

EDMUND G. BROWN JR.



MATTHEW RODRIQUEZ SECRETARY FOR ENVIRONMENTAL PROTECTION

State Water Resources Control Board

JAN 29 2018

Ms. Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, D.C. 20426

Dear Secretary Bose:

COMMENTS ON READY FOR ENVIRONMENTAL ANALYSIS AND PRELIMINARY TERMS AND CONDITIONS FOR DON PEDRO AND LA GRANGE HYDROELECTRIC PROJECTS, FEDERAL ENERGY REGULATORY COMMISSION PROJECTS NOS. 2299 & 14581; TUOLUMNE COUNTY

On November 30, 2017, the Federal Energy Regulatory Commission (FERC) issued a Notice of Ready for Environmental Analysis (REA) and an accompanying request for comments, protests, recommendations, and preliminary terms and conditions regarding the relicensing and new license for Don Pedro and La Grange Hydroelectric Projects (collectively, Projects), FERC Project Nos. 2299 & 14581, respectively. The Projects are owned and operated by co-licensees Turlock Irrigation District (TID) and Modesto Irrigation District (MID) (collectively, Districts).

The Districts submitted a Final License Application (FLA) for the relicensing of the Project on April 28, 2014. However, before issuing the Notice of Ready for Environmental Analysis (REA), FERC determined that the La Grange Hydroelectric Project needed to be included as part of the relicensing process. Thus, the Districts began seeking a new license for the La Grange Hydroelectric Project and submitted the FLA on October 11, 2017 along with the Amended FLA for the Don Pedro Project. On November 27, 2017, the Districts filed additional information in response to FERC's Additional Information Request issued on October 27, 2017 for both Projects. Finally, FERC issued the Notice of REA for Don Pedro and La Grange Hydroelectric Projects on November 30, 2017.

In accordance with a Memorandum of Understanding executed between the FERC and the State Water Resources Control Board (State Water Board) on November 19, 2013, State Water Board staff is providing the attached general comments and preliminary terms and conditions in response to the FERC's Notice of REA.

FELICIA MARCUS, CHAIR | EILEEN SOBECK, EXECUTIVE DIRECTOR



If you have questions regarding this letter please contact me by phone at (916) 323-0358, or by email at <u>Chase.Hildeburn@waterboards.ca.gov</u>. Written correspondence should be addressed as follows:

State Water Resources Control Board Division of Water Rights Water Quality Certification Program Attn: Chase Hildeburn P.O. Box 2000 Sacramento, CA 95812

Sincerely,

ORIGINAL SIGNED BY:

Chase Hildeburn Water Resource Control Engineer Water Quality Certification Program

Enclosures: Attachment A – General Comments on Notice of Ready for Environmental Analysis for the Don Pedro and La Grange Hydroelectric Projects

Attachment B – Preliminary Terms and Conditions for Don Pedro and La Grange Hydroelectric Projects

cc: Mr. Tomás Torres, Director U.S. Environmental Protection Agency Region 9, Water Division 75 Hawthorne Street San Francisco, CA 94105

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The following comments are provided by State Water Resources Control Board (State Water Board) staff in response to the Notice of Ready for Environmental Analysis (REA) issued on November 30, 2017, by the Federal Energy Regulatory Commission (FERC or Commission) for the Don Pedro and La Grange Hydroelectric Projects (collectively, Projects), Project Nos. 2299 & 14581. The Projects are owned and operated by co-licensees Turlock Irrigation District (TID) and Modesto Irrigation District (MID) (collectively, Districts).

Comments

1. State Water Board Section 401 Authority

Prior to obtaining a new license from FERC, the Districts must obtain water quality certifications (certification) from the State Water Board, pursuant to Section 401 of the federal Clean Water Act (33 U.S.C. §1341). Section 401 of the federal Clean Water Act requires any applicant for a federal license or permit which may result in discharge to navigable waters to obtain certification from the state in order to ensure the discharge will comply with the state's water quality standards and other appropriate requirements of state or federal law. The State Water Board is the certifying agency under Section 401 for the Projects. Accordingly, the State Water Board may set conditions implementing Clean Water Act requirements, including the requirements of Section 303 of the Clean Water Act for water quality standards and implementation plans, or to implement "any other appropriate requirement of State law." (33 U.S.C. § 1341(d).).

