

164 FERC ¶ 62,146

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Boyce Hydro Power, LLC

Project No. 10809-044,
10810-050,
10808-061, &
2785-095

ORDER MODIFYING AND APPROVING TEMPORARY
VARIANCE TO RESERVOIR ELEVATIONS

(Issued September 14, 2018)

1. On July 26, 2018, as clarified on August 7, 2018, Boyce Hydro Power, LLC (Boyce Hydro or licensee), licensee for the Secord, Smallwood, Edenville, and Sanford Hydroelectric Projects, Nos. 10809, 10810, 10808, and 2785, respectively, filed an application for a temporary variance to lower project reservoirs.¹ Boyce Hydro seeks a temporary variance so it can lower each reservoir below normal surface elevations to perform focused spillway and gate assessments at each of the above projects. As discussed below, because the license for the Edenville Project was recently revoked by the Commission, the licensee's temporary variance request for this project is not being considered.² Further, in this order, we approve the licensee's request to begin lowering the Smallwood and Sanford reservoirs starting September 20, 2018, but delay its request to begin lowering the Secord reservoir until September 24, 2018.³

¹ *Wolverine Power Corporation*, 85 FERC ¶ 61,064 (1998) (Secord license); *Wolverine Power Corporation*, 85 FERC ¶ 61,065 (1998) (Smallwood license); *Wolverine Power Corporation*, 85 FERC ¶ 61,063 (1998) (Edenville license); and *Wolverine Power Corporation*, 85 FERC ¶ 61,066 (1998), as amended (Sanford license).

² Jurisdiction over the Edenville Dam as it relates to dam safety and environmental matters will pass to the state of Michigan including the Michigan Department of Environmental Quality and the Michigan Department of Natural Resources.

³ On August 27, 2018, Boyce Hydro filed a request to change the proposed start date of its drawdowns from September 20, 2018, to September 16, 2018. However, on September 7, 2018, Boyce Hydro withdrew this request; therefore, this schedule adjustment is not being considered.

2. The projects are located on the Tittabawassee and Tobacco Rivers in Gladwin and Midland counties, Michigan. These projects do not occupy federal lands.

I. Background

3. On April 28, 2017, the Regional Engineer required the licensee to perform focused spillway assessments at the above four projects. As discussed in the Regional Engineer's letter, events at the Oroville Dam in California have brought renewed attention to the potential failure modes associated with concrete chute and unlined spillways at dams across the country. As a result, the Commission has required detailed assessments of similar spillways at other projects. The Regional Engineer required Boyce Hydro to complete focused spillway assessments at each of its four dams by December 31, 2017.⁴

4. The licensee also plans to inspect its spillway gates at the same time it completes the focused spillway assessments. Spillway gate inspections are also required by the Regional Engineer.⁵

5. For the Secord, Smallwood, and Sanford Projects, the licenses require Boyce Hydro to maintain the following normal water surface elevations with a variance of 0.4 feet (ft.) below and 0.3 ft. above reservoir levels: 750.8 ft. for the Secord Project pursuant to Article 403; 704.8 ft. for the Smallwood Project pursuant to Article 403; and 630.8 ft. for the Sanford Project pursuant to Article 411 (all reservoir elevations are at National Geodetic Vertical Datum). Annually, after December 15 until surface water temperatures reach 39 degrees Fahrenheit, the licensee is required to lower all of the reservoirs and hold them at three feet below normal surface elevations for the winter. During the winter, daily fluctuations of surface water elevations should not exceed 0.7 ft.

⁴ The licensee did not file the requested information needed to perform the focused spillway assessments by December 31, 2017. Consequently, the licensee was found in violation of part 12 of the Commission's regulations. See letter issued January 30, 2018, <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14811146> to the licensee from the Regional Engineer citing section 31 of the Federal Power Act noting that the Commission may take enforcement action regarding the licensee's non-compliance with this directive, which could include imposition of civil penalties or license revocation.

⁵ See letter issued March 27, 2017, including a reminder that gate inspection reports must be filed every 10 years for certain projects. See also Chapter 14 - Evaluation of Hydropower Projects, Appendix L - Detailed Radial Gate Inspection Reports, Engineering Guidelines for the Evaluation of Hydropower Projects, Federal Energy Regulatory Commission, May 8, 2017. Available at: <https://www.ferc.gov/industries/hydropower/safety/guidelines/eng-guide/chap14-appendix-l.asp>.

