



PROJECT FACT SHEET: Healy Clean Coal Project

CURRENT STATUS: HCCP has been idle since the completion of its 90-day test period in December 1999. On April 7th, 2001, GVEA declined interest in a limited retrofit of the plant. AIDEA continues to pursue all options for getting HCCP into operation and selling power as soon as possible. AIDEA's \$35 million grant application to the Department of Energy has been accepted as one of 36 proposals to successfully pass first review by DOE. If awarded, this grant would partially fund a limited retrofit and subsidize a three-year test period to commercialize the technology. Capital Energy, Inc., has completed their contract with AIDEA to (1) review existing information, physical inspection of HCCP and its subsystems, determination of present status and requirement to bring into safe, reliable, economic and long-term operation, and budgetary cost estimates and schedule to accomplish these requirements and (2) determine operational and wholesale energy sale options.

PROJECT BUDGET: \$297 million

SOURCE OF FUNDS: Project funding includes a \$117.3 million grant from the United States Department of Energy (DOE); \$25 million state grant appropriated in 1990; \$85 million AIDEA bond sale; and additional funding from interest earnings, power revenues and contributions from project participants.

PARTICIPANTS: AIDEA administered the state funds and, as the DOE grant recipient and under the Power Sales Agreement (PSA), was designated the project owner. Under the original PSA, Fairbanks utility GVEA was to operate the facility and pay for power generated. Per the PSA, GVEA will pay AIDEA \$4.4 million/annually over a 30-year period. Usibelli Coal Mine Inc. will furnish coal to GVEA. The architect/engineer for the project is Stone and Webster Engineering Corporation. TRW and Babcock & Wilcox were the technology suppliers. H.C. Price Company was the general construction contractor.

PURPOSE: To demonstrate an environmentally sound technology for burning waste coal, create additional energy generation to serve the Interior and show the attractiveness of Alaska coal in combination with modern combustion technology for primarily overseas markets.

BACKGROUND: The Healy Clean Coal Project grew out of a nationwide competition sponsored by the DOE to test new technologies that will help solve the international problem of acid rain. Alaska was one of 48 applicants selected for 13 grants. The project is located adjacent to GVEA's existing Healy No. 1 power plant, which was constructed in 1967.

General construction of the power plant began in May 1995 and was completed on November 21, 1997. Coal firing start-up and the demonstration testing phase, required under the federal grant provisions, began in January 1998 and was comprised of several test series, including performance guarantee acceptance tests, environmental compliance tests, major system characterization tests, integrated system commercial operating condition tests, and collection of commercial operating data.

A 90-day test of the power plant and its new technology was completed in December 1999. Although AIDEA finds that the new technology meets the technical and environmental objectives that were established for the project, GVEA maintains that the plant in its present configuration does not meet its requirements in terms of operations and maintenance cost, reliability and safety.

In May 1998, GVEA filed a complaint in Alaska Superior Court regarding AIDEA's obligations under the Power Sales Agreement and AIDEA filed countersuit in June 1998. Settlement was reached in March 2000 wherein GVEA and AIDEA agreed to a course of action that protects the interest of the ratepayers, provides for pay-back of AIDEA's investment and allows GVEA the opportunity to retrofit the plant to conventional combustor technology.

ECONOMIC EFFECTS: Construction of the project employed approximately 200 workers over a two year period, and approximately 35 permanent jobs were created in Healy and Fairbanks.

SCOPE OF PROJECT: The HCCP consists of a power plant utilizing a combustion system that burns coal in stages to minimize formation of nitrogen and sulfur oxides. Pulverized limestone is added to the combustor and converted by heat in the flue gas to lime, which reacts with the sulfur dioxide in the gas and removes it as a sulfate. A second technology catches the unreacted lime and sulfates, which are recycled to scrub the flue gas, and further reduce the sulfur dioxide content. The process uses a conventional

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boiler that produces steam for a conventional turbine to produce approximately a nominal 50 megawatts of electricity for use by GVEA.