

APPENDIX 1-4

INDIAN ORCHARD PROJECT

FISH & WILDLIFE SERVICE LETTER SETTING MINIMUM FLOWS, DATED JULY 14, 1989

A copy of Fish & Wildlife Service letter setting minimum flows, dated July 14, 1989, may be found on the portion of the LIHI website devoted to the Indian Orchard application and is titled “Appendix 1-4 FWS Letter Dated 1989_07_14.”



Powerhouse



United States Department of the Interior

FISH AND WILDLIFE SERVICE
400 RALPH PILL MARKETPLACE
22 BRIDGE STREET

CONCORD, NEW HAMPSHIRE 03301-4901

FILED
OFFICE OF THE
SECRETARY

FEDERAL ENERGY
REGULATORY COMMISSION
JUL 20 1989

REF: Chicopee River Projects

Mr. Brandon H. Kulik
Kleinschmidt Associates
75 Main Street, P.O. Box 576
Pittsfield, Maine 04967

Dear Mr. Kulik:

This is in reference to your June 14 and June 30, 1988 hydrologic analysis for the Chicopee River, in regard to the Red Bridge (#10676), Putts Bridge (#10677), Indian Orchard (#10678), and Dwight (#10675) Hydro Projects, located in Hampshire and Hampden Counties, Massachusetts.

The objective of your analysis was to determine a hydrologically based approximation of the historic, unregulated August median flow for the Chicopee River. This was accomplished by examining gage data from tributaries to the Chicopee River, i.e., the Swift, Ware, and Quaboag Rivers. The entire period of record for these gages was then examined to find those periods that met the Fish and Wildlife Service's (Service) Aquatic Base Flow (ABF) criteria, viz., at least 25 years of essentially unregulated flow, data rated "good" by USGS, and a drainage area at the gage of at least 50 square miles.

Using this approach, a 27 year period of data from the Quaboag River and the entire period of record for the Ware River yielded an unregulated August median flow value of 0.36 cfs. Extrapolation to the four hydro projects yields minimum instantaneous flow releases at the dam of 237 cfs for Red Bridge, 247 cfs for Putts Bridge, 247 cfs for Indian Orchard, and 258 cfs for Dwight. These flow releases will apply at the base of the dam, unless sampling indicates a need to spill water for water quality purposes. We would also like to view these flow releases at the time you are conducting water quality sampling.

Please contact Mr. Bob Scheirer of this office at (603) 225-1411 to arrange a flow demonstration, and for further coordination as your pre-licensing studies proceed.

Sincerely yours,

Gordon E. Beckett
Supervisor
New England Area

JUL 19 1989

FERC

JUL 20 1989

890725025U