

159 FERC ¶ 62,292
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Boyce Hydro Power, LLC

Project No. 10808-053,
-044, -047, -055

COMPLIANCE ORDER

(June 15, 2017)

1. Boyce Hydro Power, LLC, licensee for the Edenville Hydroelectric Project No. 10808, is in violation of its license¹ and the Commission's regulations for: 1) failing to increase the spillway capacity of the project; 2) performing unauthorized dam repairs; 3) performing unauthorized earth-moving activities; 4) failing to file an adequate Public Safety Plan; 5) failing to construct approved recreation facilities pursuant to the Commission's 2001 Order approving its Recreation Plan² and for restricting public access; 6) failing to acquire all necessary project property rights; and 7) failing to comply with the Commission's 1999 Order approving its Water Quality Monitoring Plan.³

2. As fully discussed below, the Commission's primary concern is the licensee's longstanding failure to address the project's inadequate spillway capacity. The Edenville dam has a high hazard potential rating, which means a failure of the project's works would create a threat to human life and/or would cause significant property damage.⁴ The project's spillway deficiencies must be remedied. In addition, the licensee has failed to comply with other requirements in its license. The licensee must provide the

¹ *Wolverine Power Corporation*, 85 FERC ¶ 61,063 (1998).

² *Wolverine Power Corporation*, 96 FERC ¶ 62,055 (2001).

³ *Wolverine Power Corporation*, 87 FERC ¶ 62,365 (1999).

⁴ The hazard potential of a dam is based on the potential for loss of human life or property damage in the area downstream of the dam in the event of failure or incorrect operation. Hazard potential does not refer to the structural integrity of the dam itself, but rather its effects should failure occur. Also, the hazard potential assigned to a dam is based on consideration of the effects of a failure during both normal and flood flow conditions.

Commission the requested plans, specifications, reports, and other information as discussed in this order. The Edenville Project is located on the Tittabawassee River in Gladwin and Midland counties, Michigan. The project does not occupy any federal lands.

I. **BACKGROUND**

3. The Edenville Project consists of earthen embankments, known as the Edenville dam, totaling about 6,600 feet in length and having a maximum height of 54.5 feet. The dam spans both the Tittabawassee and Tobacco Rivers creating a 2,600-acre reservoir known as Wixom Lake with a gross storage capacity of about 40,000 acre-feet and a 49-mile-long shoreline at full pool. There is a 50-foot-long intake leading to the powerhouse located at the dam on the eastern side of the project. The powerhouse contains two 2.4-megawatt (MW) Francis-type turbine generator units for a total installed capacity of 4.8 MW. The project creates a 0.4-mile-long bypassed reach on the Tobacco River that extends from the dam to the point where the Tobacco River meets the Tittabawassee River. Two reinforced concrete multiple arch spillways are present at the project. The 69-foot-wide and 39-foot-high Tittabawassee spillway (also referred to as the Edenville spillway) is located on the east side (Tittabawassee River side) of the project and contains three Tainter gates and two low-level sluice gates. The Tobacco spillway is about 72 feet long and 72 feet wide with a crest height of about 40 feet, and contains three steel Tainter gates located on the western side (Tobacco River side) of the project. Michigan State Highway 30 bisects both Wixom Lake and the project's dam.

4. The project was originally licensed to Wolverine Power Corporation on October 16, 1998. The license was transferred from Wolverine Power Corporation to Synex Michigan, LLC on June 23, 2004.⁵ Synex Michigan, LLC changed its name to Boyce Hydro Power, LLC (licensee) and filed a statement with the Commission on July 12, 2007 to this effect.

II. **VIOLATIONS**

A. **FAILURE TO FOLLOW REGIONAL ENGINEER DIRECTIVES TO MEET THE PROBABLE MAXIMUM FLOOD**

1. **Requirements**

5. Standard Article 4 of the project license states:

⁵ *Wolverine Power Corporation and Synex Michigan, LLC*, 107 FERC ¶ 62,266 (2004).

The project, including its operation and maintenance and any work incidental to additions or alterations authorized by the Commission, whether or not conducted upon lands of the United States, shall be subject to the inspection and supervision of the Regional Engineer, Federal Energy Regulatory Commission, in the region wherein the project is located, or of such other officer or agent as the Commission may designate, who shall be the authorized representative of the Commission for such purposes. The licensee shall cooperate fully with said representative and shall furnish him such information as he may require concerning the operation and maintenance of the project, and any such alterations thereto, and shall notify him of the date upon which work with respect to any alteration will begin, as far in advance thereof as said representative may reasonably specify, and shall notify him promptly in writing of any suspension of work for a period of more than one week, and of its resumption and completion. The licensee shall submit to said representative a detailed program of inspection by the licensee that will provide for an adequate and qualified inspection force for construction of any such alterations to the project. Construction of said alterations or any feature thereof shall not be initiated until the program of inspection for the alterations or any feature thereof has been approved by said representative. The licensee shall allow said representative and other officers or employees of the United States, showing proper credentials, free and unrestricted access to, though, and across the project lands and project works in the performance of their official duties. The licensee shall comply with such rules and regulations of general or special applicability as the Commission may prescribe from time to time for the protection of life, health, or property.

6. Section 12.35(b)(1) of the Commission's regulations states:⁶

Specific inspection requirements

(b) *Evaluation of spillway adequacy.* The adequacy of any spillway must be evaluated by considering hazard potential which would result from failure of the project works during flood flows.

(1) If structural failure would present a hazard to human life or cause significant property damage, the independent consultant must evaluate the ability of project works to withstand the loading or overtopping which may occur from a flood up to the probable maximum flood or the capacity of spillways to prevent the reservoir from rising to an elevation that would endanger the project works.

⁶ 18 C.F.R. § 12.35(b)(1) (2016).

7. Given Edenville dam's high hazard potential rating, the potential loss of life and destruction of property and infrastructure is grave should the project not be maintained and operated appropriately, with consequences that could certainly affect the Village of Sanford, Northwood University, City of Midland, Michigan, and other areas downstream. The Commission's Dam Safety Guidelines require the project works to be designed to either withstand overtopping of the loading condition that would occur during a flood up to the probable maximum flood (PMF),⁷ or to the point where a failure would no longer constitute a hazard to downstream life and/or property. In the alternative, the capacity of the spillway⁸ must be adequate to prevent the reservoir from rising to an elevation that would endanger the safety of the project works. As summarized in an August 6, 1993 letter from the Regional Engineer to the prior licensee, the spillway capacity of the Edenville Project does not meet the Commission's guidelines for passing the PMF.⁹ The Regional Engineer has repeatedly directed the licensee to address the spillway capacity concerns at the project, as discussed below.¹⁰

2. Violations

8. The licensee is in violation of Article 4 for failing to follow directives from the Regional Engineer requiring the project to meet the Commission's guidelines for passing the PMF. The existing spillway capacity at the project is approximately 50% of the PMF. In working with the licensee, Commission staff identified certain risk reduction measures the licensee was required to implement in stages to increase spillway capacity until the full PMF can be passed. These risk reduction measures include the construction of auxiliary spillways on both the east and west sides of the project in proximity to the

⁷ The flood that may be expected from the most severe combination of critical meteorologic and hydrologic conditions that is reasonably possible in the drainage basin under study. This is referred to as a "PMF event."

⁸ The spillway capacity is the maximum outflow flood which a dam can safely pass.

⁹ See Federal Energy Regulatory Commission, Engineering Guidelines for the Evaluation of Hydropower Projects, Chapter 2: Selecting and Accommodating Inflow Design Floods for Dams (August 2015), <http://www.ferc.gov/industries/hydropower/safety/guidelines/eng-guide/chap2.pdf>

¹⁰ See initial letters from the Regional Engineer dated January 4, 1999, and June 10, 2004, to the prior licensee, issued shortly before the license was transferred noting the need to address the spillway capacity. *Also see, e.g.*, letter dated September 23, 2004, from the Regional Engineer to the licensee after license transfer requesting designs in order to construct auxiliary spillways in 2005 and 2006.

existing spillways to add additional hydraulic capacity. Given Commission staff's current assessment of what the licensee is developing, albeit based on inadequate plans and specifications as discussed in more detail below, after both risk reduction auxiliary spillways are constructed, the spillway capacity at the project would be increased to approximately 66% of the PMF. The licensee would therefore still need to implement additional measures to increase spillway capacity further. The licensee must also address the independent consultant's repeated recommendations¹¹ to raise the minimum dam crest elevation by re-grading the embankments in certain locations which will also augment spillway capacity. However, the licensee has never filed any specific plans and specifications to do so other than a general schedule to complete this work by November 1, 2013 - a schedule the licensee did not meet.¹² The licensee's plans for additional measures are unclear because the licensee has not filed plans and specifications with the Commission despite the Regional Engineer's directives to do so on multiple occasions.

9. As detailed below, since acquiring the license in 2004, the licensee has not filed adequate plans, specifications, or designs as directed by the Regional Engineer for addressing spillway capacity concerns at the project.¹³ The licensee has failed to follow Regional Engineer directives to meet the PMF, has consistently filed inadequate and untimely reports, studies, plans, and specifications in preparing for construction of risk reduction measures to address spillway capacity deficiencies, and has failed to acquire a necessary permit.

¹¹ See the 2010 and 2016 Independent Consultant Safety Inspection reports filed with the Commission on January 3, 2011 and March 23, 2016, respectively, in which settlement in the crest of the earth embankments at certain locations is noted and determined to have impacted the elevation of the dam and the project's hydraulic capacity.

¹² See letter issued February 28, 2013 by the Regional Engineer accepting the licensee's schedule to address crest elevation issues by November 1, 2013. However, the licensee never filed plans and specifications with the Commission to complete this work; therefore, the Regional Engineer has not authorized any work to modify the crest elevation. In the Part 12D report filed March 23, 2016, the independent consultant stated that this work is needed and should be coincident with the auxiliary spillway construction projects.

¹³ As stated in the license transfer order, Boyce Hydro Power, LLC is subject to the terms and conditions of the license as though it were the original licensee. See *Wolverine Power Corporation and Synex Michigan, LLC*, 107 FERC ¶ 62,266 (2004).

a. Failure to Complete Requirements

10. Since 2004, the licensee has repeatedly failed to comply with schedules for filing plans and completing measures and has frequently and repeatedly requested more time to complete requirements. In a letter issued February 24, 2005, the Regional Engineer noted that a PMF study was overdue even after the licensee received an extension of time to complete the necessary study. The licensee's plan and schedule to complete auxiliary spillway work was also unacceptable. In the February 24, 2005 letter, the licensee was also put on notice regarding the enforcement and penalty provisions of section 31 of the Federal Power Act (FPA) should it remain in non-compliance with Part 12 of the Commission's regulations.¹⁴

11. For years, Commission staff worked with the licensee (and continues to do so) to increase the spillway capacity at the project needed to pass the PMF. Multiple meetings were held with the licensee, Commission staff, and a Board of Consultants to review and discuss plans for addressing spillway capacity.¹⁵ Such meetings took place on December 13-16, 2005; May 22-23, 2007; July 9-11, 2007; March 19-20, 2008; and February 4-5, 2009.

12. On February 9, 2009, the Regional Engineer granted the licensee an extension of time to construct the auxiliary spillways due to the licensee's inability to finance the work. This extension of time accepted the licensee's revised schedule to complete the construction over a three-year period, instead of one, with construction to be completed in 2013. Later, after a series of letters dated September 30, 2013, October 9, 2013, and November 29, 2013, the licensee proposed to construct two auxiliary spillways, one in 2014 and one in 2015.¹⁶ However, the licensee never completed this work. After not meeting those deadlines, the Regional Engineer then proposed and required implementation of a new plan and deadline to construct one auxiliary spillway in 2015.

¹⁴ Section 31 of the FPA, 16 U.S.C. § 823b (2012), authorizes the Commission, after notice and opportunity for hearing, to issue such orders as may be necessary to require compliance with the terms and conditions of a license. Additional remedies may include imposing civil penalties or revoking a license.

¹⁵ The Board of Consultants consists of qualified, independent professional engineers who will oversee, review, and assess the planning, design, and construction of the auxiliary spillways. *See* letter from the Director of the Commission's Division of Dam Safety and Inspections issued to the licensee on September 7, 2005, regarding the requirement to convene a Board of Consultants for the auxiliary spillways.

¹⁶ *See* letter from the Regional Engineer to the licensee dated February 11, 2014.

The licensee did not meet this deadline either, despite accepting the schedule in a letter it filed with the Commission on July 31, 2014.¹⁷

13. A December 5, 2014 letter from the Regional Engineer formalized yet another timeline for completing the two auxiliary spillways with the Tobacco auxiliary spillway to be completed in 2015. This letter included a schedule with due dates for filing certain plans and specifications, monthly progress reports, and new construction deadlines. Under this schedule, an initial auxiliary spillway would be constructed by November 14, 2015, on the Tobacco side of the project and the second auxiliary spillway would be constructed by December 31, 2016 on the Tittabawassee side of the project. The licensee failed to meet either of these new deadlines. The licensee has yet to file complete and adequate plans for either auxiliary spillway and has already received numerous other extensions of time to complete certain design phase analyses and to file documents.¹⁸

14. In addition to the risk reduction measures of the two auxiliary spillways, the Regional Engineer required the licensee to file a plan to pass the full PMF at the project. The Regional Engineer requested this plan in a letter to the licensee dated September 9, 2013, requiring final designs by December 20, 2014, for a permanent solution to address the complete PMF. Later, in a letter dated July 22, 2014, the Regional Engineer required the licensee to file plans and recommendations by December 15, 2015, to resolve the project's long-term spillway capacity issue. The licensee has not filed a plan to reach the full PMF.

