UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

Eklutna Project
Annual Project History

Calendar Year 1965

Volume XV

NARRATIVE STATEMENT

POWERPLANT

The Eklutna Powerplant generation and distribution figures are shown below in kilowatt-hours for calendar year 1965.

Gross generation	135,343,000
Station service use	687,600
Net generation	134,655,400
Transmission losses	4,932,864
Sales to customers	131,968,736
Nonfirm power	14,031,832

Maximum load on the plant was 35,000 kilowatts, which is a utilization of 117 percent.

During the year, 192,123 acre-feet of water were used through the turbines, indicating a water factor of 100 percent as there was no spill from the lake.

Unit No. 1 was started 97 times during the year and operated 5,565.4 hours, generating 66,446,000 kilowatt-hours. Availability factor was 79.2 percent.

Unit No. 2 was started 84 times during the year and operated 6,026.2 hours, generating 70,897,000 kilowatt-hours, for an availability factor of 84.6 percent.

Unit No. 1 received a major overhaul. Details are given in the attached overhaul report.

Unit No. 2 received an annual overhaul, details of which are shown in the attached report.

The 115-kv Anchorage line breaker exploded during a normal switching operation on May 19, 1965. This was attributed to the May 11 earthquake which apparently cracked the hollow column insulators. These have been replaced with high strength insulators in an attempt to prevent any recurrence.

DRAINAGE AND LAKE

Due to the work scheduled on the intake works and the dam, the lake elevation was held below normal at the beginning of the 1964-1965 water year and stood at 858 feet the first of October. The lake was drawn down more rapidly than normal throughout the winter and early spring in order to minimize the required cofferdam. The cofferdam was closed on March 24, 1965 with a lake elevation of 812.2 feet. Work on the intake structure under Specifications No. DC-6212 was completed on May 14. Refer to the Final Construction Report on Replacement of Eklutna Dam, dated December 1965, for details on the intake and dam replacement.

Due to the intentional draw-down of the lake, followed by less than normal runoff, the lake did not fill and stood at 846.5 feet at the end of the water year.

The precipitation gage and all snow markers were checked and serviced in the early fall. Regular snow marker readings were taken throughout the winter.

Replacement of Eklutna Dam

P783-908-C&R-173NA. Looking downstream from near Sta. 3+00 on approach channel for spillway, showing work continuing on inlet walls and conduit sections.
August 19, 1965 USBR Photo by W. S. Nelson

P783-908-C&R-216A. View of upstream face of completed dam.
Nov. 10, 1965 USBR Photo by W. S. Nelson

P783-908-2370. View of spillway section, Old Eklutna Dam, Eklutna Lake.

December 1965 USBR Photo by W. S. Nelson

P783-908-2371. View of gated spillway section of Old Eklutna Dam after removal of gates by contractor on new dam.

December 1965 USBR Photo by W. S. Nelson