colorado Springs Utilities, to demonstrate the range of environmental performance capabilities of the advanced CFB generating unit.

The CFB generating unit would be constructed on an approximately 10-acre site adjacent to the existing 151-acre Ray D. Nixon Power Plant, which has been operating since 1980. The existing power plant features a 227 MW pulverized coal-fired boiler using PRB coal, two 35 MW combustion turbines, a coal storage area, and coal handling facilities. All facilities for the new CFB Unit would be located on the 5,000-acre Clear Springs Ranch property that Colorado Springs Utilities owns and uses for power generation, ash disposal, wastewater treatment, and land application sludge disposal. Site preparation would require grading, clearing of vegetation, and the addition of infrastructure improvements, such as roads, fencing, and drainage. Construction preparations would include installation of foundations for the plant equipment and structures.

The CFB Generating Unit would feature an advanced staged-combustion process that can achieve low nitrogen oxide levels, and an advanced selective non-catalytic reduction system that can further reduce nitrogen oxide emissions. Limestone would be added to the combustion furnace for sulfur removal.

The CFB Generating Unit would also include a three-stage system for sulfur oxide control to achieve up to 98 percent sulfur removal. Requirements for limestone, which would be the only reagent added to the combustion furnace for sulfur control, would be reduced to less than half the amount required by conventional CFB systems.

In addition to the advanced sulfur oxide and nitrogen oxide control technologies, the low emission combustion system would feature an integrated trace metal control system with potential to remove virtually all acid gas emissions and up to 90 percent of mercury from the combustion gas. The CFB generating unit would include an advanced system for solids separation, whereby solids separators would be integrated into the traditional furnace structure to reduce cost and improve reliability. This design would allow reduced size of the overall combustion system and eliminate hot expansion joints, thus potentially achieving improved operational performance and reduced maintenance costs.

The primary feed material for the new CFB Unit would be up to approximately 2,200 tons-per-day of subbituminous coal that would be delivered to the site using the existing rail loop and coal handling facilities. Coal would be stored in the same coal storage area that is currently serving the Nixon Power Plant, though a separate conveyor would be constructed to service the CFB Unit.

Construction of the proposed plant would take approximately 36 months. Plant start-up, system and feedstock testing, and long-term performance and reliability demonstration under the cooperative agreement with DOE would require approximately 12 months, after which the plant could continue in commercial operation.

Alternatives

NEPA requires that agencies evaluate the reasonable alternatives to the proposed action in an EIS. The purpose for agency action determines the range of reasonable alternatives.

The Clean Coal Power Initiative (CCPI) was established to help implement the President's National Energy Policy (NEP) recommendation to increase investment in clean coal technology by addressing national challenges of ensuring the reliability of domestic electric and energy supplies while simultaneously protecting the environment. The CCPI program was structured to achieve NEP goals by promoting private sector initiatives to invest in demonstrations of advanced