



# Division of Fisheries & Wildlife

OFFICE OF THE SECRETARY  
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FEDERAL ENERGY REGULATORY COMMISSION

Wayne F. MacCallum, Director

February 15, 2000

RE: Chicopee River Projects:  
Dwight - 11675  
Red Bridge - 11676  
Putts Bridge - 11677  
Indian Orchard - 11678

Mark Noyes  
CEEMI  
111 Broadway, 16th Floor  
New York, NY 10006

Dear Mr. Noyes,

The Massachusetts Division of Fisheries and Wildlife (Division) is the state agency responsible for the protection and management of the fish and wildlife resources of the Commonwealth. As such, we have prepared the following comments in response to the Federal Energy Regulatory Commission's December 29, 1999 Order Amending Exemptions for the Red Bridge, Putts Bridge, Indian Orchard, and Dwight Projects, located on the Chicopee River in Massachusetts.

As originally exempted, each project had specific minimum flows and allowable impoundment drawdowns.

Original Conditions

**Red Bridge**

237 cfs min. flow (or inflow, if less), 1-ft. drawdown April 1- June 30 and 2-ft. from July 1 - March 30

**Putts Bridge**

247 cfs min. flow (or inflow, if less), 1-ft. drawdown April 1- June 30 and 2-ft. from July 1 - March 30

**Indian Orchard**

247 cfs min. flow (or inflow, if less), 1-ft. drawdown year-round

**Dwight**

258 cfs min. flow (or inflow, if less), 1-ft. drawdown year-round

Proposed Conditions

**Red Bridge**

237 cfs min. flow (or inflow, if less), 1-ft. drawdown April 1- June 30 and 2-ft. from July 1 - March 30.

**Putts Bridge**

25 cfs min. flow (or inflow, if less), 1-ft. drawdown April 1- June 30 and 2-ft. from July 1 - March 30.

**Indian Orchard**

247 cfs min. flow (or inflow, if less), 0.5-ft. drawdown April 1- June 30 and 1-ft. drawdown from July 1 - March 30.

**Division of Fisheries & Wildlife**

Field Headquarters, One Rabbit Hill Road, Westboro, MA 01581 (508) 366-4470

An Agency of the Department of Fisheries, Wildlife & Environmental Law Enforcement

## Dwight

258 cfs min. flow (or inflow, if less), 0.25-ft. drawdown when boards are up and no fluctuation when boards are down.

The original exemptions required that the minimum flows were to be released via new minimum flow turbines. This idea was subsequently found to be uneconomical, and alternative release mechanisms were investigated. The original exemptions also required project capacity upgrades. CDEMI submitted a development plan in June 1999 that outlined how upgrading the existing facilities would result in meeting that criterion.

We believe the following issues have been adequately addressed:

Minimum bypass flows and release mechanisms at each project, with the exception of Putts Bridge.

Impoundment fluctuation levels, specifically the proposed changes to limit drawdowns at Indian Orchard to 0.5-ft from April 1 - June 30, and at Dwight to within 0.25-ft. when boards are up, should ensure that continuous and stable minimum flows are maintained below those projects.

The proposed capacity upgrades should influence the minimum flows or drawdown limits for each project.

### Unresolved issues:

The Putts Bridge bypass flow. We have not agreed to the reduced flow as a permanent condition of the exemption. Before we do so, a water quality study must be performed to verify that the lower flow will protect water quality in the bypass reach. It is our understanding that the study will occur this summer. Once we receive the study results we will make a final decision on the minimum bypass flow needed at Putts Bridge.

Revised Monitoring Plan. A condition of each exemption was the development of a plan to monitor headpond elevations and bypass flows. On March 11, 1993 the previous owner of the projects submitted a Monitoring Plan for our review. Since that time, major changes in the methods of releasing the bypass flows have been made at the projects. We believe that these changes require the development of a new Monitoring Plan. You should provide us with a plan that (1) details the flow release structures and locations, (2) describes the mechanisms used to monitor headpond elevation and minimum flows, (3) specifies how often maintenance and calibration of the monitoring and recording equipment takes place, (4) states how bypass flows will be maintained during any periodic maintenance activities that require the impoundment to be drawn down below the level of the flow release structures, and (5) states how frequently and in what form the data are recorded. A calculation sheet that verifies the discharge of each release structure (i.e., slide/canal gate, board notches and dam spill) under all operating ranges should be included.

