

160 FERC ¶ 61,001
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Cheryl A. LaFleur, and Robert F. Powelson.

Grand River Dam Authority

Project Nos. 1494-437
1494-441

ORDER AMENDING LICENSE AND DISMISSING APPLICATION FOR
TEMPORARY VARIANCE

(Issued August 15, 2017)

1. On May 6, 2016, as supplemented June 2 and June 30, 2016, Grand River Dam Authority (GRDA or licensee) filed an application to permanently amend the reservoir elevation rule curve requirements contained in Article 401 of the current license for the Pensacola Project No. 1494. Specifically, GRDA proposes to increase the target elevation of the reservoir by up to two feet between August 16 and October 31. On July 11, 2017, GRDA filed an application for a temporary variance from the rule curve requirements of Article 401 from August 15, 2017 through October 31, 2017, to keep reservoir levels at the same levels as requested in the amendment application. As discussed below, we grant GRDA's request to amend its Article 401 rule curve and dismiss as moot GRDA's request for a temporary variance.

I. Background

2. On April 24, 1992, the Commission issued a new license to GRDA for the continued operation of the 105.18-megawatt Pensacola Project, located on the Grand (Neosho) River in Craig, Delaware, Mayes, and Ottawa Counties, Oklahoma.¹ The project includes a 5,950-foot-long, 147-foot-high dam; a 46,500-acre reservoir (Grand Lake); a powerhouse at the base of the dam; and a 1.5-mile-long tailrace and spillway channel in the riverbed below the dam.

¹ *Grand River Dam Authority*, 59 FERC ¶ 62,073 (1992).

3. Grand Lake has a surface area of about 46,500 acres at a pool elevation of 745 feet Pensacola Datum (PD),² with approximately 522 miles of shoreline that extends about 66 miles upstream from the dam. Grand Lake is managed for multiple purposes, including power generation, recreation, fish and wildlife enhancement, and flood control. Dedicated flood storage (the flood pool) is provided between elevations 745 and 755 feet. When reservoir elevations are within the flood pool, the Tulsa District of the U.S. Army Corps of Engineers (Corps) directs GRDA's releases from the dam under the terms of a 1992 Letter of Understanding and Water Control Agreement between the Corps and GRDA that addresses flooding both upstream and downstream of Grand Lake.³

4. When reservoir elevations are below the limits of the flood pool, GRDA operates the Pensacola Project pursuant to license Article 401. In order to balance the multiple uses of the reservoir, Article 401, as amended in an order issued December 3, 1996,⁴ requires GRDA to operate the Pensacola Project to maintain, to the extent practicable, the following seasonal target reservoir surface elevations, known as a rule curve, except as necessary for the Corps to provide flood protection:⁵

Period	Reservoir Elevation, in Feet PD
May 1 through May 31	Raise elevation from 742 to 744
June 1 through July 31	Maintain elevation at 744
August 1 through August 15	Lower elevation from 744 to 743

² Pensacola Datum (PD) is 1.07 feet higher than National Vertical Geodetic Datum, which is a national standard for measuring elevations above sea level. Reservoir levels discussed in this order are in PD values unless otherwise specified.

³ Section 7 of the Flood Control Act of 1944, Pub. L. No. 78-534, 58 Stat. 890, 33 U.S.C. § 709 (2012), directs the Secretary of the Army to prescribe regulations for the use of storage allocation for flood control or navigation at all reservoirs constructed wholly or in part with federal funds. A federal grant provided a substantial part of the funding for the construction of the Pensacola Project.

⁴ *Grand River Dam Authority*, 77 FERC ¶ 61,251 (1996).

⁵ The elevations in the rule curve were based on recommendations from the Grand/Neosho River Committee, a group formed in 1993 by the offices of U.S. Congressional delegations from Kansas and Oklahoma and consisting of representatives of towns, chambers of commerce, counties, and state resource agencies from Kansas and Oklahoma, the Kansas-Oklahoma Flood Control Alliance, the Neosho Basin Advisory Committee, and lakeshore landowners associations.

August 16 through August 31	Lower elevation from 743 to 741
September 1 through October 15	Maintain elevation at 741
October 16 through October 31	Raise elevation from 741 to 742
November 1 through April 30	Maintain elevation at 742

5. Since issuance of the December 3, 1996 order, and prior to this proceeding, GRDA has applied to the Commission nine times for either temporary variances from, or permanent amendments of, the elevations specified in the Article 401 rule curve. Six of those applications were withdrawn by GRDA, denied, or dismissed by the Commission.⁶ In August 2012, the Commission granted GRDA a temporary variance so that it could operate the project to vary from the rule curve in late summer and early fall in order to alleviate effects of an ongoing regional drought.⁷ In July 2015, GRDA applied for a temporary variance primarily to enhance recreational boating in late summer and early fall. That application, which involved the same changes to the rule curve elevations being requested in this proceeding, was approved in an order issued August 14, 2015.⁸ Last, on August 12, 2016, the Commission granted a temporary variance involving the same changes requested in this proceeding for the late summer and early fall of 2016.⁹

⁶ See June 26, 2015, Commission staff letter dismissing, for lack of adequate information, May 28, 2015 request for temporary variance to enhance recreational boating and tailwater dissolved oxygen management; July 3, 2013 Commission order denying March 20, 2013 request for temporary variance based on drought forecasts, *Grand River Dam Authority*, 144 FERC ¶ 61,007 (2013) and August 2, 2013 letter denying request for reconsideration; July 25, 2011 Commission staff letter dismissing, for lack of adequate information, April 6, 2011 request for a temporary (two-year) variance to enhance recreational boating; April 4, 2006 Commission staff letter denying March 13, 2006 request for temporary variance to respond to drought conditions on basis that variance not warranted based on forecasted conditions; June 17, 2004 letter from GRDA withdrawing January 26, 2004 request to permanently amend Article 401 rule curve to enhance recreation, water quality, and wildlife habitat; and August 16, 1999 letter from GRDA withdrawing June 2, 1999 request for temporary variance (for calendar year 1999) to allow for alternative plan for millet seeding.

⁷ *Grand River Dam Authority*, 140 FERC ¶ 62,123 (2012).

⁸ *Grand River Dam Authority*, 152 FERC ¶ 61,129 (2015) (August 14, 2015 order).

⁹ GRDA had requested the 2016 temporary variance if the Commission could not act on this permanent amendment application prior to August 15, 2016. *Grand River Dam Authority*, 156 FERC ¶ 61,106 (2016) (August 12, 2016 order).

