

Alaska Energy Cost Reduction Program Progress Report

Grantee: Alaska Power & Telephone Company

Project Name: Upper Lynn Canal Power Supply Projects (Denali)

Financial Assistance Award # 296-07

Period of Report: Second Quarter 2008 (April 1, 2008 to June 30, 2008)

Project activities completed:

- Completed the diversion dam spillway and Obermeyer gates
- Completed the installation of the intake structure, attached the 48” inlet valve and bypass piping to meet in-stream flow requirements.
- Completed the diversion dam sluiceway and sluice gate less operator
- Removed the cofferdam.
- Framed and insulated the wood-frame valve house superstructure.
- Trenched and trim blasted for the 48” HDPE penstock
- Mobilized HDPE fusion equipment and fused 400 feet of pipe from valve house to bridge.
- Completed alignment, grouting and plinth .
- Completed powerhouse building electrical.
- Placed all powerhouse equipment and completed 80% of equipment electrical interconnections.

Project existing or potential problems:

Bending the 48” HDPE pipe to the designed radii is proving to be problematic especially with the low ambient temperatures we have been experiencing. The section between the valve house and the bridge appears to be manageable but the 125 foot radius curve at penstock station 8+00 will likely require some redesign. Several solutions are being considered. Locating suitable backfill material for the HDPE is another potential problem. If there is not enough material located on site, it may require importing a crusher or barging in crushed material from Skagway or other locations.

Activities targeted for Next Reporting Period, Third Quarter 2008:

- Complete the fusion welding of HDPE, place and backfill.
- Complete the installation of above ground ductile iron pipe, concrete supports and thrust blocks.

- Install the power and communications conduits and cables from the powerhouse to the valve house.
- Complete the installation of equipment at the valve house to control the spillway gates, the sluice gate and inlet valve.
- Complete the valve house exterior sheeting.
- Install the substation transformer and cabling.
- Finish the mechanical connections for hydraulics, bearing lube and building cooling.
- Clean sediment from tailrace and finish slope stabilization on right of ways
- Commission the equipment and synchronize to the ULC grid.
- Complete all agency punch-list tasks on the project.
- Demobilize construction equipment.