6. As mentioned above, the Commission revoked Boyce Hydro's license for the Edenville Project No. 10808 on September 10, 2018, with an effective date of September 25, 2018.⁶ A full accounting of why the Commission took this action is contained in its Order Revoking License. Consequently, the Edenville Project will no longer be under the Commission's jurisdiction as of September 25, 2018.

7. Despite having its license revoked, Boyce Hydro must still lower Wixom Lake, the reservoir for the Edenville Project, so it can inspect the upstream Smallwood spillway. Boyce Hydro, as licensee for the Secord, Smallwood, and Sanford Projects remains responsible for coordinating drawdowns at adjacent projects necessary to perform dam safety inspections. Boyce Hydro will remain under license at the Edenville Project until September 25, 2018, the effective date of the Commission's revocation order, and will be able to generate power during that time while lowering Wixom Lake.

II. The Licensee's Plan

8. As it relates to the Secord, Smallwood, and Sanford Projects, Boyce Hydro proposes to lower each project reservoir about 4 feet below normal surface water elevations with a variance of 0.4 ft. below and 0.3 ft. above these reservoir levels: 746.8 ft. for Secord, 700.4 ft. for Smallwood, and 626.8 ft. for Sanford. In its July 26, 2018 proposal, as clarified,⁷ the licensee requested a temporary variance from articles 403, 403, and 411 in each of its licenses, respectively, so it can begin lowering the reservoirs on September 20, 2018. The licensee would draw down each reservoir at a rate of 8 inches per day for the inspections to occur on/about October 1, 2018. Potentially beginning on October 2, 2018, the licensee would begin refilling the reservoirs at a rate not to exceed 9 inches per day to return the reservoirs to their normal water surface elevations of 750.8 ft. for Secord, 704.8 ft. for Smallwood, and 630.8 ft. for Sanford. The licensee stated that refill of the reservoirs would continue until the normal surface water elevations are returned to license conditions, but did not provide an estimated date when that would occur because refilling the reservoirs is dependent on inflow.⁸

⁶ *Boyce Hydro Power, LLC*, 164 FERC ¶ 61,178.

⁷ The licensee's July 26, 2018 filing only sought a temporary variance for the Smallwood, Edenville, and Sanford Projects, however, an associated filing dated July 30, 2018, sought a temporary variance for the Secord Project as well. On August 6, 2018, Commission staff contacted the licensee to confirm that it indeed sought a temporary variance to lower the Secord reservoir for flood control purposes and so that it could perform gate inspections at that dam.

⁸ By letters dated August 16 and 30, 2018, the Regional Engineer requested a revised water management plan that provides additional details for lowering and raising
(continued ...)

III. Consultation

9. On July 25, 2018, the licensee provided a copy of its proposed temporary variance to the U.S. Fish and Wildlife Service (FWS), Michigan Department of Natural Resources (Michigan DNR), and Michigan Department of Environmental Quality (Michigan DEQ) for comment.

10. On August 1 and 24, 2018, Michigan DNR filed comments on the licensee's proposed action. Michigan DNR does not object to the proposed dates for lowering the reservoirs but notes that late September and early October are still popular times for fishing in these lakes. Michigan DNR therefore recommended a vigorous public information campaign to alert the public about the proposed drawdowns and said the lowered impoundments could create navigation hazards.

11. Michigan DNR also recommended release of certain minimum flows during the drawdown to minimize effects to downstream riverine habitat areas, and it also recommended that surveys and relocation of stranded fish and mussels be performed to minimize impacts to these organisms. Specifically, Michigan DNR recommended the licensee release a minimum flow of 30 cubic feet per second (cfs) below the Secord and Smallwood dams and 30 cfs at the Tittabawassee dam at the Edenville Project. The agency also recommended maintaining license-required minimum flow releases below the Tobacco spillway at the Edenville Project and at the Sanford Project.⁹ Michigan DNR recommended that minimum flows be maintained at all times while the impoundments are below normal surface water elevations, except when staff are onsite conducting the spillway inspections.

12. To help reduce effects to fish and mussels in the reservoirs, Michigan DNR recommended that Boyce Hydro conduct fish and mussel stranding surveys when the reservoirs are three feet below required elevations, and again when the reservoirs are four feet below elevations. The agency recommended that any stranded fish or mussels be relocated to the main waterbody. Finally, Michigan DNR recommended a report summarizing the species, sizes, and locations of stranded fish and mussels be provided to the agency. We address each of Michigan DNR's recommendations below.

the reservoirs. The licensee filed its revised plan on September 10, 2018, which is being reviewed by Commission staff separately.