6. The current license for the Pensacola Project expires on March 31, 2022. On February 1, 2017, GRDA filed a Notice of Intent and Pre-application Document to relicense the Pensacola Project using the Commission's Integrated Licensing Process. On February 15, 2017, Commission staff issued a letter order holding the pre-filing process for relicensing in abeyance until the Commission resolved this amendment application. Following issuance of this letter order, Commission staff will issue a notice commencing the Integrated Licensing Process, along with an update to the process plan and schedule filed by GRDA in its February 1, 2017 filing.

II. GRDA's Proposal

7. GRDA requests a permanent amendment of the Article 401 rule curve of its current license and proposes to implement a Storm Adaptive Management Plan and a Drought Adaptive Management Plan. GRDA seeks the rule curve change to reduce the risk of vessel grounding at Grand Lake in late summer, improve recreation during the summer/fall peak recreation season, better balance competing stakeholder interests, and provide additional water storage, if necessary, to assist in maintaining dissolved oxygen (DO) concentrations in the river below the project, and below its Markham Ferry Project No. 2183, located immediately downstream.

A. Rule Curve Modification

8. Under GRDA's proposal, between August 16 and September 15, the reservoir would be maintained at elevation 743 feet, which is up to two feet higher than the current rule curve. Between September 16 and September 30, the elevation would be lowered from 743 to 742 feet. Between October 1 and October 31, the reservoir would be maintained at elevation 742 feet, which is up to one foot higher than the current rule curve. After October 31, reservoir elevations would follow the project's existing rule curve. GRDA's proposed rule curve change is illustrated in Figure 1.

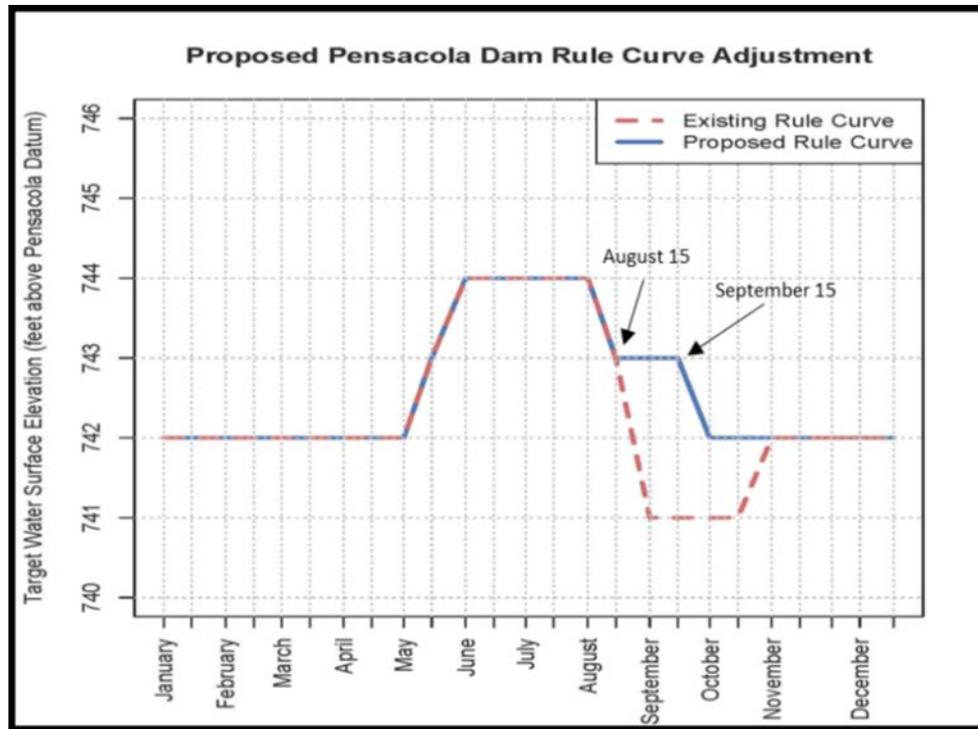


Figure 1: Proposed changes to Article 401 reservoir rule curve elevations.¹⁰

B. Storm Adaptive Management Plan

9. GRDA proposes to implement a year-round Storm Adaptive Management Plan that would be used in anticipation of and during major precipitation events within the Grand/Neosho River basin that might result in high water conditions upstream or downstream of Grand Lake. According to the plan, GRDA would review, at a minimum, on a daily basis the following information: (1) weather forecasts in the watershed; (2) Grand Lake surface elevation data; (3) data from U.S. Geological Survey gages upstream and downstream of the project; (4) surface elevations at the Corps' upstream John Redmond Reservoir¹¹ and downstream Lake Hudson (part of GRDA's Markham Ferry Project); and (5) other relevant information affecting surface elevations at Grand Lake during the potential flood period.

¹⁰ GRDA May 6, 2016 Application, Appendix 1 at 5.

¹¹ This reservoir is used for flood control and is located upstream of the Pensacola Project.

10. If GRDA's daily review of the information indicates a probability of high water conditions in the Grand/Neosho River basin in the vicinity of the project, GRDA would immediately provide the information to federal and state resource agencies, local government officials, Commission staff, tribes, and other interested stakeholders.¹² In conjunction with the distribution of the information, GRDA would also schedule a conference call. Prior to the conference call, GRDA would consult with the Corps to determine whether any reservoir management actions could be taken to avoid, reduce, or minimize high water levels upstream or downstream of the project. During the conference call, GRDA would then notify the participants of any decision to take action. GRDA would continue regular communications with all participants during each event in order to keep them informed of prevailing conditions.¹³

11. GRDA notes that, although the protocols contained in the Storm Adaptive Management Plan are separate and distinct from the protocols in its Emergency Action Plan for the project,¹⁴ the Storm Adaptive Management Plan complements the Emergency Action Plan and involves many of the same entities. According to the Storm Adaptive Management Plan, if the Emergency Action Plan were triggered, the communication protocols in the Emergency Action Plan would supersede those included in the Storm Adaptive Management Plan until the emergency was resolved.

¹² The current contact list for this plan includes: Commission staff, the Corps, National Weather Service, Oklahoma Secretary of Energy and Environment, Oklahoma Department of Wildlife Conservation, Oklahoma Water Resources Board, Oklahoma Office of Emergency Management, U.S. Fish and Wildlife Service, City of Miami, Ottawa County Office of the County Commissioner, Ottawa County Emergency Management, Modoc Tribe, United Keetoowah Band of Cherokees, Quapaw Tribe of Indians, Oklahoma State Historic Preservation Office, and the Oklahoma Archeological Survey. The contact list is subject to change at any time as other entities express an interest or need for participation.

¹³ Such communications would include conference calls, email messages, or other forms of communication, as appropriate for the given situation.