15. The need to address the spillway capacity at the project was also highlighted in the latest Part 12D Independent Consultant Safety Inspection Report the licensee filed with the Commission on March 22, 2016. The independent consultant stated that "the licensee should continue to work for review and approval of the existing spillway rehabilitation projects which will allow the dam to safely pass the 100% PMF." As discussed later in this order, the licensee has not filed a plan and schedule to address certain dam safety items identified in this report, including increasing the spillway capacity of the project.¹⁹

¹⁷ See also July 22, 2014 letter from Regional Engineer to the licensee including specific deadlines for auxiliary spillway construction.

¹⁸ See *e.g.*, letters from the Regional Engineer dated August 17, 2010, September 6, 2011, December 17, 2014, and September 9, 2015. These letters gave the licensee more time to hold meetings and to discuss plans with consultants and to file design documents that more fully address comments and revised deadlines for a final design package because of delays in meeting milestones.

¹⁹ See letter from the Regional Engineer to the licensee dated June 30, 2016.

16. Thirteen years after acquiring the license for the project, the licensee has still not increased spillway capacity leaving the project in danger of a PMF event. The licensee has shown a pattern of delay and indifference to the potential consequences of this situation. A situation that must be remedied in order to protect life, limb, and property.

b. Inadequate Filings

17. The licensee frequently files incomplete materials for Commission staff review, significantly hindering an essential review process and effectively delaying construction. In a letter dated February 16, 2011, the Regional Engineer noted the licensee's failure to address comments provided on a modelling study needed for the spillway capacity remediation work. This letter also warned the licensee that it was unacceptable to disregard comments provided by Commission staff and that its failure to address comments on plans is not justification to extend timelines for the start of construction.

18. Letters including those issued by the Regional Engineer on August 6, 2011, March 5, 2014, and July 15, 2015, to the licensee all state that the licensee's filings of designs, specifications, and plans over the years for the auxiliary spillway work were insufficient. These letters included a detailed review of the licensee's filings along with a list of specific deficiencies. In another letter from the Regional Engineer issued September 9, 2015, the licensee was informed that its drawings filed August 14, 2015, for the Tobacco auxiliary spillway did not incorporate comments it received from Commission staff. In addition, the licensee's design report, a water management plan, project specifications, Quality Control Inspection Program (QCIP), Temporary Construction Emergency Action Plan (TCEAP), and other requirements were either not filed or not addressed as directed.

19. On February 3 and 8, 2016, the licensee filed designs and plans for the Tobacco auxiliary spillway work. On June 6, 2016, the Regional Engineer issued a letter to the licensee again finding its filings inadequate. A response to the letter was requested by July 5, 2016. The licensee did not file the required designs and plans by this deadline.

20. The licensee is also not keeping the Commission informed of its efforts toward construction of the auxiliary spillways by frequently not filing its required monthly progress reports.²⁰ The purpose of the December 5, 2014 requirement to file monthly progress reports is to keep the Regional Engineer apprised of the licensee's progress in planning for and constructing the auxiliary spillways. On March 30, 2016, the Regional Engineer notified the licensee that the December 2015, and January, February, and March 2016 monthly progress were not filed. The Regional Engineer noted that a failure to file monthly construction reports is a violation of section 12.4(b)(2)(ii) of the Commission's

²⁰ See *e.g.*, July 7, 2015 letter from the Regional Engineer to the licensee.

regulations. The licensee was given notice of the penalty provisions of Section 31 of the FPA should it continue to miss filing monthly construction reports.

21. On May 16, 2016, the Regional Engineer issued another letter reiterating the need to file monthly updates with the Commission to demonstrate that progress is being made in resolving the spillway capacity issue and to highlight how the licensee is addressing any obstacles to that progress. In this letter, the Regional Engineer required the licensee to file with the Commission, by May 27, 2016, a detailed report for the period of November 2015 through April 2016 summarizing all actions it has taken to plan for and construct the auxiliary spillways. The May 2016 monthly progress report was required to be filed by June 15, 2016, with subsequent monthly reports due until otherwise directed by the Commission.

22. In a response filed May 31, 2016, the licensee says the reason certain monthly progress reports were not filed was because there was either nothing to report or the Regional Engineer was already aware of filings made pertaining to the spillway work and the licensee didn't see the need to file anything else. The monthly reporting requirement is a discrete action item identified in the Regional Engineer's December 4, 2014 letter. These reports should document diligent, continued action toward resolving the spillway capacity issues at the project. The requirement to file these reports is separate from any other filing requirement.

23. On July 21, 2016, the licensee filed a late monthly progress report for June in which it stated that it suspended work on spillway improvements due to litigation with the Michigan Department of Environmental Quality (Michigan DEQ) regarding permits. In response, the Regional Engineer issued a letter dated July 28, 2016, stating that the licensee's monthly progress reports from November 2015 to June 2016, show that it made no progress in advancing construction of the Tobacco auxiliary spillway. The licensee then filed a late monthly progress report on August 18, 2016, for July. In that report, the licensee stated that for July, "all permit application activity for the auxiliary spillway project related to the Michigan DEQ is on hold until Michigan DEQ litigation filed in June is resolved." The report did not show the licensee engaging in any other activities to address the PMF other than those activities related to permitting. The licensee did not file monthly progress reports by September 15, 2016, or October 15, 2016, for activities performed in August or September. Instead, the licensee filed a late report on November 21, 2016, that it stated was "for August and September, 2016." In this report, the licensee again, did not show any progress addressing the PMF. The licensee only reiterated that all permit application activity for the auxiliary spillways is on hold until litigation with the Michigan DEQ is resolved. Later, the licensee failed to file monthly progress reports covering activities for October, November, and December 2016. The licensee has failed to file monthly progress reports for January, February, March, and April 2017.

c. **Permits**

24. The licensee is not exercising due diligence in acquiring a permit from the Michigan DEQ to complete the Tobacco auxiliary spillway at the west side of the project. The licensee stated in monthly progress reports filed with the Commission on July 8, 2015, October 19, 2015, and November 18, 2015, that it filed with the Michigan DEQ on April 30, 2015, a permit application specific to the construction of the Tobacco auxiliary spillway. The Michigan DEQ found the licensee's permit application incomplete and asked for additional information.²¹ The licensee stated in progress reports filed with the Regional Engineer that it would respond to these comments by the end of July 2015, per the July 6, 2015 report. In subsequent reports, though, the licensee then stated it would respond to Michigan DEQ's comments by the end of October 2015, per the October 14, 2015 progress report, and then stated that it would respond by the end of November 2015, per the November 7, 2015 report.

25. The licensee continued to delay addressing Michigan DEQ's comments. In its monthly progress report filed with the Commission on May 31, 2016, the licensee stated that it was in the final stages of preparing a response to Michigan DEQ regarding its deficient permit application for the Tobacco auxiliary spillway. It stated that "progress on the permit application for the Auxiliary Spillway project which includes the initial toe drain project... is delayed until clarity and understanding of actual circumstances are established with [Michigan DEQ]."²²

26. In the licensee's June and July progress reports filed July 21, 2016, and August 18, 2016, respectively, the licensee states that the Michigan DEQ is pursuing litigation for unresolved permitting issues and the licensee's counsel has advised it to stop planning work for the Tobacco auxiliary spillway. The licensee stated that for July, "all permit application activity for the auxiliary spillway project related to the [Michigan DEQ] is on hold until [Michigan DEQ] litigation filed in June is resolved." In a report filed November 21, 2016, the licensee stated that a pre-trial hearing took place on

²¹ See letter dated June 2, 2015 from the Michigan DEQ, attached to the licensee's July 6, 2015 monthly progress report.

²² The June 2, 2015 letter from the Michigan DEQ details the deficiencies with the licensee's permit application. Included in the letter is a statement that if the additional information requested is not filed within 30 days of the letter, i.e. by July 2, 2015, Michigan DEQ will consider the application withdrawn. The licensee would therefore need to file a new application which would include additional filing fees.

September 26, 2016 regarding litigation with the Michigan DEQ and that it is pursuing a settlement with the Michigan DEQ regarding permitting issues.²³

3. Discussion

27. The licensee has shown a persistent pattern of requesting additional time; missing deadlines; providing deficient designs, plans, and specifications; and has not shown due diligence obtaining a permit from the Michigan DEQ. Commission staff has worked with the licensee for 13 years in an attempt to get plans developed and implemented to meet the spillway capacity requirements. The Regional Engineer and staff have been very flexible, granting the licensee multiple extensions of time, allowing the licensee to switch its overall plans, and ultimately allowing the licensee to address the spillway capacity deficiencies in stages – starting with two auxiliary spillways. Despite this, the licensee is making no progress in advancing construction of even the initial risk reduction measure and its disregard for the severity of this situation is appalling.

28. The licensee's excuse that it can no longer move forward with the Tobacco auxiliary spillway until permitting issues with the Michigan DEQ are resolved is misplaced. While the full extent of the licensee's permitting issues with the Michigan DEQ regarding the auxiliary spillway, and the unauthorized earthmoving activity addressed below, is not known, there is no reason the licensee cannot finalize its plans, specifications, and designs for the Tobacco auxiliary spillway and submit them to the Regional Engineer while working with the Michigan DEQ. Likewise, the licensee can, and should, be preparing preliminary plans and specifications for the Tittabawassee auxiliary spillway (its next risk reduction measure) and should be developing a plan to address the full PMF while working with the Michigan DEQ. The fact that the licensee has halted all PMF development and implementation activities required by the Regional Engineer over one permit from the Michigan DEQ is just another tactic in a pattern of delay that has now stretched to 13 years. Pending litigation does not relieve the licensee of its obligation to meet the PMF at the Edenville Project.

29. As mentioned earlier, the Edenville dam has a high hazard potential rating which means a failure of the project's works would create a threat to human life and/or would cause significant property damage. The licensee must immediately file complete plans, specifications, and designs for the Tobacco auxiliary spillway as required by the Regional Engineer in the June 6, 2016 letter and must resolve its permitting issues with the Michigan DEQ. In addition, the licensee must proceed with developing preliminary plans and specifications for the Tittabawassee auxiliary spillway (its next risk reduction measures) and must develop a plan to address the full PMF.

²³ See also letter filed with the Commission by the licensee on January 25, 2017, regarding continued settlement discussions with the Michigan DEQ.

B. UNAUTHORIZED DAM REPAIR WORK**1. Requirements**

30. Section 12.4(b)(2)(ii) of the Commission's regulations states:²⁴

A Regional Engineer or other authorized Commission representative may: Require an applicant or a licensee to submit reports or information, regarding: (A) the design, construction, operation, maintenance, use, repair, or modification of a water power project or project works; and (B) any condition affecting the safety of a project or project works or any death or injury that occurs at, or might be attributable to, the water power project.

31. Section 12.10 of the Commission's regulations states:²⁵

Reporting safety-related incidents.

(a) Conditions affecting the safety of a project or its works. (1) Oral reports. An applicant or licensee must report by telephone to the Regional Engineer any condition affecting the safety of a project or projects works, as defined in §12.3(b)(4). The initial oral report must be made as soon as practicable after that condition is discovered, without unduly interfering with any necessary or appropriate emergency repair, alarm, or other emergency action procedure.

(2) Written reports. Following the initial oral report required in paragraph (a)(1), the applicant or licensee must submit to the Regional Engineer a written report on the condition affecting the safety of the project or project works verified in accordance with §12.13. The written report must be submitted within the time specified by the Regional Engineer and must contain any information the Regional Engineer directs, including:

(i) the causes of the condition; (ii) a description of any unusual occurrences or operating circumstances preceding the condition; (iii) an account of any measure taken to prevent worsening of the condition; (iv) a detailed description of any damage to project works and the status of any repair; (v) a detailed description of any personal injuries; (vi) a detailed description of the nature and extent of any private property damages; and (vii) any other relevant information requested by the Regional Engineer.

²⁴ 18 C.F.R. § 12.4(b)(2)(ii) (2016).

²⁵ 18 C.F.R. § 12.10 (2016).

(3) The level of detail required in any written report must be commensurate with the severity and complexity of the condition.

32. Section 12.11 of the Commission's regulations states:²⁶

Reporting modifications of the project or project works.

(a) *Reporting requirement.* Regardless of whether a particular modification is permitted without specific prior Commission approval, an applicant or licensee must report any modification of the project or project works to the Regional Engineer in writing, verified in accordance with §12.13, at the time specified in paragraph (b) of this section.

(b) *Time of reporting.* (1) Any modification that is an emergency measure taken in response to a condition affecting the safety of the project or project works must be submitted with the report of that condition required by §12.10(a)(2).

(2) In all other instances, the modification must be reported at least 60 days before work on the modification begins.

33. Section 12.39 (a) of the Commission's regulations states:²⁷

Taking corrective measures after the report.

(a) *Corrective plan and schedule.* (1) Not later than 60 days after the report of the independent consultant is filed with the Regional Engineer, the licensee must submit to the Regional Engineer three copies of a plan and schedule for designing and carrying out any corrective measures that the licensee proposes.

(2) The plan and schedule may include any proposal, including taking no action, that the licensee considers a preferable alternative to any corrective measure recommended in the report of the independent consultant. Any proposed alternative must be accompanied by the licensee's complete justification and detailed analysis and evaluation in support of that alternative.

(b) *Carrying out the plan.* The licensee must complete all corrective measures in accordance with the plan and schedule submitted to, and approved or modified by, the Regional Engineer.

²⁶ 18 C.F.R. § 12.11 (2016).

²⁷ 18 C.F.R. § 12.39 (2016).

(c) Extension of time. For good cause shown, the Regional Engineer may extend the time for filing the plan and schedule required by this section.

34. Section 12.40 of the Commission's regulations states:²⁸

Quality control programs.

