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Attorneys for MERCED IRRIGATION DISTRICT

BEFORE THE

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of: California State Water Resources Control Board, Investigation Order WR 2011-0003-EXEC.	PETITION FOR RECONSIDERATION OF INVESTIGATION ORDER (WATER CODE SECTIONS, 1058, 1122, and 1123; CALIFORNIA CODE OF REGULATIONS, TITLE 23 SECTION 769(a)); REQUEST FOR STAY (WATER CODE SECTION 13321; CALIFORNIA CODE OF REGULATIONS, TITLE 23, SECTION 2053)

Petitioner Merced Irrigation District (hereinafter "MID"), pursuant to Sections 1058, 1122 and 1123 of the California Water Code and Title 23 Section 769(a) of California Code of Regulations, hereby petitions the State Water Resources Control Board (hereinafter "SWRCB") for reconsideration of Investigation Order WR 2011-0003-EXEC.

1. NAME, ADDRESS, TELEPHONE AND EMAIL FOR PETITIONER:

Bryan Kelly, Director of Regulatory Compliance and Government Affairs (Water)
Merced Irrigation District
P.O. Box 2288
Merced, CA 95344-0288
Telephone: (209) 722-5761
Email: bkelly@mercedid.org

In addition, all materials in connection with this Petition for Reconsideration should also be provided to MID's counsel at the following address:

Kenneth M. Robbins
Mason, Robbins, Browning & Godwin
700 Loughborough Drive, Suite D
Merced, CA 95348
Telephone: (209) 383-9334
Facsimile: (209) 383-9386
Email: kmr@mrgb.org

2. The specific board action of which petitioner requests reconsideration:

MID requests reconsideration of Investigation Order WR 2011-0003 – EXEC, adopted by the SWRCB on January 28, 2011, a true and correct copy of which is attached to Petitioner's Statement of Points and Authorities. In addition, MID requests a hearing before the SWRCB.

3. The date on which the order or decision was made by the board.

The SCWRC adopted Investigation Order WR 2011-0003 – EXEC on January 28, 2011.

4. The reason the action was inappropriate or improper.

As explained in greater detail in Petitioner's Statement of Points and Authorities, the executive director acted improperly when he ordered MID to furnish burdensome information supposedly required by the SWRCB.

Pursuant to California Code of Regulations Title 23 Section 768, the order was improper because of:

A. Irregularity in the proceedings, or a ruling, or abuse of discretion, by which the person was prevented from having a fair hearing. Neither the code nor the regulations provide for an investigation order issued to a potential Clean Water Act Section 401 (hereinafter "CWA 401") certification applicant. Further, MID was not provided any hearing. The issuance of the Order constitutes an abuse of discretion.

B. The order is not supported by substantial evidence. The scope of the order goes far beyond the Project effects.

C. Error in Law. The order far exceeds the purpose and scope of CWA 401. SWRCB fails to address that its actions are preempted by federal law. SWRCB sites various California Water Code Sections that are both inapplicable and unavailing. SWRCB exceeds their authority under the Porter-Cologne Water Quality Control Act. SWRCB's actions are preempted by federal law.

5. The specific action which petitioner requests.

Petitioner seeks an Order by the SWRCB that cancels Investigation Order WR 2011-0003 – EXEC.

6. A statement that copies of the petition and any accompanying materials have been sent to all interested parties.

A true and correct copy of the petition and any accompanying materials have been sent via First Class mail on February 28, 2011 to all interested parties listed below:

Tim Heyne
Senior Environmental Scientist
California Department of Fish and Game
P.O. Box 10
La Grange, CA 95329

J. Scott Foott
U.S. Fish and Wildlife Service
California-Nevada Fish Health Center
24411 Coleman Hatchery Rd.
Anderson, CA 96007

Ken Landau
Assistant Executive Officer
Central Valley Regional Water Quality Control Board
11020 Sun Center Dr., Suite 200
Rancho Cordova, CA 95670

7. Petitioner's Request for Stay

Pursuant to Water Code Section 13321 and Title 23, California Code of Regulations section 2053, MID requests that SWRCB immediately stay Investigation Order WR2011-0003-EXEC, pending the outcome of this proceeding. The Request for Stay is based on substantial harm to MID, the lack of substantial harm to others and the public, and substantial questions of fact or law and is supported by the

Statement of Points and Authorities, the Declaration of Arthur F. Godwin (see Exhibit "D") and the Declaration of James Lynch (see Exhibit "B"), all of which are attached hereto.

DATED: February 28, 2011

Respectfully submitted,

Arthur F. Godwin
Mason, Robbins, Browning & Godwin
Attorneys for Petitioner, Merced Irrigation District

KENNETH M. ROBBINS, #72389
ARTHUR F. GODWIN, #143066
RICHARD T. MARCHINI, #255871
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Attorneys for MERCED IRRIGATION DISTRICT

BEFORE THE

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of: California State Water Resources Control Board, Investigation Order WR 2011-0003-EXEC.	STATEMENT OF POINTS AND AUTHORITIES IN SUPPORT OF PETITION FOR RECONSIDERATION OF INVESTIGATION ORDER (WATER CODE SECTIONS, 1058, 1122, and 1123; CALIFORNIA CODE OF REGULATIONS, TITLE 23 SECTION 769(a))

I. Introduction/Statement of Facts

Merced Irrigation District (hereinafter "MID") is an irrigation district formed in 1919 under the Irrigation District Law (codified as Division 11 of the California Water Code). MID owns, operates and maintains the New Exchequer and McSwain dams, reservoirs, and hydroelectric facilities. The two dams and reservoirs are integral parts of the 1964 Merced River Development Project (hereinafter "Project"), and are licensed by the Federal Energy Regulatory Commission (hereinafter "FERC").

The initial FERC license for the Project expires February 28, 2014. Merced ID has begun the process of applying to FERC for a new license using FERC's Integrated Licensing Process (hereinafter "ILP"), as described in Title 18 of the Code of Federal Regulations, Subchapter B, Part 5. Consistent with these regulations, MID filed with FERC a notice of intent to apply for a new license and a pre-

application Document on November 3, 2008. MID has also filed a proposed and revised study plan and thereafter submitted their Initial Study Report to FERC on November 15, 2010. MID plans to file an application for a new license by February 28, 2012.

On January 28, 2011, State Water Resources Control Board (hereinafter "SWRCB" or "State Board") issued an Investigation Order, WR 2011-0003 – EXEC (hereinafter "Order"), which ordered MID to furnish information following a determination by SWRCB that "insufficient information exists to adequately assess the impacts of Merced ID Merced River Hydroelectric Project ... on water quality and beneficial uses in the Merced River." Most of these studies have been previously requested by the SWRCB and other interested parties to the Project relicensing proceeding. These studies were rejected by FERC in its Study Plan Determination (September 14, 2009). On October 5, 2009, the SWRCB and others filed a notice of study dispute pursuant to Section 5.14 of the ILP regulations. Included in the notice were sixteen studies including Water Quality Study, Bioaccumulation Study, Instream Flow (PHABSIM) Study, Chinook Salmon Egg Viability Study, and Anadromy Salmonid Habitat Study. At the conclusion of a technical conference chaired by 3-person Dispute Resolution Panel, FERC issued its Final Study Plan Determination (attached hereto as Exhibit "A"), in which FERC rightly determined that studies previously requested by SWRCB were not required by the ILP regulations and would not inform FERC or the participants of potential license conditions. Rejected by FERC, the SWRCB issued the Order in a misguided effort to subvert federal law.

The Order further states that the information is needed to develop conditions for the Clean Water Act Section 401 (codified in 33 U.S.C. §1341) water quality certification and ensure compliance with the Clean Water Act. MID has yet to file an application for water quality certification, which will initiate the process of compliance with the Clean Water Act Section 401.

It is upon these facts that MID petitions SWRCB for reconsideration of the Order.

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II. Argument

A petition for reconsideration of an order may be based on any of the following causes: 1. Irregularity in the proceedings, or any ruling, abuse of discretion, by which the person was prevented from having a fair hearing; 2. The decision or order is not supported by substantial evidence; 3. There is relevant evidence which, in the exercise of reasonable diligence, could not have been produced; and 4. Error in law. (California Code of Regulations Title 23, Section 768.) Causes 1, 2, and 4 apply to this petition for reconsideration and we discuss each in turn.

A. Irregularity in the Proceedings; Abuse of Discretion; No Fair Hearing

SWRCB has cited water quality certification under Section 401 of the Clean Water Act as authority for the Investigation Order. Any applicant for a Federal license which may result in a discharge in any navigable waters must provide the permitting agency a certification from the state, which certifies that discharges authorized by federal permits will not violate the state's water quality standards. (Clean Water Act §401) This process is initiated with an application for certification with the state. (*Id.*) MID has not applied to the State of California for water quality certification and thus has not begun the process of obtaining water quality certification under Section 401 of the Clean Water Act. Therefore, SWRCB has no authority under Section 401 of the Clean Water Act to obtain or provide information related to water quality certification.

Further, not only did MID not receive a fair hearing, it received no hearing. As stated above, FERC already has rightly determined that the studies previously requested by SWRCB were not required by the ILP regulations and would not inform FERC or the participants of potential license conditions.

There is nothing in the Porter-Cologne Water Quality Control Act (Water Code § 13000 et seq.) nor the SWRCB's regulations (Title 23, California Code of Regulations) that authorizes the SWRCB to issue an "Investigation Order". Such an action by the SWRCB constitutes an abuse of discretion.

Because MID has not applied for certification under Section 401 of the Clean Water Act the Investigation Order issued by SWRCB was both untimely and irregular. MID was also never given the opportunity to have a fair hearing. Therefore, the Order should be overturned.

B. Order is Not Supported by Substantial Evidence

In the Order, SWRCB states that the information requested in this Order is "required to assess direct, indirect and cumulative impacts of MID's Project on water quality and fisheries habitat in the Merced and San Joaquin River." (Order, p. 7, ¶19.) Gathering information to determine effects on water quality remains inapplicable because MID has not yet applied for certification under Section 401 of the Clean Water Act.

Notwithstanding the fact that MID has not submitted an application, the cost and burden of the studies required by the SWRCB must bear a reasonable relationship to the need for and the benefits obtained from the reports. (Cal. Water Code §13165.) Much of the request is for collecting data that has nothing to do with Project operations, but instead seeks to obtain information on the quantity and quality of irrigation water return flows from MID's irrigation system and irrigation return flows from the entire Merced River and San Joaquin River watersheds. SWRCB even admits that the data can be used for review and potential amendments to the Bay-Delta Plan and for preparation of total maximum daily load amendments to the Water Quality Control Plan for the Sacramento and San Joaquin River Basins, neither of which has anything to do with 401 certification. In addition, the studies request information that is currently being collected or has been collected by MID and other entities in the watershed and is largely duplicative of those efforts. The most astounding burden facing MID in complying with the Order is the huge cost involved. By the estimation of James Lynch, consultant to MID on the Project, the broad scope of the studies ordered by SWRCB in the Order could cost between $3,480,000 and $7,315,000 over the next two or three years. (See Declaration of James Lynch ¶7, attached hereto as Exhibit "B".) SWRCB has failed to provide substantial evidence to show a reasonable relationship between the need for the reports and the costs and burden of the studies.

Furthermore, the scope of the order goes well beyond the Project effects and includes, for example, water quality sampling for pesticides in the San Joaquin River. There is nothing in the order that indicates how Project operations are causing violations of the water quality parameters to be sampled or how terms and conditions in a 401 certification could meet these water quality objectives. Using SWRCB's logic, they could have required sampling all the way through the Delta and into the Bay without providing substantial evidence supporting the studies. SWRCB has failed to provide substantial evidence to show how Project operations are affecting the water quality parameters required to be studies in the Order.

Thus, SWRCB has failed to provide substantial evidence justifying the Order and the Order should therefore be overturned.

C. Error in Law

1. Clean Water Act Section 401

Clean Water Act Section 401 requires states to issue a water quality certification addressing the aquatic resource impacts of federally issued permits and licenses prior to issuance of the federal license. Despite the seemingly exclusive authority to issue the water quality certification, the state's authority under section 401 is "not unbounded". (*PUD No. 1 of Jefferson County, etc. v. Washington Dept. of Ecology* (1994) 511 U.S. 700.) The project here is the renewal and continued operation of the FERC license for the Merced River Hydroelectric Project consisting of the New Exchequer and McSwain hydroelectric projects. FERC defines the geographic scope for water quality in their Scoping Document 2 by stating, "For water quality, we have tentatively identified areas within the current project boundary downstream to include the segment between Merced Falls Hydroelectric Project (FERC No. 2467) and Crocker-Huffman Diversion Dam as well as the approximately 7 mile-long section of the Merced River between Crocker-Huffman Diversion Dam and Snelling Road Bridge." (FERC Scoping Document 2, p. 10, attached hereto as Exhibit "C".)

