

**FEDERAL ENERGY REGULATORY COMMISSION**

**MEMORANDUM**

DATE: December 3, 2021

FROM: Ryan Hansen  
Northwest Branch  
Division of Hydropower Licensing  
Office of Energy Projects

TO: Public Files for the Pejepscot Hydroelectric Project  
(FERC Project No. 4784-106)

SUBJECT: Email from Topsham Hydro Partners Limited Partnership  
clarifying proposed measures for the Pejepscot Hydroelectric  
Project No. 4784.

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On November 22, 2021, Ryan Hansen (Commission staff) emailed Mr. Luke Anderson of Topsham Hydro Partners Limited Partnership to clarify several measures proposed for the re-licensing of the Pejepscot Hydroelectric Project. On December 2, 2021, Mr. Anderson provided a response. The email response from Mr. Anderson is attached.

**From:** [Anderson, Luke](#)  
**To:** [Ryan Hansen](#)  
**Subject:** RE: Pejepsco questions  
**Date:** Thursday, December 02, 2021 4:26:24 PM

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CUI

Good Afternoon Ryan,

As a follow up to our conversation last week and your email below, please find the following responses to the FERCs questions as follows;

1. *Topsham Hydro's proposal for a new fish guidance boom includes a proposal for "modifications to bascule gate no.1". Could you please explain generally what these modifications may consist of?*

Topsham Hydro expects that the design for the modifications to bascule gate no. 1 will be finalized in consultation with USFWS and NMFS after license issuance. However, at this time, Topsham Hydro anticipates that the general design will consist of removing a section of bascule gate no. 1 sufficient to pass approximately 430 cfs (5% of the Project's total hydraulic capacity of 8,600 cfs). A conveyance structure (i.e., open channel flume) would be constructed to connect the bypass opening to the Project tailwater (i.e., receiving pool). The conveyance structure will be designed to maintain a flow depth of 1 foot or two body depths of the largest target fish species (American shad), whichever is greater, per USFWS Fish Passage Engineering Design Criteria.

2. *In the proposed Fish Passage Operations Maintenance Plan filed with the application, it states that Topsham Hydro will "Notify NMFS of any changes in Project and fishway operations (including maintenance activities such as flashboard replacement and draft tube dewatering)". In looking closely at the project, I am can find no description of flashboards in use at the Pejepsco Project. Can you clarify if the project has any flashboards, and if so, where they are located?*

There are currently no flashboards at the Project. Shortly after Project redevelopment in the mid-1980's, the Project spillway was equipped with flashboards, but these were subsequently replaced with the current hydraulically operated bascule gate system. The statements in the proposed Fish Passage Operations Maintenance Plan will be corrected within the final version of the plan.

3. *Topsham Hydro proposes a number of measures to protect endangered Atlantic salmon. One of the measures reads: "Conduct an Atlantic salmon radio telemetry study to determine upstream passage effectiveness at the Pejepsco fish lift, when at least 40 adult Atlantic salmon of Androscoggin River origin are counted at the Brunswick fishway*

*for two consecutive years”.*

*Topsham Hydro also proposes the following two measures: “(1) Monitor downstream migrating Atlantic salmon kelts as part of the adult Atlantic salmon radio telemetry study described above to determine survival through the project, and (2) Open bascule gate No. 1 (closest to the powerhouse) 50% to provide approximately 500 cfs of spill at night (8:00 pm – 7:00 am) during the month of May.*

*Are these two measures also tied to when at least 40 adult Atlantic salmon of Androscoggin River origin are counted at the Brunswick fishway for two consecutive years? Or are they independent of this?*

Topsham Hydro’s proposal assumes that the study for downstream migrating Atlantic salmon kelts will be conducted when at least 40 adult Atlantic salmon of Androscoggin River origin are counted at the Brunswick fishway for two consecutive years.

Topsham Hydro’s proposed measure to open bascule gate No. 1 (closest to the powerhouse) 50% to provide approximately 500 cfs of spill at night (8:00 pm – 7:00 am) during the month of May is independent of the 40 adult Atlantic salmon trigger being reached. This measure is intended to enhance passage for Atlantic salmon smolts during the first passage season after license issuance, until the proposed fish guidance boom and bypass are implemented in the second passage season after license issuance.

4. Approximately how often is the Pejepscot impoundment drawn down for emergency or maintenance activities?

Typically, drawdowns of the impoundment occur 2-3 times per year to facilitate safe completion of maintenance activities. These activities typically include installation (spring) and removal (fall) of the Project’s boating safety barrier, as well as inspection of the dam crest (fall). The magnitude of the drawdown during these activities is approximately 0.5 feet below the normal pond elevation of 67.2 feet, msl.

5. *As a part of Topsham Hydro’s proposal for operation of the fish lift, you state “July 2 through November 15: operate once a day following passage of salmon at Brunswick if not already identified passing through Pejepscot”. Can you clarify what this means? Does it mean one lift per day every day from July 2 through November 15 in any year when a salmon is seen passing Brunswick? Or does it mean something different?*

Correct, Topsham Hydro proposes to cycle the lift once per day every day from July 2<sup>nd</sup> through November 15<sup>th</sup> in any year an Atlantic salmon is seen passing through the

Brunswick fishway.

I trust the answers above provide the additional information and/or clarification needed. Otherwise please don't hesitate to contact me for additional information.

Thank you,

**Luke T. Anderson**

Manager, Licensing

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