UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Reclamation

Eklutna Project

Annual Project History

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Calendar Year 1962

Volume XII

NARRATIVE STATEMENT

POWER PLANT

The Eklutna Power Plant generation and distribution figures for calendar year 1962 are as follows:

Gross Generation	150,521,000 kwh
Station Service Use	618,700 kwh
Net Generation	149,902,300 kwh
Transmission Losses	3,731,171 kwh
Sales to Customers	146,558,729 kwh
Net Interchange	387,600 kwh

The maximum load on the plant was 32,000 kw which is a utilization factor of 107%.

216,490 acre-feet of water were used through the turbines during the year and none was spilled. This gives a water factor of 100%.

Unit No. 1 was started 167 times during the year and operated 6,920.1 hours, generating 74,746,000 kwh. Availability factor during the year was 98.8%.

Unit No. 2 was started 165 times during the year and operated 7,030.4 hours, generating 75,775,000 kwh. Availability factor during the year was 99.1%.

The annual overhaul and inspection of Units No. 1 and 2 was completed May 11 and May 17, respectively. The exciters on both units were wiped and blown out and the accessible portions of the stators and rotors were wiped clean of oil and dust. Resistance readings were taken on the resistance temperature detectors and on the generators and exciters.

The turbines and draft tubes were inspected. Galling on the turbine wicket gages was negligible. Some cavitation was noted in the four air holes through the runner. These spots were patched with epoxy cement, but inspection a month later showed that all the epoxy cement had been washed out. The epoxy used was Epolast 540 and Metlhesive F2005.

DRAINAGE AND LAKE

Lake elevation at the end of the water year on October 1 was 858, which is ten feet below the spillway crest. The lake had been drained to elevation 814 to install the gate seal rings. Due to this low elevation and below normal summer runoff, the lake did not fill.

The Army relocated a section of the road between the lake and Eklutna Glacier and conducted glacier training exercises for most of the summer. This relocation crossed the left-hand fork of Eklutna River at a narrow spot where they built a Bailey bridge.

Gauging on the two streams above the lake was discontinued. Operation of the precipitation gauge was not satisfactory. The burner was out each time it was checked during the winter. The burner was removed during the fall and sent to the Denver laboratory for repairs and was reinstalled before the winter operation.

A small stream below the dam was diverted into the lake by digging a short ditch with ditching powder. The flow of the creek was gauged and found to be less than expected, possibly due to the light snow fall during the winter.

The spillway gates were painted, but no other work was done at the lake during the year.

During installation of the gate seal, a diver was hired to inspect the trash rack. He reported that there were no logs on the racks and that there was still about three or four feet of the trash rack structure above the lake bed.

Several new snow markers and three new snow courses were set up in the upper drainage area.

The Army requested a withdrawal of 63 acres at the foot of Eklutna Glacier for glacier and mountain training of troops. Also, a 1,200-acre withdrawal was requested below Eklutna Dam for an ammunition dump.

The Bureau of Land Management requested and was granted permission to build four camp and picnic grounds in the vicinity of Eklutna Lake.

P783-908-2167 - Eklutna Project, Alaska
Dynamiting channel for the diversion of a stream into Eklutna Lake. This stream originally ran into Eklutna Creek several hundred yards below the dam.
5/62 - USBR Photo by T. Lappi

P783-908-2169 - Eklutna Project, Alaska
New channel and water flow in "Blasted Creek." View looking toward lake.
5/62 - USBR Photo by T. Lappi