State Water Resources Control Board

MAY 29 2015

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

Dear Secretary Bose:

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR MERCED RIVER HYDROELECTRIC PROJECT (FEDERAL ENERGY REGULATORY COMMISSION [FERC] PROJECT NO. 2179), AND MERCED FALLS HYDROELECTRIC PROJECT (FERC PROJECT NO. 2467); MARIPOSA AND MERCED COUNTIES

On March 30, 2015, the State Water Resources Control Board (State Water Board) Division of Water Rights (Division) received the Federal Energy Regulatory Commission's (FERC) notice of issuance of the draft Environmental Impact Statement (DEIS) for the Merced River Hydroelectric Project, FERC Project No. 2179 (MR Project) and the Merced Falls Hydroelectric Project, FERC Project No. 2467 (MF Project). The MR Project is owned and operated by Merced Irrigation District (MID). The MF Project is owned by Pacific Gas and Electric Company (PG&E), and is operated by MID and PG&E.

On July 21, 2014, in accordance with Item 2 under the Post-Application Filing Activities under the Integrated Licensing Process section of the memorandum of understanding executed between FERC and the State Water Board on November 19, 2013, and to the extent that information was available, State Water Board staff provided comments and preliminary terms and conditions in response to FERC's Ready for Environmental Analysis (REA). On February 7, 2012, PG&E, submitted a Final License Application (FLA) for the MF Project to FERC. On April 23, 2014, MID submitted an amended FLA[1] for the MR Project to FERC. FERC used PG&E's FLA, and MID's amended FLA to develop a National Environmental Policy Act DEIS document that contains required measures related to licensing for the continued operation of the MR and MF Projects. State Water Board staff's comments on the MF Project and MR Project DEIS are enclosed.

If you have any questions regarding this letter or the attached comments, please contact me at (916) 323-9389 or by email at amber.villalobos@waterboards.ca.gov. Written correspondence should be directed to:

State Water Resources Control Board
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Water Quality Certification Program
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[1] Final License Application submitted to FERC on February 26, 2012.

Sincerely,

ORIGINAL SIGNED BY:

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Water Quality Certification Program

Enclosure: Attachment A – Comments on the DEIS for the Merced River and Merced Falls Hydroelectric Projects

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ATTACHMENT A:
COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT
FOR THE MERCED RIVER AND MERCED FALLS HYDROELECTRIC PROJECTS

The following comments are provided by the State Water Resources Control Board (State Water Board) staff on the draft Environmental Impact Statement (EIS) issued by the Federal Energy Regulatory Commission (FERC) for the Merced River Hydroelectric Project (MR Project), FERC Project No. 2179 and the Merced Falls Hydroelectric Project (MF Project), FERC Project No. 2467. The MR Project is owned and operated by Merced Irrigation District (MID). The MF Project is owned by the Pacific Gas and Electric Company (PG&E), and is operated by PG&E and MID.

State Water Board Authority

MID and PG&E must obtain water quality certification (WQC) from the State Water Board, pursuant to Section 401(a)(1) of the Federal Clean Water Act (CWA) (33 U.S.C. §1341(a)(1)). Section 401 of the CWA requires any applicant for a federal license or permit which may result in any discharge to navigable waters, to obtain WQC from the state in which the discharge originates that 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 MR and MF 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).)

Designated Beneficial Uses of Merced River

The Central Valley Regional Water Quality Control Board (Central Valley Region) has adopted, and the State Water Board and the US Environmental Protection Agency (EPA) approved, the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan). The latest version of the Basin Plan can be found at: http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr.pdf. The Basin Plan designates the beneficial uses of waters within each watershed basin and water quality objectives designed to protect those uses. Section 303 of the Clean Water Act requires the states to develop and adopt water quality standards (33 U.S.C. § 1313.). The beneficial uses together with the water quality objectives that are contained in the Basin Plan constitute state water quality standards under section 303.