The Investigation Order issued by SWRCB goes well beyond the purpose and scope of 401. As stated above, the SWRCB's purpose in issuing the order is to gather information needed by staff to make a 401water quality certification. However, this is not even applicable since no 401 application has yet been filed by MID. Despite the premature nature of the Order, SWRCB also exceeds the geographic scope of the Project, for purposes of water quality, by extending the studies many miles past the end of the geographical scope established by FERC. FERC states that the geographic scope shall end at the Snelling Road Bridge. On the other hand, SWRCB has included studies in the Order that extend more than 100 miles downstream of the bridge and into the San Joaquin River, well outside the limits of any Project-caused effects.

If the SWRCB requires additional information as they claim, then the time for requesting additional information is *after* the application has been filed (Title 23, California Code of Regulations, Section 3836.) SWRCB's Order requests information prior to the receipt of an application and before determining that the application is complete. (*Id.*) The issuance of the Order is both premature and in direct contravention of both Federal and State law requiring a complete application to be received before requesting further information.

The focus of the 401 certification should be on the operation of the hydroelectric project and its effects on water quality. The project that will be the subject of the 401 application is the relicensing of the Exchequer and McSwain hydroelectric projects, not the entire operation of the MID, the operation of the Merced Falls Hydroelectric Project, or the operation of Crocker-Huffman Dam. "[I]t is incumbent upon the State Water Board, as the designated water pollution control agency, to ensure that the operation of the *Project*...will comply water quality objectives." (Order, p. 5 ¶14.) (Emphasis added.) The Investigative Order goes far beyond anything remotely connected to the Project. The Project discharges no pesticides and yet the Investigative Order requires water quality sampling for pesticides many miles downstream of the Project and even *upstream* of the confluence of the Merced and San Joaquin rivers. No *E. coli* is discharged by the Project yet the Investigative Order requires water quality

sampling for *E. coli* many miles downstream of the Project. There are countless drains and discharges between the Project boundary and the scope of the Investigative Order. Most of these are outside the boundary of the MID and are therefore outside of its control. Although MID has some drains that return flow into the Merced River, these drains are connected to MID's irrigation system and are not related to the hydroelectric facilities. These drains are regularly sampled by MID as part of the Irrigated Lands Regulatory Program. The purpose of CWA § 401 was to ensure that the project receiving a federal license would not adversely affect water quality or state water quality objectives, not to guarantee that all water quality objectives would be met regardless of whether or not the pollutants are discharged by the project or have anything to do with project operations.

2. California Water Code §13383

SWRCB states that the Order was prepared pursuant to Water Code Section 13383. California Water Code Section 13383 addresses the State Board's ability to establish monitoring, reporting and other requirements for any person who discharges material to navigable waterways. (Cal. Water Code §13383.) Section 13383 falls under Chapter 5.5, which addresses National Pollutant Discharge Elimination System (hereinafter "NPDES") permits under the Federal Water Pollution Control Act. The purpose of the chapter is clearly to provide a permit system to regulate the discharge of pollutants and dredged or fill material to navigable water of the United States. (Cal. Water Code § 13370.) This is evident by references to sections 13376 and 13377 in section 13383—the monitoring, reporting, and record keeping requirements apply to those filing reports of waste discharge. Water Code §13383 is not applicable here because MID is not applying for a discharge permit. In fact, the SWRCB has no authority or ability in this instance to issue a waste discharge permit because the "discharge" at issue here is from a FERC-licensed hydroelectric project. (See *Karuk Tribe v. California Regional Water Quality Control Board* (2010) 183 Cal. App. 4th 330 (*Karuk*).)

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3. California Water Code §13267

Water Code § 13267 cited in the Order authorizes *regional boards* to investigate water quality when establishing or reviewing water quality control plans or waste discharge requirements, or in connection with any action relating to a plan or requirement authorized by this division. (Cal. Water Code §13267.) Water Code § 13267(b)(1) provides that the *regional board* may require any person who has discharged waste within the region to furnish technical or monitoring reports. (Cal. Water Code § 13267(b)(1).) The board is required to provide a written explanation with regard to the need for the reports, identifying the evidence that supports requiring the reports. (*Id.*) No section save for section (d) of Water Code §13267 confers any authority upon the State Board, and section (d) only applies to a discharger of wastes or fluids to an injection well. (Cal. Water Code §13267(d).) None of these sections have any application to MID or confer any authority for the Order issued by SWRCB.

Notwithstanding the fact that Section 13267 does not apply to MID, the section further requires that the burden of furnishing technical or monitoring reports, including costs, shall bear a reasonable relationship to the need for reports and the benefits to be obtained. (Cal. Water Code § 13267(b)(1).) The fourteen items ordered by SWRCB require expensive ($3,480,000 to $7,315,000, see attached Declaration of James Lynch ¶7.) and excessive testing to be completed by MID. The Order does not include any benefits of significance that would justify the enormous cost, time to conduct the studies and need for the requested reports. There is no written explanation with regard to the need for the reports and no identification of the evidence that supports requiring the reports. Thus, SWRCB cannot provide evidence of a reasonable relationship between the costly burden and the benefit of the reports.

4. Federal Preemption

The Project is currently licensed by FERC and the relicensing process is being conducted in accordance with federal laws and regulations. The Supreme Court in, *California v. FERC* reiterated the conclusion that the Federal Power Act occupies the field of hydropower regulation. (*California v. FERC* (1990) 495 U.S. 490, 499, 506). However, the Clean Water Act gives states a very substantial

role by requiring applicants for federal licenses to comply with state water quality procedures. (*Karuk, supra*, 183 Cal. App. 4th 330 at 359-360.) Thus, "only when states attempt to act outside of this *federal* context and this *federal* statutory scheme under authority of independent state law that such collateral assertions of state power are nullified." (*Karuk, supra*, 183 Cal. App. 4th 330 at 360.)

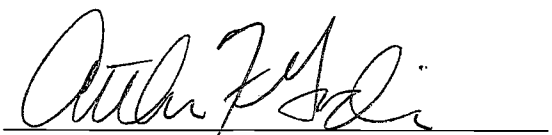
In the Investigation Order, SWRCB attempts to usurp federal authority and implement studies (collateral assertions) beyond the context of a Section 401 water quality certification. The provisions of Section 401 are still premature because MID has not yet filed their application for water quality certification. Furthermore, in its Final Study Plan Determination (attached hereto as Exhibit "A"), FERC rightly determined that studies previously requested by SWRCB were not required by the ILP regulations. The Order issued by SWRCB is preempted by federal authority under the Federal Power Act because it is an attempt to act under authority of independent state law that does not fall within the state's power under the Clean Water Act water quality procedures. Therefore, the Order is nullified.

III. Conclusion

For the reasons stated above, and in the Petition for Reconsideration, the State Water Resources Control Board should issue a stay of the Order's provisions pending the outcome of this proceeding and nullify the Order issued by SWRCB as requested in the Petition.

DATED: February 28, 2011

Respectfully submitted,



Arthur F. Godwin
Mason, Robbins, Browning & Godwin
Attorneys for Petitioner, Merced Irrigation District

EXHIBIT A

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

OFFICE OF ENERGY PROJECTS

Project No. 2179-042 – California
Merced River Hydroelectric Project
Merced Irrigation District

December 22, 2009

Mr. Geoff Rabone
Deputy General Manager
Merced Irrigation District
P.O. Box 2288
Merced, CA 95344

Reference: Director's formal study dispute resolution determination

Dear Mr. Rabone:

This is my determination on the study disputes filed by the U.S. Department of the Interior, Fish and Wildlife Service (FWS); the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS); and the California State Water Resources Control Board (Water Board) for the Merced River Hydroelectric Project No. 2179. Merced Irrigation District (MID) is using the Integrated Licensing Process (ILP) for relicensing the Merced River Project.

Background

On September 14, 2009, I issued a Study Plan Determination (Determination) for the Merced River Project in response to MID's revised study plan filed August 14, 2009. FWS, on October 2, 2009, and NMFS and the Water Board, on October 5, 2009, filed notices of study dispute pursuant to Section 5.14 of the Federal Energy Regulatory Commission's (Commission) regulations. FWS, NMFS, and the Water Board identified 16 studies they indicated were not adequately accommodated by the Determination. The studies in dispute identified by FWS and NMFS were identical and included the: (1) *Hydrologic Alteration Study*; (2) *Water Balance/Operations Model Study*; (3) *Water Quality Study*; (4) *Water Temperature Model Study*; (5) *Bioaccumulation Study*; (6) *Riparian Habitat and Wetlands Study*; (7) *Reservoir Water Temperature Management Feasibility Study*; (8) *Gravel Sediment Budget and Mobility Study*; (9) *Upper River Fish Populations and Habitat Study*; (10) *Anadromy Salmonid Habitat Study*; (11) *Anadromous Conservation Hatchery Study*; (12) *Anadromous Fish Passage Study*; (13)

Anadromous Fish Passage Facilities Study; (14) *Salmonid Floodplain Rearing Study*; (15) *Chinook Salmon Egg Viability Study*; and (16) *Instream Flow (PHABSIM) Study.*

The Water Board disputed the following studies: (1) *Water Balance/Operations Model Study*; (2) *Water Quality Study*; (3) *Water Temperature Model Study*; (4) *Bioaccumulation Study*; and (5) *Instream Flow (PHABSIM) Study*. Additionally, the Water Board stated they supported NMFS in its dispute of the following studies: (1) *Gravel Sediment Budget and Mobility Study*; (2) *Upper River Fish Populations and Habitat Study*; (3) *Anadromy Salmonid Habitat Study*; (4) *Anadromous Conservation Hatchery Study*; (5) *Anadromous Fish Passage Study*; (6) *Anadromous Fish Passage Facilities Study*; (7) *Salmonid Floodplain Rearing Study*; and (8) *Chinook Salmon Egg Viability Study*. In a letter filed with the Commission on October 30, 2009, MID responded to the study disputes.

In response to the agencies' study dispute notices, Commission staff convened a three-person Dispute Resolution Panel (Panel) on October 16, 2009. Panel members included: Aaron Liberty of the Commission (Panel Chair), Larry Thompson of NMFS[1] (Resource Agency Panelist), and Robert Deibel of the U.S. Forest Service (Independent Third-Party Panelist). On October 28, 2009, the Panel issued a notice informing the disputing agencies that it had been convened and indicating the time and location of a technical conference.

On November 17, 2009, the Panel held a technical conference in Sacramento, CA. The conference was transcribed by a court reporter and included representatives from FWS, NMFS, the Water Board, MID, the Commission, and other interested parties. At the technical conference, representatives from NMFS, FWS, and the Water Board collectively stated that two studies were no longer in dispute. These two studies included the *Hydrologic Alteration Study* and the *Riparian Habitat and Wetlands Study.*[2] As a result, I have removed these two studies from further consideration in the dispute.

On December 2, 2009, all panel members filed their findings regarding the disputed studies. The Panel Chair and the Independent Third-Party Panelist filed joint findings; the Resource Agency Panelist filed his findings separately. According to the report filed by the Panel Chair and the Independent Third-Party Panelist, not all of the panelists were able to participate fully in preparing the joint findings. The Commission's Final Rule[3] envisioned the panel, deliberating together as a whole, and filing a single

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[1] Larry Thompson was designated by NMFS, FWS, and the Water Board to represent the federal and state agencies in this dispute.

[2] Federal Energy Regulatory Commission. *In the Matter of: Merced Irrigation District Dispute Resolution Panel Meeting and Technical Conference.* November, 2009. Ace-Federal Reporters, Inc., 2009. Filed on November 24, 2009. pp-17-30.

[3] Final Rule. Hydroelectric Licensing under the Federal Power Act, issued July 23, 2003. 104 FERC ¶ 61,109.

report containing its findings and recommendations. This would assure the panel's collaborative discussion of each panelist's views and would be more likely to result in a consensus report. While the approach taken here does not invalidate the Panel's findings, in the future, I hope panel members will collaboratively produce a single report, which could, of course, contain differing opinions as appropriate.

Study Dispute Determination

Pursuant to Section 5.14(l), my determination on the disputed studies is based on the study criteria set forth in Section 5.9(b) of the Commission regulations, applicable law, Commission policy and practices, and information in the record, including technical expertise of the panel. I summarize my findings below, and include a table of the findings in Appendix A and the basis for the findings in Appendix B.

I am amending two studies ((1) *Water Balance/Operations Model Study* and (2) *Water Temperature Model Study*) to expand the geographic scope. Information presented at the Technical Conference indicated that the approved studies may not provide results that would allow for the reliable correlation of potential project operational scenarios with downstream effects without expanding the geographic scope to Shaffer Bridge.

I am requiring that four studies be considered during the second study season ((5) *Reservoir Water Temperature Management Feasibility Study*; (12) *Salmonid Floodplain Rearing Study*; (13) *Chinook Salmon Egg Viability Study*; and (14) *Instream Flow (PHABSIM) Study downstream of Crocker-Huffman*). These four studies would evaluate a biological or ecological response to water quality and quantity variables associated with project operations. Because of the confounding effects of the downstream Crocker-Huffman diversion dam, an evaluation of the need for these studies should be based upon receipt of results from two approved first-season studies (*Water Balance/Operations Model Study* and the *Water Temperature Model Study*) to identify and isolate direct project effects on water quality and quantity variables.

