Bradley Lake Hydroelectric Project

Description: Bradley is a storage hydro electric power project located near Homer, Alaska. With a peak capacity of 126 MW, and significant water storage held behind a rock fill dam, Bradley is an important part of the Railbelt operating power portfolio. Due to its remote location, the project has its own airstrip, boat dock, residential quarters, and utility system. The project is interconnected to the Homer Electric Association transmission system through 21 miles of dual 138KV transmission lines.

Background: The power generation potential of Bradley Lake was first studied by the U.S. Corps of Engineers and presented in a report dated March 1955. The project was authorized by Congress in 1962, but, despite its feasibility, federal funds were not available for its construction. The Alaska Energy Authority (then Alaska Power Authority) assumed responsibility for the project in 1982. Preliminary plans and field investigations started in 1982. In April 1984, the Authority submitted an application for license to the Federal Energy Regulatory Commission (FERC). The license to construct the project was issued on December 31, 1985. In December 1987, the Authority and the Railbelt utilities entered into a Power Sales Agreement to delineate responsibilities. Project was declared in commercial operation September 1, 1991. Bradley has been producing power for 16 years. In 2007, Bradley produced 392,000 MWh of power at a cost of approximately $.039 per kWh.

Purpose: The Bradley project provides 5-10% of the annual Railbelt electric power needs at the lowest Railbelt wide generation cost. Bradley is most important to the Railbelt electric system during the cold winter months, when demand for both electric power and gas for heat is at its highest. Utilities limited by available gas use Bradley power to meet the high electric demand.

Source of Funds: The project is owned by the Alaska Energy Authority, who has issued tax exempt bonds to finance a portion of cost of the project. The original cost was $328 million. The State of Alaska appropriated a portion of the construction funds to AEA's predecessor Alaska Power Authority, and the original principal on tax exempt revenue bonds was $165M. Since going into operation this initial principal has been paid down to a present amount of $113.69M. The bonds will be paid off in 2021. When bonds are paid off, payments are to continue to AEA for deposit into the Railbelt Energy Fund to refund the initial appropriations made to build the project.

Operation of Facility: All costs of operation that include payments to the bond holders and operations and maintenance costs are borne by the Railbelt Utilities and their Rate payers, who are signatories to the Bradley Lake Power Sales Agreement. Governance is through management committees populated by the Railbelt Utilities, with the AEA project manager also a member. Each year a new rate is calculated to offset actual costs of operation of the project. The Alaska Energy Authority has a small administrative fee associated with owning the asset and receiving rate payments and paying for the cost of operation. AEA provides a project manager to oversee the AEA involvement in the project.

- The agreement specifies an allocation of the Bradley Lake Power to Railbelt utilities, and through subsidiary agreements the utilities dispatch this power through the Railbelt grid to each utility.

- Under the power sales agreement, 100 percent of the project's capacity and energy has been sold to purchasers who are a part of the agreement:

    1. Chugach Electric Association, Inc. 30.4%
    2. Municipality of Anchorage 25.9%
    3. Alaska Electric and Energy Cooperative, Inc. [1] 25.8%

4.	Golden Valley Electric Association	16.9%
5.	City of Seward	1.0%

Note 1: AEG&T power flows as follows:
Homer Electric Association at (12.0%)
Matanuska Electric Association at (13.8%)

- AEA cannot unilaterally terminate the Bradley Power Sales agreement. The agreement could be changed, but only if all the Railbelt Utilities agreed. The term of the agreement is 50 years, or the date the revenue bond principal obligations are paid. Purchasers will have the ability to renegotiate the power sales agreement after bond obligations are retired.