The existing beneficial uses currently designated for the Merced River from the headwaters to Lake McClure include irrigation, power, contact and non-contact water recreation, canoeing and rafting, warm and cold freshwater habitat, and wildlife habitat. Municipal and domestic supply is designated as a potential use for this segment of the river. The existing beneficial uses currently designated for the Merced River for Lake McClure and McSwain Reservoir include irrigation, power, contact and non-contact water recreation, warm and cold freshwater habitat, and wildlife habitat. Municipal and domestic supply is designated as a potential use for this segment of the river. The existing designated beneficial uses for the Merced River from the downstream end of McSwain Reservoir to the confluence with the San Joaquin River include municipal and domestic supply, stock watering, process, service supply, power, contact and non-contact water recreation, canoeing and rafting, warm and cold freshwater habitat, warm and cold migration (includes salmon and steelhead), warm and cold spawning (includes salmon and steelhead), and wildlife habitat. The Basin Plan further clarifies that any segment with both warm and cold freshwater habitat beneficial use designations will be considered cold water

bodies for the application of water quality objectives and the beneficial uses of any identified water body generally apply to its tributary streams.

Deadman Creek is a tributary to Mariposa Slough to Bear Creek to the San Joaquin River. The existing designated beneficial uses for the San Joaquin River from Sack Dam to the mouth of the Merced River include irrigation, stock watering, process, contact recreation, canoeing and rafting, other non-contact recreation, warm freshwater habitat, warm and cold migration (includes salmon and steelhead, as well as striped bass, sturgeon and shad), warm and cold spawning (includes striped bass, sturgeon and shad) and wildlife habitat. Municipal and domestic supply as well as cold spawning (includes salmon and steelhead) are designated as a potential use for this segment of the river.

303(d) Listed Impairments

Section 303(d) of the Clean Water Act requires the identification of waterbodies that do not meet, or are not expected to meet, water quality standards (i.e., impaired waterbodies). The current list approved by the EPA is the 2008-2010 303(d) list. The 303(d) list includes impairments in the vicinity of the MR and MF Projects for the following pollutants or stressors in the lower Merced River (defined as McSwain Reservoir to the confluence with the San Joaquin River): chlorpyrifos, diazinon, Group A pesticides, mercury, Escherichia coli, unknown toxicity and water temperature. McClure Reservoir is also 303(d) listed due to impairment caused by mercury.

Cumulative Effects

There are potential cumulative effects of the MR and MF Projects on water resources, aquatic resources, and threatened and endangered species. With respect to water resources, the 303(d) listing of the lower Merced River as impaired due to temperature is evidence that water quality objectives are not being met downstream of the MR and MF Projects. As stated previously, the segment of the Merced River downstream of McSwain Reservoir to the confluence with the San Joaquin River includes beneficial use designations for cold freshwater habitat, cold migration and cold spawning. The 303(d) listing is based upon information submitted by the California Department of Fish and Wildlife (CDFW or CDFG or Cal Fish and Wildlife or Department) in the form of a report entitled “Temperature Water Quality Standards for the Protection of Anadromous Fish in the Stanislaus River, Merced River, Tuolumne River, and the San Joaquin River”. This report provides an overview of how altered temperature conditions in both the San Joaquin River and its major tributaries (including the Merced River) may be affecting anadromous fish populations. During the Merced River 303d listing review, CDFW stated the following:

> “The Department believes that one critical factor limiting anadromous salmon and steelhead population abundance is high water temperatures which exist during critical life-stages in the tributaries and the main-stem. This results largely from water diversions, hydroelectric power operations, water operations and other factors” (EPA 2011).”

It is important to consider the potential cumulative impacts of the MF Project and the multiuse MR Project on both water quality and fisheries resources in the Merced River and Deadman Creek. A major factor that contributes to high water temperature is the reduction of instream

flow due to major diversion of Merced River flow at MID's Crocker-Huffman Dam. Any WQC issued must include conditions that show that the operation of the MR and MF Projects are consistent with water quality objectives and protective of the designated beneficial uses for the Merced and San Joaquin Rivers.