¹⁴ An Emergency Action Plan is a formal document that identifies potential emergency conditions at a dam and specifies preplanned actions to be followed to minimize property damage and risk to human life. The Emergency Action Plan describes actions the dam owner will take to moderate or alleviate a problem at the dam, as well as actions the dam owner, in coordination with emergency management authorities, will take to respond to incidents or emergencies related to the dam.

12. The Storm Adaptive Management Plan also includes provisions regarding historic properties in the project area that could be adversely affected by high water levels. The plan specifies that, if the Oklahoma State Historic Preservation Officer (Oklahoma SHPO) concludes that any actions to address high water levels at Grand Lake would adversely affect any archaeological site or other cultural resource in the project area, GRDA would consult with the Oklahoma SHPO and the Oklahoma Archeological Survey to develop a site-specific plan for protection or mitigation of the site. The plan also includes a provision for the discovery of unidentified burial sites in the project area.

C. Drought Adaptive Management Plan

13. GRDA also proposes a Drought Adaptive Management Plan that guides project operations and flow releases in the event of significant drought conditions. GRDA notes that it is required to maintain DO concentrations below the Pensacola Project and below its downstream Markham Ferry Project. GRDA states that, during periods of drought, strict adherence to the Article 401 rule curve could prevent GRDA from maintaining downstream DO concentration requirements and maintaining downstream reservoir elevations at Markham Ferry sufficient to operate its Salina Pumped Storage Project No. 2524,¹⁵ as well as meeting other water supply needs.

14. Under the plan, GRDA would monitor information from the National Drought Mitigation Center's U.S. Drought Monitor.¹⁶ Based on this information, if GRDA determines that drought conditions appear imminent, GRDA would begin weekly teleconferences with, in general, the same federal and state resource agencies, local government officials, Commission staff, tribes, and other interested stakeholders GRDA intends to consult with under the Storm Adaptive Management Plan.¹⁷ In the teleconferences, GRDA would keep these parties informed of prevailing conditions and any plans to begin additional releases in the event the U.S. Drought Monitor declares a severe to exceptional drought.

¹⁵ The Markham Ferry Project's reservoir, Lake Hudson, serves as the lower reservoir for the Salina Pumped Storage Project.

¹⁶ The U.S. Drought Monitor is a weekly map of drought conditions that is produced jointly by the National Oceanic and Atmospheric Administration, the U.S. Department of Agriculture, and the National Drought Mitigation Center at the University of Nebraska-Lincoln. *See* United States Drought Monitor, <http://droughtmonitor.unl.edu>.

¹⁷ The only participant not listed for both plans is the National Weather Service, Tulsa Forecast Office, which is only included in the Storm Adaptive Management Plan.

15. If the U.S. Drought Monitor declares a severe to exceptional drought for the Grand/Neosho River basin, GRDA may, at its discretion and based on input received during the weekly teleconferences, commence additional releases from Pensacola Dam, regardless of the prevailing levels at Grand Lake and Article 401 rule curve target elevations. Such releases would not exceed a rate equal to 0.06 feet of reservoir elevation per day, which is equivalent to approximately 837 cubic feet per second per hour over a 24-hour period.

16. During the drought, GRDA would conduct weekly teleconferences to discuss project operations and would address the following issues in each teleconference: (1) current and forecasted drought conditions and planned project operation; (2) maintenance of water levels and flows sufficient to maintain downstream DO concentrations for water quality and to prevent fish kills; (3) maintenance of reservoir elevations at Markham Ferry sufficient to operate its Salina Pumped Storage Project for system reliability; and (4) based on available information, when the severe to exceptional drought period is expected to end. When severe to exceptional drought conditions are over, GRDA would cease releases under the plan, return to operating the project to target Article 401 rule curve elevations, and notify federal and state resource agencies and other stakeholders involved in the teleconferences.

D. Additional Information Provided by GRDA

17. GRDA also includes in its application: (1) an environmental report; (2) a preliminary review by Mead & Hunt, dated May 6, 2016, of a hydraulic modeling study conducted by Tetra Tech dated February 3, 2016 (2016 Tetra Tech Study);¹⁸ (3) a 2014 rule curve analysis performed by Alan C. Dennis (2014 Dennis Study);¹⁹ (4) the independent modeling analysis performed by Commission staff as part of its review of GRDA's 2015 temporary variance request (2015 Staff Analysis);²⁰ (5) letters from the University of Oklahoma regarding the 2014 Dennis Study and the 2016 Tetra Tech

¹⁸ The 2016 Tetra Tech Study was completed for the City of Miami, Oklahoma. *Hydraulic Analysis of the Effects of Proposed Rule Curve Change at Pensacola Dam on Neosho River Flooding in the Vicinity of Miami, Oklahoma*, Docket No. P-1494-433 (filed April 14, 2016) (2016 Tetra Tech Study).

¹⁹ The 2014 Dennis Study is a graduate thesis submitted to the University of Oklahoma graduate program in 2014 by Alan C. Dennis. *Floodplain Analysis of the Neosho River Associated with Proposed Rule Curve Modifications for Grand Lake O' the Cherokees*, Docket No. P-1494-432 (filed May 29, 2015) (2014 Dennis Study).

²⁰ Commission staff's independent analysis performed for GRDA's temporary variance request was filed under Docket No. P-1494-432 on August 31, 2015 (2015 Staff Analysis).

Study; (6) a letter from the Corps regarding the 2014 Dennis Study; (7) a summary report on a hydraulic modeling technical conference held December 16, 2015, at the University of Oklahoma; and (8) copies of comments GRDA received on a draft of its application and GRDA's responses to the comments.

18. In response to Commission staff's May 18, 2016 request for additional information, GRDA also provided: (1) a report on the results of Mead & Hunt's review of the 2016 Tetra Tech Study; (2) an analysis of the effects to property and structures resulting from the water surface elevations estimated in the 2016 Tetra Tech Study; and (3) an analysis of the effects on fisheries and aquatic resources that would occur under the proposed rule curve change.

E. Pre-Filing Consultation

19. On March 15, 2016, GRDA initiated pre-filing consultation with federal and state resource agencies, Indian tribes, local governmental authorities, and interested members of the public. On that same day, GRDA filed a request to shorten the normal 60-day pre-filing comment period to 30 days to help expedite processing. The Commission approved a reduced pre-filing comment period on April 5, 2016.

20. GRDA received comments on the draft application from the Delaware County Floodplain Administration, the Oklahoma Water Resources Board, the Oklahoma Department of Wildlife Conservation (Oklahoma DWC), the Modoc Tribe of Oklahoma (Modoc Tribe), the City of Miami, Oklahoma (City of Miami), plaintiff groups in two civil cases,²¹ Mr. N. Larry Bork (on behalf of citizens and businesses located in Ottawa County, Oklahoma), the U.S. Fish and Wildlife Service, and the Oklahoma SHPO. GRDA included copies of these comments and addressed them in a comment/response table in its application.