(a) *General rule.* During any construction, repair, or modification of project works, including any corrective measures taken pursuant to §12.39 of this part, the applicant or licensee must maintain any quality control program that may be required by the Regional Engineer, commensurate with the scope of the work and meeting any requirements or standards set by the Regional Engineer. If a quality control program is required, the construction, repair, or modification may not begin until the Regional Engineer has approved the program.

(b) If the construction, repair, or modification work is performed by a construction contractor, quality control inspection must be performed by the licensee, the design engineer, or an independent firm, other than the construction contractor, directly accountable to the licensee. This paragraph is not intended to prohibit additional quality control inspections by the construction contractor, or a firm accountable to the construction contractor, for the construction contractor's purposes.

(c) If the construction, repair, or modification of project works is performed by the applicant's or licensee's own personnel, the applicant or licensee must provide for separation of authority within its organization to make certain that the personnel responsible for quality control inspection are, to the satisfaction of the Regional Engineer or other authorized Commission representative, independent from the personnel who are responsible for the construction, repair or modification.

2. Violations

35. A dam safety inspection performed by Commission staff on August 6, 2015, revealed unauthorized construction repair work performed by the licensee addressing a deflection of the right Tobacco spillway abutment wall.²⁹ In a September 9, 2015 letter

²⁸ 18 C.F.R. § 12.40 (2016).

²⁹ See dam safety inspection report dated February 2, 2016. See also the March 22, 2016 filing of the Part 12D Independent Consultant Safety Inspection Report for 2015. Some correspondence regarding this issue refers to the abutment wall as a training wall, retaining wall, or a wing wall. All terms refer to the same feature.

to the licensee, the Regional Engineer noted that the licensee violated Part 12 of the Commission's regulations for not reporting a condition affecting the safety of the project (section 12.10) and for not reporting a modification to the project (section 12.11). Section 12.3 of the Commission's regulations defines "a condition affecting the safety of a project or project works means any condition, event, or action at the project which might compromise the safety, stability, or integrity of any project work or the ability of any project work to function safely for its intended purposes, including navigation, water power development, or other beneficial public uses; or which might otherwise adversely affect life, health, or property." The instability of a spillway abutment wall should have been reported to the Regional Engineer according to the requirements and procedures outlined in section 12.10 of the Commission's regulations. The licensee should have reported the issue first by telephone to the Regional Engineer followed by a written report detailing the issue. The licensee made no such oral or written report about the damage to the spillway abutment wall, and its failure to do so violated section 12.10 of the Commission's regulations.

36. The licensee allegedly attempted to repair the right spillway abutment wall, but did not inform the Regional Engineer of this modification, constituting a violation of section 12.11 of the Commission's regulations. As section 12.11 states, a licensee must report any modification of the project or project works to the Regional Engineer in writing. In the case of the repairs to the right abutment spillway wall, any modification that is an emergency measure taken in response to a condition affecting the safety of the project or project works must be submitted with the report of that condition required by section 12.10. The modification should have been reported to the Regional Engineer to provide Commission staff the opportunity to review the repair work before the work was actually completed.

37. In the September 9, 2015 letter to the licensee, the Regional Engineer also noted that a QCIP for the construction work to the right Tobacco spillway abutment wall was not filed, in violation of section 12.40 of the Commission's regulations. Section 12.40 of the Commission's regulations requires that during any construction, repair, or modification of project works, the licensee must maintain any quality control program that may be required by the Regional Engineer, commensurate with the scope of work and meeting any requirements or standards set by the Regional Engineer. Per the Commission's engineering guidelines, a QCIP should contain detailed information including, but not limited to, the following: (1) a description of the proposed construction; (2) an organization chart of the construction inspection force; (3) the number and specialties of the proposed inspectors; (4) a description of duties, responsibilities, and scope of authority of the QCIP staff; (5) field tests to be performed and frequency of testing; (6) field laboratory facilities or commercial testing services to be provided; (7) an inspection plan including documentation and reporting procedures; (8) planned use of consultants during construction; (9) a schedule of all major features of construction; and (10) a description of erosion control and other environmental

measures.³⁰ In addition, the QCIP should cover such items as: (1) water diversion during construction; (2) underground and surface excavation; (3) production and placement of earth and concrete; (4) powerhouse construction; (5) installation of penstocks; and (6) installation of major mechanical and electrical equipment. The information provided should be in sufficient detail for the reviewer to determine that the proposed QCIP provides adequate construction quality control.

38. In the September 9, 2015 letter, the Regional Engineer requested a complete design package regarding the repair work to the right Tobacco spillway abutment wall including plans, specifications, QCIP, and a final construction report by October 8, 2015. The letter also provided notice to the licensee of the enforcement and penalty provisions of section 31 of the FPA should it remain in non-compliance with the terms and conditions of its license. The licensee did not file the requested plans, specifications, or reports as directed by the Regional Engineer by October 8, 2015, nor did it request an extension of time.

39. In a June 8, 2016 letter,³¹ the Regional Engineer reminded the licensee that it had not filed the plans, specifications, or report regarding the unauthorized repairs to the right Tobacco spillway abutment wall which was required by October 8, 2015. Additionally, given new concerns of potentially compromised spillway control at the project in light of damage to a spillway apron slab rendering the Tittabawassee spillway unusable,³² the Regional Engineer requested in the June 8, 2016 letter an evaluation of the amount of flow that can safely pass solely through the Tobacco spillway, as well as the ability of the right abutment spillway wall to withstand any significant spillway flow in its present condition. The Regional Engineer requested the licensee file a specific report on this matter by June 17, 2016.

³⁰ See Federal Energy Regulatory Commission, Engineering Guidelines for the Evaluation of Hydropower Projects, Chapter 7: Construction Quality Control Inspection Program (January 1993), <http://www.ferc.gov/industries/hydropower/safety/guidelines/eng-guide/chap7.pdf>

³¹ The June 8, 2016 letter also included a request for information regarding failure of a spillway apron slab at the Tittabawassee spillway not addressed in this Compliance Order.

³² As discussed in the June 8, 2016 letter, the licensee improperly informed the Commission of the failure of the left portion of the Tittabawassee spillway apron slab via an email to the Regional Engineer on May 27, 2016. The licensee must notify the Regional Engineer by telephone of any failure with a follow-up written report as discussed above.

40. On June 15, 2016, the licensee filed a response to the June 8, 2016 letter. Regarding the work to the right Tobacco abutment spillway wall, the licensee stated that the repairs were to provide a “temporary fix pending future permanent construction” which therefore did not require specific designs or plans.
41. On June 28, 2016, Commission staff performed a dam safety inspection of the Edenville Project.³³ Pertinent to this discussion, Commission staff noted the alleged temporary fix to the right Tobacco abutment spillway wall as well as cracks to the left Tobacco abutment spillway wall.
42. In a letter dated August 11, 2016, the Regional Engineer responded to the licensee’s June 15, 2016 filing. In this letter, the Regional Engineer again noted that the licensee did not file the requested plans, specifications, and reports regarding the right Tobacco abutment spillway wall and also stated that the left abutment wall of the Tobacco spillway would also need repairs, as noted during the June 28, 2016 dam safety inspection. The Regional Engineer reiterated that the potential loss of use of spillways at the project is a major concern and requested a plan and schedule by August 26, 2016, to complete repair work to both Tobacco spillway abutment walls by the end of 2016.
43. The licensee filed plans with the Regional Engineer on October 11, 2016 to temporarily fix the left Tobacco spillway abutment wall. In a letter issued October 21, 2016 to the licensee, the Regional Engineer requested additional information about the proposed temporary repairs within 30 days and directed the licensee to file plans and specifications for a permanent fix to both the right and left Tobacco spillway abutment walls by November 1, 2016 so that repairs could be completed by the end of 2016.
44. Commission staff performed a number of construction inspections at the project in October and November of 2016 for unrelated authorized construction work at the project involving paving slabs at the Tittabawassee spillway.³⁴ During the construction inspection, Commission staff noted that the licensee completed unauthorized repairs to the left Tobacco abutment spillway wall. The Regional Engineer’s authorization to proceed with repairs at the Tittabawassee spillway for paving slabs issued to the licensee on September 21, 2016 was not a blanket authorization allowing any repair work at the project. Work authorization letters from the Regional Engineer apply to specific construction projects. In a letter issued October 27, 2016 to the licensee, the Regional Engineer noted the unauthorized construction to the left Tobacco abutment spillway wall,

³³ See dam safety inspection report issued December 22, 2016.

³⁴ See construction inspection reports for October 11-12, October 19-20, October 25, November 1, and November 9, 2016 issued December 28, 2016.

found the licensee in violation of section 12.4(b)(2)(ii) of the Commission's regulations, and provided notice of the penalty provisions of section 31 of the FPA.³⁵

45. On October 31, 2016 and November 4, 2016, the licensee filed a response to the October 21 and October 27, 2016 letters from the Regional Engineer with plans for permanent repairs to the left and right Tobacco spillway abutment walls. In its response, the licensee explains its actions by saying the temporary repair to the left abutment spillway wall was "a very small project" and that it had e-mailed Commission staff on October 19, 2016, of its intention to proceed with the project. Nevertheless, the licensee did not receive authorization to complete these repairs, in part, because it did not adequately address Commission staff's additional questions about the proposed work. The licensee completed unauthorized repairs to the left Tobacco abutment spillway wall despite being found in violation for unauthorized repairs to the right Tobacco abutment spillway wall as discussed above. The Regional Engineer detailed a number of deficiencies with the licensee's October 31, 2016 and November 4, 2016 filings in a letter issued to the licensee on December 8, 2016. The Regional Engineer directed the licensee to file complete plans and specifications for permanent repairs to both left and right Tobacco abutment spillway walls, a complete work schedule, detailed drawings, a water management plan, an erosion control plan, a TCEAP, and a QCIP by January 13, 2017.³⁶

46. To date, the licensee has not yet filed complete information, plans, and specifications requested by the Regional Engineer on multiple occasions for the unauthorized repairs to the right Tobacco abutment spillway wall as well as adequate plans for permanent repairs to both Tobacco abutment spillway walls.³⁷

³⁵ See also construction inspection reports dated October 25, November 1, and November 9, 2016 issued December 28, 2016 in which Commission staff identify that unauthorized repairs to the left Tobacco abutment spillway wall.

³⁶ To reduce the number of reservoir drawdowns needed to repair the Tobacco spillway abutment walls, and another outstanding dam safety repair, the Regional Engineer also requested that designs for repairing the spillway slabs at the Tobacco spillway be filed by January 13, 2017, such that repairs to both features could take place at the same time.

³⁷ On a related matter, in a letter issued to the licensee on June 30, 2016, the Regional Engineer found the licensee in violation of section 12.39(a) of the Commission's regulations which requires the licensee to file a plan and schedule for designing and carrying out corrective measures within 60 days after filing the Part 12D Independent Consultant Safety Inspection Report (18 CFR § 12.39(a) (2016)). The Regional Engineer provided the licensee notice of the penalty provisions of section 31 of the FPA in the June 30, 2016 letter. The licensee belatedly filed the Part 12D
(continued ...)

3. Discussion

47. The licensee performed unauthorized repairs to the right Tobacco abutment spillway wall in violation of Part 12 of the Commission's regulations. Specifically, the licensee violated section 12.10 of the Commission's regulations for not reporting the safety-related incident, section 12.11 for not reporting its modification to project works, section 12.4(b)(2)(ii) for not filing a report regarding the design and plans for the modification, section 12.40 for not filing a quality control inspection program for the modification, section 12.39(a) for failing to file a plan and schedule to address repair needs identified in the Part 12D report, and Article 4 of the project license for failing to follow the Regional Engineer's directives in addressing each of these violations. Even after violating the Commission's regulations and its license by performing the unauthorized repairs to the right Tobacco abutment spillway wall, and being informed by the Regional Engineer on September 9, 2015; June 8, 2016; and August 11, 2016 of the violations, the licensee proceeded with unauthorized repairs to the left Tobacco abutment spillway wall.

48. The licensee is presenting a serious risk to the infrastructure of this high hazard potential dam by performing unauthorized repairs and then providing no information about those repairs. The Tobacco spillway abutment walls continue to deteriorate but the licensee is only performing temporary fixes to address the problems. It has been almost two years since Commission staff identified the modification to the right Tobacco abutment spillway wall and the licensee has not yet provided the Commission with information about the modification including plans, specifications, QCIP, and a final construction report for the modification, however "temporary" the work may be. Without explanation, the licensee has ignored requests from the Regional Engineer in letters issued September 9, 2015; June 8, 2016; August 11, 2016; October 21, 2016; and December 8, 2016 to file the requested information regarding unauthorized repairs to both Tobacco abutment spillway walls.

49. The licensee must come into compliance with the Regional Engineer's directives and the Commission's regulations to address the deficiencies to the left and right Tobacco spillway abutment walls. As directed by the Regional Engineer in a letter issued

Independent Consultant Safety Inspection Report on March 22, 2016 (originally due December 31, 2015) in which the cracks in the right and left Tobacco spillway abutment walls were noted, among other things. The licensee has not filed its plan and schedule to address certain dam safety items identified in the Part 12D report, which Commission staff are addressing in a separate proceeding. The Regional Engineer previously found the licensee in violation of Commission regulations for failing to file its 2014 Part 12D report. *See* letters issued by the Regional Engineer to the licensee on December 29, 2014 and January 15, 2016.

to the licensee on December 8, 2016, the licensee was required to file complete plans and specifications for permanent repairs to both left and right Tobacco spillway abutment walls, a complete work schedule, detailed drawings, a water management plan, an erosion control plan, a TCEAP, and a QCIP by January 13, 2017. The licensee has not filed these documents.

