

Alaska Energy Cost Reduction Program Progress Report

Grantee: Alaska Power Company (a/k/a Alaska Power and Telephone Company)

Project Name: APC South Fork Hydro Project

Grant # 2195156

Period of Report August 1 to September 30, 2004

Project activities completed:

- Updated construction schedule and budget (will be ongoing process)
- Finalized specifications and ordered the sluice gate for diversion dam.
- Finalized specifications and ordered the turbine hydraulic unit.
- Finalized specification and ordered the switchgear and controls for the powerhouse equipment.
- Formed and poured the concrete foundation for diversion dam and valve vault.
- Formed and poured the diversion dam spillway
- Completed the penstock right of way clearing and trenching.
- Installed 95% of the 32" ductile iron penstock and compacted backfill.
- Complete excavation for tailrace at discharge end, installed 48" tailrace pipe and restored the slope with large rock to eliminate any erosion into the adjacent stream.
- Received turbine and generator drawings needed to finalize powerhouse building specification and drawings.
- Installed and maintained erosion control measures as needed.

Project existing or potential problems:

September rains created flash floods that overtopped the coffer dam for short periods as planned for. The water that overtopped the cofferdam washed across the diversion dam foundation without causing any significant damage. October has the highest flows of the year and close attention will be required to control flooding and erosion on all parts of the project. A slowdown in work progress is also likely with diminishing daylight and stormy weather.

Activities targeted for Next Reporting Period, October 2004:

- Request bids for a pre-engineered powerhouse structure. Place order for a building package ASAP.
- Complete the concrete penstock thrust blocks at Sta. 25+00.

- Complete the ductile iron penstock installation and backfill.
- Install the buried power and communications conduits and splice pedestals along the penstock, backfill to final grade.
- Form and pour the west wing wall of the diversion dam.
- Continue to follow all environmental plans and any requirement of the Environmental Compliance Monitor.



Diversion Dam foundation with bypass pipes in foreground



Loading penstock for transport on right of way



Placing 32" ductile iron pipe on bedding in trench.



Engineers and surveyors locating lower end of penstock



Tailrace discharge and energy dissipater