

Reproduced at the National Archives at Seattle

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION

Eklutna Project  
Annual Project History

Calendar Year 1964

Volume XIV

## NARRATIVE STATEMENT

### POWER PLANT

The Eklutna Power Plant generation and distribution figures are shown below in kilowatt-hours for calendar year 1964.

Gross generation	159,136,000
Station service use	670,200
Net generation	158,465,800
Transmission losses	5,387,949
Sales to customers	136,528,823
Nonfirm power	21,902,028

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

During the year, 227,332 acre-feet of water were used through the turbines, and the Geological Survey estimated that 42,630 acre-feet were spilled, resulting in a water factor of 83.8 percent.

Unit No. 1 was started 144 times during the year and operated 6,673.8 hours, generating 81,172,000 kilowatt-hours. Availability factor was 86.0 percent.

Unit No. 2 was started 110 times during the year and operated 6,724.9 hours, generating 77,966,000 kilowatt-hours for an availability factor of 87.8 percent for the year.

Unit No. 1 was scheduled to be overhauled, starting April 1, 1964, but this work was cancelled after the earthquake. The seal ring clearances and cavitation are now greater, as the plant was operated after the quake and before the tunnel was cleared, with No. 1 carrying the highest load to try to get most of the debris through it and save Unit No. 2 which was overhauled in 1963.

All of the new radio equipment has been received and installed. The Mirror Lake relay site did not prove successful, so the equipment was moved back to the Goose Bay site. It is planned to move the

### DRAINAGE AND LAKE

Due to the earthquake, no water was stored against the dam. Water was spilled for about two months. Under normal conditions the lake would probably have been full on October 1 with no spill. Runoff from the drainage area was about average. There were a number of earth slides in the canyons above the lake but none that had adverse effects on Eklutna Lake. There was a settlement or compaction of the area at the head of the lake, but its extent is not known at this time.

Permanent repairs of the intake and dam are scheduled for the Spring of 1965.

The Bureau of Land Management has completed a number of camp grounds and picnic grounds along the shore of the lake.

The precipitation gage heating mechanism did not function during the winter. The thermostat was wired out of the circuit to enable the burner to operate continuously to see if this will give satisfactory operation.

Photo No.  
109



P783-906-2358 Eklutna Powerplant - Alaska. View of the dam and spillway gate structure at Eklutna Lake. This structure, built by private interests in 1929, was declared unsafe for impounding water after the March 27 earthquake. All gates were locked open throughout the spring run-off and plans were started immediately by the Bureau of Reclamation for the construction of a new spillway and gate structure.

7/20/64 Bureau of Reclamation photo by J. V. House