I am requiring two new studies[4]. The first new study ((11) *Gravel Sediment Budget and Mobility Study)* would evaluate the comparative contribution of the Merced River and Merced Falls Projects to a documented cumulative effect – "channel armoring" downstream of Crocker-Huffman dam. The second new study, ((14) *Instream Flow study downstream of Merced Falls dam*) would evaluate flow-habitat between Merced Falls dam and Crocker-Huffman, due to the potential for the projects to affect flow-related habitat variables in that riverine reach. After consultation with the NMFS, FWS, and the Water Board, and within 45 days of the date of this letter, MID should file, for Commission approval, plans for the implementation of these studies.

[4] These will, by necessity, need to be cooperative studies between MID's Merced River Project (No. 2179) and Pacific Gas and Electric Company (PG&E), for the downstream Merced Falls Project (No. 2467).

Finally, I am not adopting or modifying: (3) *Water Quality Study*; (4) *Bioaccumulation Study*; (6) *Upper River Fish Populations and Habitat Study*; (7) *Anadromy Salmonid Habitat Study*; (8) *Anadromous Conservation Hatchery Study*; (9) *Anadromous Fish Passage Study*; and (10) *Anadromous Fish Passage Facilities Study*. These studies did not conform to one or more of the Study Criteria, listed in Section 5.9(b)(1-7), for the reasons discussed in Appendix B.

If you have any questions, please contact Matt Buhyoff at (202) 502-6824.

Sincerely,

Jeff C. Wright
Director
Office of Energy Projects

Enclosures: Appendix A -- List of Modified, Phased, New, and Not Adopted Studies
Appendix B -- Study Dispute Analysis

cc: Mailing List
Public Files

APPENDIX A – MODIFIED, PHASED, NEW, AND NOT ADOPTED STUDIES

STUDY	DETERMINATION			
	Approved Study with Modification	*Phased Study*	*New Study*	*Study Not Adopted*
(1) Water Balance/Operations Model	X			
(2) Water Temperature Model	X			
(3) Water Quality				X
(4) Bioaccumulation				X
(5) Reservoir Water Temperature Management Feasibility		X		
(6) Upper River Fish Populations and Habitat				X
(7) Anadromy Salmonid Habitat				X
(8) Anadromous Conservation Hatchery				X
(9) Anadromous Fish Passage				X
(10) Anadromous Fish Passage Facilities				X
(11) (a) Gravel Sediment Budget and Mobility Study (b) Relative contribution to channel armoring downstream of Crocker-Huffman.			X	X
(12) Salmonid Floodplain Rearing		X		
(13) Chinook Salmon Egg Viability		X		
(14) Instream Flow (PHABSIM): (a) downstream of Crocker-Huffman (b) downstream of Merced Falls dam		X	X	

APPENDIX B – STUDY DISPUTE ANALYSIS

Appendix B provides Commission staff's analysis of the disputed studies, with reference to the Panel's and Resource Agency Panelist's findings and recommendations, the study criteria set forth in § 5.9(b), and any applicable law or Commission policies and practices.

The September 2009 Determination discussed the nature of Crocker-Huffman operations as it relates to the relicensing of the Merced River Project. Crocker-Huffman dam (Crocker-Huffman) is located downstream of the Merced River Project dams, and immediately downstream of Pacific Gas and Electric's (PG&E's) Merced Falls Project (FERC No. 2467) dam. Crocker-Huffman is maintained by MID for the implementation of its irrigation program, is not a licensed project facility, and therefore, is not within the Commission's jurisdiction.

The Panel and the Resource Agency Panelist concluded that the Commission erred in its September 2009 Determination when limiting the downstream scope of certain disputed studies to Crocker-Huffman based on the conclusion that expanding the scope of studies downstream of Crocker-Huffman would not inform relicensing participants of direct effects from the Merced River Project.

To clarify, in our Determination, we found that the physical presence of the Merced Falls dam and Crocker-Huffman, in conjunction with MID's irrigation operations, would confound direct project effects downstream of Crocker-Huffman. Hence, as the Panel notes, we did not approve some studies under Study Criterion 5, because a nexus with direct project effects could not be established, and therefore, the results could not be used to inform potential license requirements. We acknowledged the project's potential to contribute to cumulative effects downstream of Crocker-Huffman, both in Scoping Document 2 and in our Determination. Because of the confounding influences of Crocker-Huffman and MID's irrigation operations, we therefore evaluated requested studies based upon their capacity to identify and isolate project effects, thereby demonstrating a capability to inform potential license requirements for the project.

The following contains our analysis of the disputed studies.

(1) *Water Balance/Operations Model Study*

Both the Panel and the Resource Agency Panelist recommended that the Commission expand the scope of the approved study. The Panel and the Resource Agency Panelist concluded that information in the record and information presented at the Technical Conference demonstrated a nexus between project operations and

hydrologic effects downstream of Crocker-Huffman, consistent with Study Criterion 5 (Section 5.9(b)(5)). The Panel concluded that the only way to evaluate baseline conditions, and assign direct, indirect, and cumulative effects is to expand the scope of this study to Shaffer Bridge (RM 32).

We agree with the Panel's and the Resource Agency Panelist's findings. The September 2009 Determination found that the agencies had not adequately addressed a nexus between project operations and effects or how the requested information would inform the development of license requirements (Study Criterion 5). It stated that the existing SJR5Q model would be able to provide information on flows downstream of Crocker-Huffman. We believed that the results from MID's proposed study would have the capacity to identify and isolate direct project effects, even downstream of Crocker-Huffman. However, at the Technical Conference, we learned that the existing model results may not be as valid as originally thought. Discussions at the Technical Conference indicated that the results from existing SJR5Q model may not be suitable to provide a forecast of comparable operations' information for the currently proposed study area and the downstream areas requested by the agencies without model validation. This information will be necessary to provide a depiction of not only the magnitude of potential project effects downstream of Crocker-Huffman, but also the range of viable project operational scenarios to inform potential license requirements, consistent with Study Criterion 5. Given the limited capability of the existing model's scope to provide this information, MID must expand the downstream scope of the *Water Balance/Operations Model Study* to Shaffer Bridge (RM 32).

(2) *Water Temperature Model Study*

The Panel concluded that information in the record and information presented at the technical conference demonstrated that there is a nexus between project operations and hydrologic effects, including temperature, downstream of Crocker-Huffman to Shaffer Bridge, consistent with Study Criterion 5. The Panel recommended that the study be expanded to Shaffer Bridge (RM 32).

Regarding the resource agencies' request that the study scope be extended even further downstream of Shaffer Bridge, the Panel noted that information provided at the technical conference reaffirms the Commission's conclusions in the Determination that the existing SJR5Q model would be adequate to evaluate project-related effects and to evaluate water temperatures under various potential operating scenarios downstream of Shaffer Bridge. Finally, the panel found that existing information would be suitable to meet the requests of the agencies for a thermodynamic model of the project reservoirs and therefore did not recommend any modifications to the approved study plan based upon this request by the agencies.

The Resource Agency Panelist concluded that the Commission should adopt the Agencies' modification to expand the scope of the proposed Water Temperature Model study downstream of Crocker-Huffman. The Resource Agency Panelist indicated that it is not reasonable to halt study downstream of Crocker-Huffman, because the project's instream flow measurement point is several miles downstream of Crocker-Huffman and water temperature is highly influenced by water quantity released from the Merced River Project. Additionally, the Resource Agency Panelist indicated that halting study of water resources downstream of Crocker-Huffman contradicts the Commission's scoping decisions (in SD2) that investigation should be conducted further downstream.

The September 2009 Determination found that the requested addition of five temperature monitoring recorders downstream of Crocker-Huffman, or additional (HEC)-5Q temperature model nodes downstream of Crocker-Huffman, would not provide information that would serve to inform license requirements (Study Criterion 5). Information in the record and presented at the Technical Conference indicated that the addition of model nodes was not necessary, as the existing model displays adequate capability to provide output results approximately every half-mile in the lower Merced River from Crocker-Huffman to its confluence with the San Joachin River. However, discussions at the Technical Conference indicated the need to verify the accuracy of the approved model downstream of Crocker-Huffman. Assuring model validity will ensure the depiction of not only the magnitude of potential project water temperature effects downstream of Crocker-Huffman, but also the range of viable project operation scenarios to inform potential license requirements, consistent with Study Criterion 5.

Therefore, we agree with the Panel's and the Resource Agency Panelist's findings and recommend that the scope of the study be expanded downstream of Crocker-Huffman to Shaffer Bridge (RM 32). The Resource Agency Panelist did not provide justification for expanding the downstream extent of the study beyond Shaffer Bridge. Given the increase of non-project related variables with increasing river distance from the project, I agree that the Panel's recommended scope is sufficient to determine project-related cumulative effects. I also agree with the Panel that existing information indicates that the approved study will satisfy the requests of the agencies for a thermodynamic model of project reservoirs. Therefore, MID must validate the output of the *Water Temperature Model Study* to Shaffer Bridge (RM 32).

(3) *Water Quality Study*

The September 2009 Determination declined the resource agencies' request to add additional water quality study sites downstream of Crocker-Huffman at this time. It found that MID's proposal to study downstream effects of any water quality parameter that exceeded state standards after examination of historic and current data would adequately address any potential cumulative effects of the project downstream of

Crocker-Huffman. The Determination concluded that the resource agencies' requested study did not adequately address nexus between project operation and the resource to be studied, and how the results would inform the development of license requirements, as required by Study Criterion 5.

Both the Panel and the Resource Agency Panelist recommended the Commission expand the scope of the approved study, as requested by the resource agencies. The Panel and the Resource Agency Panelist concluded that information in the record and information presented at the technical conference demonstrated that there is a nexus between project operations and effects on hydrology, and therefore potentially water quality, downstream of Crocker-Huffman, consistent with Study Criterion 5. The Panel concluded that the only way to evaluate baseline conditions and direct, indirect, and cumulative effects is to expand the scope of this study to Shaffer Bridge (RM 32). The Panel also stated that this study will also provide information necessary to evaluate MID's proposal to move the current compliance point to downstream of the project's lower most dam, McSwain dam. The Resource Agency Panelist indicates that the approved study methodology is inadequate, stating: "...[a] review of historical information...will not allow investigation of lower Merced River water quality conditions that could be due, incrementally, to the project." The Panel recommended adopting the disputing agencies requests to expand the scope of this study to Shaffer Bridge (RM 32), but did not recommend the resource agencies' request to expand the scope of this study further downstream of Shaffer Bridge, after finding no basis to do so.

We do not agree with the Panel's and the Resource Agency Panelist's findings that the scope of the study should be expanded downstream of Crocker-Huffman during the first season. However, we believe the study's scope should be expanded if the evaluation of historic and current data indicates a need. The Panel and the Agency Panelist failed to recognize that, as noted by Commission staff in the Determination, the approved *Water Quality Study* already includes the study of dissolved oxygen concentration at a study site downstream of Crocker-Huffman, as well as a phased mechanism for the investigation of any project-related effects on water quality downstream of Crocker-Huffman to Shaffer Bridge if any water quality parameters that exceeds state standards is identified. Therefore, the Panel and the Resource Agency Panelist incorrectly characterize any limit of the downstream geographic scope of the study imposed by the Commission's Determination. We agree with the Resource Agency Panelist that, in isolation, a review of historical information will not allow investigation of lower Merced River water quality conditions that could be due, incrementally, to the project. However, we note that the approved study methodology includes not only a review of historical information, but also the implementation of new water quality surveys at several study sites within project reservoirs, as well as downstream of the Merced Falls Project. Results of the water quality surveys will be available at the Initial Study Report meeting, at which point relicensing participants, including Commission staff, can address the need for further

studies. For these reasons, we maintain that MID's study is sufficient to characterize both direct and indirect Project effects within the geographic scope requested by the resource agencies, and recommended by the Panel and the Resource Agency Panelist.

(4) *Bioaccumulation Study*

The September 2009 Determination found that because MID was not proposing operations or activities typically associated with the release or mobilization of mercury, the resource agencies' requested study did not adequately address nexus between project operation and the resource to be studied, and how the results would inform the development of license requirements, as required by Study Criterion 5.

The Panel agreed with the Determination not to adopt this study. However, the Panel's reasons for not adopting the study differed from the reasons outlined in the Determination. The Panel concluded that although an appropriate nexus had been demonstrated, the disputing agencies did not adequately address how the additional information collected would be useful in developing potential license conditions. The Panel further recommended that in lieu of a study, a public education and information program, regarding the risks associated with mercury bioaccumulation, especially for project reservoirs, would be appropriate.

The Resource Agency Panelist recommended the Commission adopt the *Bioaccumulation Study*. Reiterating the assertions made in the resource agencies' study request that MID's continued operations and maintenance of the project has a potential to affect mercury concentrations in fish dwelling in the project's reservoirs, and that sediment quality within project reservoirs may affect geochemical processes that can promote mercury methylation and enhanced bioaccumulation in resident fish, the Resource Agency Panelist concluded that an appropriate nexus required by Study Criterion 5 had been demonstrated. The Resource Agency Panelist further stated that "it is not reasonable to perform no study whatsoever, given the potential ecological and human health hazards of mercury bioaccumulation." Although the Resource Agency Panelist recommended adopting the Agencies' requested study, he also recommended the adoption of a phased study, where the finding of appreciable bioaccumulation in the Merced River downstream of the project would trigger further evaluation.

