



Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First St., N.E.
Washington, D.C. 20426

FILED ELECTRONICALLY

September 22, 2016

RE: AMERICAN EEL PASSAGE SAFETY, ELLSWORTH PROJECT, UNION RIVER, MAINE, FERC NO. 2727.

Dear Secretary Bose:

By and through the Licensee's letter to the Commission dated Sept. 19, 2016, the Licensee admits that its own quantitative studies show that the existing downstream fish passage system at the Ellsworth Dam is unable to provide safe and effective downstream passage for adult American eels (*Anguilla rostrata*) outmigrating from the Union River watershed during the late summer and fall. The studies conducted by the Licensee indicate 100 percent of eels tracked in Oct. 2015 with a confirmed migration path used the project turbines for passage and none used the surface bypass weir or spillway. *Id.*

This Oct. 2015 study corroborates the direct observation and collection of dead American eel and juvenile river herring by DSF staff and members directly below the Ellsworth Dam in the fall of 2014 and 2015. *See*: Letter of Thomas J. LoVullo, FERC, to Brookfield/Black Bear, January 27, 2015.

In this Jan. 2015 letter, the Commission determined the ongoing, documented eel kills at the Ellsworth Dam are a violation of Article 406 of the existing operating license for the dam. *Id.* The results of the Oct. 2015 study by the Licensee (and its Sept. 19, 2016 letter) confirm these eel kills are not due to any malfunction of the existing downstream fish passage system (ie. the surface bypass weir is inherently incapable of safely diverting American eels away from the project turbine intakes). The docket record for the Ellsworth dam since 1991-1996 (its last relicensing) shows that the surface bypass system at the dam was never tested for effectiveness for adult American eels when it was constructed and installed. The lethality of turbine passage at the Ellsworth Dam for American eels is further confirmed by the Licensee's Oct. 2015 study in which all 47 adult eels tagged and tracked in the study successfully swam by and through the upstream Graham Lake Dam without injury or mortality. *Id.* FERC has direct and recent experience in Maine showing the inability of surface weir bypass systems designed for juvenile river herring to attract and safely pass down-migrating adult American eel (ie. Benton Falls Project, Sebasticook River, FERC No. 5073; American Tissue Project, Cobbosseecontee Stream, FERC No. 2809).

Downeast Salmon Federation concurs with Commission Staff (Jan. 27, 2015 Letter of Thomas J. LoVullo) that the present and ongoing absence of safe downstream American eel passage at the Ellsworth Dam is a violation of Article 406 of the existing license for the Project and is not merely a future issue to be examined during the ongoing relicensing process. This point was reinforced in March 2016 at the URFCC Annual Meeting in which USFWS staff, reviewing the Oct. 2015 study data, informed

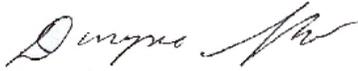
the Licensee that pro-active steps must immediately be taken to provide safe egress for eels at the dam, including the use of deep gates, further screening and operational shutdowns.

While DSF appreciates the interim passage enhancements offered by the Licensee in its Sept. 19, 2016 letter (aka prioritizing use of turbine units by dint of their comparative, documented lethality), these measures fall short of the mark required for compliance with Article 406. The offer as described contains no explicit deliverables (ie. what does prioritization mean?) and establishes no quantitative, enforceable benchmark for safe eel passage; nor does the offer provide a monitoring system to ensure the measures provide safer passage than the status quo. The Licensee's Sept. 19, 2016 offer rests on two presumed but unsubstantiated conclusions: (a) that turbine passage is a *per se* 'allowed' method of passing adult American eels under Article 406 and (b) that some level of mortality and injury of X percent due to turbine passage is *per se* 'allowed' under Article 406. The falsity of the latter is shown by the fact that the Licensee has no idea how many American eels attempt to migrate past the Ellsworth Dam each fall. Given the watershed size of the Union River (+ 500 square miles), even a 10-20 percent mortality could mean the death of thousands of adult eels in fall 2016.

Brookfield's operation and scientific staff have collectively many decades of experience on Maine coastal rivers and dams as it pertains to passing American eels. Eel passage is not a 'new' issue for Brookfield staff. When Brookfield purchased the Ellsworth Project from BlackBear it did so with 'eyes wide open' to the challenges of providing safe eel passage on a 90-year-old, 67-foot high head-of-tide dam. In 2015, the Commission granted Brookfield the opportunity to prove through quantitative studies that the Ellsworth Dam surface bypass effectively guides American eels away from the project turbines; the results of that study show the opposite. The 2016 migration season (which is beginning now) is the time for Brookfield to pro-actively respond to the results

of its own study and to provide effective and safe egress for eels at the Ellsworth Dam.

Sincerely,

A handwritten signature in cursive script, appearing to read "Dwayne Shaw".

Dwayne Shaw
Executive Director
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