50. The licensee must file with the Commission's Division of Dam Safety and Inspections, Chicago Regional Engineer, complete plans and specifications for permanent repairs to both left and right Tobacco abutment spillway walls, a complete work schedule, detailed drawings, a water management plan, an erosion control plan, a TCEAP, and a QCIP as originally specified in the Chicago Regional Engineer's letter to the licensee issued December 8, 2016.

C. UNAUTHORIZED EARTH-MOVING ACTIVITY

1. Requirements

51. Standard Article 19 of the project license states:

In the construction, maintenance, or operation of the project, the licensee shall be responsible for, and shall take reasonable measures to prevent, soil erosion on lands adjacent to streams or other waters, stream sedimentation, and any form of water or air pollution. The Commission, upon request or upon its own motion, may order the licensee to take such measures as the Commission finds to be necessary for these purposes, after notice and opportunity for hearing.

52. Standard Article 20 of the project license states:

The licensee shall clear and keep clear to an adequate width lands along open conduits and shall dispose of all temporary structures, unused timber, brush, refuse, or other material unnecessary for the purposes of the project which results from the clearing of lands or from the maintenance or alteration of the project works. In addition, all trees along the periphery of project reservoirs which may die during operations of the project shall be removed. All clearing of the lands and disposal of the unnecessary material shall be done with due diligence and to the satisfaction of the authorized representative of the Commission and in accordance with appropriate Federal, State, and local statutes and regulations.

53. Standard Article 21 of the project license states:

Material may be dredged or excavated from, or placed as fill in, project lands and/or waters only in the prosecution of work specifically authorized under the license; in the maintenance of the project; or after obtaining Commission approval, as appropriate. Any such material shall be removed and/or deposited in such

manner as to reasonably preserve the environmental values of the project and so as not to interfere with traffic on land or water. Dredging and filling in a navigable water of the United States shall also be done to the satisfaction of the District Engineer, Department of the Army, in charge of the locality.

2. Violations

54. The licensee performed a significant amount of unauthorized earth-moving activity as noted during an August 2014 Environmental Inspection of the project and as detailed by the Regional Engineer between March 2015 and June 2016, as discussed below. The licensee is in violation of Article 20 of its license for unauthorized clearing of lands, Article 21 for unauthorized dredging and filling of earth at the project, and Article 19 for failing to implement and maintain appropriate soil erosion control measures. The unauthorized earth-moving and land-clearing activities involved significant impacts to large areas of land above and beyond what would be involved in regular project maintenance given that little to no erosion control measures were employed and these activities created large areas of bare soil that were not revegetated. The licensee is also in violation of Article 4 for failing to follow the Regional Engineer's directives to cease earth-moving activity, ignoring certain directives, and failing to file soil erosion control plans.

55. On August 6, 2014, Commission staff performed an Environmental Inspection of the Edenville Project. At the time of the inspection, a significant amount of earth-moving activity was noted at the project. The licensee declined to participate in this inspection. A representative from the Michigan Department of Transportation (Michigan DOT) accompanied Commission staff on this inspection and stated during the inspection that the Michigan DOT had ongoing concerns regarding the licensee's placement of non-permitted fill in Michigan DOT right-of-way locations on both sides of Michigan State Highway 30. Photographs 21, 29, 40, 41, 48, 49, 50, and 52 included in the Environmental Inspection Report issued February 27, 2015, show areas of earth-moving activity on both sides of State Highway 30 within the project boundary, much of it at the base of the dam. The Michigan DOT representative stated that the licensee had also created an unpermitted access point off the highway to access project lands and placed soil in Michigan DOT ditches, creating road access and sight-distance concerns. The Michigan DOT representative also stated that on several occasions, the licensee had placed unauthorized traffic-control devices including plastic drums and concrete barriers within the traveling roadbed of State Highway 30 and that Michigan DOT staff have repeatedly informed the licensee of their traffic safety concerns regarding earth-moving activities in proximity to State Highway 30.³⁸

³⁸ See the February 27, 2015 Environmental Inspection Report for a summary of the Michigan DOT representative's concerns as orally communicated to Commission (continued ...)

56. The licensee filed a response on March 16, 2015 to the Environmental Inspection Report. In its response, the licensee stated that it had been stockpiling topsoil for use as an overlay at various locations at the project that were being augmented for “embankment stability reinforcement.” It contends that this augmentation was authorized “by order of FERC.” In fact, this work was never authorized by the Regional Engineer.

57. In regards to some fill placement and access off of State Highway 30, the licensee stated that these actions occurred on non-project lands and argued that these activities are not within the Commission’s jurisdiction. These statements are confusing because the licensee is clearly saying that the purpose of these earth-moving activities, as noted in the Environmental Inspection Report, was for project purposes, specifically to reinforce project embankments (i.e., the dam). As such, any contention that this activity is not within the Commission’s jurisdiction is misplaced.³⁹ To the extent that earth-moving activities are carried out in the performance of work for project purposes, the Commission clearly has jurisdiction over such activities.⁴⁰ In regards to earth-moving activity that affects traffic, Article 21 states that “any such [excavated or fill] material shall be removed and/or deposited in such manner... so as not to interfere with traffic on land or water.” Moreover, the Regional Engineer did not authorize this earth-moving activity in the first place, as noted in the Environmental Inspection Report.

58. On March 27, 2015, the Regional Engineer issued a letter noting a significant amount of unauthorized earth-moving activity had occurred at the Edenville Project in recent weeks. The Regional Engineer directed the licensee to file with the Commission

staff during the inspection.

³⁹ The FPA grants the Commission broad jurisdiction to regulate, through issuance of work permits, the construction and/or maintenance of "works incidental" to dam, water conduit, reservoir, [or] power house," without any limitation on the physical location of those works. *See* 16 U.S. Code § 817(1) (2012); *See also id.* § 803(c) (requiring licensees to "conform to such rules and regulations as the Commission may from time to time prescribe for the protection of . . . property" without limitation that such property be located within the project boundary). Commission regulations grant the Regional Engineer authority to "require an applicant or licensee to take any other action with respect to the design, construction, operation, maintenance, repair, use, or modification of the project or its works that is, in the judgment of the Regional Engineer or other authorized Commission representative, necessary or desirable." 18 C.F.R. § 12.4(2)(iv). That regulation does not require that the "works" be located within a project boundary.

⁴⁰ Certain construction activities may require overlapping jurisdictional review, such as when actions affect the concerns of other agencies, including permitting issues, or, in this case, traffic concerns presented by the Michigan DOT.

by March 31, 2015, a statement that all earth-moving activity at the project had ceased. The Regional Engineer requested an erosion control plan to include a plan view of the project where any earth-moving activity had or will occur showing the location and drawings of erosion control features. The erosion control plan was required to be filed for Commission review and approval before any further earth-moving activity took place.

59. In a letter dated March 28, 2015, the licensee stated that activity pertaining to embankment stability overlay construction and related grading work would discontinue until a soil erosion control plan had been approved by the Regional Engineer and protective measures installed. However, in the March 28, 2015 response, the licensee claimed that it “will continue with approved toe drain installation work that has been in progress on an annual basis” without providing support for its claim that the work was “approved.” The Regional Engineer never authorized the licensee to start work on overlay construction or the toe drain on the far right end of the right Tobacco embankment. The licensee was previously authorized to and had performed construction of stability overlays and toe drains in other areas of the project; however, it chose of its own accord to continue this activity elsewhere on an incremental basis. The licensee’s August 11, 2014 QCIP only detailed work to the embankment to the right of the Tobacco spillway between catch basin structures ‘A’ to ‘K’.⁴¹ Each time the licensee proposes to perform work on a stability overlay or toe drain, the scope of work must be clearly defined and a work authorization sought from the Regional Engineer. Work authorizations from the Regional Engineer apply to specific work projects. A prior work authorization does not permit future work even if it is to the same project feature. Additionally, the licensee had engaged in construction activity to the toe drain involving earth-moving activity along a length in excess of 400 feet, which hardly qualifies as general maintenance.

60. On March 31, 2015, the Regional Engineer issued another letter to the licensee repeating that all earth-moving activity at the project must cease immediately. A detailed plan for all ongoing construction, soil erosion control, and revegetation was also required. The Regional Engineer further requested confirmation by April 1, 2015, that all earth-moving activity had ceased. The licensee responded to the Regional Engineer by e-mail on April 2, 2015, stating that construction work to a toe drain at the base of the dam should continue as it believes the work was previously authorized and that it should be exempt from soil erosion control plan requirements.

61. On April 2, 2015, a representative from the Michigan Department of Natural Resources (Michigan DNR) filed a statement with the Commission that the licensee had a

⁴¹ See letter dated August 29, 2014, from the Regional Engineer authorizing certain construction of the toe drain, as specifically described in the August 11, 2014 QCIP.

number of unresolved permit issues with Michigan DEQ regarding unpermitted earth-moving activity at the project and requested that all earth-moving activity should stop at the project until these issues were clarified.

62. On May 5, 2015, the Regional Engineer issued another letter stating that the toe drain work the licensee had started was not authorized, a soil erosion control plan was needed, and that the licensee must acquire all necessary permits to complete this work. In that letter, the Regional Engineer again directed the licensee to cease all earth-moving activities.

63. Michigan DEQ performed a site inspection on May 5, 2015, concerning the licensee's permit application for the proposed auxiliary spillway project.⁴² During the inspection, Michigan DEQ staff noted unauthorized work in a regulated wetland in the vicinity of the Tobacco spillway. A meeting between the licensee and Michigan DEQ staff to discuss this work and the permit application was held on May 13, 2015. A representative for the Michigan DNR reiterated in a letter dated May 13, 2015, that permits from the State of Michigan would be necessary for the amount of earth-moving activity it observed at the project in the vicinity of the Tobacco spillway. In a filing with the Commission on May 21, 2015, the Michigan DNR provided photographs dated May 8 and 14, 2015, showing large piles of soil being moved by heavy equipment on the east side of State Highway 30 at the base of the embankment.

64. Relying on the information provided by the Michigan DNR, in a letter dated May 27, 2015, the Regional Engineer noted that earth-moving activity was still occurring at the project in violation of the March 31 and May 5, 2015 Regional Engineer directives. Notice to the licensee of the enforcement and penalty provisions of section 31 of the FPA should it remain in non-compliance with the terms and conditions of its license was also provided in the May 27, 2015 letter. The Regional Engineer requested specifics about all earth-moving activities at the project and a response by June 2, 2015, that all earth-moving activity had ceased.

65. In a filing dated June 1, 2015, addressed to the Regional Engineer,⁴³ the licensee expressed confusion with the photographs of earth-moving activity provided by the Michigan DNR on May 21, 2015. It again argued that at some locations depicted in the photos, it had been moving stockpiled topsoil for replenishing eroded soil at various

⁴² See filing dated July 6, 2015, from the licensee. A letter issued by the Michigan DEQ dated June 2, 2015 regarding the site inspection and permit application is included in the filing. However, the full scope of work for this permit application is unclear as it has not been provided to the Commission.

⁴³ See Attachment 8 of the November 23, 2015 filing with the Commission.

locations. For the earth-moving activity at the west end of the project, it argued that a Gladwin County official in charge of issuing soil erosion protection permits had inspected the area and directed the licensee to implement prudent protection measures, such as installing silt fencing around the area. The licensee stated that it acquired a soil erosion protection permit from Gladwin County, Michigan for this work, which it only later filed with the Commission on November 23, 2015. The licensee did not provide documentation of receiving a permit from Michigan DEQ for the earth-moving activities, only an opinion in an email dated June 1, 2015, from a Michigan DEQ representative that the licensee implement soil erosion control measures approved by the County until further consideration of the need for permits from the State of Michigan is completed regarding past and future work.⁴⁴

66. On May 22, 2015, the licensee filed an erosion control plan with the Commission, which the Regional Engineer found incomplete, in part, because it did not include documentation of a permit from Michigan DEQ.⁴⁵ The Regional Engineer stated in a June 9, 2015 letter that some minor amount of earth grading would be required to install the erosion control features and that this limited work was authorized. However, the additional items in the letter, including drawings, photographs, and specific information must be addressed before further consideration of any other work would be authorized by the Regional Engineer. A response to the letter was requested by June 19, 2015.

67. The licensee never responded. So the Regional Engineer issued another letter to the licensee on July 7, 2015, noting the overdue response and again provided notice of section 31 of the FPA. Again, the licensee failed to respond.

68. The Regional Engineer noted other unauthorized earth-moving activities at the project in a letter dated September 9, 2015, including reworking of project lands between the Tittabawassee spillway and State Highway 30 and clearing of trees along the Tobacco spillway ahead of proposed, but not yet authorized, spillway enhancement work. Roadway foundation work to relocate an access road along the right Tobacco spillway embankment was also performed ahead of authorization.⁴⁶ These unauthorized excavations and land-clearing activities also constitute violations of Articles 20 and 21.

⁴⁴ See Attachment 6 of the November 23, 2015 filing with the Commission.

⁴⁵ See letter issued by the Regional Engineer to the licensee on June 9, 2015.

⁴⁶ In addition to the letter from the Regional Engineer dated September 9, 2015, See also Environmental Inspection report dated February 27, 2015, noting comments provided by Michigan DOT regarding concerns with a proposed, but not yet authorized, access driveway at the Tobacco spillway.

69. On September 28, 2015, a representative from Michigan DEQ e-mailed the Regional Engineer stating that he observed active earth-moving activity at the project on September 25, 2015.⁴⁷ The e-mail included photographs showing earth-moving activity in the vicinity of the Tobacco spillway near State Highway 30.

70. On October 27, 2015, the Michigan DEQ issued a violation notice to the licensee regarding its failure to apply for necessary permits for earth-moving activity taking place at the project. The notice directed the licensee to file appropriate applications for permits within 10 days.