We agree with the Panel that the disputing agencies did not adequately address how the results of the requested study would be useful in developing potential license conditions. However, we do not agree with the Resource Agency Panelist's suggestion that the potential hazards of mercury bioaccumulation necessitate a study. The Resource Agency Panelist did not provide an analysis of how the results of the requested study would be useful in developing potential license conditions. Existing information adequately documents the causal mechanisms, vulnerable species, and consequences of

mercury bioaccumulation and will be suitable to inform any potential license conditions, such as a public information program.

Finally, we disagree with the Panel and the Resource Agency Panelist's assessment that the proposed study identifies an appropriate nexus to potential project effects. As stated in the Determination, the baseline for our NEPA analysis of the project is existing conditions, not the original construction of the project reservoirs. MID is not proposing to alter project operations, to increase water fluctuations, or mobilize substrates. Therefore, as proposed, the project is not performing any actions associated with the release or methylation of mercury. For the reasons cited above, we maintain that a study of mercury bioaccumulation is not warranted.

(5) ***Reservoir Water Temperature Management Feasibility Study***

The September 2009 Determination found the requested study required development of potential PM&E measures rather than identification of resource effects. It stated that because a project effect had not yet been demonstrated, the assessment was premature, and therefore, the requested study did not address the nexus between project operations and effects (Study Criterion 5).

The Panel concurred with the Determination that NMFS' and FWS' request for this study did not address the nexus between project operations and effects. The Panel further concluded that NMFS and FWS did not provide sufficient justification as to how collecting this information would help inform the agencies' exercise of their mandatory conditioning authorities for fishways under section 18 of the Federal Power Act. However, the Panel recommended that the Commission modify the *Water Temperature Model Study* to reflect a phased approach where the *Reservoir Water Temperature Management Feasibility Study* could be triggered if the results from the *Water Temperature Model Study* indicate agency targeted temperature criteria could not be met. Similarly, the Resource Agency Panelist recommended the Commission approve a phased study approach, but did not provide a specific recommendation for the implementation of a phased study.

We agree with both the Panel and the Resource Agency Panelist that the *Reservoir Water Temperature Management Feasibility Study*, as proposed by the agencies, is premature. We concur with the Panel's conclusion that no project effect has been established, and therefore, studies of water temperature management alternatives are premature. We also agree with the Panel and the Resource Agency Panelist's recommendation to consider a phased approach to the *Reservoir Water Temperature Management Feasibility Study*, based upon results of the Water *Temperature Model Study*. If the results *Water Temperature Model Study* indicate the need for a study to assess reservoir temperature management feasibility, relicensing participants, including

Commission staff, may request such a study, as described by the Commission's regulations in Sections 5.15(d) and 5.15(e).

(6) *Upper River Fish Populations and Habitat Study*

The September 2009 Determination noted that because there was no proposal to introduce fish species into project reservoirs, no proposal for any new project structures upstream of the project's uppermost reservoir Lake McClure, no proposal for any actions that could alter habitat upstream of Lake McClure, and no known anadromous fish populations in the upper Merced River, the requested study had no nexus between project operation and the resource to be studied and, therefore, the proposed study would not inform the development of license requirements (Study Criterion 5).

The Panel concurred with the analysis in the Determination that an appropriate nexus had not been established, due to the absence of anadromous fish in Lake McClure. The Panel recommended the Commission not adopt this study.

The Resource Agency Panelist recommended the Commission approve the agencies requested *Upper River Fish Populations and Habitat Study*. In his evaluation of the nexus between project effects and the requested study, the Resource Agency Panelist cited the resource agencies' study request. Specifically, the Resource Agency Panelist stated: "The Agencies' study request explains that the project prevents upstream passage of fishes in the Merced River, and the project's reservoirs are sources of non-indigenous and non-native fish species that could be adversely affecting indigenous fishes in the upper Merced River (e.g., through competition, genetic effects, etc.). The Agencies explain that if passage for anadromous fishes is provided in the future through the project and upstream, the population condition and suitability of aquatic habitat will inform those decisions (such as indicating the condition of the habitat in the upper Merced to support anadromous fishes)."

In his evaluation of the capability for the requested information to inform the development of license requirements, the Resource Agency Panelist again cited the resource agencies' study request. The Resource Agency Panelist stated: "The Agencies' study request explained it will provide information on project-affected streams to allow for evaluation of the health of fish populations, especially special-status fishes; information on project-affected streams to allow for evaluation of differences between fish populations in project-affected streams and unimpaired streams of similar size, stream flow and elevation; and information on project-affected streams to allow for the evaluation of potential project-related effects on the health and size of fish populations." The Resource Agency Panelist further noted that at the Technical Conference, NMFS brought to the Commission's attention a Draft Recovery Plan that would propose to plant anadromous fish within the project and above the project.

We disagree with the Resource Agency Panelist's analysis that seeks to establish a project nexus to the resource to be studied as required by Study Criterion 5. The Panel noted that anadromous fish do not pass upstream of the Merced Falls dam, which is downstream of the first project dam at McSwain Reservoir, and therefore are not present in Lake McClure or the upper Merced River. As the Panel also noted, the Commission-approved *Reservoir Fish Populations Study* would characterize fish species composition, relative abundance (*e.g.*, catch per unit effort (CPUE)), and size in project reservoirs, including Lake McClure, and there is some redundancy in the resource agencies' request for this information and that requested in *Upper River Fish Populations and Habitat Study*. Because project operations or structures do not affect areas upstream of the uppermost project reservoir, we fail to see how results of the study would allow for the evaluation of project-affected streams, and therefore inform the development of license requirements. Finally, we acknowledge NMFS' *Resource Management Goals and Objectives* for federally-listed anadromous fish filed with the Commission on November 13, 2009, but do not see that it constitutes a Draft Recovery Plan under the Endangered Species Act (ESA), as suggested by the Resource Agency Panelist. Pursuant to section 4(f) of the ESA, a Recovery Plan must include objective, measurable criteria, which when met, will allow delisting of the species, a description of site-specific management actions necessary for recovery, and estimates of the time and cost to carry out the recommended recovery measures. The NMFS document did not include any of these attributes. In addition, pursuant to section 4(f)(4) of ESA, prior to final approval of a new or revised Recovery Plan, NMFS must provide public notice and an opportunity for public review and comment on such a plan. To our knowledge, NMFS has not initiated this effort. Therefore, we do not recommend the *Upper River Fish Populations and Habitat Study* for the reasons discussed here.

(7) *Anadromy Salmonid Habitat Study*

The September 2009 Determination found that existing information would be adequate to perform environmental analyses on salmonid habitat, and therefore, the requested study did not adequately address the need for additional information (Study Criterion 4).[5] We also found that because the requested study did not address direct effects of project operation, it would not inform the development of license requirements (Study Criterion 5).

The Panel disagreed with Commission staff's conclusion in the Determination that a habitat study of the reach between Crocker-Huffman and Shaffer Bridge is not needed,

[5] In the Determination, Commission staff stated that existing information would be adequate to perform environmental analyses, but did not explicitly state that the need for additional information is required by Study Criterion 4.

and stated that the agencies provided a sufficient nexus as required by Study Criterion 5. However, the Panel also recommended that the Commission not adopt this study as requested by the disputing agencies. The Panel concluded that the existing habitat assessment conducted by Stillwater Sciences (2008) provides sufficient information regarding aquatic habitat in the downstream areas within the Merced River and that integrating this information with other recommended studies would be sufficient to address baseline conditions and potential project-related effects on anadromous salmonid habitats.

The Resource Agency Panelist recommended the Commission adopt the requested study in its entirety.. The Resource Agency Panelist disagreed with our Determination that the requested study did not sufficiently address Study Criterion 5. The Resource Agency Panelist stated "The basis for not adopting the study speaks only to the direct effects of the project, contrary to the regulations at § 5.9(b)(5), and omits consideration of the project's potential to exert direct, indirect, and/or cumulative effects on anadromous fish populations and habitats downstream of Crocker-Huffman." The Resource Agency Panelist also disagreed with our Determination that the requested study did not sufficiently describe existing information concerning the subject and the need for additional information, required by Study Criterion 4. The Resource Agency Panelist stated that it is not clear how the existing information described by the Commission in its Determination would adequately assess project effects on floodplain and rearing habitat for juvenile anadromous fishes.

In our Scoping Document 2, Commission staff identified several resources, including federally-listed species, to be cumulatively affected downstream of Crocker-Huffman. Thus, we agree with both the Panel and the Resource Agency Panelist that the nexus between project cumulative effects and the resources has been established. However, direct project effects have not been established. As explained above, results from the *Water Balance/Operations Model Study* and the *Water Temperature Model Study* will serve to identify direct project effects and therefore, inform the necessity and scope of any future studies. We agree with the Panel's conclusion that the agencies have not adequately described the need for additional information (Study Criterion 4), as existing information, which includes a coarse-scale habitat assessment of the mainstem Merced River, in concert with currently approved studies are sufficient to inform relicensing participants on the potential project-related cumulative effects on anadromous salmonid habitats. For the reasons cited above, we maintain that the study is not warranted.

(8) *Anadromous Conservation Hatchery Study*

The September 2009 Determination found the requested study represented the development of potential PM&E measures rather than effects on a project resource. We

found that because a project effect had not yet been demonstrated, this assessment is premature, and therefore, this requested study did not address the nexus between project operations and effects, or how the study results would inform the development of license requirements (Study Criterion 5).

The Panel and the Resource Agency Panelist recommended the Commission not adopt this study as requested by the disputing agencies. Both the Panel and the Resource Agency Panelist concurred with the analysis in the Determination that the requested study did not adequately address Study Criterion 5 because it addressed future activities rather than current project effects. Finally, the Panel questioned how the disputing agencies could prescribe measures related to an anadromous conservation hatchery under their authorities granted by section 18 of the Federal Power Act or 401 of the Clean Water Act.

While the Resource Agency Panelist recommended the Commission not adopt the requested study as proposed by the disputing agencies, he recommended a phased approach. The Resource Agency Panelist recommended that genetic investigations similar to those identified in proposed *Upper River Fish Populations and Habitat Study,* be performed prior to any conservation hatchery study. The Resource Agency Panelist suggested that if suitable steelhead (*O. mykiss*) stocks are identified, then an assessment of their production in a hatchery could be evaluated, but did not indicate how this information is related to potential project effects.

We agree with the Panel and the Resource Agency Panelist and continue to conclude that the requested study does not adequately address the nexus between project operations and effects, nor effects on a specific resource as required by Study Criterion 5, and therefore, maintain that an anadromous conservation hatchery study is not warranted.

The Resource Agency Panelist's description of a phased study approach did not provide any additional information about how the study would address Study Criterion 5. For this reason, we do not adopt the Resource Agency Panelist's recommendation to include a phased approach for a conservation hatchery study as part of the *Upper River Fish Populations and Habitat Study.*

(9) *Anadromous Fish Passage Study*

The September 2009 Determination found the results from approved studies and results from existing studies could provide information regarding the Project's cumulative effect on certain environmental variables related to the life history requirements of anadromous fish downstream of Crocker-Huffman. It also recognized Crocker-Huffman as an upstream anadromous fish barrier, and found that because the requested study did not address direct effects of project operation, it would not inform the development of license requirements (Study Criterion 5).

The Panel recommended the Commission not adopt this study as requested by the disputing agencies. The Panel concluded that although the status of Crocker-Huffman as an anadromous fish barrier is disputed, anadromous fish cannot currently access the base of the project's McSwain dam. Therefore, the Panel concluded that the disputing agencies did not provide an adequate nexus to project effects, as required by Study Criterion 5. The Panel also concurred with Commission staff's conclusions in the Determination that if anadromous fish are reintroduced to the project area at a later date, the Commission may require additional studies to assess project-related effects on anadromous fish.

The Resource Agency Panelist disagreed with the Panel and recommended the adoption of the study. In his analysis, the Resource Agency Panelist concluded that there is a nexus between project effects and the resource to be studied. The Resource Agency Panelist did not recognize the Merced Falls dam or Crocker-Huffman as upstream anadromous fish barriers, but instead stated that "fish passage across the McSwain and New Exchequer Dams does not necessarily require volitional fish passage facilities at Crocker-Huffman." The Resource Agency Panelist noted that in the request for this study, the resource agencies discussed a "trap and truck" bypass alternative.

We agree with the Panel and continue to conclude that because the project does not currently block anadromous fish passage, the agencies have not demonstrated an adequate nexus to project-related effects as required by Study Criterion 5. Therefore, we maintain that a study of anadromous fish passage is not warranted at this time. As indicated in our Determination, if anadromous fish are reintroduced to the project area at a later date, the Commission may require additional studies to assess project effects on anadromous fish. If NMFS or FWS prescribes a "trap and truck" bypass alternative in its fishway prescription(s), we will evaluate that measure in our NEPA analysis.