III. Public Notice, Interventions, and Comments

21. The Commission issued public notice of GRDA's application for a permanent amendment of the Article 401 rule curve on September 22, 2016, and published the notice in the *Federal Register* on September 29, 2016.²² The notice was also published in four newspapers in the project area. The notice established October 24, 2016, as the deadline for submitting comments, motions to intervene, and protests.

²¹ The two cases are *City of Miami v. GRDA*, Case No. CJ-08-690 (Okla. Dist. Ct.) and *Asbell, et al. v. GRDA*, Case No. CJ-01-381 (Okla. Dist. Ct.).

²² 81 Fed. Reg. 66,957 (Sept. 29, 2016).

22. The U.S. Department of the Interior (DOI) filed a timely notice of intervention.²³ The City of Miami, the Inter-Tribal Council of Northeast Oklahoma (Tribal Council),²⁴ and the Intervening Tribes²⁵ filed timely motions to intervene and comments opposing GRDA's application.²⁶ Mr. N. Larry Bork (on behalf of citizens and businesses located in Ottawa County, Oklahoma), DOI, the Modoc Tribe, Mr. Al Newkirk, the Oklahoma DWC, and the Oklahoma Archeological Survey filed comments on the application.²⁷

23. On November 8, 2016, GRDA filed an answer to the comments. Although the Commission's Rules of Practice and Procedure generally do not permit answers to protests,²⁸ our rules also provide that we may, for good cause, waive this provision.²⁹ We will accept GRDA's answer because it provided information that assisted us in our decision-making process.

24. On June 8, 2016, the Tribal Council and its member tribes formally requested consultation with the Commission regarding the rule curve proceeding and early notice to be included as an interested party in the project's relicensing matters. The Commission

²³ A timely notice to intervene filed by the U.S. Department of the Interior is granted by operation of Rule 214(a)(2). 18 C.F.R. § 385.214(a)(2) (2017).

²⁴ The Tribal Council member tribes are the Miami Tribe of Oklahoma, the Wyandotte Nation, the Ottawa Tribe of Oklahoma, the Peoria Tribe of Oklahoma, the Eastern Shawnee Tribe of Oklahoma, the Shawnee Tribe, the Modoc Tribe, the Quapaw Tribe, and the Seneca-Cayuga Tribe

²⁵ The Intervening Tribes are the Miami Tribe of Oklahoma (Miami Tribe), the Wyandotte Nation, the Ottawa Tribe of Oklahoma, the Peoria Tribe of Oklahoma, the Eastern Shawnee Tribe of Oklahoma, and the Seneca-Cayuga Nation.

²⁶ Timely, unopposed motions to intervene are granted by operation of Rule 214(b) of the Commission's Rules of Practice and Procedure. 18 C.F.R. § 385.214(b) (2017).

²⁷ The Modoc Tribe and Oklahoma DWC filed comments in response to the Commission's March 16, 2016 notice of request to reduce the comment period on GRDA's draft amendment application from 60 to 30 days. However, these comments pertained to the overall rule curve proceeding and not the reduction of the comment period.

²⁸ 18 C.F.R. § 385.213(a)(2) (2017).

²⁹ 18 C.F.R. § 385.101(e) (2017).

granted the Tribal Council's request, and after providing notice to the public of the meeting on July 8, 2016, Commission staff and the Tribal Council and its member tribes met in Miami, Oklahoma, on August 3, 2016.³⁰

25. The comments submitted and those made at the tribal consultation meeting raised a number of issues, including the proposal's effects on flooding and cultural resources. These comments are addressed in the final Environmental Assessment (EA), issued on May 11, 2017, and below.

IV. Statutory Compliance

A. Clean Water Act

26. Under section 401(a) of the Clean Water Act (CWA),³¹ the Commission may not authorize construction or operation of a hydroelectric project that may result in a discharge from the project unless the state water quality certifying agency either has issued water quality certification for the project or has waived certification by failing to act on a request for certification within a reasonable period of time, not to exceed one year. Section 401(d) of the CWA provides that the certification shall become a condition of any federal license that authorizes construction or operation of the project.³²

27. On June 30, 2016, the Oklahoma Department of Environmental Quality (Oklahoma DEQ) issued a 401 certification for GRDA's permanent amendment request, subject to four conditions: (1) the certification does not authorize any discharge or dredging; (2) the reservoir will be maintained between elevations 742 and 744 feet as requested by GRDA; (3) emergency and routine maintenance will be as permitted by the Corps; and (4) the results of ongoing testing of DO mitigation measures under the project license shall be submitted annually to Oklahoma DEQ. The conditions in the 401 certification are set forth in Appendix A of this order and are incorporated into the license by ordering paragraph (E).

³⁰ Transcripts of the August 3rd meeting with the Tribal Council and its member tribes were filed on August 24, 2016.

³¹ 33 U.S.C. § 1341(a) (2012).

³² 33 U.S.C. § 1341(d) (2012).

B. Endangered Species Act

28. Section 7 of the Endangered Species Act (ESA) requires federal agencies to ensure their actions are not likely to jeopardize the continued existence of federally listed threatened or endangered species, or result in the destruction or adverse modification of the critical habitat of such species.³³ Several federally listed species are known to use the Pensacola Project area. In its April 21, 2016 comments on GRDA's application, the U.S. Fish and Wildlife Service stated that GRDA's proposal would not adversely affect any listed species. As discussed in the final EA, Commission staff concluded that none of the threatened and endangered species identified at the project would be affected by the rule curve change.³⁴

C. National Historic Preservation Act

29. Under section 106 of the National Historic Preservation Act (NHPA)³⁵ and its implementing regulations,³⁶ federal agencies must take into account the effect of any proposed undertaking on properties listed or eligible for listing in the National Register (defined as historic properties) and afford the Advisory Council on Historic Preservation (Advisory Council) a reasonable opportunity to comment on the undertaking. This generally requires the Commission to consult with the State Historic Preservation Officer (SHPO) to determine whether and how a proposed action may affect historic properties, and to seek ways to avoid, minimize, or mitigate any adverse effects.

30. The Miami Tribe argues that the Commission failed to complete its section 106 obligations. The tribe asserts that the area of potential effects (APE) was too narrowly defined and should have included areas currently affected by backwater flooding, and also contends that the Commission has never engaged in a section 106 review with respect to tribal cultural properties in and around the project area, including gathering information from tribes, identifying historic properties of relevance to the tribes, and assessing the effects that the project has already had on tribal historic properties. Last, the tribe asserts that the Commission should engage in meaningful consultation with the

³³ 16 U.S.C. § 1536(a) (2012).

