PROJECT DESCRIPTION

Ever since Juneau’s gold-mining heyday over a century ago, the majority of the electric power required for the City and Borough of Juneau (CBJ) has come from hydroelectric facilities. Burgeoning power needs in the 1950s and 1960s necessitated the search for a long-term and low-cost power source. Long and Crater Lakes, located about 30 miles southeast of Juneau were subsequently determined to contain developable hydroelectric resources. In 1967, construction began on the Long Lake hydroelectric project by the U.S. Army Corps of Engineers. In 1973, 47.2 megawatts (MW) of power were delivered to the City of Juneau by the recently completed facility that included, an 8,400 foot power tunnel (to deliver water from the lake to the turbines), a remote camp, a boat slip, an airstrip, and a 44 mile long high voltage transmission line. In 1990, the nearby Crater Lake facility was brought on-line, contributing an additional 31 MW. The combined 78.2 MW from the project now provides approximately 65% of the power for the local electric utility, Alaska Electric Light and Power Company (AEL&P).

CURRENT STATUS

September 2019

The three hydroelectric generating units that comprise the Snettisham project provide reliable and low cost power to Juneau residents and businesses. Excess power, when available, is provided to the Princess Cruise Ships when docked in Juneau and to the Greens Creek mine. The Snettisham power station infrastructure also provides key support to the associated Snettisham Fish Hatchery, owned by the State of Alaska and operated by Douglas Island Pink and Chum (DIPAC), a non-profit focused on salmon sustainment. AEL&P is owned by Avista Corp. Juneau Hydropower, Inc. (JHI) has applied for an interconnection agreement with AEL&P to utilize a portion of the Snettisham transmission system operated by AEL&P. AIDEA has entered into an MoU with JHI to help facilitate their facilities study for the interconnection.
BUDGET/FINANCE

In 1998, seeking to divest itself from local power utilities nationwide, the federal government completed the sale of the facility and transmission line to AIDEA, which financed the purchase and some necessary rehabilitation of the facilities and transmission line through the sale of $100 million in revenue bonds. Payback of the bonds, by 2034, is accomplished through both long-term project and power sale agreements between AIDEA and AEL&P. Under the agreements, AEL&P is responsible for the operations and maintenance of the facility.

PROJECT/ ECONOMIC BENEFITS

The continued operation and local ownership of the Snettisham hydroelectric facility has enabled the CBJ to enjoy some of the lowest electrical rates in Alaska. These low electrical rates have helped foster continued growth and development of the city. Other distinct benefits from the project include the following:

- Maintenance of a stable power price, adjusted only for increased maintenance or operations costs.
- Sale of excess power to the local Greens Creek mine to lower production costs for the mine, which supports >300 mine employees. The mine is the largest private employer in Juneau. Hydropower also reduces emissions from the mine that otherwise relies upon diesel generators for power production.
- Sale of excess power to local cruise ships during temporary docking. This reduces onboard power requirements from diesel generators and removes air pollution during docking. Power sales to these cruise ships also produces rebates to local Juneau power customers.
- The Snettisham infrastructure provides access and support to the Snettisham Fish Hatchery, which provides 10-12 seasonal hatchery jobs. The hatchery provides critical support to the local fishing industry.

PARTNERS

Owner: AIDEA