71. On November 10, 2015, the Regional Engineer issued a letter to the licensee noting that the Michigan DEQ had provided photographs of earth-moving activity taking place near the State Highway 30 bridge on September 25, 2015, in violation of the Regional Engineer's directive to cease all earth-moving activities at the project. The Regional Engineer again required the licensee to cease all earth-moving activity and provided notice of the enforcement and penalty provisions of section 31 of the FPA.

72. On November 23, 2015, the licensee filed a response to the November 10, 2015 letter providing evidence that it received three soil erosion and sedimentation control permits from the Gladwin County Soil Erosion and Sedimentation Control Department in 2014 and 2015.⁴⁸ The activities described in the permits involved excavations, work on the toe drain filter at the base of the Edenville dam, and "embankment stabilization." The licensee did not provide documentation of receiving any permits from the State of Michigan for earth-moving activities as repeatedly directed by the Regional Engineer.

73. In the November 23, 2015 filing, the licensee contends that the area involved in the movement of earth is less than that requiring a permit from Michigan DEQ and that some of the earth-moving activity is not within the boundary of the Edenville Project. It references excavation from a clay borrow pit, land-clearing activities, and grading activities carried out by "Boyce Hydro, LLC... not the licensee"⁴⁹ located in an area it

⁴⁷ See e-mail filed with the Commission on November 5, 2015.

⁴⁸ The work described in these permits involves project features of the Edenville dam. However, the location of the activities and the entities applying for the permits varied. The various entities noted on the permit applications include Boyce Hydro Power, LLC; Edenville Hydro Property, LLC; and Lee Mueller/Edenville Hydro Property LLC.

⁴⁹ The licensee states in the November 23, 2015 filing that Boyce Hydro, LLC is Boyce Hydro Power, LLC's operating company.

contends is outside the project boundary.⁵⁰ It also states that a second area of land-clearing activity in the vicinity of the Edenville dam occurred in the winter of 2015; however, it contends that this area is outside of the project boundary as well, and therefore, is not within the Commission's jurisdiction. Nevertheless, the purpose of excavating from a clay borrow pit, work on the toe drain filter, and grading activities clearly involves work to project features. As stated above, because the activities involve work for project purposes, they fall under the Commission's jurisdiction.

74. During a dam safety inspection on June 28-30, 2016, Commission staff noted unauthorized soil borings adjacent to the powerhouse on the downstream side of the project.⁵¹ The licensee indicated during the inspection that the soil borings were completed within the last month to determine design parameters for a future substation retaining wall to be located near the powerhouse. In a letter issued by the Chicago Regional Engineer to all licensees in the region on January 28, 2016, Item 4 stated that any geotechnical investigations, such as borings, conducted at the project must be coordinated with the Division of Dam Safety and Inspections, Chicago Regional Engineer, in advance, by filing investigation plan documents for Commission staff's review at least 30 days before the desired start of construction.

75. Also during the June 28-30, 2016 dam safety inspection, Commission staff identified excavation behind a sheet pile wall along the downstream side of the Tittabawassee spillway that the licensee stated had occurred within the last month. Plans for this excavation and repair should have been filed with the Commission prior to the commencement of work as indicated in Item 5 of Enclosure 2 of the Regional Engineer's January 28, 2016 letter.⁵² Commission staff also noted that erosion control features were not adequate and were not being maintained at various locations at the project.

⁵⁰ The licensee states that Boyce Hydro Power, LLC is not the legal owner of land in which earth-moving activity took place. However, in regards to obtaining a permit from Gladwin County for earth-moving activity, it states that "acting as agent for the owner, it [Boyce Hydro Power, LLC] was the permit applicant and permittee for ease of filing purposes. The owner of this non-project property is Boyce Michigan, LLC, a separate and distinct legal entity, the business of which is real estate investment." Note that the licensee also states that "Boyce Hydro, LLC" carried out this work, which the licensee clarified is its operating company.

⁵¹ See letter from the Regional Engineer to the licensee issued August 24, 2016.

⁵² The sheet pile wall is an erosion control measure identified in the licensee's Article 401 Erosion Control Plan. See *Wolverine Power Corporation*, 87 FERC ¶ 62,100 (1999).

76. In a letter dated July 21, 2016 to the licensee, the Regional Engineer found the licensee in violation of Section 12.4 of the Commission's regulations for its failure to notify the Commission of the soil borings and earth excavations. More specifically, the licensee is in violation of Section 12.4(b)(2)(ii) of the Commission's regulations for the licensee's failure to submit reports or information, regarding: (a) the design, construction, operation, maintenance, use, repair, or modification of a water power project or project works; and (b) any condition affecting the safety of a project or project works. The unauthorized excavation behind the sheet pile wall is yet another violation of Article 21 and the licensee did not employ appropriate erosion control measures in violation of Article 19. Engaging in these activities without authorization also are violations of Article 4 for failing to follow the Regional Engineer's January 28, 2016 directives.

3. Discussion

77. The licensee repeatedly engaged in unauthorized earth-disturbing and land-clearing activities in violation of Articles 20 and 21 as well as failing to employ and maintain appropriate erosion control measures in violation of Article 19. The licensee is also in violation of Article 4 for ignoring the Regional Engineer's directives to cease all earth-moving activities at the project, provide details regarding the earth-moving activities, and file a soil erosion control plan.

78. While we note that the licensee acquired permits from Gladwin County, Michigan for some earth-moving and construction activities, the licensee did not provide the Regional Engineer information needed to review the activities to authorize such work, nor did the licensee provide evidence of acquiring permits from the Michigan DEQ. Unauthorized earth-moving and land-clearing activities with no or inadequate soil erosion control measures constitute violations of Articles 19, 20, and 21. Repeatedly ignoring the Regional Engineer's directives to cease such activity, file reports of such activity, and file an erosion control plan constitute violations of Article 4.

79. The licensee contends that at least some of the earth-moving activity that took place at the project is for maintenance purposes in addressing erosion which would not need authorization from the Regional Engineer. The Regional Engineer has stated on numerous occasions that this is not the case; authorization for earth-moving activities would be necessary given the scale, location, perceived purpose, impacts, potential for erosion, and frequency. Further, the licensee has engaged in unauthorized activity within a regulated wetland at the project as documented by the Michigan DEQ, showing additional disregard for environmental protection. Finally, the licensee's unauthorized earth-moving activities also created traffic concerns, as detailed by the Michigan DOT.

80. For many of these violations, the licensee contends that some work was performed outside of the project boundary and therefore, was not within the Commission's

jurisdiction. As stated above, work carried out in the prosecution of activities for project purposes is within the purview of the Commission.

81. The licensee is in violation of the Commission's regulations and Articles 4, 19, 20, and 21 as specified above. These violations have been made a part of the licensee's compliance history for the project. In the future, the licensee must not engage in unauthorized earth-moving and/or land-clearing activities at the project. Before performing such work, the licensee must seek and obtain the Regional Engineer's approval pursuant to the Commission's regulations and Articles 20 and 21. Further, the licensee must employ and maintain appropriate soil erosion control measures in accordance with Article 19 and must file a soil erosion control plan if directed by the Regional Engineer and obtain approval before performing such work. Finally, the licensee must follow all directives issued by the Regional Engineer pursuant to the Commission's regulations and Article 4.

D. FAILURE TO FOLLOW REGIONAL ENGINEER DIRECTIVES TO FILE AN ADEQUATE PUBLIC SAFETY PLAN

1. Requirement

82. Section 12.42 of the Commission's regulations states:

Warning and safety devices.

To the satisfaction of, and within a time specified by, the Regional Engineer, an applicant or licensee must install, operate, and maintain any signs, lights, sirens, barriers, or other safety devices that may reasonably be necessary or desirable to warn the public of fluctuations in flow from the project or otherwise to protect the public in the use of project lands and waters.

83. When appropriate, the Regional Engineer may require a Public Safety Plan (PSP) that includes specific measures and safety devices to ensure that the public is protected when using project lands and waters.⁵³ Pursuant to Article 4 of the license, on August 1, 2013, the Regional Engineer directed the licensee to file a revised PSP for the project by August 12, 2013. The licensee has filed a number of revised PSPs but as discussed below, has failed to file an acceptable plan.

⁵³ See Federal Energy Regulatory Commission, Guidelines for Public Safety at Hydropower Projects (March 1992, as amended November 29, 2011), <http://www.ferc.gov/industries/hydropower/safety/guidelines/public-safety.pdf>

2. Violation

84. The Commission was informed by a member of the public that the licensee's boat barrier in the project's tailrace was wrapped in barbed wire as an exclusionary device. In response, the Regional Engineer issued a letter to the licensee on August 1, 2013, requiring the licensee to immediately remove the barbed wire and file a schedule to revise its PSP. The Regional Engineer requested the revised plan to document any safety or exclusionary devices the licensee may have installed to avoid conflicts with its PSP of record.⁵⁴ The Regional Engineer, in a letter issued to the licensee on October 4, 2013, clarified that the licensee is obligated to comply with its PSP that is prepared pursuant to the Commission's guidelines, filed, and accepted by the Commission. The Regional Engineer issued another letter on November 18, 2013, clarifying and reminding the licensee to file a schedule to update its PSP by December 18, 2013.

85. The licensee has filed numerous draft PSPs over the last several years⁵⁵ which were largely inadequate because they conflicted with the licensee's approved Recreation Plan.⁵⁶ The Regional Engineer has consistently reminded the licensee that the PSP must protect the public while also permitting reasonable access to project lands and waters. The PSP must also be consistent with the project's approved Recreation Plan.⁵⁷ In a letter dated October 30, 2015 from the Regional Engineer to the licensee, the Regional Engineer identified conflicts between the licensee's proposed PSP filed June 12, 2015, and its Recreation Plan. In summary, these conflicts included: 1) proposed signs with misleading wording and certain language in the PSP; 2) the use of tailwater exclusion barriers that unnecessarily restrict fishing and boating;⁵⁸ 3) recreation facilities that were

⁵⁴ The licensee's last PSP of record was filed on July 8, 2008. The Regional Engineer provided comments on this plan on July 17, 2008, and Commission staff reviewed the plan during a dam safety inspection conducted on August 18, 2008.

⁵⁵ See filings on December 27, 2013, June 15, 2015, December 4, 2015, and January 8, 2016.

⁵⁶ *Wolverine Power Corporation*, 96 FERC ¶ 62,055 (2001).

⁵⁷ See letters dated June 27, 2014, October 30, 2015, and April 18, 2016, from the Regional Engineer to the licensee.

⁵⁸ The licensee justified its use of a boat barrier in the Edenville tailrace in a filing dated December 1, 2015. See letter issued December 4, 2015 by the Regional Engineer discussing how the use of a boat barrier in the tailrace is appropriate for public safety, but that the licensee must still clarify its location and the information to be included on warning signs.

not identified in the PSP including designated parking areas and a barrier-free tailwater fishing pier; 4) improper signs that should more appropriately direct the public to access the tailrace area; 5) inaccessible parking areas and certain recreation areas that should not have vehicle gates blocking public access; and 6) mislabeled fishing areas.

86. In letters dated April 18, 2016 and July 15, 2016, the Regional Engineer stated that the licensee's December 4, 2015 and January 8, 2016 filings included plans for signs and barriers that do not allow for public access to recreation areas shown in the project's Recreation Plan. The letters included a reminder of the penalty provisions of section 31 of the FPA. On August 3, 2016, the licensee filed a new PSP. However, the public access issues and the construction of license-required recreation facilities, as discussed below, have not been resolved.

3. Discussion

87. The licensee has repeatedly failed to file an adequate PSP for the project in accordance with the Regional Engineer's directives pursuant to Article 4. Its draft PSPs are inconsistent with its approved Recreation Plan. The licensee must resolve all inconsistencies and file a new PSP for Commission review.

E. FAILURE TO CONSTRUCT APPROVED RECREATIONAL FACILITIES AND RESTRICTING PUBLIC ACCESS

1. Requirements

88. Standard Article 18 states:

So far as is consistent with proper operation of the project, the licensee shall allow the public free access, to a reasonable extent, to project waters and adjacent project lands owned by the licensee for the purpose of full public utilization of such lands and waters for navigation and for outdoor recreational purposes, including fishing and hunting: provided, that the licensee may reserve from public access such portions of the project waters, adjacent lands, and project facilities as may be necessary for the protection of life, health, and property.

89. Article 410 of the license required a Recreation Plan to include the following: (1) a fishing access site at the Tittabawassee River outlet of the Edenville dam including (a) directional signs; (b) a barrier-free restroom; (c) access paths to the tailwater, dike areas, restrooms, canoe portage, and parking areas; (d) parking for 15 vehicles with designated barrier-free parking spaces; and (e) an improved railed barrier-free fishing pier at the tailwater area; (2) a fishing access site at the Tobacco River outlet of the Edenville dam including (a) directional signs; (b) access paths to the tailwater, dike areas, parking lot, and fishing pier; (c) parking for 15 vehicles; and (d) an improved railed shoreline fishing pier located on the dike near the dam; (3) a canoe portage around the dam; (4) installation

of signs that identify all recreational facilities and access at the project; (5) functional design drawings, costs for the improvements to, or construction of, recreation facilities and a construction schedule for the facilities; and (6) a schedule for completing construction of the required facilities by October 16, 2001. The plan had to be prepared in consultation with the Michigan DNR.

90. The licensee's Recreation Plan, filed on December 15, 1999, includes drawings for the recreational facilities to be built at the Tittabawassee and Tobacco River outlets. The Tittabawassee drawing labelled "Wixom Recreation Plan" depicts a parking lot for 15 cars off of State Highway 30, a parking lot with two handicapped spaces, a barrier-free restroom, a railed handicapped-accessible fishing pier in the tailrace next to the powerhouse, two canoe portages, and access paths. The Tobacco drawing depicts a parking lot for 15 cars off of State Highway 30, an access path, and stairs to a railed fishing pier. According to the Recreation Plan, canoe portages were to be constructed as shown on the drawing, and signs that identify the recreational facilities were to be installed on State Highway 30.