⁹ Article 401 of the Sanford Project license requires a 210 cfs minimum flow.

IV. Public Notice

13. On August 7, 2018, Commission staff issued a public notice of the proposed temporary variance with a comment due date of September 6, 2018. We received 32 comments in response to the notice including comments from the Wixom Lake Association, Gladwin County Commissioners, and Michigan DNR. Twenty of these comments were from individuals and entities asking that the start of the drawdowns begin no earlier than September 20, 2018.¹⁰ We summarize and address the issues raised in these comments and respond to them below.

14. On August 30, 2018, the Michigan DNR filed a motion to intervene in the proceeding, citing its interests in protecting aquatic resources during the proposed drawdowns.

V. Discussion

A. Comments on Public Notification and Drawdown Timing

15. As indicated above, the Commission received a number of comments from the public about the timing of the drawdowns. Twenty commenters requested that the original reservoir drawdown start date of September 20, 2018, be approved by the Commission and not changed to September 16, 2018, as proposed by the licensee on August 27, 2018. Many of these commenters noted logistical and financial hardships in removing boats earlier than was previously proposed, particularly on the Secord reservoir. On September 7, 2018, the licensee withdrew its request for a schedule adjustment, therefore the request to change the drawdown start date from September 20, to September 16, 2018, is no longer considered.

16. A number of commenters asked that the drawdowns be delayed so shoreline property owners and boaters would have more time to prepare and some asked why the drawdowns and inspections could not be performed later, in either October or November.¹¹ In response, we note that the licensee has scheduled the drawdowns after

¹⁰ See comments from: Mike Byler, Gene and Kim Davis, Valerie Watson, Dale Furney, and Denise Hicks (August 27, 2018); Debra and James Adams (August 29, 2018); Debbie Beauchamp (August 30, 2018); Matt Halbach (August 31, 2018); Luann Mann and Dan Mann (September 1, 2018); Amy Iwen, and Gene Beldyga (September 3, 2018); Wixom Lake Association, Joseph Sepesy, and Steve Friend (September 4, 2018); Janell Swanson, Charles Dryer, Lawrence Thiesen, and Gladwin County Commissioners (September 5, 2018); and Brian Jezweski (September 6, 2018).

¹¹ See comments provided by the following: Heather Gunn (August 23, 2018); Mike Byler, Arthur Craig, and Dale Furney (August 27, 2018); Bruce Townley, Debbie (continued ...)

the Labor Day holiday, which normally marks the end of the busy summer recreation season. Also, scheduling the drawdowns any later increases the risk that winter weather would result in ice and snow on the spillways which can affect access and visibility necessary to inspect certain features.

17. A few commenters said the licensee did not provide sufficient public notice.¹² Some said that they would have preferred to be notified by mail or through a public forum, and some stated that the notifications posted in local newspapers were insufficient. As stated above, the Commission issued a public notice of the licensee's proposal on August 7, 2018, with comments due September 6, 2018. The notice was published in local newspapers, as required by the Commission's regulations, and numerous comments were filed. We understand the concerns expressed by the commenters but believe public notification in this instance was sufficient.

18. Finally, several commenters wrote in support of Boyce Hydro's plans to conduct the inspections noting that such inspections are necessary to maintain dam safety.¹³

B. Comments of Michigan Department of Natural Resources

19. As indicated above, Michigan DNR, intervened in this proceeding, providing recommendations to address effects of the proposed drawdowns on fishing opportunities, creation of navigation hazards, maintenance of minimum flows to protect downstream resources, and protection of fish and mussels from stranding. We address each of these recommendations below, balancing each issue with the need to perform the work in a timely manner to ensure dam safety.

20. As explained above, we believe the Commission's public notice provided reasonable notice of the drawdowns. However, to further inform the public, we are requiring the licensee, as quickly as possible and before starting the drawdowns, to install

Beauchamp, Bruce and Deb Vance, and Don Burnside (August 30, 2018); Richard Derrick and Timothy Daugherty (August 31, 2018); Eric MacLaughlin (September 3, 2018); Jennifer Dewulf (September 4, 2018); and Timothy Daugherty (September 5, 2018).

¹² See comments provided by the following: Vicky Jacobs (August 9, 2018); Valerie Watson (August 27, 2018); Timothy Daugherty (August 31, 2018); Timothy Daugherty and Lawrence Theisen (September 5, 2018).

