MASSWILDLIFE

DIVISION OF
FISHERIES & WILDLIFE

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May 6, 2020

Pat McIlvaine
LIHI Reviewer
pbmwork@maine.rr.com

RE: LIHI Certification of Dwight Project FERC #10675

Dear Pat,

The Department of Fish and Game ("DFG") hereby submits the following comments on the Low Impact Hydropower Institute's ("LIHI") pending application for the proposed LIHI certification of the Dwight Project (FERC No. 10675) located on the Chicopee River in the Town of Chicopee, Hampden County, Massachusetts, at approximate river mile 1.0 on the Chicopee River:

DFG is submitting these comments to LIHI in order to fulfill the requirements of the Massachusetts Department of Energy Resources ("DOER") Renewable Energy Portfolio Standard Regulations (225 CMR 14.00; "RPS I" and 225 CMR 15.00; "RPS II"). The RPS I and RPS II regulations were promulgated by DOER on January 1, 2009 and require that any hydroelectric project wishing to qualify as either a RPS I or RPS II generator first obtain LIHI certification. These regulations also require all relevant regulatory agencies to comment on the pending LIHI application.

Comments on LIHI re-certification:

1. **Minimum Flows in Bypassed Reach to the confluence with the tailrace and Chicopee River**
   The minimum flow for this reach is 258 cfs or inflow if less. The Massachusetts Division of Fisheries and Wildlife (MassWildlife) has no record that the Project has operated in non-compliance of the Project's minimum flow, however the project has a 3,000 foot long bypass reach which receives this minimum flow. This flow is the calculated median August flow. The Division, in principle, does not believe that projects with long bypass reaches are "low impact", however the project owner has proposed to eliminate daily peaking generation releases from all of their projects on the Chicopee River (Red Bridge, Putts Bridge, Indian Orchard, and Dwight) in exchange for reduction of the required minimum flow in the project bypass reaches- new minimum flows are to be determined for each project through a site specific fish habitat study. MassWildlife is working with the project owner and the US Fish and Wildlife Service on this agreement and would prefer that be in place to prior to LIHI certification.

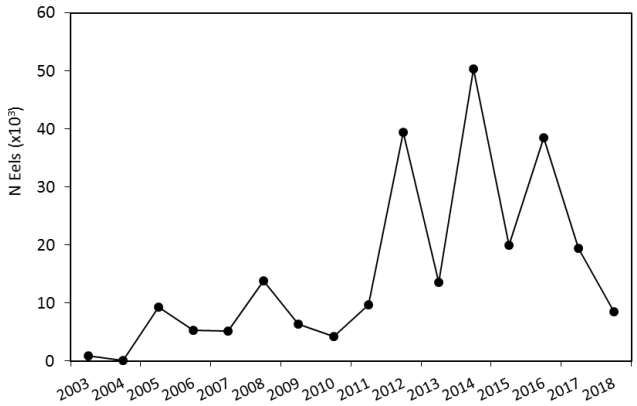
2. **Minimum Flows of Dwight Impoundment or Tailrace to the confluence with the bypassed reach and the Chicopee River**
   MassWildlife is unaware of any minimum flow requirement for Dwight impoundment or the tailrace to the confluence with the bypassed reach and the Chicopee River. Therefore,

MassWildlife expresses no position on these minimum flows and any associated LIHI requirements for these flows.

3. **Upstream Fish Passage of the Bypassed Reach to the confluence with the tailrace and Chicopee River, Dwight Impoundment or Tailrace to the confluence with the bypassed reach and the Chicopee River.**
   There is no current requirement for upstream fish passage at the project and none is installed. However, the FERC exemption requires that once upstream fish passage is determined to be necessary (by MassWildlife and/or other relevant Federal or Massachusetts agencies) the Project Owner shall install acceptable upstream fish passage within two years.

   The Dwight Dam is the first barrier on the Chicopee River, and as the Chicopee River enters the Connecticut River downstream of the Holyoke Dam, the first barrier from the ocean for diadromous fish. Each spring thousands of American Shad and River Herring attempt to ascend the Chicopee River and are stopped by the Dwight project. I would love to see a modern fish passage facility at this Project, however the cost of such a facility would be prohibitive while the ecological benefit small, given that the next barrier on the Chicopee River is just 1.5 miles upstream.

   However, upstream passage for juvenile American Eel is relatively inexpensive and has proven to be very effective at many hydro projects in MA. In fact the Holyoke Project has passed hundreds of thousands of juvenile eels since passage was installed in 2003 (see figure below).



   The entire Chicopee River system is American Eel habitat, and adult eels are occasionally observed at various sites throughout the system. Several are entrained on the racks at the entrance to the MWRA aqueduct at the Quabbin Reservoir each year.

   MassWildlife asks LIHI to make installation and testing of upstream passage for American Eel a condition of certification.

4. **Downstream Fish Passage of the Bypassed Reach to the confluence with the tailrace and Chicopee River, Dwight Impoundment or Tailrace to the confluence with the bypassed reach and the Chicopee River.**
   There is no current requirement for downstream fish passage at the project and none is installed. However, the FERC exemption requires that once downstream fish passage is determined to be necessary (by MassWildlife and/or other relevant Federal or Massachusetts

agencies) the Project Owner shall install acceptable downstream fish passage within two years. Downstream fish passage protection is very important for American Eels as the downstream migrant adults are large (long) and suffer very high mortality if entrained. Downstream passage protection would consist of full depth ¾ inch clear space racks at the unit intake and adequate downstream passage around the units. Interim measures would include unit shutdowns on rainy nights, and for next two days from dusk to dawn, for the downstream migration season (8/15-11/15) until long-term measures can be installed.

MassWildlife asks LIHI to make installation and testing of downstream passage for American Eel a condition of certification.

Please let me know if you need anything further.

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