(10) ***Anadromous Fish Passage Facilities Study***

The September 2009 Determination found the requested study represented the development of potential PM&E measures, rather than effects on a project resource. We found that because a project effect had not yet been demonstrated, this assessment is premature, and therefore, the requested study did not address the nexus between project operations and effects (Study Criterion 5).

The Panel recommended the Commission not adopt this study as requested by the disputing agencies. The Panel agreed that the requested study was premature given the inability of anadromous fish to currently access the base of McSwain dam and therefore, concluded that the resource agencies had not adequately addressed Study Criterion 5. Additionally, the Panel concluded that portions of the requested study would evaluate

potential fish passage facilities, which does not address project effects, as is also required by Study Criterion 5.

The Resource Agency Panelist did not provide a specific recommendation regarding this requested study. The Resource Agency Panelist only reiterated the agency study request; he did not provide an analysis of how the requested study satisfies the study plan criteria. The Resource Agency Panelist suggested the Commission did not discuss this requested study, nor make a determination regarding adoption of this request.

We agree with the Panel's analysis and continue to conclude that the requested study does not satisfy the requirements set forth by Study Criterion 5. We disagree with the Resource Agency Panelist's assessment that Commission staff did not address the requested study in the Determination. As noted by the Panel, "... at the technical conference, Commission staff stated there was a typographical error in the [Determination] and that the second full paragraph on page 13 of the Determination should have referenced the "*Anadromous Fish Passage Facilities Study*," not the, "Anadromous *Fish Passage Study*." For the reasons cited above, we maintain that a study of anadromous fish passage facilities is not warranted.

(11) *Gravel Sediment Budget and Mobility Study*

The September 2009 Determination found the resource agencies did not demonstrate why a study of gravel sediment budget and mobility was needed given the availability of existing information (Study Criterion 4), including bathymetry and sediment transport studies, or how the information would provide information regarding direct project effects, and therefore inform license requirements (Study Criterion 5). We acknowledged the potential cumulative effects of the project upon sediment budget and gravel mobility.

The Panel recommended the Commission not adopt this study as requested by the disputing agencies. The Panel found that neither NMFS nor FWS provided adequate reasoning as to how developing a sediment budget relates to the exercise of their authorities for fishways under section 18 of the Federal Power Act. However, the Panel suggested that the Water Board could use the information from the study to inform license requirements under its broader authority under the Clean Water Act.

The Panel noted that existing information includes a detailed analysis of channel substrate conditions in the areas immediately downstream of Crocker-Huffman. While this information would provide the basis for potential PM&E measures with regard to cumulative effects, it would not identify which facility or facilities are responsible for those effects. Therefore, the Panel recommended that the Commission require a new

study to determine if either the Merced River Project or the Merced Falls Project is the primary contributor to the channel armoring noted in existing studies.

The Resource Agency Panelist recommended the Commission adopt the *Gravel Sediment Budget and Mobility Study*. The Resource Agency Panelist indicated that "it is not reasonable to assume, based on reservoir bathymetry studies, that the upper Merced River delivers supplies [sic] no appreciable coarse sediments downstream to Lake McClure. Instead, it is reasonable to determine, through study, what that supply quantity is. Asserting that no riverine reaches occur in the project area ignores the lower Merced riverine reaches that receive little to no supply of coarse sediments from the upper Merced River, due to interrupted passage at the project's dams. The assertion also ignores the obvious flow alterations in the lower Merced River caused primarily by the project's New Exchequer Dam and the large impoundment it forms. These alterations are widely accepted as primary causes of geomorphic alterations to river channels and downstream floodplains."

Based upon information in the record, as well as the analysis of the Panel and the Resource Agency Panelist, it is clear that sediment supply and mobility in the Merced River downstream of Crocker-Huffman is a function of not only project-related factors, but also the presence of non-project facilities such as PG&E's Merced Falls dam (FERC No. 2467), Crocker-Huffman, and non-Project irrigation delivery operations. The Determination recognized the project's potential to contribute to cumulative impacts downstream of Crocker-Huffman, and also recognized existing information that documents channel armoring resulting from cumulative impacts. As the Panel noted, existing information already provides a basis for potential mitigative measures. Furthermore, approved studies, such as the *Water Balance/Operations Model* will provide further information regarding the magnitude of the project's influence downstream of McSwain dam and scope of viable operation scenarios. For these reasons, we continue to find that the agencies have not adequately described the need for additional information, required by Study Criterion 4.

We agree with the Panel that a new study to determine the relative contributions to downstream effects is most relevant to inform potential license conditions. Such a study will necessitate cooperation between MID and PG&E. Therefore, we will require MID, in coordination with PG&E, to file a study plan, for Commission approval, where the primary objective is to determine the incremental contribution of project effects to channel armoring downstream of Crocker-Huffman. Within 45 days of the date of this letter, and after consultation with NMFS, FWS, and the Water Board, MID should file, for Commission approval, plans for the implementation of these studies. This study plan will also be addressed in the development of the Merced Falls Study Plan.

(12) *Salmonid Floodplain Rearing Study*

The September 2009 Determination found the results from approved studies existing information could provide information regarding the project's cumulative effect on certain environmental variables related to the life history requirements of anadromous fish downstream of Crocker-Huffman. We also recognized Crocker-Huffman as an upstream anadromous fish barrier, and found that because the requested study did not address direct effects of project operation, it would not inform the development of license requirements (Study Criterion 5).

The Panel recommended the Commission not adopt this study as requested by the disputing agencies, but rather integrate it with the requested *Instream Flow (PHABSIM) Study*. The Panel concluded that the requested study was likely too intensive to establish defensible relationships between only three target flow releases and the growth, survival, and health of juvenile salmonids within the Integrated Licensing Process (ILP) timeframe. Given information presented at the Technical Conference, the Panel noted a further technical dilemma wherein the requested study methods dictate collecting juvenile salmon for physiological, histological, and disease analysis. This collection effort would necessitate killing the juvenile salmon. The requested study methods call for the collection of 5,000 juvenile salmon per year, representing a majority of a given year's recruitment to the population in a system with very low numbers of returning adults.

The Resource Agency Panelist recommended the adoption of the study. The Resource Agency Panelist concluded that a nexus exists between the project and requested study. The Resource Agency Panelist stated that the requested study would inform the conditions for immigration and pre-spawning downstream of the project, as well as the project's capability to influence these conditions, and therefore, the results could inform potential project-related enhancement measures and ultimately license conditions.

We agree with the Panel and the Resource Agency Panelist that there is a nexus between project cumulative effects and the resources identified (Study Criterion 5). However, consistent with our Determination, we do not agree with the Resource Agency Panelist's conclusion that the requested study would necessarily inform the development of license requirements, also required by Study Criterion 5. The Resource Agency Panelist suggested that the study would inform the project's capability to influence water quantity. As described above, water quality and quantity variables in the Merced River downstream of Crocker-Huffman are cumulatively affected by project-related factors, as well as the presence of non-project facilities such Merced Falls dam, Crocker-Huffman, and non-project irrigation delivery operations. In addition, current fall pulse flows downstream of Crocker-Huffman are not dictated by the Commission, but rather through a 2002 MOU between MID and the California Department of Fish and Game (CDFG). As noted by the Panel, results of the approved *Water Balance/Operations Model and*

Water Temperature Model studies will provide a depiction of not only the magnitude of potential project effects on water temperature and quantity downstream of Crocker-Huffman, but also the range of viable project operation scenarios for potential license requirements. We find that acquiring this information is essential prior to determining the necessity, utility, or scope of water quantity and quality-dependent biological studies, such as the salmon floodplain rearing study, Chinook salmon egg viability study, or instream flow study, described below.

Furthermore, the potential sizeable juvenile salmon mortality from the requested study methodology, raised during the Technical Conference, and noted above was not addressed by the Resource Agency Panelist. Therefore, we see no reason to change the findings.

For the reasons cited above, we will not require MID, at this time, to conduct a study of salmonid floodplain rearing as requested by the resource agencies. Results from approved studies and results from existing studies could provide information regarding the project's cumulative effect on water quantity, temperature and dissolved oxygen as they relate to the life history requirements of anadromous fish downstream of Crocker-Huffman. However, they may not provide information on the project's capability to influence those variables. If the results of the approved *Water Balance/Operations Model and Water Temperature Model* studies indicate the need for a study to assess the quality of corridor habitat and/or existing spawning and rearing habitat that exists in the lower Merced River, relicensing participants, including Commission staff, may file requests for modification of an approved study or a new study, as described by the Commission's regulations in Sections 5.15(d) and 5.15(e).

(13) ***Chinook Salmon Egg Viability Study***

The September 2009 Determination found that the results from approved studies and existing information could provide information regarding the project's cumulative effect on certain environmental variables related to the life history requirements of anadromous fish downstream of Crocker-Huffman. We also recognized Crocker-Huffman as an upstream anadromous fish barrier, and found that because the requested study did not address direct effects of project operation, it would not inform the development of license requirements (Study Criterion 5).

The Panel recommended the Commission not adopt this study as requested by the disputing agencies. The Panel concluded that prior to knowing the magnitude of project effects downstream of Crocker-Huffman, or the capability of the project to mitigate these effects, implementing the *Chinook Salmon Egg Viability Study* at this time was premature, and therefore, the disputing agencies did not meet the criteria required by Study Criterion 5, based on a lack of demonstrated project-related effects. The Panel

further recommended that the Commission consider utilizing a phased approach to address the potential need for this study in the future based upon the results of approved studies.

The Resource Agency Panelist recommended the adoption of the study. The Resource Agency Panelist suggested a nexus for the project by stating: "Resource Agency Panelist [sic] understanding is that a reasonable nexus can be "mapped" between project facilities/operations → flow effects → anadromous "attraction" flows and water temperatures along immigration path → Chinook egg viability → the target species for passage in a potential section 18 fishway prescription and/or a resource protected under a water quality certification." The Resource Agency Panelist stated that the requested study would inform the conditions for immigration and pre-spawning downstream of the project, as well as the project's capability to influence these conditions, and therefore the results could inform potential, project-related enhancement measures and ultimately license conditions.

As described above, we agree there is a nexus between project cumulative effects and the resources identified, as required by Study Criterion 5. However, we do not agree with the Resource Agency Panelist's conclusion that the requested study would inform the development of license requirements, also required by Study Criterion 5. The Resource Agency Panelist suggested that the study would inform the project's capability to influence variables to be studied. We disagree with this assessment. As previously discussed, we find that acquiring information provided by the approved *Water Balance/Operations Model, Water Temperature Model,* and *Water Quality* studies is essential prior to determining the necessity, utility, or scope of water quantity, temperature and dissolved oxygen-dependent biological studies, such as the Chinook salmon egg viability study.

Finally, we agree with the Panel that the disputing agencies have not sufficiently addressed Study Criteria 5, based on a lack of demonstrated project-related effects. For the reasons cited above, at this time, we will not require MID to conduct a study of Chinook salmon egg viability as requested by the agencies. We note that the Panel's recommendation for a phased study approach can be accommodated by the Commission's ILP regulations. While results from approved studies and results from existing studies could provide information regarding the Project's cumulative effect on certain environmental variables related to the life history requirements of anadromous fish downstream of Crocker-Huffman, as previously explained, they may not provide information on the project's capability to influence those variables. Therefore, if the results of the approved *Water Balance/Operations Model and Water Temperature Model* studies indicate the need for a study to assess Chinook salmon egg viability, relicensing participants may file requests for the modification of an approved study, or requests for a new study, as described by the Commission's regulations in Sections 5.15(d) and 5.15(e).

(14) ***Instream Flow (PHABSIM) Study***

The September 2009 Determination found that the results from approved studies and existing information could provide information regarding the project's cumulative effect on certain environmental variables related to the life history requirements of anadromous fish downstream of Crocker-Huffman. It also recognized Crocker-Huffman as an upstream anadromous fish barrier, and found that because the requested study did not address direct effects of project operation, it would not inform the development of license requirements (Study Criterion 5).

The Panel recommended the Commission not adopt this study as requested by the disputing agencies, but rather adopt a modified form of the Instream Flow study. The Panel concluded that there is a nexus between project operations and certain project-related effects, including hydrology and therefore potentially fish habitat, downstream of Crocker-Huffman, consistent with Study Criterion 5. The Panel recommended that the Commission modify this study to include two study sites: one upstream and one downstream of Crocker-Huffman and combine this study with the *Salmonid Floodplain Rearing Study* to assess flow-habitat relationships for differing fish species. The Panel noted that a sound approach to conducting such a flow-habitat assessment is to integrate the results with the operational hydrology output from the *Water Balance/Operations Model Study*.

The Resource Agency Panelist recommended the Commission further review existing information before making a decision to adopt or not adopt this study. Also, the Resource Agency Panelist indicated the Commission should review information presented during the Technical Conference that suggested that several studies of the type requested already exist, and were unsuccessful in evaluating fish habitat availability in the lower Merced River, due to the alterations of its channel by pits and levees. The Resource Agency Panelist concluded that there is a nexus between project operations and certain project-related effects, including hydrology and therefore potentially fish habitat, downstream of Crocker-Huffman, consistent with Study Criterion 5.