91. The December 15, 1999 Recreation Plan was approved in an Order Modifying and Approving Recreation Plan on July 19, 2001 (2001 Order).⁵⁹ Ordering Paragraph (A) required implementation of the plan by October 16, 2002. Later, in an order issued December 5, 2006, Commission staff extended this date to October 15, 2007.⁶⁰ Ordering paragraph (B) of the 2001 Order required that the licensee, at the same time it installed the signs included in the approved plan, to install a sign in a prominent location at each of the fishing access sites that informs the public about the availability and use of project lands for recreation consistent with section 8.2 of the Commission's regulations.⁶¹ Ordering paragraph (C) required the licensee, immediately after completing construction of the approved fishing piers, to install warning signs on the piers to alert anglers to the potential water hazards near these facilities. Immediately after completing construction of the approved canoe portage, the licensee was required to install a directional sign for the canoe take-out to further provide safe passage around the dam. Ordering paragraph (D) required the licensee to file, within 90 days of completing construction of the recreation facilities, as-built drawings for the completed facilities.

⁵⁹ *Wolverine Power Corporation*, 96 FERC ¶ 62,055 (2001).

⁶⁰ *Synex Michigan, LLC*, unpublished (2006).

⁶¹ 18 C.F.R. § 8.2 (2016).

2. Violations

92. As discussed above, the project's Recreation Plan was approved on July 19, 2001, with an initial implementation date of October 16, 2002. In early 2003, it became apparent that the recreation facilities were delayed. At about this same time, there was extensive correspondence between the licensee, the Michigan DNR, and Commission staff attempting to resolve what was becoming a compliance issue regarding the recreational facilities. Some of that correspondence is discussed in the following paragraphs.

93. On May 17, 2004, Commission staff performed an environmental inspection of the project. Staff noted that there were continuing issues regarding parking and public access and issued a letter on August 10, 2004. Almost a year later, the recreation facilities were still not completed, so the Commission provided the licensee with notice under section 31 of the FPA on July 20, 2005, stating that it remained in non-compliance with its license pertaining to recreation facilities. Another letter was issued on November 9, 2005, informing the licensee that it remained in non-compliance and must complete the required recreation facilities and file notification within 90 days, or file an application for an extension of time within 45 days.

94. On February 15, 2006, the licensee provided an update saying it had completed paving of a parking lot near State Highway 30, improvement of access near the Tobacco spillway, necessary signage, and that it expected to file an extension of time request within 90 days. On June 6, 2006, the licensee filed a letter stating that the project was under new management and requested an extension until December 2006 to complete the required facilities or until October 2007 if consultation with the Michigan DNR was not completed by August 2006. On September 21, 2006, the Michigan DNR concurred with some of the licensee's proposed changes to the recreation facilities, but stated there were still outstanding issues to be resolved before Michigan DNR could give the licensee its full support.

95. On October 24, 2006, Michigan DNR filed a letter stating that the project remained out of compliance with its license for recreational improvements and that there was a dispute between parties associated with Synex Michigan LLC that brought into question who was responsible for completing the recreation facilities.⁶²

96. In an order issued December 5, 2006, Commission staff extended the implementation date of the Recreation Plan to October 15, 2007. The extension of time was approved to allow additional time for site surveys, assessments, and consultation

⁶² As mentioned earlier, Synex Michigan, LLC changed its name to Boyce Hydro Power, LLC, who remains the licensee.

with the Michigan DNR. The recreation facilities should have been constructed by October 15, 2007 and Commission staff required the licensee to file as-built drawings of the recreation facilities by letter dated July 10, 2008. However, the licensee never responded to that requirement.

97. Commission staff conducted another environmental inspection of the project on August 10 and 11, 2010, issuing an inspection report on September 21, 2010. In that report, staff found incomplete and/or inappropriate recreation construction. Further, staff noted that some facilities were constructed without Michigan DNR or Commission approval. Also, staff noted that during the inspection, the licensee mentioned plans to permanently close informal recreational access.

98. In an October 4, 2010 follow-up letter to the environmental inspection, Commission staff required the licensee to come into compliance with the approved Recreation Plan within 45 days.⁶³ The letter also informed the licensee that in order to have recreational closures for security reasons, it needed to consult with the appropriate local agencies and seek approval from the Commission's Division of Dam Safety and Inspections and the Division of Hydropower Administration and Compliance.

99. The licensee filed a response to the Commission's October 4, 2010 letter on December 6, 2010 stating that photographic evidence of the corrections to signage would be filed by December 31, 2010. The licensee also stated that new site design proposals and related drawings depicting security-appropriate recreation facilities would be submitted to the Michigan DNR for further consideration and consultation prior to March 1, 2011. However, the licensee never made filings with the Commission regarding corrections to signage, the results of any consultation with the Michigan DNR, or a request to construct or close certain recreational facilities.

100. The Michigan DNR filed a letter with the Commission on September 21, 2012, requesting an investigation of the many violations and delinquencies at the project that have been ongoing for years. In its letter, the Michigan DNR says the licensee has installed fishing structures in poor locations, has installed tall fences blocking access to much of the project's lands, has installed signage that restricts public recreation such as picnicking, and has closed parking areas.

⁶³ The October 4, 2010 letter from Commission staff stated that "while certain aspects of the plan have been approved, our records indicate that a comprehensive plan that shows compliance with all aspects required by the license articles has not been filed." While the Recreation Plan was approved, the licensee did not provide documentation of consulting the Michigan DNR on plans for the construction of certain recreation facilities including fishing platforms, nor were construction plans filed with the Chicago Regional Engineer for approval prior to construction.

101. After looking into this matter further, Commission staff sent a letter on August 22, 2013, to the licensee concerning allegations of non-compliance related to public access and detailing a specific May 10, 2013 incident in which representatives of the licensee forced anglers to leave the project's tailrace. Apparently, access to the project area was being restricted, there was no fishing access, no canoe portage, no parking, and restrooms were not available. In the August 22, 2013 letter, staff required the licensee to respond to the various issues within 30 days. The licensee filed a response on September 23, 2013, stating that it was working through the issues staff had identified in consultation with Michigan DNR. Nevertheless, the licensee did not provide any documentation of compliance with the public access and recreation requirements of the license.

102. In an attempt to determine the current status of public access and the licensee's compliance with recreation requirements at the project, Commission staff and representatives from Michigan DNR and Michigan DOT conducted a special environmental inspection on August 6, 2014. The licensee declined to participate. A report of the inspection was issued February 27, 2015. In that report, staff found that fencing, no-trespassing signs, and a tailrace cable continued to block access for tailrace fishing, and that there was no realistic public access to the tailrace as required by the approved Recreation Plan. Later, the Michigan DNR filed a letter on March 13, 2015, stating that fencing, barbed wire, and physical confrontations with the licensee's representatives have prevented individuals from accessing the project and requested that the Commission direct the licensee to bring the project's recreation facilities into compliance.

103. The licensee filed a response to the February 27, 2015 special environmental inspection report on March 16, 2015, indicating that it would provide maps and justification for closing certain areas to the public and that any restrictions on public access were necessary to protect the project works for security purposes. The licensee also disputed the appropriateness of certain recreational facilities, as approved. In a letter dated May 7, 2015 to the licensee, Commission staff pointed out that the licensee had not requested an amendment to its approved Recreation Plan nor had the licensee sought Commission approval to close off and restrict public access to the project. Staff also notified the licensee that it must take immediate steps to bring any project-related recreation facilities into the project boundary, if not already included in the boundary.

104. The May 7, 2015 letter also notified the licensee that it was in violation of Article 18 and section 12.4 of the Commission's regulations for blocking public access and for failing to comply with the requirements of its approved Recreation Plan. In this letter, Commission staff required the licensee to immediately reopen project lands and waters to the public, with proper signage and safety devices. On May 22, 2015, the Michigan DNR filed a letter indicating that the licensee had once again closed public access to project lands. A follow-up letter from Commission staff to the licensee dated July 30, 2015, required the licensee to file, within 15 days, sufficient documentation that project lands

and waters were open to the public including the removal of fencing blocking access to the shoreline. This letter also required the licensee to file a description of its progress in complying with its recreation requirements. Again, the licensee never responded to this letter.

105. Letters from the Michigan DNR to the Commission dated August 17 and 18, 2015, and May 4, 2016, indicated continued violations of the license and violations of Commission staff's directives including continued restrictions to public access to the tailwater at the Tittabawassee spillway for fishing.

106. The licensee filed a response to the Michigan DNR's May 4, 2016 letter on May 18, 2016, stating that it intends to file an application to amend the license to change the location of the proposed tailrace fishing access area and to modify the project boundary on or about July 1, 2016. The licensee also stated that two fishing platforms at the Tobacco River outlet, that are open to the public, have been in place for several years. However, the licensee never filed an amendment application. Further, the Michigan DNR filed a letter with the Commission on May 5, 2016, stating that those fishing platforms are poorly situated and were installed without consultation with Michigan DNR.

107. On June 1, 2017, Michigan DNR filed a letter with the Commission stating that recreational access to the project remains limited and facilities remain unconstructed according to the approved Recreation Plan.

3. Discussion

108. The licensee is in violation of its license for failing to construct recreation facilities as required by its approved Recreation Plan and for failing to provide as-built drawings of those facilities. The licensee was originally required to implement its Recreation Plan by October 16, 2002, a date that was later extended to October 15, 2007.

109. It has now been almost 10 years since the Commission extended the due date for the approved recreation facilities and the licensee has still not constructed many of these facilities. Further, the licensee has constructed other facilities including a fishing platform in a manner and location that does not conform to its approved plan.

110. The licensee is also in violation of Article 18 for unnecessarily restricting public access to project lands and waters. The licensee has shown a consistent pattern of erecting fences and other barriers in an attempt to unreasonably restrict public access.

111. Commission staff have worked extensively with the licensee over the years issuing numerous letters and conducting special environmental inspections in an effort to get the licensee to construct its required recreation facilities. The Michigan DNR has likewise worked with the licensee and has filed numerous emails and letters with the Commission

describing the licensee's lack of progress. At this point, it is clear the licensee simply refuses to comply with its license and has made no effort to build the recreation facilities specified in the approved Recreation Plan. The licensee says its approved facilities are no longer appropriate, yet the licensee has not filed an application to amend its plan or otherwise provide any justification for these statements.

112. Commission staff have provided numerous opportunities for the licensee to comply with its Recreation Plan, the public access requirements of Article 18, and/or to file an amendment application but it has failed to do so. The licensee has periodically responded to letters from the Commission and the Michigan DNR with various reasons for not fulfilling its license requirements and has stated that an amendment application would be filed. However, no such filing has ever been made.

113. The licensee must take steps to obtain authorization from the Commission's Chicago Regional Engineer to start construction and/or to complete construction of all recreation facilities required by its approved Recreation Plan. The approved facilities for the Tittabawassee side include: a parking lot for 15 cars off State Highway 30, a parking lot with two handicapped spaces, a barrier-free restroom, a railed handicapped-accessible fishing pier next to the powerhouse, two canoe portages, access paths, and signs that identify the recreation facilities. The approved recreation facilities for the Tobacco side include: a parking lot for 15 cars off State Highway 30, an access path, stairs to a railed fishing pier, and signs that identify the recreational facilities. Once these facilities are built, the licensee must file as-built drawings with the Commission.

114. In addition, the licensee must provide reasonable access to project lands and waters for the public and must file documentation that such access has been provided. The licensee's documentation must include photographs showing that gates restricting access to parking and fishing areas are open, that fencing blocking access to recreational features has been removed, and that reasonable access to the water is allowed. The licensee's documentation must also include a statement from the licensee affirming its compliance with the access provisions of Article 18.

F. FAILURE TO CLARIFY PROPERTY RIGHTS

1. Requirements

115. Standard Article 5 (Article 5) of the project license states:

The Licensee, within five years from the date of issuance of the license, shall acquire title in fee or the right to use in perpetuity all lands, other than lands of the United States, necessary or appropriate for the construction, maintenance, and operation of the project. The Licensee or its successors and assigns shall, during the period of the license, retain the possession of all project property covered by the license as issued or as later amended, including the project area, the project

works, and all franchises, easements, water rights, and rights or occupancy and use; and none of such properties shall be voluntarily sold, leased, transferred, abandoned, or otherwise disposed of without the prior written approval of the Commission, except that the Licensee may lease or otherwise dispose of interests in project lands or property without specific written approval of the Commission pursuant to the then current regulations of the Commission. The provisions of this article are not intended to prevent the abandonment or the retirement from service of structures, equipment, or other project works in connection with replacements thereof when they become obsolete, inadequate, or inefficient for further service due to wear and tear; and mortgage or trust deeds or judicial sales made thereunder, or tax sales, shall not be deemed voluntary transfers within the meaning of this article.

2. Violation

116. Article 5 required the licensee to obtain all necessary property rights for operation and maintenance of the project within 5 years of the date of the license. The Commission issued a license for this project in 1998 so all rights should have been obtained by 2003. Boyce Hydro Power, LLC acquired the project and assumed responsibility as licensee in 2004.

117. In 2010, Commission staff discovered that the licensee did not have all necessary rights to lands within the project boundary of the Sanford Project.⁶⁴ By letter dated April 19, 2010, staff required the licensee to file a status report identifying the rights it held for the Edenville, Secord, and Smallwood projects.⁶⁵

118. Between June and October 2010, the licensee filed⁶⁶ and was granted⁶⁷ two extensions of time to file the required status report. In each case, the licensee said it

⁶⁴ In addition to the Edenville Project, the licensee also owns and operates the Sanford Project No. 2875, Secord Project No. 10809, and Smallwood Project No. 10810. In 2010, the licensee lost its rights to lands within the Sanford project boundary for failure to pay property taxes; land ownership was transferred to Midland County. As a result, Commission staff began investigating the licensee's compliance regarding property rights at all four projects.