³⁴ Final EA at 22.

³⁵ Section 106 of the National Historic Preservation Act of 1966, as amended, 54 U.S.C. § 306108, Pub. L. No. 113-287, 128 Stat. 3188 (2014). (The National Historic Preservation Act was recodified in Title 54 in December 2014).

³⁶ 36 C.F.R. pt. 800 (2017).

tribes, establish an appropriate APE, and require GRDA to develop a project-wide Historic Properties Management Plan (HPMP), as it did in the Markham Ferry relicensing proceeding.

31. In accordance with the Advisory Council's regulations implementing section 106 of the NHPA, Commission staff defined the APE for the proposal, consulted with the appropriate entities (including the Oklahoma SHPO, Oklahoma Archeological Survey, and the Tribal Council), identified cultural resources within the APE, and assessed the impact that the proposal would have on those resources.³⁷ First, as described in the final EA, based on the scale and nature of the proposed amendment, the APE was defined as those lands potentially affected by the proposed amendment, i.e., lands between elevations 741 and 743 feet PD.³⁸ Staff determined this to be an appropriate APE because the proposed amendment would maintain water levels within Grand Lake's normal fluctuation limits and would not involve any land-clearing or land-disturbing activities.³⁹

32. Next, as the final EA notes, GRDA consulted with both the Oklahoma SHPO and the Oklahoma Archeological Survey during preparation of its draft amendment application, and Commission staff held a government-to-government meeting with the Tribal Council and its member tribes on August 3, 2016.⁴⁰ GRDA also maintains data supplied by the Oklahoma SHPO and the Oklahoma Historical Society that identifies potential and significant cultural resource sites in the project area.⁴¹

33. Commission staff determined there would be no effect on historic properties because the amendment would not cause Grand Lake to exceed its normal maximum or minimum water surface elevations and there would be no land-clearing or land-disturbing activities. Specifically, the final EA states that GRDA's proposed changes are within Grand Lake's normal maximum and minimum fluctuation limits, and therefore, no new

³⁷ See 36 C.F.R. pt. 800 (2017).

³⁸ Final EA at 22.

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ *Id.* at 22-23, 48.

lands would likely be affected.⁴² The final EA further notes that the proposed changes would reduce fluctuating water surface elevations within Grand Lake and any cultural and historic properties located on or near the shoreline would be less affected and would not be subject to additional exposure, looting, or vandalism.⁴³ Moreover, approval of this amendment would not exacerbate erosion effects since the difference in water elevations would be smaller, and within the range of current fluctuations.⁴⁴

34. In a January 18, 2017 letter to the Oklahoma SHPO and the Oklahoma Archeological Survey, Commission staff requested both agencies to concur with staff's finding that the proposed amendment would not affect historic properties. In response, the Oklahoma Archeological Survey recommended a project-wide HPMP be developed as part of GRDA's upcoming relicensing proceeding, but had no other comments. The Oklahoma SHPO did not respond to Commission staff's January 18, 2017 request for concurrence. Because neither state agency objected within 30 days to Commission staff's finding that GRDA's proposal would not affect historic properties, the Commission has fulfilled its obligations under section 106.⁴⁵

35. On May 22, 2017, the Miami Tribe reasserted its argument that the Commission failed to complete its section 106 responsibilities.⁴⁶ The tribe contends that the Commission wrongly concluded that the Oklahoma SHPO and the

⁴² *Id.* at 50 (notes the proposal would only increase flooding by approximately 0.2 feet at the Neosho River Miami gage).

⁴³ *Id.* In addition, in GRDA's February 21, 2017 response to comments filed on the draft EA, GRDA cited the following studies to support these same conclusions: (1) JOHN A. WARE, EL89-4, ARCHEOLOGICAL INUNDATION STUDIES: MANUAL FOR RESERVOIR MANAGERS, at 30 (1989), <http://www.dtic.mil/dtic/tr/fulltext/u2/a213319.pdf>; (2) U.S. ARMY CORPS OF ENGINEERS, DRAFT LOWER SNAKE RIVER JUVENILE SALMON MIGRATION FEASIBILITY REPORT/ENVIRONMENTAL IMPACT STATEMENT N3-8, N3-12 to N3-13 (Dec. 1999); and (3) PAUL R. NICKENS, *Technologies for In-Place Protection and Long-Term Conservation of Archaeological Sites*, in SCIENCE AND TECHNOLOGY IN HISTORIC PRESERVATION 309 (2000).

⁴⁴ Final EA at 50.

⁴⁵ See 36 C.F.R. § 800.4(d)(1)(i) (2017).

⁴⁶ Miami Tribe's May 22, 2017 Comments. On May 23, 2017, the Ottawa Tribe and Eastern Shawnee Tribe filed letters joining the Miami Tribe. On June 20, 2017, the Miami Tribe filed a letter reiterating their argument.

Oklahoma Archeological Survey concurred in the finding that the amendment application would not affect historic properties, noting that both agencies had previously expressed concerns with the project's potential effects on cultural resources and recommended that an HPMP be developed for the amendment. Next, the tribe asserts that the Commission failed to comply with the Advisory Council's regulations, arguing that because, following the Commission's January 18, 2017 letter, the tribe filed an objection to the finding that the proposed amendment would not affect historic properties and because it is a consulting party for the purposes of section 106, its objection requires the Commission to either consult with the tribe and resolve the disagreement or request that the Advisory Council review the finding. The tribe avers that the Commission did neither, and thus failed meet its obligations under section 106.

36. We disagree with the tribe's argument. First, the tribe relies on assertions made by the Oklahoma agencies that have since been revised. While the agencies had previously recommended that an HPMP be developed for the amendment, their latest filings state that an HPMP need not be developed in this proceeding and instead should be developed during the relicensing process.⁴⁷ Moreover, as discussed above, neither agency objected to the Commission's finding that the proposed amendment would not affect historic properties.⁴⁸ Further, it is not correct that the Commission was required to either consult with the tribe and either resolve its disagreement with the Commission's finding or request that the Advisory Council review the finding. Under section 800.4 of the Advisory Council's regulations implementing section 106 of the NHPA, after the agency

⁴⁷ Prior to issuance of the draft EA, both Oklahoma SHPO and Oklahoma Archeological Survey recommended that GRDA develop an HPMP for the project. Both the Oklahoma SHPO and the Oklahoma Archeological Survey now assert that such a plan should be developed in the relicensing proceeding, which is currently pending in Docket No. P-1494-438. *See* Oklahoma Archeological Survey's February 14, 2017 Letter (filed February 22, 2017) and Oklahoma SHPO's February 1, 2017 Comments on the Draft EA (filed February 9, 2017). The Miami Tribe, however, continues to assert that an HPMP is needed for the amendment.