As described above, we agree there is a nexus between project cumulative effects and the resources identified (Study Criterion 5). However, we do not agree with the Panel's and the Resource Agency Panelist's conclusion that the requested study, performed downstream of Crocker-Huffman would inform the development of license requirements, also required by Study Criterion 5. As previously discussed, we find that acquiring information provided by the approved *Water Balance/Operations Model and Water Temperature Model* studies is essential prior to determining the necessity, utility, or scope of water quantity-dependent biological studies, such as the instream flow habitat study.

Furthermore, as indicated by the Resource Agency Panelist, information presented during the Technical Conference questions the efficacy (Study Criterion 4) of performing a flow-habitat study in riverine segments where the channel has been significantly altered by past mining activity, as is commonly seen in the lower Merced River downstream of Crocker-Huffman. For the reasons cited above, we do not require MID to conduct an instream flow habitat study downstream of Crocker-Huffman. We note the Panel's recommendation for a phased study approach can be accommodated by the ILP. While results from the approved *Water Balance/Operations Model, Water Temperature Model* and results from existing studies could provide information regarding the Project's cumulative effect on certain environmental variables related to the life history requirements of anadromous fish downstream of Crocker-Huffman, as previously discussed, they may not provide information on the project's capability to influence those variables. Therefore, if the results of the *Water Balance/Operations Model, Water Temperature Model* studies indicate the necessity and utility of a study to assess instream flow habitat, relicensing participants, including Commission staff, may request modification of an approved study, or a new study, as described by the Commission's regulations in Sections 5.15(d) and 5.15(e).

We agree with the Panel that an analysis of instream flow habitat downstream of Merced Falls would provide useful information regarding the potential effects of the Merced River and Merced Falls Projects on the river reach between Merced Falls dam and Crocker-Huffman. Such a study will necessitate cooperation between MID and PG&E. Therefore, we will require MID, in coordination with PG&E, to file a flow-habitat study plan for resident fish and Pacific lamprey between Merced Falls dam and Crocker-Huffman. Within 45 days of the date of this letter, and after consultation with NMFS, FWS, and the Water Board, MID should file, for Commission approval, plans for the implementation of these studies. This study plan will also be addressed in the development of the Merced Falls Study Plan

EXHIBIT B

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Attorneys for MERCED IRRIGATION DISTRICT

BEFORE THE

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of: California State Water Resources Control Board, Investigation Order WR 2011-0003-EXEC.	DECLARATION OF JAMES LYNCH IN SUPPORT OF MERCED IRRIGATION DISTRICT'S PETITION FOR RECONSIDERATION OF STATE WATER RESOURCES CONTROL BOARD INVESTIGATION ORDER WR 2011-0003-EXEC

I, JAMES LYNCH, declare:

1. I am the Senior Vice President of HDR/DTA, a hydropower and renewable energy firm.

2. HDR/DTA has been providing consulting services to the Merced Irrigation District ("Merced") in its effort to obtain a new hydropower license from the Federal Energy Regulatory Commission.

3. This declaration is made in support of Merced's Petition for Reconsideration of State Water Resources Control Board ("SWRCB") Investigation Order WR 2011-0003-EXEC.

4. I have read the SWRCB Investigation Order WR 2011-0003-EXEC which orders Merced to conduct a number of water quality sampling and fishery-related studies in the Merced and San Joaquin rivers.

5. I have personal knowledge and/or I am informed and believe, the facts stated herein and could and would competently testify thereto if called upon as a witness.

6. This declaration is based upon my personal knowledge except where otherwise indicated and I can and will competently testify thereto if called upon as a witness.

7. The studies ordered by the SWRCB provide no estimate of effort or cost. Based on the broad scope of the studies ordered, it is my estimate that the studies ordered by SWRCB could cost between $3,480,000 and $7,315,000 over the next two to three years.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct and that this declaration was executed on the 28 day of February, 2011.

JAMES LYNCH

EXHIBIT C

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC 20426
April 17, 2009
OFFICE OF ENERGY PROJECTS

Project No. 2179-042 – California
Merced River Hydroelectric Project
Merced Irrigation District

Re: Scoping Document 2 for the Merced River Hydroelectric Project.

To the Parties Addressed:

The Federal Energy Regulatory Commission (Commission) is reviewing the Pre-Application Document (PAD) submitted to the Commission by Merced Irrigation District (MID) on November 3, 2008 for relicensing the Merced River Hydroelectric Project (FERC No. 2179-042). The Project is located on the Merced River in Mariposa County, California, about 23 miles northeast of the City of Merced. MID will use the Commission's Integrated Licensing Process (ILP) to relicense the project. Under the ILP, MID must file their preliminary licensing proposal or draft license application for the continued operation of the project by October 1, 2011. The final license application must be filed with the Commission on or before February 28, 2012. The current license for the project expires on February 28, 2014.

Pursuant to the National Environmental Policy Act of 1969, as amended, the Commission staff intends to prepare an environmental assessment (EA) on this project, as well as the adjacent Merced Falls Hydroelectric Project (FERC No. 2467). The EA would be used by the Commission to determine whether, and under what conditions, to issue new licenses. To support and assist our environmental review, we are conducting scoping to ensure that all pertinent issues are identified and analyzed and that the EA is thorough and balanced. We note that we will conduct a separate scoping effort for the Merced Falls Hydroelectric Project (FERC No. 2467).

Our preliminary review of the environmental issues to be addressed in our EA was contained in the initial scoping document (SD1), which was issued on January 2, 2009. We requested comments on SD1 and held scoping meetings and a site visit on January 28-29, 2009, to hear the views of all interested entities on the scope of issues to be included in the EA. Based on the verbal comments that we received at the scoping meetings, and written comments we received throughout the scoping process, we prepared the enclosed Scoping Document 2 (SD2). We prepared SD2 to provide you with information on the proposed action and alternatives, the environmental analysis

process we will follow to prepare the EA, and a revised list of issues to be addressed in the EA.

We appreciate the participation of governmental agencies, non-governmental organizations, and the general public in the scoping process. Key changes from SD1 to SD2 are identified in bold, italicized type. SD2 is being distributed to all entities on the Commission's mailing list for this project. SD2 is also available from our Public Reference Room by calling 202-502-8371 and can be accessed online at: http://www.ferc.gov/docs-filing/elibrary.

SD2 is issued for informational use by all interested entities; no response is required.

Please direct any questions about the Merced River Hydroelectric Project relicensing to Matt Buhyoff at (202) 502-6824, or matt.buhyoff@ferc.gov.

Enclosure: Scoping Document 2

cc: Mailing List
Public Files

SCOPING DOCUMENT 2

MERCED RIVER HYDROELECTRIC PROJECT

CALIFORNIA

PROJECT NO. 2179-042

Federal Energy Regulatory Commission
Office of Energy Projects
Division of Hydropower Licensing
Washington, DC

April 2009

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SCOPING DOCUMENT 2
Merced River Hydroelectric Project No. 2179-042

1.0 INTRODUCTION

The Federal Energy Regulatory Commission (Commission or FERC), under the authority of the Federal Power Act (FPA),[1] may issue licenses for up to 50 years for the construction, operation, and maintenance of non-federal hydroelectric projects. On November 3, 2008, Merced Irrigation District (MID), using the Integrated Licensing Process, filed a Pre-Application Document for a new license for the existing Merced River Hydroelectric Project (FERC No. 2179-042).[2]

The existing Merced River project has an installed capacity of 103.5 megawatts (MW) and operates as a seasonal storage and peaking system throughout the year. The project consists of two developments – New Exchequer and McSwain – which in total include two dams, two powerhouses and associated switchyards, and appurtenant facilities, including recreation facilities. A detailed description of the project is provided in Section 3.0 of this document.

The National Environmental Policy Act of 1969 (NEPA),[3] the Commission's regulations, and other applicable laws require that we independently evaluate the environmental effects of licensing the project as proposed and also consider reasonable alternatives to the proposed action. Based on a preliminary analysis of the issues, Commission staff is proposing to prepare an environmental assessment (EA) that describes and evaluates the probable effects, including an assessment of the cumulative effects, if any, of the proposed action and alternatives considered. EA preparation will be supported by the scoping process to ensure the identification and analysis of all pertinent issues.

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[1] 16 U.S.C. §791(a) -825(r).

[2] The current license for the Merced River Hydroelectric Project was issued to Merced ID, MID's predecessor, on August 18, 1964, and expires on February 28, 2014.

[3] National Environmental Policy Act of 1969, as amended (Pub. L. 91-190. 42 U.S.C. 4321-4347, January 1, 1970, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, and Pub. L. 97-258, §4(b), Sept. 13, 1982).

2.0 SCOPING

2.1 Purposes of Scoping

Scoping is the process used to identify issues, concerns, and opportunities associated with a proposed action. According to NEPA, scoping should be conducted early in the planning stage of a project. The purposes of scoping are as follows:

- invite participation of federal, state, and local resource agencies, Indian tribes, nongovernmental organizations (NGOs), and interested persons to identify significant environmental and socioeconomic issues related to the proposed action;
- determine the depth of analysis and significance of issues to be addressed in the EA;
- identify how the project would or would not contribute to cumulative impacts in the project area;
- identify reasonable alternatives to the proposed action that should be evaluated in the EA;
- solicit from participants available information on the resources at issue; and
- determine the resource areas and potential issues that do not require detailed analysis during review of the project.

2.2 Comments and Scoping Meetings

The Commission staff held two public scoping meetings in the vicinity of the project on January 28, 2009. The afternoon meeting focused on resource agency concerns and the evening meeting focused on receiving input from the public.

Transcripts of the two meetings can be found on the Commission's we site at:

(1) http://ferris.ferc.gov:0/idmws/doc_info.asp?document_id=13687777 (afternoon); and

(2) http://ferris.ferc.gov:0/idmws/file_list.asp?document_id=13687776 (evening).

A site visit was held on January 29, 2009.

The Commission received comments on the Merced Irrigation District's PAD, on staff's initial scoping document (SD1), and during staff's scoping meetings. Written comments were received from the following agencies and individuals:

Commenting Entity	*Comment Filing Date*
National Park Service	*February 27, 2009*
State Water Resources Control Board	*March 2, 2009*
Merced River Conservation Committee (MRCC) – Ralph Mendershausen	*March 2, 2009*
Mariposa County	*March 2, 2009*
Rick W. Jones	*March 3, 2009*
Golden West Women Flyfishers	*March 3, 2009*
Merced Irrigation District	*March 3, 2009*
Friends of the River	*March 3, 2009*
MRCC	*March 3, 2009*
California Sportfishing Protection Alliance	*March 3, 2009*
Bureau of Land Management (BLM)	*March 4, 2009*
National Marine Fisheries Service (NMFS)	*March 4, 2009*

All comments received are part of the Commission's official record for the project. Information in the official file is available for inspection and reproduction at the Commission's Public Reference Room, located at 888 First Street, N.E., Room 2A, Washington, DC 20426, or by calling (202) 502-8371. Information also may be accessed through the Commission's eLibrary using the "Documents & Filing" link on the Commission's web page at http://www.ferc.gov. Call (202) 502-6652 for assistance.

Key changes to the scoping document are identified in bold, italic type. More in-depth discussion of comments is provided below. Note that the primary purpose of SD2 is to identify issues to be analyzed in the EIS, not to identify all recommended and/or potential protection, mitigation, and enhancement (PM&E) measures. All proposed and recommended PM&E measures will be analyzed in the EIS.

Comprehensive Plans

The Bureau of Land Management commented that the "Sierra Resource Management Plan and Record of Decision (2008)" and the Merced Wild and Scenic River Management Plan (1991)" contain information relevant to the relicensing. We will consider these plans in our evaluation of the effects of the project on relevent

resources. To be considered a comprehensive plan under section 10(a)(2)(A) of the FPA, however, the plan must be filed with the Commission with a request that it be considered as a comprehensive plan. The Commission is required to determine whether a project is consistent with filed, qualifying plans.

Geographic Scope of Project Effects

During the scoping process, including comments on SD1, there was considerable discussion concerning the downstream extent of project effects. We note that presence of the Crocker-Huffman Diversion Dam, an impoundment not within the jurisdiction of FERC, located downstream of PG&E's Merced Falls project (FERC No. 2467) nullifies the direct effects of the Merced River project downstream of the diversion dam. However, we recognize that for some project effects on resources, such as changes in water temperature, the Project may contribute to a cumulative impact downstream of the non-jurisdictional Diversion Dam. We note that relicensing studies may provide additional new information of the downstream extent of project effects.

Water Resources

NMFS commented that for water resources, all resource effects identified in the PAD should also be identified in our scoping document.

Response: Most of the issues we identified in SD1 encompass those identified in the PAD, however, where pertinent, we have modified this section accordingly.

BLM requested that we include the bullet: "Effects of any project construction, operation, and maintenance upon the free-flowing character of the Merced River and direct and adverse affects on the Outstandingly Remarkable Values (ORV) within the Congressionally established Wild and Scenic River boundary."

Response: We respectfully disagree with BLM's suggested inclusion. The applicant is not currently proposing any action that could alter the free-flowing character of the Merced River within the Wild and Scenic River boundary.

