

167 FERC ¶ 62,069  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Northwestern Corporation

Project No. 2188-163, 164,  
165, 166, 167, 168, & 215

**ORDER MODIFYING AND APPROVING REVISED FIVE-YEAR FISHERIES PROTECTION, MITIGATION, AND ENHANCEMENT PLANS PURSUANT TO ARTICLES 408, 409, 412, 414, 416 and 417**

(Issued April 29, 2019)

1. On November 21, 2018, Northwestern Corporation (licensee) filed its revised Five-Year Madison and Missouri River Fisheries Protection, Mitigation and Enhancement Plans pursuant to Articles 408, 409, 412, 414, 416 and 417 of the license for the Missouri-Madison Hydroelectric Project.<sup>1</sup> The licensee's filing also included monitoring reports from the previous five-year fisheries plan period under the respective articles. The project consists of nine developments and is located on the Madison and Missouri Rivers in Gallatin, Madison, Lewis and Clark, and Cascade counties, in southwestern Montana.

**License Requirements and Background**

2. The Order Modifying and Approving Fisheries Protection, Mitigation and Enhancement Plans<sup>2</sup> requires the licensee to file, for Federal Energy Regulatory Commission (Commission) approval, revised plans by December 31, 2013 and every five years thereafter. Further, the order requires the licensee to include with the revised plans, progress reports for the prior five-year monitoring period describing the results of protection, mitigation and enhancement (PM&E) measures under the respective license articles. License Articles 408, 409 and 412 require the licensee to implement various fisheries mitigation and enhancement measures and post-licensing evaluations and monitoring for the Madison River. Articles 414, 416 and 417 require the licensee to implement various fisheries mitigation and enhancement measures and post-licensing

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<sup>1</sup> Order Issuing New License (92 FERC ¶ 61,261), issued September 27, 2000.

<sup>2</sup> (126 FERC ¶ 62,028), issued January 14, 2009.

evaluations and monitoring for the Hauser and Holter developments as well as at the five Great Falls reservoirs and their tailwaters on the Missouri River. The articles require the plans to be prepared in consultation with the U.S. Fish and Wildlife Service (FWS), Montana Department of Fish, Wildlife, and Parks (Montana FWP), and Montana Department of Environmental Quality (Montana DEQ).

### **Licensee's Plans**

3. The licensee's revised plans provide continued implementation of various fisheries PM&E measures as required under Articles 408, 409, 412, 414, 416 and 417 for the 2019 through 2023 five-year period. In addition to continuing ongoing fisheries PM&E measures, the licensee plans to implement additional PM&E measures when problems or opportunities are identified in consultation with the Madison and Missouri River Technical Advisory Committees (TAC).<sup>3</sup>

### **Article 408: Fisheries Plan for Madison River from Hebgen Reservoir to Three Forks**

4. Under Article 408, the licensee proposes to implement the following measures for Hebgen Reservoir and the upper Madison River: (1) conduct spring gillnetting with experimental floating and sinking gillnets to assist in determining relative change in fish assemblages in Hebgen Reservoir as a result of project operations; (2) assess Hebgen Reservoir tributaries for native fish restoration potential and determine feasibility of establishing/enhancing spawning runs of rainbow trout from the reservoir to increase the contribution of natural reproduction to the reservoir fishery; (3) assess reservoir macrophyte densities to determine the impacts of the reservoir drawdown regime on reservoir fish populations; (4) conduct annual population estimates in the upper Madison River to monitor population abundance and assess effectiveness of mitigation and enhancement measures resulting from project operations; (5) conduct annual population estimates in the upper Madison River to monitor population abundance, spawning success, and assess effectiveness of mitigation and enhancement measures related to spring flow fluctuations; (6) assess Madison River tributaries for native fish restoration

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<sup>3</sup> The Madison River TAC consists of representatives from the FWS, U.S. Bureau of Reclamation, U.S. Forest Service, U.S. Environmental Protection Agency, U.S. Bureau of Land Management, Montana DEQ, Montana FWP, U.S. Geological Survey, and the licensee. The Missouri River TAC consists of representatives from the Montana FWP, U.S. Forest Service, U.S. Bureau of Land Management, FWS, and the licensee.

potential and determine feasibility of establishing spawning runs of rainbow trout from the Madison River to increase natural production in the upper Madison River fishery; and (7) monitor native fish species of special concern (i.e., Arctic grayling and westslope cutthroat trout) and develop projects to secure, recover, and expand their populations in the upper Madison River.