⁴⁸ In the Oklahoma SHPO's letter dated July 25, 2017, filed in response to the notice soliciting comments regarding GRDA's request for a temporary variance to the rule curve requirements, that agency renewed its concerns regarding the section 106 consultation process and the EA for the proposed amendment. These issues have been considered in the final EA or this order, and, as noted above, the failure of the Oklahoma SHPO and the Oklahoma Archeological Survey to object to Commission staff's finding that GRDA's proposal would not affect historic properties, meant that the Commission had fulfilled its obligations under section 106.

determines that the undertaking will have no effect on historic properties, the SHPO has 30 days to object to the finding.⁴⁹ If no objection is made, the agency's "responsibilities under section 106 are fulfilled."⁵⁰ Moreover, we disagree with the tribe's assertion that it was a consulting party for the purposes of section 106. As discussed in the final EA, no tribal lands are within the APE.⁵¹ Additionally, the tribe has made only general statements regarding potential effects to properties and has failed to provide any specific information on any properties within the APE to which the tribe attaches religious and cultural significance that may be affected by the amendment.⁵²

37. In addition, we find that the tribe's argument that GRDA should develop a project-wide HPMP for the amendment is unconvincing. As discussed in the final EA and above, because the proposed rule curve amendment will not affect cultural resources, it is unnecessary to develop a HPMP in conjunction with this proceeding.

V. Environmental Assessment

38. On January 6, 2017, Commission staff issued a draft EA on GRDA's proposal, with a public notice identifying February 6, 2017, as the deadline for filing comments on the draft EA. The draft EA examined effects of project operation under GRDA's proposal on geology and soils, water quantity and flows (including flooding), water quality, fisheries and other aquatic resources, terrestrial resources, wetlands and riparian resources, threatened and endangered species, cultural and historic resources, recreation, and land use and aesthetics. The draft EA also addressed the environmental issues raised in the responses to the September 22, 2016 notice of GRDA's application.

39. The City of Miami, the Eastern Shawnee Tribe of Oklahoma, GRDA, Mr. Rod Miami Hugh, Ms. Myril J. Landers, the Miami Tribe of Oklahoma, Mr. Al Newkirk, the Oklahoma Archeological Survey, the Oklahoma SHPO, the Ottawa Tribe of Oklahoma, the Seneca-Cayuga Nation, and the Wyandotte Nation

⁴⁹ The final EA inadvertently cited 36 C.F.R. § 800.5 (2017), which applies when the agency makes a finding that historic properties may be affected by a proposed undertaking. However, both the January 18, 2017 letter and the final EA make clear that the Commission's finding was that the amendment would not affect historic properties, which is a finding under 36 C.F.R. § 800.4 (2017).

⁵⁰ 36 C.F.R. § 800.4(d)(1)(i) (2017).

⁵¹ Final EA at 50 (finding that the Pensacola project boundary does not occupy tribal lands held in trust and the proposed amendment would not change the overall range of water surface elevations currently approved for project operations).

⁵² 36 C.F.R. § 800.2(c)(2)(ii) (2017).

filed comments on the draft EA. The comments raised a number of issues, primarily: (1) existing flooding at the project, (2) the adequacy of GRDA's easements, (3) the proposal's potential impact on flooding and cultural resources, (4) the Commission's compliance with section 106 of the NHPA, and (5) the draft EA's analysis of cumulative impacts.

40. On May 11, 2017, Commission staff issued a final EA for the project. In the final EA, staff modified the draft EA to address the concerns raised in comments on the draft EA. These modifications included the addition of information on existing flooding at the project, and possible cumulative effects on flooding. The major environmental issue raised in this proceeding (flooding), and the final EA's findings on this issue is discussed below. We also address an additional comment filed concerning the final EA.

A. Flooding Effects

41. The final EA included information regarding flooding currently experienced in areas near the project and the effect that the proposed amendment would have on flooding. Specifically, the final EA describes the flooding effects associated with three previous storm events, which occurred in October 1986, September 1993, and October 2009. Additionally, the final EA summarizes the results of hydraulic modeling studies, which also examine the same three storm events, that include information that generally characterizes the effects of flooding during the August 16 to October 31 period under the current rule curve.⁵³

42. The final EA also describes the proposed rule curve's effect on flooding as analyzed by hydraulic studies and reviews of those studies that were submitted in this proceeding.⁵⁴ The final EA finds that all the studies come to very similar conclusions regarding the maximum change in water surface elevations that could occur in the vicinity of the USGS Neosho River Miami gage during operation using the proposed rule

⁵³ *Id.* at 28-29.

⁵⁴ Those studies include: (1) the 2014 Dennis Study; (2) the 2015 Staff Analysis; (3) the 2016 Tetra Tech study and an inundation study conducted by Tetra Tech dated April 26, 2016; (4) a June 2016 review by Mead & Hunt of the 2016 Tetra Tech Study and the June 27, 2016 Mead & Hunt upstream inundation and hazard analysis; (5) letters dated July 23, 2015, and May 2, 2016, from the University of Oklahoma regarding the 2014 Dennis Study, and differences between the 2014 Dennis Study, 2015 Staff Analysis, and the 2016 Tetra Tech Study; (6) a letter dated February 20, 2015, from the Corps regarding the 2014 Dennis Study; and (7) a summary report on a hydraulic modeling technical conference held December 16, 2015, in Tulsa, Oklahoma. *Id.* at 31-37.

curve change. If conditions equivalent to the worst modeled storms were to recur during that time, modeling found that maximum increases in water levels of 0.2 feet, equivalent to 2.4 inches, or less, would be expected at that location.⁵⁵ While the 2016 Tetra Tech Study concluded that the 2015 Staff Analysis underestimated the number of structures inundated under the current rule curve, due to the staff's lower computed water surface elevations, no additional structures would be impacted by the proposed rule curve change.

43. Modeling of the October 2009 storm indicates that the proposed rule curve change could increase flooding of 11 structures in the vicinity of Miami that would already be inundated by flooding under the current rule curve.⁵⁶ An additional 22 structures within a 30-foot horizontal buffer of the inundation zone could also be impacted.⁵⁷ Changes in hazard under maximum conditions were determined to be insignificant, with negligible increased risk to human life. Specifically, the final EA found that two structures may experience increased danger under the September 1993 storm conditions; however, the increased danger is the result of a slight increase in flood depth of 0.1 feet and the actual change in hazard is insignificant.⁵⁸

B. Fisheries

44. On May 17, 2017, the Oklahoma DWC filed comments seeking to clarify information in the final EA regarding the occurrence of three fish species, which the final EA describes as components of the robust fishery in Grand Lake. The agency indicates that the smallmouth bass population in the lake is small, with the species occurring primarily in tributaries on the lake's east side. The agency also indicates that striped bass are not present in the lake, and hybrid striped bass are present only through stockings made every two years. We note that the Oklahoma DWC's comments help to more accurately describe presence and distribution of fishes in Grand Lake. However, the agency did not address effects of the proposed rule curve amendment on fisheries, and we do not believe the clarification changes the effects to fisheries identified in the final EA.