California Environmental Quality Act

Action on a WQC application is a discretionary act and is subject to the California Environmental Quality Act (CEQA). MID will act as the lead agency in satisfying CEQA requirements for relicensing of the MR Project, while the State Water Board will be a responsible agency. Meanwhile, the State Water Board will be the lead agency in satisfying CEQA requirements for the MF Project. CEQA requires an analysis of the environmental impacts of the project, including cumulative impacts; the identification of mitigation measures that could minimize any significant effects on the environment; and a monitoring-reporting program to ensure compliance with those mitigation measures adopted by the lead agency. CEQA Guidelines encourage the preparation of joint federal and state environmental documents or the reuse of existing federal National Environmental Protection Act (NEPA) documents (Cal. Code Regs. tit. 14, §§ 15221, 15222, 15226). FERC issued a draft EIS for NEPA compliance. The draft EIS covered the MR and MF Projects. The MF Project is immediately downstream of the MR Project. The State Water Board staff encourages MID to work closely with FERC staff to provide guidance on how the NEPA process can best satisfy both state and federal requirements and to work with State Water Board staff to determine extent of CEQA analysis required to act on a request for WQC.

MR Project operations, through water releases from New Exchequer and McSwain Dams, influence water quantity and water quality throughout the lower Merced River extending downstream into the San Joaquin River to the Delta. Specifically, the MR Project controls the amount of water released into the Merced River below New Exchequer Dam, and is therefore capable of influencing both water quality and freshwater habitat conditions downstream of the Project to the Sacramento-San Joaquin Delta. For this reason, a geographic scope that extends downstream into the San Joaquin River to the boundary of the Delta at Vernalis is necessary.

Concurrent Proceeding

There are existing proceedings underway, both at the state and federal level, that may affect how MID manages the water resources stored in Lake McClure under its various water rights. Among these is the State Water Board Bay-Delta Program's release of the Draft Substitute Environmental Document in Support of Potential Changes to the Water Quality Control Plan for the Bay Delta: San Joaquin River Flows and Southern Delta Water Quality (Bay-Delta SED). The draft Bay-Delta SED recommends 35 percent of unimpaired flow for the Merced River in February through June. The final Bay-Delta SED may require instream flow that range from 25 to 60 percent of unimpaired flow. While the final outcome of these proceedings is not yet known, it is important to consider the potential interaction between these activities and the relicensing proceedings before FERC. As stated in the State Water Board's July 18, 2013, correspondence to MID and relicensing participants, it is reasonable to expect that the State Water Board will consider the outcome of the Bay-Delta SED process when it makes a final decision on conditions necessary and appropriate to include in the WQC for the FERC relicensings on the Merced River.

Specific Comments for the Merced River Project

Executive Summary

1) Page xxiii: *"MID proposes no new capacity and no new construction at the project".*

   Comment: State Water Board staff request that FERC revise/clarify this statement. While MID did not propose any hydroelectric production related construction, MID did propose new construction related to Project recreation facilities (see page xxx of the draft EIS).

2) Page xxxi: *"Under the staff alternative, the project would also include most…and the Water Board's mandatory water quality certification conditions with the exception of the following due to cost and project nexus considerations:…(2) annual consultation to review the project status for newly listed species; (3) a fish passage or habitat restoration plan; and (4) a review of federally listed and special-status species lists".*

   Comment: While FERC does not recommend the mandatory conditions, FERC recognizes that the mandatory conditions shall be included as part of the license. Thus, FERC should include an analysis of these mandatory conditions in the NEPA document.

3) Page x1: "*The Water Board issued preliminary WQC conditions for the Merced River and Merced Falls Projects pursuant to section 401 of the Clean Water Act by letter dated July 22, 2014*."

   Comment: State Water Board staff request that FERC include additional background language noting this is the first time the State Water Board has released preliminary conditions per Item 2 under the Post-Application Filing Activities section of the memorandum of understanding[1] (MOU) between FERC and the State Water Board.

Clean Water Act

4) Page 9: "*The WQC is due by May 20, 2015*".

   Comment: State Water Board recommends removal of this timeline. A certified CEQA document is required prior to acting on a WQC application. State Water Board staff does not anticipate MID to issue a draft or certified CEQA document prior to FERC's release of the final EIS.