2. Water Quality Control Plans and Water Quality Standards

The California Regional Water Quality Control Boards have primary responsibility for the formulation and adoption of water quality control plans for their respective regions, subject to State Water Board and the United States Environmental Protection Agency (USEPA) approval, as appropriate. (Wat. Code, §13240 et seq.) The State Water Board may also adopt water quality control plans, which will supersede regional water quality control plans for the same waters to the extent of any conflict. (Wat. Code, §13170.) For a specified area, the water quality control plans designate the beneficial uses of water to be protected, water quality objectives established for the reasonable protection of those beneficial uses or the prevention of nuisance, and a program of implementation to achieve the water quality objectives. (Wat. Code, §§ 13241, 13050 subd. (h), and 13050 subd. (j).) The beneficial uses together with the water quality objectives that are contained in the water quality control plans, and state and federal anti-degradation requirements constitute California's water quality standards. Water Code section 13247 requires state agencies, in carrying out activities that may affect water quality, to comply with water quality control plans in most instances.

3. Designated Beneficial Uses of the Tuolumne River

The Central Valley Regional Water Quality Control Board adopted, and the State Water Board and United States Environmental Protection Agency (USEPA) approved, the *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins* (Basin Plan). According to the Basin Plan, the designated beneficial uses currently designated for the Projects' area are categorized in two surface waterbodies.

- Existing beneficial uses currently designated for Don Pedro Reservoir include hydroelectric power generation, contact and non-contact water recreation, warm and cold freshwater habitat, and wildlife habitat. Municipal and domestic supply is a potential beneficial use that has been designated for Don Pedro Reservoir.
- Existing beneficial uses currently designated for the Lower Tuolumne River (i.e., from Don Pedro Reservoir to the confluence with the San Joaquin River include irrigation, stock watering, contact and non-contact recreation, canoeing and rafting, warm and cold freshwater habitat, cold freshwater migration, warm and cold freshwater spawning habitat, and wildlife habitat. Municipal and domestic supply is a potential beneficial use that has been designated for the Lower Tuolumne River.

4. 303(d) Listed Impairments

Section 303(d) of the Clean Water Act requires the identification of waterbodies in each state that do not meet, or are not expected to meet, water quality standards (i.e., impaired waterbodies). The 2008-2010 303(d) list (303(d) list) is the most current list that USEPA has approved. The 303(d) list designates impairments near the Projects for the following pollutants or stressors in the Lower Tuolumne River: chlorpyrifos, diazinon, Group A pesticides, mercury, and water temperature. Don Pedro Reservoir is also 303(d) listed for mercury.

5. Geographic Scope

State Water Board staff agrees with and supports the Commission's determination¹ that the geographic scope for cumulative impacts to water resources and aquatic resources should extend upstream on the Tuolumne River to Hetch Hetchy and downstream to the San Francisco Bay. State Water Board staff also agrees that the geographic scope for cumulative impacts to geomorphology should extend upstream on the Tuolumne River to Hetch Hetchy and San Joaquin Rivers.

The Commission has tentatively set the geographic scope for cumulative impacts to anadromous fish and Essential Fish Habitat to include the Tuolumne River basin downstream to the confluence with the San Joaquin River, and through the Sacramento-San Joaquin Delta to the San Francisco Bay. State Water Board staff supports the

¹ Don Pedro SD2 – July 25, 2011. La Grange SD1 – May 23, 2014.

Commission's tentative geographic scope for cumulative impacts to anadromous fish and Essential Fish Habitat.

6. California Environmental Quality Act

Issuance of a certification is subject to the California Environmental Quality Act (CEQA). The Districts will act as the lead agencies in satisfying CEQA requirements for licensing of the Projects, while the State Water Board will be a responsible agency. CEQA requires: an analysis of the environmental impacts of the Projects, including cumulative impacts; the identification of mitigation measures that could minimize any significant effects on the environment; and a monitoring and reporting program to ensure compliance with adopted mitigation measures. As a responsible agency, the State Water Board will use the environmental documents, and will use the environmental document in to comply with its requirements as a CEQA responsible agency and in acting on the certification applications.

7. <u>Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta</u> <u>Estuary</u>

The State Water Board is in the process of updating the *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary* (Bay-Delta Plan) to protect beneficial uses in the Bay-Delta watershed. The State Water Board is updating water quality objectives to improve conditions and address population declines of commercial, recreational, and forage fisheries and provide reasonable protection of all beneficial uses. The Bay-Delta Plan is being updated in two separate phases. Phase I addresses salinity requirements in the southern Delta and modified requirements for inflows from tributaries in the Lower San Joaquin River (LSJR), including the Tuolumne River. Phase II addresses, in part, flow requirements for the Sacramento River and Delta outflow. In Phase I, new flow objectives and a program of implementation are proposed for the lower Tuolumne River as well as the Merced and Stanislaus Rivers and LSJR for the reasonable protection of fish and wildlife beneficial uses. It is important to consider the potential interaction between these activities and the licensing proceedings before the Commission as the outcome of these proceedings is finalized.