**Article 409: Stream Enhancement Plan for Madison River from Hebgen Reservoir to Three Forks**

5. Under Article 409, the licensee plans to implement the following measures for the Madison River from Hebgen dam to Madison Reservoir: (1) implement fish habitat enhancements for all life stages in both the main stem Madison River and tributary streams by assessing the presence of barriers, potential for flow enhancement through irrigation system improvements, and spawning and rearing potential related to the evaluation of flushing flow effectiveness; (2) purchasing water leases to improve native fish restoration potential and establishing spawning runs of rainbow trout from the Madison River; (3) implement PM&E measures as specific projects are identified for improving or replacing stream culverts; (4) implement PM&E measures as specific projects are identified related to the inclusion or exclusion of fish barriers, including: screening, irrigation needs, and fish losses by entrainment into canals; and (5) implement PM&E measures as specific projects are identified related to purchasing fishing access sites.

**Article 412: Fisheries Monitoring for Madison River from Hebgen Reservoir to Three Forks**

6. Under Article 412, the licensee proposes to implement the following measures for Madison Reservoir and the lower Madison River: (1) conduct fall gillnetting with sinking and floating nets in Madison Reservoir to monitor the effects of project operations on reservoir and lower Madison River fish populations, and conduct periodic population estimates in the bypass reach and lower Madison River to monitor population abundance and assess effectiveness of mitigation and enhancement measures; (2) implement PM&E measures when problems are identified related to monitoring of ice erosion on Madison Reservoir shoreline habitats which may be affecting fish populations; (3) assess macrophyte density to determine the impacts on Madison Reservoir fish populations related to changes in the reservoir drawdown regime; (4) monitor native fish species of special concern (Arctic grayling and westslope cutthroat trout) and develop projects to secure, recover, and expand populations in the lower Madison River; and (5) implement PM&E measures when problems are identified related to spawning gravel supplementation; (6) conduct annual population estimates in the lower Madison River to

monitor population abundance and assess the effectiveness of mitigation and enhancement measures related to monitoring flushing flow needs in the Madison River near Ennis, Norris, and Greycliff; (7) implement PM&E measures when problems are identified to enhance tributary spawning to increase the contribution of natural reproduction in the lower Madison River fishery; and (8) monitor water and air temperatures throughout the lower Madison River annually to determine any long-term effects of high temperatures on fish species and, if found, implement appropriate mitigation measures.

#### **Article 414: Missouri River; Hauser Reservoir and Tailwaters**

7. Under Article 414, the licensee proposes to: (1) monitor fish populations in the Hauser dam tailwater in alternate years using electrofishing methods to assist in identifying any evidence of injury and whether the fish have hatchery or wild origins as a result of impingement, entrainment or spillage during high flow events from Hauser Reservoir; (2) provide annual funding to implement adaptive management practices and fisheries PM&E requirements at Hauser dam; (3) coordinate with the Missouri River TAC to identify various additional mitigation measures to mitigate for avoidable or unavoidable project impacts; (4) monitor Hauser dam tailwater trout populations by electrofishing during the fall on alternate years to evaluate the effects of short-term flow fluctuations on resident fish; (5) monitor Hauser Reservoir fish populations in the spring and fall using experimental floating and sinking gillnets to assist in determining the impact of fish spilled from Hauser Reservoir on resident fish populations in Holter Reservoir and project operations on Hauser Reservoir populations; (6) conduct summer and winter weekend creel surveys on Hauser Reservoir; (7) use reservoir netting and creel survey results to evaluate and enhance tributary spawning to increases the contribution of natural reproduction to the Hauser Reservoir fishery; and (8) evaluate the potential to enhance tributary spawning to increase natural reproduction in the Hauser Reservoir fishery.