Endangered Species Act

5) Page 9: "*Five federally listed animal species…occur or potentially occur in the project area: San Joaquin Kit fox…and vernal pool fairy shrimp (Branchinecta lynchi)*…"

   Comment: State Water Board staff recommend inclusion of Conservancy fairy shrimp in the list of federally listed species. According to the US Fish and Wildlife Service (USFWS) Environmental Conservation Online System Conservancy fairy shrimp (*Branchinecta conservatio),* occur or potentially occur in the MR Project area and are

[1] Memorandum of Understanding between the Federal Energy Regulatory Commission and the California State Water Resources Control Board Concerning Coordination of Pre-Application Activities for Non-Federal Hydropower Proposals in California (November 19, 2013).

federally listed as Endangered (USFWS 2015). MID Technical Memo 7.3 classified Conservancy fairy shrimp habitat to only include large pools although, the habitat requirements of Conservancy fairy shrimp are not fully understood. Conservancy fairy shrimp were found in Butte, Solano, and Placer Counties in small pools (Yolo 2009 and USFWS 2007 pg. 17). Since MID did not perform sampling of Conservancy fairy shrimp, it is possible that Conservancy fairy shrimp may be present in small pools found in the MR Project area and for the MR Project to have a negative effect on Conservancy fairy shrimp.

Conservancy fairy shrimp (*Branchinecta conservatio)* and vernal pool fairy shrimp *(Branchinecta lynchi)* were included in the State Water Board staff's preliminary WQC condition No. 6. State Water Board staff note the goal of the MOU between FERC and the State Water Board is to coordinate activities, ultimately leading to issuance of environmental documents that satisfy the legal requirements of NEPA and CEQA and otherwise meet the Commission's and the State Water Board's needs.

Fall Pulse Flow

6) Page 406: "…*We therefore recommend a fall pulse flow release of 1,000 cfs during October or November until a total volume of 12,500 acre-feet is released, including the volume of water associated with the staff-recommended minimum flow during this period.*"

Comment: MID's water right licenses (Nos. 2685, 6047, and 11395) includes a condition which requires MID to "*provide 12,500 acre-feet of additional water in the month of October in all year types as measured above its current requirement of 2,350 acre-feet or 3,124 acre-feet (at Shaffer Bridge) as defined in the FERC license for the Exchequer Merced River Project*." FERC's staff recommended alternative allows MID to release this fall pulse flow in October or November, although MID is limited to only October for the fall pulse flow release per their water right licenses.

Merced National Wildlife Refuge Water Delivery Plan

7) Page 411: *"……we recommend that MID develop a Merced National Wildlife Refuge (NWR) water delivery plan in consultation with USFWS and CDFW, to ensure to the extent reasonably practical, the delivery of 15,000 acre-feet to the refuge during times of the year when this water would provide the most benefit to wildlife".*

Comment: State Water Board staff support the inclusion of a plan in the upcoming MR FERC license to improve and continue the delivery of 15,000 acre-feet to the refuge during times of the year when the water would provide the most benefit to wildlife.

Water Quality

8) Page 78: "*Existing designated, beneficial uses from McSwain reservoir downstream to the San Joaquin River are: Municipal and domestic water supply, stock watering, industrial process and service supply, hydropower generation, contact and non-contact recreation, warm and cold freshwater habitat, migration of warm and coldwater aquatic organisms, spawning of warmwater and coldwater fishes, and wildlife habitat*."

Comment: State Water Board staff recommend revising this statement to include canoeing and rafting as an existing beneficial use[2]; and also noting any water bodies or segments with both cold and warm freshwater habitat beneficial use designations will be considered cold freshwater habitat for the application of water quality objectives[3].

9) Page 80: "*Water shall not contain individual pesticides or a combination of pesticides in concentrations that adversely affect beneficial uses*".

Comment: According to the Basin Plan, pesticide pertains to all levels of pesticide use and states that the term pesticide shall include: (1) any substance, or mixture of substances which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, which may infest or be detrimental to vegetation, man, animals, or households, or be present in any agricultural or nonagricultural environment whatsoever, or (2) any spray adjuvant, or (3) any breakdown products of these materials that threaten beneficial uses. Note that discharges of "inert" ingredients included in pesticide formulations must comply with all applicable water quality objectives (California 1998). As defined by the Basin Plan the term "*pesticide"* includes but is not limited to pesticides, herbicides and any other ingredients.

10) Page 136: "*MID proposes to rehabilitate and construct new recreation facilities at Lake McClure and McSwain reservoir*".

Comment: State Water Board staff support FERC's required erosion control and restoration plan measures.