The requirements proposed in Phase I of the Bay-Delta Plan are critical to assessing whether the Districts' Protection, Mitigation, and Enhancement measures (PM&Es) satisfy water quality objectives and protect the beneficial uses in the LSJR. The proposed Phase I updates to the Bay-Delta Plan state that the State Water Board may implement the proposed flow objectives through water quality certifications and water right permits. It is reasonable to expect that the State Water Board will consider the outcome of the Phase I Bay-Delta Plan update process when it makes a final decision on conditions necessary and appropriate to include in the certification for the FERC relicensing of the Projects.

State Water Board staff generally sees positive benefits in the proposed PM&Es that have been submitted on behalf of the Districts. However, State Water Board staff's analysis of the Districts' PM&Es remains incomplete due to the short timeline to evaluate them and the pending proposed updates to the Bay-Delta Plan.

8. Lower San Joaquin River Water Quality Objectives

The draft Phase I changes to the Bay-Delta Plan² identify a proposed LSJR water quality objectives of 40 percent of unimpaired flow for February through June, within an adaptive management range of 30 to 50 percent, based on a minimum 7-day running average, from the Tuolumne River at United States Geological Survey (USGS) gage 1129000³. In addition, the proposal includes a base flow objective for February through June of 1,000 cubic feet per second (cfs), based on a minimum 7-day running average, at Vernalis at all times. When the percentage of unimpaired flow requirement is insufficient to meet the minimum base flow requirement, the proposal indicates that the Tuolumne River shall provide 47 percent of the additional total outflow needed to achieve and maintain the required base flow at Vernalis.

The proposal also calls for the establishment of a Stanislaus Tuolumne Merced (STM) Working Group to assist with the implementation, monitoring, and effectiveness of the LSJR flow requirements. The proposal indicates that entities who have expertise in LSJR, Stanislaus, Tuolumne, and Merced Rivers fisheries management, hydrology, operation, and monitoring and assessment needs will be invited to join, including the California Department of Fish and Wildlife, National Marine Fisheries Service, U.S. Fish and Wildlife Service, and water users on the LSJR tributaries. As additional scientific information becomes available through the monitoring and review processes, the State Water Board plans to work with the STM Group to establish adaptive adjustments that meet biological goals that will be developed for Phase I to support and maintain the natural production of viable native San Joaquin River watershed fish populations migrating through the southern Delta. The proposal allows for adaptive adjustments to flow requirements to be approved by the State Water Board on an annual or long-term basis, or by the Executive Director on an annual basis, as long as specific criteria for such adjustments are met.

Proposed adaptive adjustments include: a) the required percent of unimpaired flow may be adjusted to any value between 30 percent and 50 percent; b) the required percent of unimpaired flow for February through June may be managed as a total volume of water and released to better protect fish and wildlife beneficial uses; c) the release of a portion of the

² On September 15, 2016, the State Water Board released for public comment the Draft Revised Substitute Environmental Document in Support of Potential Changes to the Bay-Delta Plan.

³ More detailed information regarding the State Water Board's Phase I update of the Bay-Delta Plan is available at: <u>https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/bay_delta_plan/water_quality_control_planning/</u>

February through June unimpaired flow may be delayed until after June to prevent adverse effects to fisheries, including temperature; and d) the required base flow for February through June may be adjusted to any value between 800 and 1,200 cfs, inclusive.

To refine the implementation actions and provide for coordination with ongoing FERC proceedings in the LSJR watershed, the LSJR flow objectives may be phased in over time, but are proposed to be fully implemented by 2022. Under its water rights and water quality authority, the State Water Board will, as necessary and appropriate, determine the contributions from the Districts needed to implement the LSJR objectives.

State Water Board staff recommends the Commission evaluate alternatives that are consistent with the draft Phase I changes to the Bay-Delta Plan in its National Environmental Policy Act document, including flows equivalent to 40 percent of unimpaired flow from February through June and carryover storage levels that would be protective of fish and wildlife resources. State Water Board staff is happy to work with the Commission on development of such an alternative.