⁵⁵ Final EA at 37.

⁵⁶ *Id.* at 33.

⁵⁷ *Id.*

⁵⁸ *Id.* at 35.

C. Environmental Conclusion

45. Based on the analysis in the final EA, as supplemented in this order, we conclude that our approval of this proposal will not constitute a major federal action significantly affecting the quality of the human environment.

VI. Generation Analysis

46. In the August 14, 2015 order granting GRDA a temporary variance for the same changes in the rule curve requested here,⁵⁹ the Commission analyzed the proposal's effects on generation at the Pensacola Project and the downstream Markham Ferry Project.⁶⁰ The August 14, 2015 order found that although the change in the rule curve would not result in a substantial change in generation at the Pensacola Project, there would be a net loss of \$132,000 per year in the value of the generation.⁶¹ With respect to the Markham Ferry Project, the Commission found that the change in the rule curve would result in an estimated yearly loss of 123 megawatt-hours in generation, which has a value of about \$58,000.⁶² The same results will obtain if we grant the permanent variance.

VII. Discussion

47. The City of Miami, the Tribes, and Mr. Bork assert that the operation of the Pensacola Project under the current Article 401 rule curve results in flooding and significant adverse effects to the Miami region. These parties argue that the Commission should not evaluate the proposed amendment based solely on its incremental effects, but should also look at how the project currently affects upstream properties and whether GRDA must acquire additional flowage easements for its operations. They contend that GRDA's proposed amendment would exacerbate flooding and should therefore be denied. Each party says that GRDA must conduct a comprehensive flooding study prior to making any changes to the project's rule curve. The City of Miami further notes that,

⁵⁹ *Grand River Dam Authority*, 152 FERC ¶ 61,129, at PP 66-69 (2015).

⁶⁰ Markham Ferry's generation is dependent upon the timing and volume of releases from the Pensacola Project.

⁶¹ The August 14, 2015 order noted that the energy generated by lowering the reservoir shifted from August to late September, when energy is less valuable. *Grand River Dam Authority*, 152 FERC ¶ 61,129, at P 67 (2015).

⁶² *Id.* at P 68.

in this amendment proceeding, the Commission is not limited to considering only the changes proposed but can impose conditions, such as requiring a flood study or the acquisition of additional property rights.⁶³ The parties also argue that the Commission must require GRDA to amend its project boundary and purchase all necessary easements prior to the approval of the amendment.

48. In its answer, GRDA argues that the Corps has exclusive jurisdiction over flood control operations pursuant to the Flood Control Act of 1944⁶⁴ and that Congress has periodically directed the Corps to study the ongoing flooding issues. GRDA notes that, pursuant to the 1992 agreement between the Corps and GRDA, the Corps directs releases from the project when the elevation is, or is projected to be, between 745 and 755 feet. In addition, GRDA states that the federal government obtained flowage easements above 750 feet, and asserts that the Commission has recognized that issues related to flood control are beyond the Commission's jurisdiction for this project. GRDA contends that the commenters' argument that GRDA must acquire additional property rights beyond its project boundary fails to recognize that GRDA is not responsible if the Corps' flowage easements are inadequate.

49. As discussed in the final EA and above, all of the hydraulic studies have shown that GRDA's proposed amendment would result in, at most, incremental upstream flooding in the vicinity of Miami (about 0.2 feet higher).⁶⁵ The incremental increase in flooding would not affect any additional structures and would result in only insignificant changes in the danger zone classification for two structures with negligible increased risk to human life.⁶⁶ With respect to comments related to ongoing flooding due to the project, because no new lands are affected by the amendment, these arguments are not germane here and are more appropriately addressed in the upcoming relicensing proceeding.⁶⁷

⁶³ The City of Miami also asserts that the Commission should impose additional mitigation for flooding pursuant to Article 12 of GRDA's license.

⁶⁴ 33 U.S.C. § 709 (2012).

⁶⁵ Flooding could be up to 0.7 feet higher downstream of the project at the Langley gage. Final EA at 33.

⁶⁶ Final EA at 35.

⁶⁷ Although we agree with GRDA that the Corps maintains exclusive jurisdiction over operations within the flood pool, i.e., from 745 to 755 feet PD, in relicensing the Commission may consider the effect of GRDA's operations on flooding, including the appropriate target elevations and any necessary mitigation.

Accordingly, we see no reason to condition GRDA's proposed license amendment on the acquisition of additional property rights. Last, we note that the relicensing proceeding is in its early stages and the studies required for that proceeding are still being determined. Therefore, we will not condition our authorization here on GRDA's completion of a comprehensive flood study during relicensing.

50. The proposed amendment would also have some benefits, including improved boating conditions on Grand Lake, fewer boat groundings during the late summer, an extended recreation season, and improved DO conditions downstream of the project should a drought occur.⁶⁸ Further, as discussed in the final EA and above, there would be no significant environmental impacts associated with the proposed variance and relatively little electric generation lost.

51. GRDA also proposes to implement its Storm Adaptive Management Plan. This plan, which would be implemented year-round, could help mitigate impacts associated with flooding if GRDA is able to effectively forecast and release water in Grand Lake to lower the reservoir in anticipation of a storm. However, uncertainties in forecasting and storm dynamics do not always permit these pre-releases.⁶⁹ Notwithstanding this concern, the Storm Adaptive Management Plan would help GRDA coordinate with federal, state, local, and tribal governments during a storm event. Therefore, we will require GRDA to implement the proposed Storm Adaptive Management Plan.

52. With respect to GRDA's proposed Drought Adaptive Management Plan, this plan would help GRDA maintain downstream DO requirements and downstream reservoir elevations at the Markham Ferry Project sufficient to operate its Salina Pumped Storage Project, which is used to maintain regional energy reliability, and to meet other water supply needs.⁷⁰ Therefore, we will require GRDA to implement the Drought Adaptive Management Plan as well.

⁶⁸ Final EA at 54.

⁶⁹ For example, a pre-release may not be advisable if such a release would spill water into an already flooded section of the Neosho River downstream.

⁷⁰ Local municipalities withdraw water from both Grand Lake and Markham Ferry's Lake Hudson.