Aquatic Resources

NMFS commented that for aquatic resources, all resource effects identified in the PAD should also be identified in our scoping document.

Response: Most of the issues we identified in SD1 encompass those identified in the PAD, however, where pertinent, we have modified this section accordingly.

SWRCB requested that we include the issue: "potential impacts associated with the

bioaccumulation of mercury in fish that reside in Project impoundments."

Response: We respectfully disagree with SWRCB's suggested inclusion. The applicant does not propose any activities typically associated with the release or mobilization of mercury.

Recreation Resources

The Bureau of Land Management (BLM) requested that we include the issues "Evaluate the feasibility of realigning the existing Merced River Trail to a location where inundation from Lake McClure and Lake McSwain does not occur. This would include rerouting the trail within and outside the current project boundary" and "Evaluate new access facilities including developing a Trails Master Plan for Project 2179."

Response: We respectfully disagree with the BLM. These additional issues do not correspond to potential project effects but rather potential mitigation measures. Therefore, we believe that it would be inappropriate to include them in the SD 2. That is not to say however, that these measures may be recommended or proposed in the future based on the results of studies.

BLM also requested that we include the issue "Evaluate the adequacy of existing public recreation access facilities to protect and enhance the Wild and Scenic Recreational ORV opportunities within or adjacent to the project boundaries, including whitewater boating, hiking, biking, equestrian riding, and camping activities."

Response: We note that there are no project recreation facilities within nor adjacent to the Wild and Scenic River Recreation Area, therefore, we believe the said facilities have no nexus to the Project.

Developmental Resources

During the public scoping meeting Ms. Diana Westmoreland-Pedrozo requested we look at the effects of any protection, mitigation, and enhancement measures upon regional agriculture.

Response: Because Ms. Westmoreland-Pedrozo didn't identify a specific issue where the project affects agriculture, we did not include agriculture as an issue in the SD 2.

Proposed Protection and Enhancement Measures

BLM requested the inclusion of "Visual Resource Plan" and "Trail Master Plan for the Merced River Trail and other connector trails within or Adjacent to the Merced

River Hydroelectric Project 2179" in the Proposed Protection and Enhancement Measures section of SD2

Response: We note that the proposed protection and enhancement measures listed in this section are only those proposed by the applicant, enumerated in section 9.2.2 of the applicant's PAD. Because the plans requested by the BLM do not appear in the proposed protection and enhancement section of the applicant's PAD, we will not include them in this document. That is not to say however, that these measures may be recommended or proposed in the future based on the results of studies.

3.0 PROPOSED ACTION AND ALTERNATIVES

In accordance with NEPA, our environmental analysis will consider the following alternatives, at a minimum: (1) the potential applicant's proposed action, (2) alternatives to the proposed action, and (3) no action.

3.1 MID's Proposed Action

Several entities commented on MID's potential proposal to increase usable storage and maximum storage elevation at Lake McClure with respect to the designation of the Merced River upstream of Lake McClure as a Wild and Scenic River. If MID proceeds with this proposal, we will perform an environmental analysis on the proposed action to determine if the proposed action affects this designated area.

MID proposes to continue operating the Merced River Hydroelectric Project as seasonal storage and peaking system, using the available water supply after satisfying minimum instream flow requirements and consumptive demands. MID is currently evaluating one or more potential physical enhancements to increase Project power generation. Changes under consideration by MID include:

- Adding a McSwain Energy Recovery Unit.
- Installing spillway gate facilities in the McSwain Dam passive spillway to increase operating storage at McSwain Reservoir by approximately 5 feet.
- Installing new turbine wicket gates, modifying spiral case stay vanes and draft tube liner at the New Exchequer Powerhouse.
- Constructing a pumped storage development adjacent to Lake McClure.
- Increasing usable storage and the maximum storage elevation at Lake McClure.

3.1.1 MID's Project Facilities

As now proposed, the Project would consist of two developments:

New Exchequer Development - (1) New Exchequer Dam - A rock structure with a reinforced concrete upstream face located on the Merced River 62.4 miles upstream of the confluence with the San Joaquin River. The dam is 490 feet high with a crest length of 1,220 feet and a crest elevation of 879 feet, and a drainage area of 1,035 square miles; (2) New Exchequer Dam Spillway - An ogee-type concrete spillway located about one mile north of New Exchequer dam in a saddle. The spillway includes a 240-foot-long gated section with a crest elevation of 837 feet, and a 1,080-foot-long ungated section with a crest elevation of 868 feet; (3) New Exchequer Dike – An earth and rock dike 62 feet high and 1,500 feet long located in a saddle about 0.75 mile north of New Exchequer Dam; (4) Lake McClure – A man-made lake on the Merced River formed by New Exchequer dam. At normal maximum water surface elevation (El. 867 ft), Lake McClure extends 19 miles upstream, has a gross storage capacity of 1,024,600 acre-feet (ac-ft) of water, a surface area of 7,110 aces, and a shoreline length of about 82 miles; (5) New Exchequer Power Tunnel and Penstock – A diversion facility composed of an intake, tunnel and penstock. The intake structure is located at the base of New Exchequer dam. The intake opening is 12 feet wide. The tunnel is concrete-lined, 383 feet long and has a diameter of 18 feet. The steel penstock is concrete encased, 982 feet long, 16 feet in diameter, and connects to New Exchequer powerhouse; (6) New Exchequer Powerhouse Bypass – A 94.5 foot-long, 108-inch-diameter steel pipe from New Exchequer Power Tunnel to Merced River north of New Exchequer powerhouse; (7) New Exchequer Powerhouse – A semi-outdoor, above-ground, concrete powerhouse located at the base of New Exchequer dam on the south side of Merced River; (8) New Exchequer Powerhouse Switchyard – Approximately 175 feet by 75 feet fenced, outside switchyard located adjacent to New Exchequer Powerhouse and (9) Lake McClure Recreation Facilities – Four developed recreation facilities (McClure Point, Barrett Cove, Horseshoe Bend, and Bagby) with 515 camping units, 4 boat launch facilities, boat rentals, showers, 28 comfort stations, 3 swimming lagoons, 2 marinas, gas and oil service stations, 186 water-electrical campsite hookups, washers and dryers, 117 picnic units and fish cleaning stations.

McSwain Development - (1) McSwain Dam - An embankment structure, consisting of a central impervious core of rolled fill contained between shoulders of cobbles or crushed rock located on the Merced River at River Mile 56.1 miles upstream of the confluence with the San Joaquin River, 6.3 River Miles downstream from New Exchequer dam. The dam is 80 feet high, with a crest length of 1,620 feet and a crest elevation of 425 feet, and a drainage area of 1,054 square miles; (2) McSwain Dam Spillway – An ungated concrete overflow spillway located in a flat ridge on the southeast side of McSwain dam. The spillway includes two sections: a 150 foot-long section with a crest elevation at 402 feet, and a 475-foot-long section with a crest elevation at 400 feet; (3) McSwain Reservoir – A man-made reservoir on the Merced River formed by McSwain dam. At normal maximum water surface elevation (El. 400 ft), McSwain Reservoir is 4.8 miles long, has a gross storage capacity of 9,730 ac-ft of water, a surface area of 310 aces, and a shoreline length of about 12.5 miles; (4) McSwain Power Tunnel

and Penstock – A diversion facility composed of an intake, conduit and penstock. The intake structure is located in a depression at the bottom of McSwain Reservoir about 70 feet upstream of McSwain dam. The buried, steel penstock is 160 feet long, has a diameter of 15 feet, and connects to McSwain powerhouse; (5) McSwain Powerhouse Bypass – A 160 foot-long, 96 inch diameter steel pipe from McSwain Power Tunnel Intake to Merced River north of McSwain powerhouse. The Bypass releases directly into Pacific Gas and Electric Company's (PG&E) Merced Falls reservoir, which has a normal maximum water surface elevation of 344 feet; (6) McSwain Powerhouse – An outdoor, above-ground, concrete powerhouse located at the base of McSwain dam on the north side of the Merced River. The Powerhouse releases directly into PG&E's Merced Falls reservoir; (7) McSwain Powerhouse Switchyard - Approximately 40 feet by 85 feet fenced, outside switchyard located adjacent to McSwain powerhouse; (8) McSwain Reservoir Recreation Facilities - One developed recreation facility with 99 camping units, 1 boat launch facility, boat rentals, showers, 5 comfort stations, a swimming lagoon, marina, gas and oil, 65 water-electrical campsite hookups, washers and dryers, 48 picnic units, a concession store, and fish cleaning stations.

The Project does not include any other facilities or features including electric transmission or distribution lines or rights-of-way, water conveyance facilities (i.e., canals, flumes or ditches), recreation facilities not listed above (e.g., downstream of the Project along the Merced River), roads, spoil piles or borrow areas. The Project does not include any in-basin or out-of-basin water transfers, or sections of Merced River other than those impounded by New Exchequer and McSwain dams. The Project does not include any water conveyance systems or other facilities, features or appurtenant structures used by the Irrigation District solely for the purpose of providing consumptive water such as the Crocker-Huffman Diversion and associated facilities. The Project does not include fishing access points along the Merced River.

3.2 Staff's Modification of the Proposed Action

Commission staff will review and consider alternatives to the proposed action, including environmental measures not proposed by MID. Modifications could include recommendations from agencies, Indian tribes, non-governmental organizations, and individuals.

3.3 No-Action Alternative

In the no-action alternative, the project would continue to operate under the terms and conditions of the existing license and no new environmental protection, mitigation, or enhancement measures would be implemented. Commission staff uses this alternative to establish baseline environmental conditions for comparison with other alternatives.

3.4 Alternatives Considered But Eliminated From Detailed Study

Commission staff propose eliminating the following alternatives from detailed study in the EA:

3.4.1 Federal Government Takeover

Commission staff does not consider federal takeover to be a reasonable alternative. Federal takeover of the Merced River Project would require Congressional approval. While that fact alone would not preclude further consideration of this alternative, there is currently no evidence showing that a federal takeover should be recommended to Congress. No party has suggested that federal takeover would be appropriate and no federal agency has expressed an interest in operating the Merced River Project.

3.4.2 Nonpower License

A nonpower license is a temporary license which the Commission would terminate whenever it determines that another governmental agency is authorized and willing to assume regulatory authority and supervision over the lands and facilities covered by the nonpower license. At this time, no governmental agency has suggested a willingness or ability to takeover the project. No party has sought a nonpower license and we have no basis for concluding that the Merced River Project should no longer be used to produce power. Thus, we do not consider a nonpower license a reasonable alternative.

3.4.3 Project Decommissioning

Decommissioning the project would require denying MID's license application and requiring the surrender and termination of MID's existing license with any necessary conditions. The project would no longer be authorized to generate power. The Merced River Project has generated an average of 341 gigawatt-hours of electricity annually.

There would be significant costs involved with decommissioning the project and/or removing any project facilities. Also, decommissioning would foreclose any opportunity to add environmental enhancements to the existing project. For these reasons, we do not consider project decommissioning a reasonable alternative.

4.0 SCOPE OF CUMULATIVE ANALYSIS AND RESOURCE ISSUES

4.1 Cumulative Effects

According to the Council on Environmental Quality's regulations for implementing NEPA (Section 1508.7), a cumulative effect is the impact on the environment which results from the incremental impact of the action when added to other

past, present and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time, to include hydropower and other land and water development activities.

Based ***upon scoping meetings and the comments we received on SD1, we have determined that several resource areas should be considered in the cumulative effects analysis. These resources include: water resources, aquatic resources, and threatened and endangered species.***

4.1.1 Geographic Scope

Our geographic scope of analysis for cumulatively affected resources is defined by the physical limits or boundaries of: (1) the proposed action's effect on the resources, and (2) contributing effects from other hydropower and non-hydropower activities within the Merced River basin. Because the proposed action would affect the resources differently, the geographic scope for each resource may vary.

At this time, we have tentatively identified the upper and lower Merced River, including the San Joachin River between confluences with the Merced and Sacramento Rivers as our geographic scope of analysis for federally listed species.

For water quality, we have tentatively identified areas within the current project boundary downstream to include the segment between Merced Falls Hydroelectric Project (FERC No. 2467) and Crocker-Huffman Diversion Dam as well as the approximately 7 mile-long section of the Merced River between Crocker-Huffman Diversion Dam and Snelling Road Bridge.

4.1.2 Temporal Scope

The temporal scope of our cumulative effects analysis in the EA will include a discussion of past, present, and future actions and their effects on each resource that could be cumulatively affected. Based on the potential term of a new license, the temporal scope will look 30-50 years into the future, concentrating on the effect on the resources from reasonably foreseeable future actions. The historical discussion will, by necessity, be limited to the amount of available information for each resource.

4.2 Resource Issues

Environmental issues and concerns preliminarily identified by the staff are presented below. This identification of issues and concerns is not intended to be exhaustive or final, but is an initial listing of issues we have identified. For convenience, the issues have been listed by resource area.