Managing and Monitoring Water Temperatures

11) Page 168: "*Construction of a pipe to deliver water released from Lake McClure to Crocker-Huffman diversion dam would require 7.5 to 10-miles of construction. Reducing the amount of cold water released into McSwain reservoir would increase the temperature of water released from McSwain dam, [which] could cancel out of the beneficial temperature effects to the lower Merced River*".

Comment: Operation of a pipe to deliver cold water to Crocker Huffman was not fully explored, developed, or modeled in the licensing process. Since current MR Project operations do not provide water temperatures protective of the beneficial uses in the lower Merced River this option and other engineering solutions should be fully explored, developed, and included in the NEPA analysis.

Project Reservoir Management

12) Page 184 and 185: "*Maintaining the recommended higher Lake McClure storage level would have an effect on the water available for delivery to irrigators…Dry warm summers create stressful conditions for salmonids in the lower Merced River and for irrigators that depend on the water supply that had been provided by MID long before the project was operated for hydroelectric power generation".*

[2] Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Table II-1.
[3] Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Table II-1.

Comment: This information, regarding competing needs for water supply, supports the need for preservation of an appropriate amount of carryover storage that will ensure water is available for all beneficial uses. The State Water Board reserves the right to condition minimum pool requirements for Lake McClure in light of the whole record. The whole record includes but is not limited to the FERC record (i.e., recommendation by the resource agencies), the final NEPA document, and the final CEQA document.

Minimum Instream Flows

13) Page A-10: This page contains FERC staff's alternative recommended minimum instream flows.

Comment: On December 2012, the State Water Board released a draft Bay-Delta SED. The draft Bay-Delta SED's preferred alternative required release of 35 percent of unimpaired flow February through June in the Merced River. Although, the State Water Board is evaluating 20 to 60 percent of unimpaired flow.

FERC's draft EIS minimum instream flows in February through June are less than 35 percent of unimpaired flow, all time periods and water year types, except February, and April 16-30 in below Normal water year types, March 16-31 in Dry water year types, and April 16-30 in Critically dry water year types. FERC's draft EIS flows for February in all water year types range from 14 to 35 percent of unimpaired, March range from 8 to 31 percent of unimpaired, April range from 17 to 46 percent of unimpaired flow, May range from 13 to 32 percent of unimpaired, and June range from 4 to 22 percent of unimpaired[4].

The State Water Board reserves the right to condition minimum instream flows in light of the whole record. The whole record includes but is not limited to the FERC record (i.e., recommendation by the resource agencies), the final NEPA document, and the final CEQA document.

<u>Specific Comments for the Merced Falls Project</u>

Executive Summary

14) Page xxxviii: *"Under the staff alternative, the project would also include most…and the Water Board's mandatory water quality certification conditions with the exception of the following due to cost and project nexus considerations: (1) a gravel augmentation plan for Merced Falls reach; (2) a fish passage plan; and (3) a review of federally listed and special-status species lists".*

Comment: While FERC does not recommend the mandatory conditions, FERC recognizes that the mandatory conditions shall be included as part of the license. Thus, FERC should include an analysis of these mandatory conditions in the NEPA document.

15) Page x1: "*The Water Board issued preliminary WQC conditions for the Merced River and Merced Falls Projects pursuant to section 401 of the Clean Water Act by letter dated July 22, 2014*."

[4] These percents of unimpaired flows do not include additional cubic feet per second (cfs) resulting from the release of pulse flows.

Comment: State Water Board staff request that FERC include additional background language noting this is the first time the State Water Board has released preliminary conditions per Item 2 under the Post-Application Filing Activities section of the MOU between FERC and the State Water Board.

16) Page 12: "*The WQC is due by May 20, 2015*".

Comment: State Water Board recommends removal of this timeline. A certified CEQA document is required prior to acting on a WQC application. State Water Board staff does not anticipate issuance of a draft or certified CEQA document prior to FERC's release of the final EIS.

References

California Regional Water Quality Control Board, Central Valley Region. 1998. Water Quality Control Plan for the Sacramento River and San Joaquin River Basins. Fourth Edition. September 15, 1998.

EPA. 2011. Final Decision Regarding the Water Bodies and Pollutants USEPA added to California's 2010 303(d) List. October 11, 2011.

USFWS. 2015. Environmental Conservation Online System. Species Profile, Conservancy Fairy Shrimp. http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=K03D. Accessed on May 6, 2015.

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