United States Department of the Interior

FISH AND WILDLIFE SERVICE

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April 2, 2021

Donald E. Emel Jr.
Hydroland Green Energy
403 Madison Ave.
Bainbridge Island, WA 98110-1716

RE: Comments on Fish Passage, False Attraction, and Ansonia Unit
Kinneytown Hydroelectric Project, FERC No. 6985-005
Naugatuck River, New Haven County, CT

Dear Mr. Emel:

This letter provides the U.S. Fish and Wildlife Service's (Service) response to Hydroland Green Energy Parks' (Hydroland) March 1, 2021, filing with the Federal Energy Regulatory Commission (FERC) regarding the Kinneytown Hydroelectric Project (Kinneytown or Project), located on the Naugatuck River in Seymour and Ansonia, Connecticut. Based on a March 22, 2021, filing with the FERC, we understand Hydroland Omega, LLC purchased the Project from Enel Green Power North America on December 15, 2020.

Fish passage effectiveness at Kinneytown has been compromised since 2013. There is an urgent need for comprehensive solutions, and the Service appreciates Hydroland's commitment to address outstanding issues affecting fish passage efficiency at the Project. In its March 1, 2021, letter, Hydroland proposes to (1) correct a flashboard elevation error to reduce spill at the dam in spring 2021; (2) repair and automate the canal gates in summer 2021 to better control pond level; and (3) rehabilitate the Ansonia powerhouse in 2022 and 2023. While these efforts may improve fish passage efficiency at the Project, the proposed plan would not fully resolve the fundamental problems of false attraction and stranding.

Comments on Hydroland's proposed plan:

- The Service supports Hydroland installing flashboards to maintain a uniform headpond elevation of 54.8 feet, as this is an optimal operational elevation for the existing fish ladder. However, correcting the flashboard elevations will not eliminate spill events during the fish passage season. Based on an analysis of hydrologic data from the US Geological Survey's Beacon Falls Gage 01208500 (prorated for the difference in drainage area at the Project), interannual flow variability is high during the fish passage season, with flows exceeding 756 cubic feet per second (cfs) an average of 27.5 percent of the passage season (ranging from 2.8

to 50 percent of the time) over the 2000 to 2019 water years (Attachment A). As indicated in your March 1, 2021, letter, 756 cfs is the maximum capacity of the Seymour unit. At flows exceeding 756 cfs, spill may begin at the dam while the Ansonia powerhouse is nonfunctional.

- Hydroland's proposals to (1) correct flashboard elevation, and (2) repair and automate the canal gates, attempt to address spill during periods of low flow (i.e., below the 200 cfs minimum hydraulic capacity of the Seymour turbine). The low end of the hydrograph is less of a concern during the majority of the fish passage season; on average, flows less than 200 cfs occur during 1 percent of April, less than five percent of May, and 20 percent of June. Conversely, on average, flows greater than 756 cfs occur 40 percent of the time in April and 20 percent of the time in May and June (Attachment A). Therefore, Hydroland should prioritize pairing these two efforts with interim measures to address false attraction and stranding issues that arise on the higher end of the hydrograph.

- Hydroland's third proposed measure, rehabilitating the Ansonia unit, will reduce the amount of time the Project spills during the fish passage season, but this will not eliminate spill entirely. Further, the extent of the spill reduction depends on whether the Ansonia unit is rehabilitated to its most recent operable state at half-capacity of 200 cfs or its original maximum capacity of 400 cfs. However, even at 400 cfs capacity, the Project, on average, will spill during 20 percent of April and 10 percent of May and June. The risk of false attraction caused by this spill was why the previous Exemptee agreed to implement remedial measures in the bypass channel.

In order to expedite resolution of passage issues at the Project, the Service proposes the following measures and associated implementation schedule:

Measure	**Implementation Schedule**
Return Seymour unit to service	By April 15, 2021
Install flashboards to elevation 54.8 feet	By April 15, 2021
Implement interim stranding prevention measures in the bypass reach during the 2021 passage season[1]	Start by April 15, 2021
Insert/remove upper baffles in ladder based on flashboard status	April 15 through June 30, annually
The Service conducts a comprehensive field investigation of the project fish passage facilities and features including the bypass reach[2]	No later than May 15, 2021
Develop a plan to implement interim and long-term solutions to improve fish passage effectiveness at the Project based on a technical memorandum developed by Service engineers	July 1 through December 31, 2021
Implement long-term solutions	Pursuant to a schedule supported by the Service and the CT DEEP

[1] In consultation with the Service and Connecticut Department of Energy and Environmental Protection (CT DEEP)

[2] The Service will produce a technical memo including proposed measures to improve passage, by June 15, 2021

The goal is to implement short-term solutions by April 15, 2021, and complete long-term solutions as early as April 1, 2022, but no later than December 2022.[3] In order to achieve this goal, the Service is available to meet with Hydroland to discuss (1) the consultation history related to fish passage; (2) identified issues affecting passage effectiveness; (3) the need for, and scope of, a field investigation; (4) the biology and management status of migratory species targeted for restoration within the watershed; and (5) the content of the Service's technical memorandum. We recommend all consultation include the Connecticut Department of Energy and Environmental Protection, as it is the lead agency managing fisheries within the Naugatuck River and a critical partner in achieving successful fish passage at the Kinneytown Project.

We look forward to working with you to resolve fish passage issues at the Project and contribute to ecological restoration of the Naugutuck River watershed. If you have any questions regarding these comments, please contact Melissa Grader of our office at melissa_grader@fws.gov.

Sincerely,

DAVID SIMMONS Digitally signed by DAVID SIMMONS
Date: 2021.04.02 17:38:01 -04'00'

David Simmons
Acting Field Supervisor
New England Field Office

cc: Reading file
FERC, Secretary
FERC, DHAC – Holly Frank
CT Delegation
DOI/SOL, Andrew Tittler
FWS/FAC, Brett Towler
CTDEEP, Tim Wildman
CTDEEP, Peter Aarrestad
NVCOG, Rick Dunne
Save the Sound, Roger Reynolds
ES: MGrader:4-01-21:603-223-2541

[3] The actual long-term implementation timeframe will depend on the measures needed.