Per Condition 8 of the Exemptions from Licensing, we hereby modify our original terms and conditions for the subject exemptions as follows:

### Red Bridge

Modify the following conditions to read:

6. The Exemptee shall, within six months from the date of issuance of the Order Amending Exemptions, present to the Division for approval, a plan for monitoring project impoundment level and instantaneous bypass flow releases. Following approval of the plan, the Exemptee shall measure and record impoundment level and flows according to the plan and provide records of these data to the Division within 30 days from a request for the records.

The following new condition is to be added to the original nine.

10. In the event that any dam maintenance or emergency drawdown is required, the Exemptee shall continue to operate the project such that the minimum flows are maintained downstream of the project at all times. If during reservoir refilling, inflow to the project is less than the required minimum flow, the Exemptee shall withhold not more than 10% of project inflow.

All other conditions are to be retained in their entirety.

### Puffs Bridge

Modify the following conditions to read:

2. An interim minimum flow of 25 cubic feet per second, or inflow to the project, whichever is less, shall be continuously released at the project dam to the bypassed reach. This release may be modified if results of a water quality study indicate that 25 cfs is insufficient to protect water quality in the bypass reach.
6. The Exemptee shall, within six months from the date of issuance of the Order Amending Exemptions, present to the Division for approval, a plan for monitoring project impoundment level and instantaneous bypass flow releases. Following approval of the plan, the Exemptee shall measure and record impoundment level and flows according to the plan and provide records of these data to the Division within 30 days from a request for the records.

The following new condition is to be added to the original nine.

10. In the event that any dam maintenance or emergency drawdown is required, the Exemptee shall continue to operate the project such that the minimum flows are maintained downstream of the project at all times. If during reservoir refilling, inflow to the project is less than the required minimum flow, the Exemptee shall withhold not more than 10% of project inflow.

All other conditions are to be retained in their entirety.

### Indian Orchard

Modify the following conditions to read:

3. The exemptee shall operate the project to limit drawdown of the project impoundment to no more than 0.5-foot below the top of the flashboards (or dam crest if boards are out) from April 1 through June 30. From July 1 through March 30, the Exemptee shall limit drawdown to no more than one foot below the top of the flashboards (or dam crest if boards are out).
6. The Exemptee shall, within six months from the date of issuance of the Order Amending Exemptions, present to the Division for approval, a plan for monitoring project impoundment level and instantaneous bypass flow releases. Following approval of the plan, the Exemptee shall measure and record impoundment level and flows according to the plan and provide records of these data to the Division within 30 days from a request for the records.

The following new condition is to be added to the original nine.

10. In the event that any dam maintenance or emergency drawdown is required, the Exemptee shall continue to operate the project such that the minimum flows are maintained downstream of the project at all times. If during reservoir refilling, inflow to the project is less than the required minimum flow, the Exemptee shall withhold not more than 10% of project inflow.

All other conditions are to be retained in their entirety.

### Dwight

Modify the following conditions to read:

3. The Exemptee shall operate the project to limit drawdown of the project impoundment to no more than 0.25 feet below the top of the flashboards. When boards are out, the Exemptee shall maintain a minimum of five inches of spill over the dam crest to maintain the minimum bypass flow specified in Condition #3.
6. The Exemptee shall, within six months from the date of issuance of the Order Amending Exemptions, present to the Division for approval, a plan for monitoring project impoundment level and instantaneous bypass flow releases. Following approval of the plan, the Exemptee shall measure and record impoundment level and flows according to the plan and provide records of these data to the Division within 30 days from a request for the records.

The following new condition is to be added to the original nine.

10. In the event that any dam maintenance or emergency drawdown is required, the Exemptee shall continue to operate the project such that the minimum flows are maintained downstream of the project at all times. If during reservoir refilling, inflow to the project is less than the required minimum flow, the Exemptee shall withhold not more than 10% of project inflow.

All other conditions are to be retained in their entirety.

Sincerely,



Caleb Slater, Ph.D.  
Anadromous Fish Project Leader

cc: John Labiak, CEEMI  
Melissa Grader, USFWS  
FERC