53. The Tribes and the City of Miami argue that GRDA's operations result in the unauthorized flooding of tribal trust lands⁷¹ and the Commission should require comprehensive flood studies and flood mitigation prior to approval of the proposed amendment.⁷² The parties contend that GRDA's use and occupancy of tribal trust lands require an amendment to GRDA's license, including a change in the project boundary, and that the Commission must address substantive issues arising under sections 4(e), 10(a), and 10(e) of the Federal Power Act. The parties note that these issues include whether it would be in the public interest to authorize the use and occupancy of federal trust lands, the development of mandatory Bureau of Indian Affairs conditions, and the annual charge that GRDA would be required to pay for the use of tribal trust lands.

54. The Tribes also argue that the Commission's trust responsibility to the tribes requires the Commission to deny GRDA's proposal because it would increase unauthorized flooding of tribal trust lands. The Tribes assert that meaningful consultation with the tribes and resolution of the issues presented in their protests must occur prior to the Commission's approval of GRDA's amendment. The Tribes further contend that the Commission has a responsibility to investigate the current unauthorized flooding of tribal lands and require GRDA to amend its license for the use and occupancy of these lands.

55. Similarly, DOI states that it is aware of backwater flooding effects on tribal lands and is in the process of establishing the physical boundaries and legal definitions of all affected tribal lands in the project area. The Tribes and DOI instead want all these issues including the proposed rule curve amendment addressed in the relicensing proceeding.

56. As stated above, GRDA does not propose to alter the project boundary or exceed its maximum water surface elevation target under the Article 401 rule curve.⁷³ Neither the Tribes nor DOI have provided information demonstrating the location of tribal trust

⁷¹ The Intervening Tribes, however, acknowledge that the physical boundaries and legal definitions of affected tribal lands have not yet been fully and finally established, but state that there is no doubt that project operations affected tribal trust lands.

⁷² The Intervening Tribes note that the Corps made a preliminary conclusion in 2002 that federal actions have been a significant cause of backwater flooding, but has not completed a feasibility study, which would have addressed the extent of flooding and any easements that would be required. The Intervening Tribes argue that the Commission should require GRDA to work with the Corps to fund the final feasibility study.

⁷³ The maximum water surface elevation target of 744 feet PD occurs from June 1 through July 31 each year.

lands within the project boundary. As noted, there are no tribal lands in the APE. As stated above, the arguments regarding unauthorized flooding currently experienced at the project are more appropriately addressed in the upcoming relicensing proceeding, where a comprehensive review of the project and its effects, including the effects on any tribal lands, can be undertaken.⁷⁴

57. We have considered GRDA's application, flood analysis studies, comments received, and the final EA, and we find that the proposed amendment would have some benefits and should not significantly affect flooding upstream or downstream of the project. Therefore, we grant the application, subject to the conditions described in this order. However, we note that regardless of this amendment, section 10(c) of the Federal Power Act provides that GRDA is liable for damages caused by its operation of the Pensacola Project.⁷⁵ Accordingly, should GRDA flood lands on which it has no flowage rights, it may be liable for any damages that result.

The Commission orders:

(A) Grand River Dam Authority's request to amend the rule curve requirements of Article 401 at the Pensacola Project, as described in its May 6, 2016 application, as supplemented on June 2 and June 30, 2016, and this order, is granted.

(B) *Storm Adaptive Management Plan*: The licensee's proposed Storm Adaptive Management Plan, appended to its May 6, 2016 application, is approved.

⁷⁴ In the final EA, Commission staff acknowledged that the socio-economic impacts identified by the Tribes are an important consideration in the Commission's comprehensive review of the project (final EA at 50). However, GRDA's current proposal should not materially alter those impacts, which will be thoroughly considered in the relicensing proceeding, discussed above.

⁷⁵ See 16 U.S.C. § 803(c) (2012) ("Each licensee hereunder shall be liable for all damages occasioned to the property of others by the construction, maintenance, or operation of the project works or of the works appurtenant or accessory thereto, constructed under the license, and in no event shall the United States be liable therefore."); also, e.g., *Pacific Gas & Electric Company*, 115 FERC ¶ 61,320, at P 21 (2006) (observing that while Congress intended for the Commission to ensure that hydroelectric projects were operated and maintained in a safe manner, Congress intended for section 10(c) of the FPA to preserve existing state laws governing the damage liability of licensees) (citing *South Carolina Public Service Authority v. FERC*, 850 F.2d 788, 795 (D.C. Cir. 1988)).

(C) *Drought Adaptive Management Plan*: The licensee's proposed Drought Adaptive Management Plan, appended to its May 6, 2016 application, is approved.

(D) The Commission reserves the right to modify the Storm Adaptive Management Plan or the Drought Adaptive Management Plan based on information provided by the licensee; any federal, state, local, or tribal government, or other entity; or upon its own determination.

(E) The amended license for the Pensacola Project is subject to the conditions submitted by the Oklahoma Department of Environmental Quality under section 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1341(a)(1) (2012), as set forth in Appendix A to this order.

(F) Grand River Dam Authority's request for a temporary variance from the rule curve requirements of Article 401 at the Pensacola Project, as described in its July 11, 2017 application is dismissed as moot.

(G) 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. § 825l (2012), and the Commission's regulations at 18 C.F.R. § 385.713 (2017). The filing of a request for rehearing does not operate as a stay of the effective date of this order, or of any other date specified in this order. The licensee's failure to file a request for rehearing shall constitute acceptance of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.

APPENDIX A

Conditions of the Water Quality Certification for Amendment to the
Pensacola Dam License
(FERC License No. 1494)

Oklahoma Department of Environmental Quality

Issued June 30, 2016

The Oklahoma Department of Environmental Quality grants Clean Water Act 401 Water Quality Certification for the amended Pensacola Dam License (FERC License No. 1494) subject to the following conditions.

The conditions for the amended Pensacola Dam License (FERC License No. 1494) are:

- 1) This Certification does not authorize any discharge or dredging of soil material into the Neosho River or Grand Lake O' the Cherokees.
- 2) The reservoir surface elevation will be maintained between 744 and 742 feet, as requested in the proposed project.
- 3) Emergency and Routine Maintenance shall be permitted under the appropriate U.S. Army Corps of Engineers Permit.
- 4) The results of all ongoing testing of dissolved oxygen mitigation measures, as required by the project license, shall be submitted annually to DEQ. DEQ will use the monitoring results to track project's progress toward meeting and remaining in compliance with state water quality standards. DEQ reserves the right to revoke this certification if the activity causes degradation of the water quality of the Lower Grand Lake O' the Cherokees or Neosho River.