#### **Article 416: Missouri River; Holter Reservoir and Tailwaters**

8. Under Article 416, the licensee proposes to: (1) monitor fish populations in a 3-mile section immediately downstream from Holter dam in alternate years using electrofishing methods to assist in identifying any evidence of fish loss through the project; (2) provide annual funding to implement adaptive management practices and fisheries PM&E requirements at Holter dam; (3) coordinate with the Missouri River TAC to identify various additional mitigation measures to mitigate for avoidable or unavoidable project impacts; (4) conduct annual trout population estimates in two long-term monitoring sections of the Missouri River downstream from Holter dam, and in the

3-mile section between Holter dam and Wolf Creek Bridge using electrofishing in alternate years to evaluate the impact of fish spilled from Holter Reservoir; (5) monitor Holter Reservoir fish populations in the spring and fall using experimental floating and sinking gillnets to assist in determining effects of project operations on the reservoir fish populations; and (6) coordinate with the Missouri River TAC to identify and implement tributary spawning enhancement projects.

#### **Article 417: Missouri River; Great Falls Reservoirs below Morony Dam**

9. Under Article 417, the licensee proposes to implement the following measures in the Missouri River downstream of Morony dam: (1) annual fall electrofishing to monitor fish populations in five standard long-term study areas in the approximate 210-mile reach of the Missouri River between Morony dam and the headwaters of Fort Peck Reservoir; (2) conduct fish sampling with drifting trammel nets in alternate years in the Morony, Fort Benton, Coalbanks, and Judith Landing areas, and annually in the Robinson Bridge section; (3) conduct seining to sample shallow shoreline areas at least every other year during late July thru mid-August to assist in determining trend information on the abundance of minnow species and production of juvenile game fish; and (4) conduct a creel survey every 4 years to monitor angler use levels, exploitation of fish populations, and changes in fish species abundance.

10. For the five Great Falls reservoirs (Black Eagle, Rainbow, Cochrane, Ryan, and Morony), the licensee plans to implement the following measures on an annual or alternate year's basis: (1) coordinate with the TAC to identify projects to implement adaptive management practices to mitigate fisheries impacts associated with dewatering 0.5 miles of the Missouri River below Rainbow dam; (2) coordinate with the Missouri River TAC to identify projects to implement adaptive management practices to mitigate fisheries impacts associated with Cochrane Reservoir and Morony Reservoir fluctuations in conjunction with peaking operations at the Cochrane and Ryan developments; (3) implement various measures to monitor populations and population trends of pallid sturgeon, sticklefin, sturgeon chub, blue sucker, sauger, paddlefish, and spiny softshell turtles; (4) conduct telemetry studies to determine seasonal movements of adult and juvenile pallid sturgeon, sauger, blue suckers, paddlefish, and spiny softshell turtles; (5) provide funding to the Montana FWP for fisheries PM&E work in the middle Missouri River and the Great Falls area, including providing assistance to the FWS and Montana FWP for ongoing evaluation of pallid sturgeon in the Missouri River downstream of Morony dam; (6) evaluate the potential to enhance tributary spawning to increase the contribution of natural reproduction to the Great Falls reservoirs fisheries, including coordinating with the Missouri River TAC to identify opportunities to implement projects to enhance trout production from the Sun and Smith River drainages; (7) conduct annual

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or biannual netting of Cochrane, Ryan, and Morony reservoirs to evaluate the drawdown impacts on reservoir fisheries; and evaluate the potential of the Smith River to provide recruitment to the reservoirs and river in the Great Falls area; and (8) implement PM&E measures if monitoring indicates significant impacts of reservoir drawdowns to minimize potential impacts on the reproductive activities of game fish species.