¹³ See comments provided by Linda Kennett (August 24, 2018); Bruce Townley (August 30, 2018); Wixom Lake Association and Joseph Sepesy (September 4, 2018); and Charles Dryer (September 5, 2018).

temporary signs at each project to further inform boaters of the drawdowns and possible shallow-water navigation hazards. Signs should be installed adjacent to the licensee's existing Part 8 signs at each project.¹⁴ These signs should remain in place throughout the drawdown period and each sign should include: (1) the schedule and target water elevations at each reservoir; (2) a warning that new shallow-water navigation hazards may be created; (3) the location of other nearby fishing and boating opportunities; and (4) a telephone number and email contact where further information can be obtained.

21. Michigan DNR made two recommendations for minimum flows to be maintained below the dams during the drawdowns, except when spillway inspections are actually being conducted, to minimize effects to aquatic resources. First, it recommended that license-required minimum flows be maintained below the Sanford Project and below the Tobacco spillway at the Edenville Project. In its September 7, 2018 filing, the licensee agreed to maintain these releases. We cannot require Boyce Hydro to release minimum flows pursuant to the license for the Edenville Project once the license revocation is effective. However, we note that the Edenville Project's reservoir would still need to be lowered to perform inspections at the Smallwood Project, therefore, we expect flow releases to be made at the Edenville Project during this time. To help protect riverine aquatic resources below the Sanford Project, we are requiring in this order that these license-required flows be maintained during the drawdowns.

22. In addition to the above, Michigan DNR also recommended a 30-cfs minimum flow below the Secord and Smallwood Projects which are not currently required by these licenses. The areas below these two dams receive flows during normal project operation that would be reduced or curtailed during the proposed drawdowns. Although the licensee did not address Michigan DNR's recommendation for these flows, and the agency did not recommend a specific method for flow release, we believe it reasonable to require the licensee to provide these flows, through the use of spillway gates, pumps, or other appropriate methods, during periods when no flows are being provided to these areas because of performance of the drawdowns. Providing these flows during such periods would reduce impacts to riverine aquatic resources. Therefore, we are requiring in this order that the licensee provide continuous flows of at least 30 cfs at these locations when the drawdowns approved in this order result in cessations of all flows that would normally be provided to these areas during normal project operation, with two exceptions. These flows may be modified or curtailed when necessary for safety and performance of the inspections at each dam, and they may be modified or curtailed as may be necessary to maintain the drawdown and refill rates and schedules approved in this order. The licensee should inform the Regional Engineer, prior to initiation of the drawdowns, of the methods by which these flows will be provided.

¹⁴ 18 C.F.R. § 8.2

23. Michigan DNR also recommended that the licensee perform surveys for stranded fish and mussels, and relocate any stranded organisms that may be found. In its September 7, 2018 filing, the licensee indicated that it disagrees with this recommendation, noting that no such recommendation was made during a previous drawdown at the Edenville Project.

24. There are several issues to be considered in determining whether the Commission should require stranding surveys and relocation work as part of this action. First, we note that these drawdowns involve four reservoirs that, together, have approximately 175 miles of shoreline. Also, the proposed drawdown rates are slightly faster than the earlier drawdown at Edenville referenced by the licensee, increasing the risk to organisms in shallow-water areas.¹⁵ Therefore, the drawdowns present a greater risk to aquatic resources through stranding.

25. Conversely, drawdowns of slightly less depth are routinely performed at these projects as part of normal operations, and the impacts from the proposed drawdowns would not, overall, be expected to result in significantly more effect to aquatic resources. Also, Michigan DNR did not provide any guidance for how such large expanses of shoreline should be surveyed. In previous proceedings, where the Commission has required surveys for stranded aquatic organisms, resource agencies and/or licensees have proposed appropriate site-specific plans for the work, with specific goals, often driven by known presence of federally-listed or state-listed organisms. For example, such plans have identified areas that are prone to stranding where the stranding surveys are therefore to be performed, or identified the maximum number of organisms to be relocated. Here, none of this information has been provided, making it difficult to require an appropriate plan, especially given the large area involved.

26. Based on the above, we are not requiring a stranding survey and relocation plan as recommended by Michigan DNR. However, to help address the issue of stranding, we are requiring the licensee to immediately forward to Michigan DNR and to the Commission any observations of significant strandings, or reports it receives of significant strandings, so that appropriate action can be taken. We are also requiring the licensee to temporarily stop a drawdown if notified by the Michigan DNR of a stranding event that the agency believes could have significant, population-level effects. If the licensee is informed by the agency of such an event, it must also immediately inform the Commission, and identify any measures it proposes to take, in consultation with Michigan DNR, to address the situation.

