

UNDEVELOPED HYDROELECTRIC SITE

State ALASKA County _____ Site PTARMIGAN LAKE
 Location NE 1/4 Section 29, T4N., R1E., SEWARD Meridian Stream PTARMIGAN Creek trib Kenai R
 Planned by (date) City of Seward, FPP 2156 (5/3/54); FPP 2262 (10/26/59)
 Reference A WATER POWER Reconnaissance in So. Central ALASKA "USGS WSP 372, pg 119 Date 1915
 Quadrangle coverage Seward, ALASKA (Recon); SEWARD (B-7), ALASKA; Plan, Dam site Ptarmigan Lake, ALASKA
 Land: Public _____ Private _____ Use: I, FC, MI, R

w.s. ALT = 750 feet ^{5/}	Undeveloped capacity <u>0.45 mw - 3.173 mw (diversion) T</u>
Dam: Height <u>52 feet</u> Length <u>100 feet ^{2/} pg 39</u>	Percent efficiency _____
Normal pool altitude <u>802 feet ^{2/} pg 33, 38</u>	Annual generation _____
Reservoir area <u>1028 acres at 800 feet alt. ^{1/}</u>	Plant factor _____
Storage capacity <u>40,000 acre feet ^{2/} pg 33, 38</u>	Mean flow <u>$3\% \times 32.6 \times 111 = 102 \text{ ft}^3/\text{sec} (74,000 \text{ ac ft/yr})$</u>
Drainage area <u>29.93 square miles ^{1/}</u>	Period of record <u>5/47-9/58, gage 15244000, DA = 32.6 sq mi.</u>
Gross head <u>802' - 436' = 366', 2 mile diversion to Kenai h.</u>	

Remarks: ^{1/} ORIGINAL Calculations in Stream files.

^{2/} "Water Power Possibilities in the General Vicinity of Anchorage and on the Kenai Peninsula" USGS, Johnson, 1/29/48

^{3/} "Inflow Report No 2, Cook Inlet and Tributaries", USACE, 1/20/50

^{4/} "Preliminary Report on the potential waterpower of ... Ptarmigan ... lakes on the Kenai Peninsula ..." USGS, Johnson, 1955

^{5/} "Geologic Investigations of Proposed Power Sites at ... Ptarmigan ... lakes, Alaska", USGS, Bulletin 1031-A, 1955

^{6/} "Cook Inlet and Tributaries, Alaska" H. Doc 34, 85th Cong., 1st Sess., USACE, 10/2/56

^{7/} "Water Resource Activities in the US - Water Resources of Alaska" Select Committee, 1/6/57 Prepared by TJK Date 11/79

(over)

- 11/ "Hydroelectric Requirements and Resources in Alaska", Hearings USSenate, 9/1960
- 12/ "Interim Report No 2., Cook Inlet and Tributaries, Part 1..." H. Doc. 455, 87th Cong. 2nd Sess., USACE, 6/25/62