### **Agency Consultation**

11. The license articles require the plans to be prepared in consultation with the FWS, Montana FWP, Montana DEQ, and other interested entities. The licensee's filing included signatures from the FWS, Montana DEQ, Montana FWP, U.S. Forest Service (Forest Service), and U.S. Bureau of Land Management, approving the licensee's revised plans.

### **Discussion and Conclusions**

12. The licensee's revised PM&E plans propose continuing various monitoring measures specified in its project license under the respective license articles. Although many of the PM&E measures under its proposed five-year plan are similar to those of the previous five-year period (2014-2018), continued fisheries monitoring will further refine previous data collection results and identify additional PM&E opportunities. According to the licensee, the original Memorandum of Understanding between the licensee and the state and federal resource management agencies to provide annual funding to implement various license requirements related to fisheries, recreation, and wildlife, was renewed. Accordingly, the Madison and Missouri River TACs will remain responsible for identifying and allocating annual funding for PM&E projects using adaptive management.

13. Interagency biologists, including those from the Montana FWP, Forest Service, and the licensee, would report on findings and work performed each year at an annual meeting of the Madison and Missouri River TACs. Additionally, annual work plans and budgets for the coming year(s) will be discussed and approved during the annual meetings. The annual work plans and associated progress reporting will describe new adaptive management opportunities for the Madison and Missouri Rivers' fisheries PM&E measures within the context of each fisheries plan. Adaptive management under each article will be accomplished by consultation of the licensee and a quorum of resource agencies within the Madison and Missouri River TACs.

14. License Articles 408, 409, 412, 414, 416 and 417 require the licensee to file, for Commission approval, revised PM&E plans every three years. However, the

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Commission's January 14, 2009 order approved the licensee's request to file revised plans at five-year intervals. Furthermore, the January 2009 order also approved the licensee's request to file their progress reports under the respective license articles at five-year intervals in conjunction with filing their revised five-year monitoring plans. Accordingly, the licensee should continue to file their subsequent revised plans and reports at five-year intervals. Thus, the licensee should file their next revised PM&E plans and associated reports from the previous five-year monitoring period with the Commission by December 31, 2023. If the licensee proposes to discontinue any mitigation measures or monitoring, the progress reports and associated monitoring results should support any such proposal and include concurrence from the resource agencies.

15. The licensee's revised five-year PM&E plans and associated reports satisfy the requirements of Articles 408, 409, 412, 414, 416 and 417 and therefore, as modified, should be approved.

The Director orders:

(A) Northwestern Corporation's (licensee) Revised Five-Year Madison and Missouri Fisheries Protection, Mitigation and Enhancement Plans for the period 2019 thru 2023 under license Articles 408, 409, 412, 414, 416 and 417, as modified by paragraphs (B) and (C), are approved.

(B) The licensee must file, by December 31, 2023, for Federal Energy Regulatory Commission (Commission) approval, revised five-year fisheries protection, mitigation and enhancement (PM&E) plans under license Articles 408, 409, 412, 414, 416 and 417 that cover the period from January 1, 2024 through December 31, 2028. The plans must be prepared in consultation with the U.S. Fish and Wildlife Service (FWS), Montana Department of Fish, Wildlife and Parks (Montana FWP), and Montana Department of Environmental Quality (Montana DEQ). The licensee must allow the resource agencies 30 days to review and comment on the plans before filing with the Commission. The plans must include documentation of consultation, copies of all comments and recommendations, and specific descriptions of how the comments are accommodated by the plans. If the licensee does not adopt a recommendation, the filing must 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 must implement the plans and schedule, including any changes required by the Commission.

(C) The licensee must file with the Commission, by December 31, 2023, progress reports for the period 2019 thru 2023 describing the results of PM&E measures under license Articles 408, 409, 412, 414, 416 and 417. The reports must be prepared in

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consultation with the FWS, Montana FWP, and Montana DEQ. The licensee must allow the resource agencies 30 days to review and comment on the reports before filing with the Commission. The reports must include any comments and the licensee's response to any such comments or recommendations. The Commission reserves the right to require changes to the plans based on the results of the reports.

(D) 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 (2018). 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.

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Document Content(s)

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