¹⁵ As mentioned above, the licensee is proposing a reservoir drawdown rate of 8 inches per day. See *Boyce Hydro Power LLC*, 156 FERC ¶ 62,191 (2016) and *Boyce Hydro Power LLC*, 157 FERC ¶ 62,045 (2016) in which drawdown rates of 5-7 inches per day were used at the Sanford Project.

C. Drawdowns and Temporary Variances from License Requirements

27. Given the scope of the spillway and gate inspection work, we note that a smaller drawdown of the Secord reservoir could be sufficient. The primary reason for lowering the Secord reservoir is to provide some additional flood storage during the time the downstream Smallwood and Sanford Project spillways are inspected and the only inspection that would occur at the Secord Project is that of the radial gates which may not require the full 4 ft. drawdown. Further, a later drawdown start date also appears sufficient and would assist landowners and recreationists in preparing for the drawdown on the Secord reservoir. Therefore, we are requiring the licensee to delay its start of the Secord reservoir drawdown to September 24, 2018, at a rate of 8 inches per day. The full 4 ft. draw down at Secord is still authorized by this order, but the licensee must consult with the Regional Engineer regarding the level to which the reservoir should actually be lowered at this development.

28. In summary, the licensee's requested temporary variance and proposed drawdowns responds to the Regional Engineer's directive to perform important dam safety inspections of spillways and gates at the above projects. The licensee's July 26, 2018 filing, as modified, should be approved as discussed herein.

The Director orders:

(A) Boyce Hydro Power, LLC's (licensee) July 26, 2018 request for a temporary variance, as clarified on August 7, 2018, to lower project reservoirs at the Secord Project No. 10809, Smallwood Project No. 10810, and Sanford Project No. 2785, is approved, as modified by ordering paragraphs (B) through (G) below.

(B) The licensee must start the drawdown of the Smallwood and Sanford Project reservoirs no earlier than September 20, 2018.

(C) The licensee must start the drawdown of the Secord Project reservoir no earlier than September 24, 2018. The licensee is authorized to lower this reservoir to elevation 746.8 ft. NVGD (-0.4 ft./+0.3 ft.), but the licensee must consult with the Regional Engineer to decide whether a full 4 foot drawdown is actually needed.

(D) The licensee must, as soon as possible, and before initiating its drawdowns, install temporary signs to inform the public of the approved drawdowns. Signs must be installed adjacent to the Part 8 signage at each project and must remain in place throughout the drawdown period for each project. Each sign must include: (1) the schedule and target water elevations at each reservoir; (2) a warning that new shallow-water navigation hazards may be created; (3) the location of other nearby fishing and

boating opportunities; and (4) a telephone number and email contact where further information can be obtained.

(E) The licensee must maintain, during the drawdowns approved in this order, minimum flows at the Sanford Project required by Article 401.

(F) The licensee must maintain continuous minimum flows of 30 cubic feet per second below the dams at the Secord and Smallwood Projects when the drawdowns approved in this order result in cessations of all flows that would normally be provided to these areas during normal project operation. These flows may be modified or curtailed when necessary for safety and performance of the inspections at each dam, and they may be modified or curtailed as may be necessary to maintain the drawdown and refill rates and schedules approved in this order. The licensee must inform the Regional Engineer, prior to initiation of the drawdowns, of the methods by which these flows will be provided.

(G) The licensee must immediately forward to the Michigan Department of Natural Resources (Michigan DNR) any observations of significant strandings, or reports it receives of significant strandings, so that appropriate action can be taken. The licensee must temporarily stop a drawdown if notified by the Michigan DNR of a stranding event that the agency believes could have significant, population-level effects. If the licensee is informed by the agency of such an event, it must also immediately inform the Commission, and identify any measures it proposes to take, in consultation with Michigan DNR, to address the situation.

(H) This order constitutes final agency action. Any party may file a request for rehearing of this order within 30 days from the date of its issuance, as provided in section 313(a) of the Federal Power Act, 16 U.S.C. § 8251 (2012), and the Commission's regulations at 18 C.F.R. § 385.713 (2017). The filing of a request for rehearing does not operate as a stay of the effective date of this order, or of any other date specified in this order. The licensee's failure to file a request for rehearing shall constitute acceptance of this order.

Steve Hocking, Chief
Environmental and Project Review Branch
Division of Hydropower Administration
and Compliance

Document Content(s)

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