⁶⁵ *See* docket No. 2785-078.

⁶⁶ *See* letters filed with the Commission from a representative for the licensee on June 18, 2010 and September 15, 2010.

⁶⁷ *See* letters from Commission staff to the licensee dated June 30, 2010 and October 4, 2010.

needed more time to prepare the report because compiling the property information was complex and involved tax parcels in five townships and Gladwin County. Commission staff extended the due date for the status report to November 2, 2010.

119. Despite the extensions, the licensee did not meet the November 2, 2010 deadline. However, the licensee did provide an update on its efforts by letter dated November 16, 2010. In response to this update, staff issued a letter on December 15, 2010, requiring the licensee to contact the Commission within 5 days to discuss Article 5 and the licensee's plans for obtaining all necessary rights for the three projects. A conference call was held between Commission staff and the licensee on January 5, 2011, to discuss the property rights issue at each project. As a result of this meeting, the licensee filed an updated status report which included a plan to bring itself into compliance with Article 5.⁶⁸ The licensee stated it would file an application to amend the project boundary to remove lands above the high water mark that are not needed for project purposes, continue to review property records and to perform title research, and identify all relevant property rights within project boundaries. The licensee requested an additional 18 months to resolve its compliance with Article 5 and proposed filing quarterly reports providing the status of its efforts. Commission staff approved the extension allowing the licensee until April 19, 2012, to comply with Article 5 and required the licensee to file quarterly reports starting in April 2011.⁶⁹

120. The licensee filed its first quarterly report on April 20, 2011, which detailed some progress toward resolving compliance with Article 5. However, the licensee did not file its next two quarterly reports due July and October 2011.

121. On January 10, 2012, Commission staff issued a letter notifying the licensee that it was out of compliance with Article 5 and in violation of the requirement to file quarterly reports. Staff's letter reminded the licensee of its responsibility to resolve this issue and to continue filing quarterly reports.

122. The licensee filed a report in January 2012. In response, staff issued a letter dated February 7, 2012, requiring the licensee to provide the following information in its next report: (1) documentation of ownership rights including a project map showing parcels owned by the licensee, parcels not owned by the licensee, and parcels that must still be researched, (2) a plan and schedule for resolving all land rights by July 12, 2012; and/or (3) if unable to meet the July 12, 2012 deadline, a request to extend this due date along with a modified plan and schedule.

⁶⁸ See letter filed on January 18, 2011 with the Commission from a representative for the licensee.

⁶⁹ See letter from Commission staff to the licensee dated January 28, 2011.

123. The licensee did not file the required documentation by July 12, 2012, nor did the licensee file a request for more time.

124. The licensee has not filed documentation that it has complied with Article 5 and has obtained, either through fee ownership or other means, the rights to all land needed for project purposes within the project boundary. The licensee previously stated it was working on developing a project boundary report, including title research and topographic mapping of the tax parcels in relation to the project boundaries; however, it has not filed evidence of these efforts. The licensee has been out of compliance with Article 5 since it acquired the license and assumed responsibilities as the licensee in 2004. Since that time, the licensee has failed to respond to repeated requests by Commission staff beginning in 2010 to address this matter. The licensee was reminded of its violation status several times since the 2010 letter (as described above) and will remain in violation until such time that it has the necessary property rights through fee ownership or title/easement to all land within the project boundary.

3. Discussion

125. The licensee has failed to retain sufficient authority over project lands to ensure that it can carry out its responsibilities under the license.⁷⁰ In order to comply with Article 5, the licensee must file with the Commission, a landownership and property line map delineating all tax parcels within the project boundary. Accompanying the map, the licensee should file an excel spreadsheet that labels: a) current land owner information (i.e., official name or title) for all parcels around the reservoir; and b) identification of the rights the licensee has to each parcel as labeled on the map (i.e., fee ownership, lease agreement, or easement) and the land parcels within the project boundary which the licensee currently does not have rights.

126. The licensee must also comply with Article 5 for lands needed to build the project's two auxiliary spillways, discussed above. The licensee filed plans with the Commission for the Tobacco auxiliary spillway on February 3 and 8, 2016. The filings defined the project area as located between the Tobacco spillway and the west end of the dam, about 1,200 feet east of Hunter Road. The filings described the proposed initial auxiliary spillway as 162 feet long and 62 feet wide with two end-retaining walls extending an additional 180 and 160 feet east and west of the Tobacco spillway. However, the licensee states in several reports to the Regional Engineer that the proposed property for the auxiliary spillway is not or may not be located in the project boundary and is not or may not be under legal contract for use by the licensee.⁷¹

⁷⁰ FPA section 3(11), 16 U.S.C. § 796(11) (2012).

⁷¹ See letters from the licensee filed with the Commission dated October 14, 2015
(continued ...)

127. The licensee's latest plans for the Tobacco auxiliary spillway filed February 3 and 8, 2016, have not been approved by the Regional Engineer because they are deficient as described in the Regional Engineer's June 6, 2016 letter. However, the pending approval of plans does not exempt or postpone the licensee's obligation to obtain the lands necessary for the auxiliary spillway either in fee or through lease/easement. The location of the lands needed for the Tobacco auxiliary spillway are known and the licensee should be working to acquire these lands while at the same time working to finalize its plans and specifications for the auxiliary spillway as required by the Regional Engineer.

128. To ensure the licensee has obtained the necessary rights over the land for the auxiliary spillway work and/or is working toward obtaining those rights, the licensee must also file, with the Commission, landownership and property line maps of the areas affected by construction of the Tobacco auxiliary spillway. Accompanying these maps, the licensee should file excel spreadsheets that label: a) current land owner information (i.e., official name or title) for all tax parcels needed for the auxiliary spillway; b) the rights the licensee has to each parcel as labeled on the map (i.e., fee ownership, lease agreement, or easement) and the land parcels within the project boundary for which the licensee currently does not have rights; and c) resolution action (i.e., purchase, lease, or easement) for land which the licensee does not have sufficient rights to.

129. The location of the lands for the Tittabawassee auxiliary spillway are not yet known because the licensee has not yet filed even preliminary plans and specifications with the Regional Engineer. Nevertheless, the licensee should also file documentation of its land rights, to the extent it knows where this spillway will be constructed, or a plan and schedule for acquiring all needed rights, once the final location of the Tittabawassee auxiliary spillway is known.

G. FAILURE TO COMPLY WITH THE PROJECT'S WATER QUALITY MONITORING PLAN

1. Requirement

130. Article 402 of the project license states:

The licensee must implement all reasonable and prudent measures to ensure that the following water quality standards are met whenever inflows to the projects are greater than or equal to the 95-percent exceedance inflow:

(1) Dissolved oxygen (DO) concentrations in the project's tailwaters of not less than 5 milligrams per liter (mg/l) at all times; and

and November 7, 2015.

(2) Monthly average temperatures downstream from the project no greater than:

January	42°F
February	41°F
March	53°F
April	67°F
May	78°F
June	85°F
July, August	86°F
September	80°F
October	69°F
November	56°F
December	44°F

These monthly average temperatures may be exceeded for short periods when natural water temperatures measured upstream of the project exceed the ninetieth percentile occurrence of water temperatures (i.e., the monthly average temperatures cited in item No. 2 minus 5°F).

Within six months of license issuance, the licensee shall file for Commission approval a plan to monitor, and mitigate if necessary, dissolved oxygen and temperature levels of the Tittabawassee River downstream from the Edenville Project. The plan shall include provisions for: (1) monitoring of DO and temperature downstream from Edenville dam with the sensor locations and monitoring frequency determined in consultation with the Michigan Department of Natural Resources (Michigan DNR) and the U.S. Fish and Wildlife Service (FWS); and (2) description of operating procedures developed in consultation with Michigan DNR and FWS to alleviate water quality conditions which deviate from the above limits.

The licensee shall prepare the plan after consultation with the Michigan Department of Natural Resources and the U.S. Fish and Wildlife Service. The monitoring plan shall include a schedule for: (1) implementation of the program

within twenty-four months from the date of issuance of this license; (2) consultation with the Michigan Department of Natural Resources and the U.S. Fish and Wildlife Service concerning the results of the monitoring; and (3) filing the results, agency comments, and licensee's response to agency comments with the Commission.

The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of thirty days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

131. Wolverine Power Corporation (the prior licensee) filed a Water Quality Monitoring Plan on April 14, 1999. The Commission approved the plan in an order issued June 29, 1999 (1999 Order).⁷² Monitoring results from the plan would be used to determine the effects of the project's operation on water quality and to establish whether current project operation would maintain state standards for DO and temperature in the Tittabawassee River below the project. According to the approved plan, the licensee is required to record water quality parameters on an hourly basis immediately below the project at the confluence of the tailrace and bypassed reach. Water temperature must be monitored year round and DO must be monitored from June 1 through September 30 annually. The approved plan also requires water quality monitoring equipment to be connected to the project's SCADA system,⁷³ which would send an alarm to an operator at any time DO concentrations fall below the 5 mg/l.

132. If monitoring downstream indicated low DO readings, the licensee would measure DO levels just upstream of the influence of the project reservoir (the DO of incoming water to Edenville is monitored below the Smallwood Project, FERC No. 10810) to determine the cause of low DO. Water coming from other rivers that supply Edenville would not be monitored. The approved plan states that in the event of a low DO situation, the licensee would release water over the spillway to increase aeration in

⁷² *Wolverine Power Corporation*, 87 FERC ¶ 62,365 (1999).

⁷³ SCADA stands for Supervisory Control and Data Acquisition and allows for remote system monitoring and control.

downstream waters until the low DO situation is alleviated. In the event that water temperature limits are exceeded, the licensee would release water from bottom release spillway gates or by drawing water from the bottom of the reservoir through the turbines, until water temperatures meet specified requirements.

133. The approved plan requires the licensee to check the condition of equipment on a weekly basis and recalibrate the monitoring units immediately upon detection of a calibration outside of a 10% tolerance band. Further, the licensee is required to compile temperature and DO data on a monthly schedule and to maintain data in print and electronic formats. The licensee is also required to file annual reports with the Commission by December 31 that includes water quality monitoring data and any recommendations for changes in project structures or operations necessary to protect water quality in the Tittabawassee River downstream of the project.

2. Violation

134. In an environmental inspection report issued September 21, 2010, and in a follow-up letter issued October 4, 2010, Commission staff required the licensee to provide final results of its water quality assessment, as annual water quality monitoring reports had not been filed since 2002.⁷⁴ The licensee subsequently provided its 2012 water quality report to the Commission and the agencies on September 19, 2012. In a letter issued April 23, 2013, Commission staff concluded that the licensee was in violation of Article 402 and the project's approved Water Quality Monitoring Plan because the licensee failed to: (1) adhere to annual monitoring and reporting schedules, (2) describe whether mitigation measures were implemented and when conditions fell below specified criteria, and (3) connect monitoring equipment to the project's SCADA system. In the April 23, 2013 letter, staff also provided the licensee notice of the penalty provisions of section 31 of the FPA should it remain in non-compliance with its approved Water Quality Monitoring Plan.

135. In response, on May 20, 2013, the licensee proposed additional water quality monitoring in the project's reservoir and proposed implementing improved quality assurance and quality control (QA/QC) measures, stating that these enhancements should ensure that water quality criteria are met and that corrective actions are taken if needed. Based on this reasoning, the licensee asked to postpone connecting monitoring equipment to the project's SCADA system. In a letter issued July 16, 2013, Commission staff

⁷⁴ Water Quality Monitoring reports were filed by the Wolverine Power Corporation on February 13, 2001, and March 21, 2002. Following the license transfer to the current licensee in 2004, annual monitoring reports were not filed until identified on a list of items needing follow-up during the environmental inspection.

acknowledged the updated methods and agreed to delay a SCADA system connection, while the licensee gained experience with the new data collection methods.

136. On August 23, 2013, the licensee filed a letter with the Commission in which it stated that it did not intend to connect the monitoring devices to the project's SCADA system and that any attempt to use the SCADA system for water quality monitoring purposes would be a waste of the operator's time and possibly counterproductive. Commission staff issued a letter on October 23, 2013, stating that the order approving the Water Quality Monitoring Plan had not been amended and therefore connecting the equipment to the SCADA was still a requirement of the plan.

137. In an annual report filed untimely on February 20, 2014, the quality of the monitoring data collected provided a more complete record and was a significant improvement from previous reports. Additionally, the licensee conducted a spill test by releasing 15 cubic feet per second (cfs) of water from the spillway over a seven hour period on July 11 and 12, 2013. The licensee stated that the spill test results were inconclusive as the spill could not be correlated to improved DO concentrations. In an annual report the licensee filed untimely on January 29, 2015, the licensee stated that reduced DO concentrations in project waters were likely exacerbated by excessive biological oxygen demand resulting from chemical treatments of aquatic vegetation and failed septic systems in the watershed. Therefore, because current watershed conditions prevented the licensee from meeting water quality standards, the licensee stated that connecting the DO monitoring equipment to the project's SCADA system would be a misuse of time and resources and there is little need to continue recording the same water quality deficiencies every year. On January 30, 2015, the licensee filed a request to amend the approved Water Quality Monitoring Plan to reduce annual monitoring to once every five years and to temporarily excuse the licensee from complying with DO requirements and from the requirement to connect the monitoring equipment to the SCADA system.

