BOYCE HYDRO POWER LLC
A W.D. Boyce Trusts Legacy Enterprise

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Mr. Thomas J. LoVullo
Chief, Aquatic Resources Branch
Division of Hydropower Administration
and Compliance
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: FERC Project No. P-10808, P-10809, P-10810, P-2785
Water Quality Conflicts with Maintenance of Reservoir Levels

Mr. LoVullo: The license articles for the above referenced hydroelectric projects require, among other things, that certain minimum reservoir levels are to be maintained during the year depending on season. Additionally, the license articles require that minimum Dissolved Oxygen ("D.O.") levels be maintained as well, and in two locations minimum flows through the dams are to be maintained.[1]

This letter is submitted to inform you that, due to the dry and hot summer season weather conditions affecting the entire Tittabawassee River basin in which the above-referenced four hydroelectric projects are situated, it is currently not possible for the licensee's operations company, Boyce Hydro, to sustain both the minimum DO levels and the minimum reservoir levels at the same time. Due to the lack of water flowing into the river system, the hydro operations have been substantially curtailed during the past week and will continue to be in this limited operations mode for the next several days until rainfall begins to replenish the river's water supply.

Specific physical circumstances currently inhibit the ability of the hydroelectric projects to operate in a normal manner necessary to support required water quality at this time. In the warm summer months the local lake improvement boards aggressively pursue weed treatment and introduce chemicals into the impoundments which kills underwater vegetation that decomposes and creates an anaerobic subculture in the impoundments. This contributes to an initial reduction in reservoir DO levels as measured by the licensee in the tail race of the four hydroelectric projects. Additionally, when water is not flowing through the turbines the DO levels measured in the tailraces are also diminished.

When water levels are low due to an absence of rainfall and approach the minimum allowable reservoir elevations the turbines are required to be shut down. As has been explained in exhaustive detail in prior correspondence, opening spill gates for the purpose of either maintaining a mandatory minimum flow requirement or for the purpose of aerating water in the project tailraces in order to supplement DO levels cannot be sustained for an extended period of time without draining the impoundments when prolonged drought conditions persists if the priority of the reservoir levels is to be maintained. This fact of life appears to have been recognized in previous FERC correspondence to the licensee.

By letter dated 28 July, 2017 you stated on page 5:

"Each project license states that the required reservoir elevation may be temporarily modified if required by operating emergencies beyond the control of the licensee, and for short periods for project

[1] Sanford Project 2785 minimum flow of 220 cfs. Edenville Project 10808, at Tobacco River spillway, minimum flow 40 cfs.

maintenance purposes, upon mutual agreement between the Licensee and the Michigan Department of Natural Resources (Michigan DNR). If the reservoir level fluctuation is so modified, you must notify the Commission as soon as possible, but no later than ten days after each such incident. "

"However, please note that water quality deviations do **not** qualify as an operating emergency nor as project maintenance**.** Should your corrective action of spilling water at a project cause the reservoir elevation to approach its lower limit, you should cease spilling and record that corrective actions were taken. You should note the actions taken and the duration and volume of spill, the specific reasons why spilling was curtailed, time that spilling was curtailed, relevant physical and operational parameters of the event, and any other efforts that were taken to increase DO after the curtailment."

Submission of this correspondence is therefore presented to comply with the requirement of providing notice that corrective action has become necessary with respect to maintaining minimum flow at the Sanford project which for the next few days, until there is an increase in the flow of water into the upper reaches of the river system, must be reduced to 140 cfs. Notice of this adjustment in minimum flow necessity has been communicated to certain down-river commercial enterprises that have a proprietary interest in receiving this information.

The licensee's operations logs will be duly annotated as to the "physical and operational parameters" of this draught condition event, and will be noted in the annual Water Quality report.

Sincerely yours,

Lee W. Mueller, Architect
Co-Member Manager
Boyce Hydro Power, LLC

Cc: John Clements
Rollin Reineck
Kyle Kruger

Document Content(s)