9. Non-Flow Measures

State Water Board staff recognizes that including non-flow measures must also be considered. Studies conducted by the Districts identified extremely low salmonid return rates and minimal juvenile Chinook salmon emigration. Habitat enhancement actions that create higher quantity and quality of salmonid spawning and rearing habitat may be needed to offset the Projects impacts. Additional habitat could be achieved through streambank grading to increase wetted area and floodplain connectivity. Higher quality habitat could be achieved through gravel augmentation, predator mitigation, large woody material placement, riparian planting, and off-channel (e.g., side channels and swales) habitat development. Implementation and effectiveness monitoring would likely be developed for any habitat enhancement measure(s).

10. Minimum Reservoir Storage

When implementing the LSJR flow objectives, the State Water Board proposes to include minimum reservoir carryover storage targets or other requirements to help ensure that providing flows to meet the flow objectives will not have adverse temperature or other impacts on fish and wildlife or, if feasible, on other beneficial uses.

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In accordance with the memorandum of understanding (MOU) executed between the Federal Energy Regulatory Commission (FERC) and the State Water Resources Control Board (State Water Board) on November 19, 2013, and to the extent that information is available. State Water Board staff is providing water quality certification (certification) preliminary terms and conditions in response to the notice of Ready for Environmental Analysis (REA) by FERC for the Don Pedro and La Grange Hydroelectric Projects (collectively, Projects), FERC Projects Nos. 2299 & 14581. The Projects are owned and operated by co-licensees Turlock Irrigation District (TID) and Modesto Irrigation District (MID) (collectively, Districts). This document is strictly preliminary in nature, and is being sent to further coordination regarding information needs and potential conditions between FERC and the State Water Board. Contrary to other recent relicensing projects, State Water Board staff reserves full analysis of the impacts of all proposed Protection, Mitigation, and Enhancement measures until more coordination has taken place between the Districts and resource agencies. This document does not reflect a decision by the State Water Board to adopt any particular term or condition, nor does it limit the State Water Board's consideration of terms or conditions different from or in addition to those presented here.

1. Minimum Instream Flows

The State Water Board will likely condition minimum instream flows in light of the whole record. The whole record includes, but is not limited to, the FERC record (including recommendations by resource agencies), the final National Environmental Policy Act (NEPA) document, the final California Environmental Quality Act (CEQA) document, the updated *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary* (Bay-Delta Plan), and the *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins* (Basin Plan).

2. Water Year Type Classification

The State Water Board will likely determine the criteria to classify water year types for the Projects-affected reaches. Water year type classification criteria for Projects-affected waters downstream of La Grange Dam will likely be based on the San Joaquin Valley 60-20-20 Index.

3. Streamflow and Reservoir Level Compliance

The State Water Board will likely require the Districts to develop and implement a Stream Flow and Reservoir Level Compliance Plan to document compliance with streamflow and reservoir level requirements in the new FERC license. At a minimum, this plan should include:

- 1. Locations where the Districts monitors streamflow and reservoir levels;
- 2. Equipment to be used by the Districts to monitor streamflow and reservoir levels in compliance with requirements of this certification;
- 3. A description of how the equipment used by the Districts to monitor streamflow and reservoir levels in compliance with the requirements of this certification is deployed, set (e.g., frequency of data collection), operated, calibrated, and maintained.
- 4. A description of how the data will be retrieved from the equipment used by the Districts to monitor compliance with the requirements in the certification related to

streamflow and reservoir levels, including frequency of data downloads, quality assurance/quality control procedures, and data storage.

5. A description of how streamflow and reservoir level data are provided to the State Water Board.

4. Large Woody Material Management Plans

The State Water Board will likely require the Districts, in consultation with relevant resource agencies, to develop and implement a plan to address for the reduction of LWM downstream of La Grange Dam. The goal of this plan is to increase the amount of LWM below La Grange Dam in order to improve downstream aquatic habitat. The Districts shall consult with representatives from the boating community (e.g., American Whitewater) to ensure LWM placement in the river is not hazardous to boaters. The Districts may also be required to monitor the implementation and effectiveness of LWM augmentation and to submit associated reports to the Deputy Director. Best management practices (BMPs) should be developed to minimize the impact to beneficial uses (e.g., turbidity and wildlife) from LWM placement and installation.

This condition will recognize that it is subordinate to safety determinations by FERC and the California Division of Safety of Dams, and shall include provisions related to safety concerns by other government entities.