138. In a letter issued June 3, 2015, Commission staff denied the licensee's January 30, 2015 request to reduce the frequency of monitoring to once every five years and to be excused from meeting DO standards. Further, because the licensee's updated water quality monitoring procedures had not ensured that corrective actions were taken when needed, or that DO standards were met, Commission staff required the licensee to connect the monitoring equipment to the SCADA system by June 1, 2016. In the June 3, 2015 letter, staff said the connection was necessary to understand project effects to water quality and the effect of implementing the approved corrective actions. In that letter, staff again provided the licensee notice of the penalty provisions of section 31 of the FPA should the licensee remain in non-compliance.

139. Letters issued August 6, 2015, February 4, 2016, and April 12, 2016, reminded the licensee of the due date for connecting monitoring equipment to the SCADA system. The licensee provided an implementation schedule on May 18, 2016, stating that it would

secure a connection between the DO monitors and the SCADA system by June 30, 2016. On June 8, 2016, Commission staff issued a letter stating that the licensee had missed the June 1, 2016 deadline, as it had not requested nor received an extension of time for the established deadline. In this letter, staff required the licensee to file a report by July 5, 2016 documenting that it had connected the equipment by June 30, 2016.

140. On July 5, 2016, the licensee filed a report stating that DO data collected so far in 2016 was inconsistent and unreliable and that the SCADA connection was not completed and would not be done until reliable water quality results were obtained. In a letter issued August 4, 2016, Commission staff found the licensee in violation of the 1999 Order for failing to connect the equipment and for failing to provide a reliable record of water quality data to demonstrate that water quality standards were met. In this letter, staff again provided the licensee notice of the penalty provisions of section 31 of the FPA should it remain in non-compliance.

141. The licensee's March 6, 2016 annual water quality monitoring report, as supplemented on March 22 and April 17, 2017, indicated that the licensee had again failed to comply with the requirements of the water quality monitoring plan. In a letter issued May 10, 2017, Commission staff found the licensee in violation of the 1999 Order for failing to connect the equipment and for failing to enact corrective measures when the water quality standards were not met in the tailrace. The letter emphasized that the licensee is required to implement all reasonable and prudent measures to ensure water quality standards are met whenever inflows to the projects are greater than or equal to the 95 percent exceedance inflow and stated that this may require the licensee to modify project operation in order to ensure that there is water available to be released in order to correct DO concentrations in the tailrace. In this letter, staff again provided the licensee notice of the penalty provisions of section 31 of the FPA should it remain in non-compliance, and stated that failure to comply would lead to an order to cease generation, and/or imposition of civil penalties.

3. Discussion

142. The Commission's 1999 Order requires the licensee to connect water quality monitoring equipment to the project's SCADA system. It has now been almost 18 years and this equipment is still not connected. Further, since acquiring the project in 2004, the licensee has frequently failed to report complete water quality data, has not filed certain annual reports and/or has filed reports late, and has continued to struggle with providing a complete record of data and with operating its monitoring equipment reliably.

143. By its own admission, the licensee has said it does not know when DO conditions are above or below the 5 mg/l state standard and has characterized its own water quality data as inconsistent and unreliable. As Commission staff stated in its Multiple Project

Environmental Assessment (EA) issued for licensing for the project,⁷⁵ project operation has the potential to violate DO state standards, primarily during low-flow periods. However, maintaining a rigorous QA/QC program would validate the results of water quality monitoring, and operational modifications such as spilling would be an effective measure to prevent violating state standards. In the EA, Commission staff recognized the potential cumulative adverse effects to DO and temperature in the river based on the combined effects of biological oxygen demand from municipal and septic discharge within the watershed, the potential loss of aeration due to reservoir stratification, and the lack of spillage during low-flow peaking operations.

144. The license and the project's approved Water Quality Monitoring Plan require the licensee to monitor DO and temperature and to adjust project operations to mitigate low DO conditions in the tailrace by enacting corrective actions in a timely manner. The licensee has tested and/or investigated various methods for improving DO, such as spilling water, using aeration curtains, and/or syphoning water from deeper and cooler areas of the reservoir. However, without a SCADA connection to its monitoring equipment, the licensee will not know when to take corrective actions in response to low DO conditions, nor can the licensee or others determine the extent to which project operation may affect water quality.

145. The licensee must modify and/or install reliable water quality monitoring equipment at the project and connect this equipment to the project's SCADA system. The licensee must then calibrate, adjust, and test this equipment as needed. The licensee must file a report with the Commission that documents the monitoring equipment is in good working order, along with a sample printout from the system showing that water temperature and DO data are being recorded. The licensee must then show diligence in monitoring water quality and taking corrective actions when necessary in order to meet water quality standards, in its required annual reports, which are due to be filed with the Commission by December 31.

III. CONCLUSIONS

146. The Commission's primary concern in this order is the licensee's longstanding failure to address the project's inadequate spillway capacity at this high hazard dam. Thirteen years after acquiring the license for the project, the licensee has still not increased spillway capacity leaving the project in danger of a PMF event. The licensee has shown a pattern of delay and indifference to the potential consequences of this situation. The spillway capacity deficiencies must be remedied in order to protect life, limb, and property. This order requires the licensee to design and construct two auxiliary

⁷⁵ The Multiple Project Environmental Assessment evaluated the impacts of four projects, including Edenville, on the environmental resources of the area and was issued by Commission staff on August 14, 1998.

spillways as risk reduction measures and to file a plan and schedule for additional modifications to meet the full PMF.

147. The licensee's pattern of non-compliance extends to other conditions in the license as well. As discussed above, the licensee is in violation of its license for making unauthorized dam repairs and for unauthorized earth-moving and land-clearing activities. The licensee has not filed an adequate PSP. The licensee has failed to build recreation facilities required by its approved Recreation Plan and has unnecessarily limited public access to project lands and waters. Further, the licensee must show evidence that it has all necessary property rights and must connect water quality monitoring equipment in accordance with its approved Water Quality Monitoring Plan.

148. The licensee's violations of the terms and conditions of its license, the Commission's regulations, and several orders are extensive. This Compliance Order requires the licensee to expeditiously address these separate violations within the time frames specified below. The due dates required by the order do not constitute extensions of time to comply with these requirements and failure to comply by the dates in this order may constitute separate violations. Commission staff have issued numerous directives to the licensee over the past 13 years to obtain compliance with the terms and conditions of the license, the Commission's regulations, and Commission orders. The licensee is aware of these requirements and should be actively addressing Commission staff's previous directives to resolve the violations of Part 12 of the Commission's regulations, Articles 4, 5, 18, 19, 20, and 21 of its project license, the approved Recreation Plan, and the approved Water Quality Monitoring Plan.

149. The licensee's violations will be made a part of the compliance history for this project and do not preclude the Commission from taking further action, pursuant to section 31 of the FPA,⁷⁶ for the violations which have already occurred. In addition, failure to comply with this order may lead to an order to cease generation or subject the licensee to the enforcement and civil penalty provisions of section 31, which includes penalties exceeding \$20,000 for each violation, per day,⁷⁷ or license revocation. In determining what action to take, the Commission is required to consider, in addition to the nature and seriousness of the violation, the efforts of the licensee to remedy the violations in a timely manner.

⁷⁶ 16 U.S.C. § 823b (2012)

⁷⁷ *See* Civil Monetary Penalty Inflation Adjustments, 18 C.F.R. § 385.1602(b) (2016).

The Director orders:

(A) Boyce Hydro Power LLC, licensee for the Edenville Hydroelectric Project, is in violation of Part 12 of the Commission's regulations, Articles 4, 5, 18, 19, 20, and 21 of its project license, the approved Recreation Plan and the approved Water Quality Monitoring Plan. The licensee must come into compliance with the Commission's regulations and with the conditions in its license as set forth in ordering paragraphs (B) through (M) below.

(B) Tobacco Auxiliary Spillway: Within 30 days from the date of this order, the licensee must file a complete design package with the Commission's Division of Dam Safety and Inspections, Chicago Regional Engineer, for a Tobacco auxiliary spillway. The design package must fully address all items noted in the Regional Engineer's letter to the licensee dated June 6, 2016.

(C) Property Rights for the Tobacco Auxiliary Spillway: Within 30 days of the date of this order, the licensee must file documentation that it has the necessary land rights to build the Tobacco auxiliary spillway. Lands needed for this facility are shown on the licensee's preliminary plans and specifications filed with the Commission's Chicago Regional Engineer dated February 3 and 8, 2016. The licensee's documentation must include: (1) a landownership map and a property line map showing all tax parcels in the area needed for the auxiliary spillway and (2) an accompanying excel spreadsheet for each map that labels: (a) the current land owner (i.e., the owner's official name or title) for all parcels needed for the auxiliary spillway, (b) the rights the licensee currently has to each parcel (i.e., fee ownership, easement, lease agreement, etc.) and (c) any parcels for which the licensee does not yet have all necessary rights to construct the auxiliary spillway. Along with the above documentation, the licensee must file a plan and schedule for acquiring any needed rights for lands necessary to construct the auxiliary spillway.

(D) Tittabawassee Auxiliary Spillway: Within 60 days of the date of this order, the licensee must file with the Commission's Chicago Regional Engineer, plans, specifications, and a schedule to construct a Tittabawassee auxiliary spillway.

(E) Property Rights for the Tittabawassee Auxiliary Spillway: Within 60 days of the date of this order the licensee must file documentation that it has the necessary land rights to build the Tittabawassee auxiliary spillway and/or must file a plan and schedule for acquiring any needed land rights based on its plans and specifications developed in accordance with ordering paragraph (D) above. The licensee's documentation must include: (1) a landownership map and a property line map showing all tax parcels in the area needed for the auxiliary spillway and (2) an accompanying excel spreadsheet for each map that labels: (a) the current land owner (i.e., the land owner's official name or title) for all parcels needed for the auxiliary spillway, (b) the rights the licensee currently

has to each parcel (i.e., fee ownership, easement, lease agreement, etc.) and (c) any parcels for which the licensee does not yet have all necessary land rights to construct the auxiliary spillway.

(F) Within 120 days from the date of this order, the licensee must file with the Commission's Chicago Regional Engineer, a plan and schedule for additional modifications to the project to meet the full (100%) Probable Maximum Flood for the project.

(G) Within 45 days from the date of this order, the licensee must file with the Commission's Chicago Regional Engineer, complete plans and specifications for permanent repairs to both left and right Tobacco abutment spillway walls, a complete work schedule, detailed drawings, a water management plan, an erosion control plan, a Temporary Construction Emergency Action Plan, and a Quality Control Inspection Program as originally specified in the Chicago Regional Engineer's letter to the licensee issued December 8, 2016.

(H) The licensee must not engage in unauthorized earth-moving and/or land-clearing activities at the project. Before performing such work, the licensee must seek and obtain the Commission's Chicago Regional Engineer's approval pursuant to the Commission's regulations and Articles 20 and 21. Further, the licensee must employ and maintain appropriate soil erosion control measures in accordance with Article 19 and must file a soil erosion control plan and obtain the Commission's Chicago Regional Engineer's approval before performing such work.

(I) The licensee must follow all directives issued by the Commission's Chicago Regional Engineer pursuant to the Commission's regulations under Part 12 and Article 4.

(J) Within 90 days from the date of this order, the licensee must provide reasonable access to project lands and waters for the public and must file documentation that such access has been provided. The licensee's documentation must include photographs showing that gates restricting access to parking and fishing areas are open, that fencing blocking access to recreation features has been removed, and that reasonable access to the water is allowed. The licensee's documentation must also include a statement from the licensee affirming its compliance with the access provisions of Article 18.

(K) Within 90 days from the date of this order, the licensee must file with the Commission's Chicago Regional Engineer, a complete design package for construction of all recreation facilities required by the project's approved Recreation Plan. The approved recreation facilities for the Tittabawassee side include: a parking lot for 15 cars off of State Highway 30, a parking lot with two handicapped spaces, a barrier-free restroom, a railed handicapped-accessible fishing pier next to the powerhouse, two canoe portages, access paths, and signs that identify the recreation facilities. The approved recreation facilities for the Tobacco side include: a parking lot for 15 cars off of State Highway 30, an access path, stairs to a railed fishing pier, and signs that identify the recreation facilities. Within 90 days of completing this work, the licensee must file documentation including as-built drawings and photographs demonstrating that the recreation facilities in the approved Recreation Plan have been constructed.

(L) The licensee must modify and/or install reliable water quality monitoring equipment at the project and connect this equipment to the project's SCADA system. The licensee must then calibrate, adjust, and test this equipment as needed. As required by the letter issued by Commission staff on May 10, 2017, the licensee must file a report by July 1, 2017, for Commission approval, that documents the equipment is in good working order along with a sample printout from the system showing that water temperature and dissolved oxygen data are being recorded.

(M) Within 180 days of the date of this order, the licensee must file documentation that it has the necessary land rights for all remaining project lands (excluding the Tobacco and Tittabawassee auxiliary spillways) in accordance with Article 5. The licensee's documentation must include: (1) a landownership map and a property line map showing all tax parcels around the reservoir and (2) an accompanying excel spreadsheet for each map that labels: (a) the current land owner (i.e., the owner's official name or title), (b) the rights the licensee currently has to each parcel (i.e., fee ownership, easement, lease agreement, etc.) and (c) any parcels for which the licensee does not yet have all necessary rights. Along with the above documentation, the licensee must file a plan and schedule for acquiring any needed rights for lands necessary for project operation and maintenance.

(N) The licensee's failure to adhere to deadlines set forth in ordering paragraphs (B) through (M) above may result in an order to cease generation at the project, the imposition of civil penalties exceeding \$20,000 per day, per violation, or revocation of the license.

(O) 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 (2016). 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.

Jennifer Hill, Director
Division of Hydropower
Administration and Compliance