

Swan Lake Pool Raise – Summary of Proposed Action

Background

The Southeast Alaska Power Agency (SEAPA) owns the Swan Lake Hydroelectric Project (Project; FERC Project No. 2911), on the Northeast side of Carroll Inlet in Southeast Alaska. SEAPA is currently evaluating the engineering feasibility and value of increasing the reservoir's storage capacity through an increase in dam height. Powerhouse operations would not change and the nameplate capacity will remain at 22 MW. Around the reservoir, as shown on FERC Project drawings K-3, K-4, and K-5, the Project boundary follows the 350 ft. elevation contour.

In 1997, U.S. Forest Service (USFS) lands around the Project were conveyed to the State of Alaska pursuant to the Alaska Statehood Act of July 7, 1958. Two parcels (U.S. Survey No. 11630) were conveyed as described under Patent Number 50-97-0286. Parcel 1 encompasses land below the dam site, and Parcel 2 describes lands surrounding the reservoir.

The present full pool reservoir elevation is 330 ft. and the present Probable Maximum Flood (PMF) elevation is 344.3 ft. Trees are cut to elevation 335 ft. along the reservoir. SEAPA is planning a 20-foot raise in full pool reservoir elevation; the top of dam would increase from an elevation of 344 ft. to 358 ft. The top of the parapet wall would rise from an elevation of 347.5 ft. to 361.5 ft. The new PMF elevation is 355 ft.

FERC has indicated that there are no firm requirements for setting a revised FERC boundary. As described in 18 CFR § 4.41(h)(2), the boundary must enclose only those lands necessary for operation and maintenance of the project and for other project purposes, such as recreation, shoreline control, or protection of environmental resources. It is common for the boundary to be set at the normal maximum water surface elevation; in this case the new full pool reservoir elevation will be at 350 ft. or at the current FERC Project boundary.

Inundation of 20 additional feet of shoreline will have some resource impacts. To the extent that these impacts are within the existing FERC boundary and on state lands, environmental review will be primarily be conducted by the US Fish and Wildlife Service (USFWS), the Alaska Department of Fish and game (ADFG) and the Alaska Department of Natural Resources (ADNR). The National Marine Fisheries Service (NMFS) may have an interest understanding potential impacts to Falls Creek, if any. Additional consideration will need to be made where USFS lands may be impacted and where potentially productive aquatic habitat may be lost; therefore, knowing precisely where USFS lands interact with the Project area and the quantity and quality of tributary habitat, is important.

FERC Process

An amendment to modify the Project license, as described above, would be considered by FERC to be non-capacity amendment, since the nameplate capacity of the Project will not change. However, it involves a modification of an existing dam that will result in a significant change in the normal maximum surface area or elevation of an existing impoundment. Therefore pursuant to 18 CFR §4.38(a)(4)(v), three stage consultation is required. Three stage consultation is generally defined as follows:

- Stage 1 – Initiate consultation through the release of an Initial Consultation Document (ICD). Stage 1 ends when agencies have provided the applicant with a list of study

requests. SEAPA is planning on filing the ICD with FERC in the late fall or winter of 2012/2013. Copies of the ICD will also be sent to all agencies, Native Villages and Indian tribes and made available to the Public.

- Stage 2 – Develop information (e.g., analysis of existing information, studies, etc.) to address the questions identified in Stage 1. Stage 2 ends when the applicant has filed the amendment request with FERC.
- Stage 3 – FERC conducts post-filing consultation with agencies, pursuant to the National Environmental Policy Act (NEPA). This stage concludes with issuance of an amended license.

This process, from the filing of the ICD to the issuance of the amended license could take 3 years. It may be possible to skip or truncate certain steps, which SEAPA would like to explore with the agencies, provided sufficient information can be developed in advance to allow all parties to knowledgeably discuss the action and its implications.

Issue Identification

SEAPA has initiated informal consultation with the resource agencies to identify questions that may need to be answered in the amendment process. The question that SEAPA will be answering in the amendment application and associated exhibits is how the new pool and operations will change the existing (i.e., baseline) environment in the reservoir and tributaries. Some preliminary issues and questions have been identified and will be explored with agencies in May, 2012.

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