5. Sediment Management Plans

The State Water Board will likely require the Districts, in consultation with the relevant resource agencies, to develop and implement a plan to facilitate coarse and fine sediment transport past La Grange Dam in the Tuolumne River. The goal of this plan is to replace sediment lost downstream of La Grange Dam in order to improve downstream habitat. The Districts may also be required to monitor implementation and effectiveness of the sediment augmentation and submit associated reports to the Deputy Director. BMPs should be developed to minimize the impact to beneficial uses (e.g., turbidity and wildlife) from initial sediment placement.

6. Water Quality Monitoring Plan

The State Water Board will likely require the Districts, in consultation with the relevant resource agencies, to develop and implement a plan to monitor water quality. This plan should include monitoring sites at the Projects' reservoirs and locations throughout affected river reaches. The monitoring sites should be adequately abundant and spatially distributed to provide data that measures potential impacts to water quality as a result of the Projects' operations. Water quality monitoring should occur at intervals during the license term to document trends in time and changes in water quality related to operational changes that may impact water quality or designated beneficial uses of water. This plan should consider *in-situ*, dissolved oxygen, recreation related water quality, and bioaccumulation monitoring components. If at any point monitoring suggests water quality conditions are in exceedance of Basin Plan water quality objectives, the Districts shall immediately notify the State Water Board and Central Valley Regional Water Quality Control Board.

7. Water Temperature Monitoring Plan

The State Water Board will likely require the Districts, in consultation with the relevant resource agencies, to develop and implement a plan to monitor potential effects on water temperature from the Projects. The objective of this plan is to monitor water temperature in Don Pedro Reservoir, La Grange Pool, and Lower Tuolumne River. This plan should include an adequate number of sites to track the changes in water temperature stored in impoundments and released below impoundments. In flowing water, the Districts should install and anchor appropriate devices to continuously record water temperature seasonally or throughout the year. In reservoirs, the Districts should monitor water temperature and thermocline depth by profile sampling near the dam to determine reservoir stratification depths. Water temperature data will be used to help determine the effects of the Projects' operations on thermal conditions.

8. Aquatic Invasive Species Management Plan

The State Water Board will likely require the Districts, in consultation with relevant resource agencies, to develop and implement a plan to manage aquatic invasive species (AIS). The goal of this plan is to establish a framework with specific activities to minimize the spread and impact of AIS on native fauna and habitats. This plan should identify and describe AIS currently established within the Projects' area and AIS with high potential to become established within the Projects' area. This plan may include, but is not limited to, the following measures:

- 1. Implement actions to minimize and prevent the introduction and spread of AIS into and throughout Projects'-affected waters.
- 2. Provide education and outreach to ensure public awareness of AIS effects and management throughout Projects'-affected waters.
- 3. Implement monitoring programs for early detection of AIS.
- 4. Ensure all the Projects' AIS management activities comply with federal and State of California laws, regulations, policies, and management plans, and with Forest Service directives and orders regarding AIS.
- 5. Monitor and minimize the spread of established AIS.

9. Erosion and Sediment Control Plan

The State Water Board will likely require the Districts, in consultation with the relevant resource agencies, to develop and implement a plan to minimize undesirable erosion or sedimentation conditions near river reaches and reservoirs caused from the Projects' operations and maintenance. This plan should contain erosion and sediment reduction protocols for ground-disturbing activities that include, but are not limited to, routine operations, maintenance, any new construction, and recreation improvements. Protocols shall abide by applicable regulations and reduce impacts to water quality within the Projects' area.

10. Hazardous Material Plan

The State Water Board will likely require the Districts, in consultation with the relevant resource agencies, to develop and implement a plan for storage, use, transportation, and

disposal of hazardous materials in the Projects' area. This plan should discuss appropriate measures and equipment required to prevent the extent of any hazardous material spill. This plan should also include protocols to prevent adverse impacts to beneficial uses in the event that hazardous materials are spilled. On-site containment for hazardous-chemical storage shall be placed away from watercourses and include secondary containment and appropriate management as specified in California Code of Regulations, title 27, section 20320. Protocols and methods in this plan shall abide by federal, state and local laws and policies.

11. Additional Conditions

In order to ensure that the Projects operate to meet water quality standards as anticipated, to ensure compliance with other relevant state and federal laws, and to ensure that the Projects will continue to meet state water quality standards and other appropriate requirements of state law over its lifetime, the certification will consider conditions regarding monitoring, enforcement, and potential future revisions. Additionally, California Code of Regulations, title 23, section 3860 requires imposition of certain mandatory conditions for all water quality certifications.

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