4.2.1 Geology and Soil Resources

- Effects of potential project construction on erosion of soils.
- ***The potential effects of the Project on sediment transport***

4.2.2 Water Resources

- Effects of project construction, operation, and maintenance on water quality, including temperature, in Lake McClure, McSwain Reservoir, and the Merced River.
- Effects of project construction, operation and maintenance upon instream flow and water quantity, ***including*** the Merced River.
- Contamination of water resources via the release of petroleum products or other volatile organic chemicals (VOCs) as a result of construction and operation of the project.

4.2.3 Aquatic Resources

- Entrainment of fish into the project's intake structures.
- The effects of proposed construction, operation, environmental measures, and project-related human disturbance on available aquatic habitat, including spawning habitat.
- Effects of ***proposed construction, operation and maintenance*** upon habitat fragmentation.
- ***Effects of project dams or operations on passage of fish.***
- ***Effects of proposed construction, operation, and maintenance on amphibians, aquatic reptiles and aquatic invertebrates.***
- ***Effects of proposed construction, operation, and maintenance on the introduction and spread of invasive species.***

4.2.4 Terrestrial Resources

- Effects of project operations and facilities on botanical species, and wildlife

species and habitat.

- ☐ Effects of project operations and maintenance on the presence, establishment, and spread of noxious weeds and invasive plants.

- ☐ Effect of the project on the extent and quality of riparian habitat and upland wetlands from and including Lake McClure to Crocker-Huffman diversion dam.

- ☐ Effects of project operations and facilities on raptors.

- ☐ Effects of project operations on wetland, riparian, and littoral vegetation community types around project facilities and reservoirs.

- ☐ ***Effects of project operations and maintenance on the presence, establishment, and spread of noxious weeds and invasive plants.***

4.2.5 Threatened and Endangered Species

- ☐ Effects of project operations on wildlife and botanical species listed as rare, threatened, endangered, or special status species on federal or states lists.

- ☐ Effects of project operations on aquatic and amphibious species listed as rare, threatened, endangered, or special status species on federal or states lists.

4.2.6 Recreation Resources

- ☐ Adequacy of existing public recreation access facilities ***(i.e. camping, picnic areas, signage, trails, boating, etc.),*** and effects of project operations on recreational opportunities

- ☐ The ability of the existing recreational facilities (including accessible facilities) to meet current and future recreational demand ***and the associated need for new recreation access facilities and or sites***

- ☐ Effects of project operations on the quality and availability of ***flow-dependent*** recreation opportunities, including: boating, angling, and swimming

4.2.7 Cultural Resources

- ☐ Effects of project operations or changes in project operation or facilities on historic or archeological resources that are eligible for listing in the National Register of Historic Places

4.2.8 Aesthetic and Land Use Resources

- Effects of project operations, including maintenance activities, construction debris and garbage, and invasive species on aesthetic resources within the project area.
- Effects of project facilities, transmission lines, maintenance, and reservoir operations on the aesthetic quality of the reservoir.
- Effectiveness of existing land use plans to establish or maintain compatibility between and among various land and water uses at the project.
- Effects of project activities on the Merced Wild and Scenic River.
- ***Effects of project activities on wildfire risk and fire management.***

4.2.9 Developmental Resources

- Effects of any protection, mitigation, and enhancement measures on project economics.

4.3 Proposed Protection and Enhancement Measures

In addition to FERC standard articles, MID proposes that the following environmental and recreational measures be included in any license issued:

- Agreement with Department of Army Regarding Flood Control.
- Delivery of 15,000 acre-feet of water to the Merced National Wildlife Refuge.
- Recreation Plan.
- Historic Properties Management Plan.
- Measurement of flow from the combined releases of McSwain Dam and Powerhouse, including spills over McSwain Dam.

5.0 REQUEST FOR INFORMATION

We are asking federal, state, and local resource agencies, Indian tribes, nongovernmental organizations, and other entities and individuals to forward to the

Commission any information that will assist the staff in conducting an accurate and thorough analysis of the site-specific and cumulative effects of relicensing the Merced River Project. Types of information that we seek include, but are not limited to:

- information, quantified data, or professional opinion that may contribute to refining the geographic scope of the analysis and identifying significant environmental issues;

- identification of, and information from, any other environmental document or similar study (previous, ongoing, or planned) relevant to the proposed licensing of the project;

- existing information and any data that would help to describe the past and present actions and future and the effects of the project and other developmental activities on environmental and socioeconomic resources;

- information that would help characterize the existing environmental conditions and habitats;

- identification of any federal, state, or local agency or Indian tribe resource plans and future project proposals in the affected resource area, such as proposals to construct or operate water treatment facilities, recreation areas, water diversions, timber harvest activities, or fish management programs;

- documentation of cumulative effects of basin-wide activities, including the proposed project operation, on resources; and

- documentation that would support a conclusion that the proposed project does or does not contribute to adverse or beneficial effects on resources and should therefore be excluded from further study or included for further consideration of cumulative effects. Documentation should include, but need not be limited to: how the project would interact with other hydropower projects in the area and other developmental and non-developmental activities; results from studies; resource management policies; and reports from federal, state, and local agencies and Indian tribes.

The requested information should be submitted in writing to the Commission no later than March 3, 2009. All filings must clearly identify the following on the first page: Merced River Hydroelectric Project No. 2179-042. Address all communications to:

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E., Room 1A
Washington, DC 20426

All filings sent to the Secretary of the Commission should contain an original and eight copies. Failure to file an original and eight copies may result in appropriate staff not receiving the benefit of your comments in a timely manner. The Commission strongly encourages electronic filings. See 18 CFR 85.2001(a)(1)(iii) and the instructions on the Commission's website (http://www.ferc.gov) under the "e-filing" link. For assistance, please contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll-free at 1-(866) 208-3676, or for TTY, (202) 502-8659.

Register online at http://ferc.gov/esubscribenow.htm to be notified via e-mail of new filing and issuances related to this or other pending projects. For assistance, contact FERC Online Support.

Any questions concerning scoping or preparation of the EA for this proposed action should be directed to Matt Buhyoff at (202)502-6824 or matt.buhyoff@ferc.gov.

6.0 EA PREPARATION SCHEDULE

At this time we plan to prepare a draft and final EA, which will be sent to all persons and entities on the Commission's service and mailing lists for the MID Project. The EA will include recommendations for operating procedures, and environmental protection and enhancement measures that should be part of any license issued by the Commission. Recipients will then have 30 days to provide the Commission with written comments on the EA. All comments on the EA filed with the Commission will be considered in the Commission's decision on the license application.

Appendix A contains the Process Plan and schedule for pre-application activity. Our preliminary schedule for processing the license application is as follows:

ACTION	TARGET DATE
Scoping Meeting	January 2009
License Application Filed	February 2012
Issue Ready for Environmental Analysis Notice	April 2012

Deadline for Filing Preliminary Agency Recommendations	June 2012
Draft EA Issued	December 2012
Deadline for Filing Modified Agency Recommendations	March 2013
Ready for Commission Decision on the Application	May 2013

7.0 DRAFT EA OUTLINE

The preliminary outline for the proposed Merced River Project EA is as follows:

SUMMARY

I. APPLICATION

II. PURPOSE OF ACTION AND NEED FOR ACTION
- A. Purpose of Action
- B. Need for Power

III. PROPOSED ACTION AND ALTERNATIVES
- A. Applicant's Proposed Action
- B. Proposed Action with Additional Staff-recommended Measures
- C. No-action
- D. Alternatives Considered but Eliminated from Detailed Study

IV. CONSULTATION AND COMPLIANCE
- A. Consultation
  1. Scoping
  2. Interventions
  3. Comments on the Applications
- B. Compliance
  1. Water Quality Certifications
  2. Section 18 Fishway Prescriptions
  3. Endangered Species Act

V. ENVIRONMENTAL ANALYSIS
- A. General Description of Merced River
- B. Cumulative Effects
  1. Geographic Scope
  2. Temporal Scope
- C. Environmental Analysis
  1. Water Resources
  2. Aquatic Resources
  3. Terrestrial Resources

4. Threatened and Endangered Resources
5. Recreational Resources and Land Use
6. Aesthetic Resources
7. Cultural Resources

D. No Action

VI. DEVELOPMENTAL ANALYSIS
- A. Power and Economic Benefits of the Projects
- B. Cost of Environmental Measures
- C. No-action Alternative
- D. Economic Comparison of the Alternatives

VII. COMPREHENSIVE DEVELOPMENT ANALYSIS
- A. Recommended Alternative
- B. Conclusion

VIII. RECOMMENDATIONS OF FISH AND WILDLIFE AGENCIES

IX. CONSISTENCY WITH COMPREHENSIVE PLANS

X. FINDING OF [OR NO] SIGNIFICANT IMPACT

XI. LITERATURE CITED

XII. LIST OF PREPARERS

APPENDICES (if necessary)

8.0 LIST OF COMPREHENSIVE PLANS

Section 10(a)(2) of the FPA requires us to consider whether or not, and under what conditions, relicensing the project would be consistent with relevant comprehensive plans on the Commission's Comprehensive Plan List. Those plans currently listed which we consider to be relevant to this project are listed below. Agencies are requested to review this list and to inform FERC of any changes (additions/subtractions). If there are plans that should be added to the list, agencies should file the plans according to 18 CFR 2.19

Bureau of Land Management. Forest Service. 1994. Standards and guidelines for management of habitat for late-successional and old-growth forest related species within the range of the northern spotted owl. Washington, D.C. April 13, 1994.

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California Department of Water Resources. 2000. Final programmatic environmental impact statement/environmental impact report for the CALFED Bay-Delta Program. Sacramento, California. July 2000. CD Rom, including associated plans.

California State Water Resources Control Board. 1995. Water quality control plan report. Sacramento, California. Nine volumes.

California - The Resources Agency. Department of Parks and Recreation. 1983. Recreation needs in California. Sacramento, California. March 1983. 39 pp.

National Marine Fisheries Service, Seattle, Washington. Pacific Fishery Management Council, Portland, Oregon. 1978. Fishery management plan for commercial and recreational salmon fisheries off the coasts of Washington, Oregon, and California commencing in 1978. Department of Commerce. March 1978. 157 pp.

National Park Service. 1982. The nationwide rivers inventory. Department of the Interior, Washington, D.C. January 1982.

Pacific Fishery Management Council. 1988. Eighth amendment to the fishery management plan for commercial and recreational salmon fisheries off the coasts of Washington, Oregon, and California commencing in 1978. Portland, Oregon. January 1988.

State Water Resources Control Board. 1999. Water quality control plans and policies adopted as part of the State comprehensive plan. April 1999.

U.S. Fish and Wildlife Service. 1990. Central Valley habitat joint venture implementation plan: a component of the North American waterfowl management plan. February 1990.

U.S. Fish and Wildlife Service. 2001. Final restoration plan for the anadromous fish restoration program. Department of the Interior, Sacramento, California. January 9, 2001.

U.S. Fish and Wildlife Service. Canadian Wildlife Service. 1986. North American waterfowl management plan. Department of the Interior. Environment Canada. May 1986.

U.S. Fish and Wildlife Service. Undated. Fisheries USA: the recreational fisheries policy of the U.S. Fish and Wildlife Service. Washington, D.C

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APPENDIX A: PROCESS PLAN AND SCHEDULE

Below is the schedule for the Merced River Hydroelectric Project pre-application activity.

Responsible Entity	Pre-Filing Milestone	Date	FERC Regulation
MID	Issue Public Notice for NOI/PAD	11/3/08	5.3(d)(2)
MID	File NOI/PAD with FERC	11/3/08	5.5, 5.6
FERC	Tribal Meeting	12/3/08	5.7
FERC	Notice of Commencement of Proceeding & SD1	1/2/09	5.8
FERC	Scoping Document 1 issued	1/2/09	5.8(c)
FERC	Scoping and Site Visit	2/1/09	5.8(b)(viii)
All stakeholders	NOI/PAD/SD1 comments due	3/3/09	5.9
FERC	Issue SD2 if needed	4/17/09	5.1
MID	File Proposed Study Plan	4/17/09	5.11(a)
All stakeholders	Study Plan Meeting	5/17/09	5.11(e)
All stakeholders	Study Plan Comments due	7/16/09	5.12
MID	File Revised Proposed Study Plan	8/15/09	5.13(a)
All stakeholders	Revised Proposed Study Plan Comments due	8/30/09	5.13(b)
FERC	Director's Study Plan Determination	9/14/09	5.13(c)
All stakeholders	Any Study Disputes due	10/4/09	5.14(a)
Study D. Panel	Third Panel Member selected	10/19/09	5.14(d)(3)
Study D. Panel	Panel Convenes	10/24/09	5.14(d)
MID	Applicant Comments on Study Dispute due	10/29/09	5.14(j)
Study D. Panel	Technical Conference held	11/3/09	5.14(j)
Study D. Panel	Panel Finding Issued	11/23/09	5.14(k)
FERC	Director's Study Dispute Determination	12/13/09	5.14(l)
MID	First Study Season	Spr/Sum 2009	5.15(a)
MID	Initial Study Report	9/14/10	5.15(c)(1)
All stakeholders	Initial Study Report Meeting	9/29/10	5.15(c)(2)
MID	Initial Study Report Meeting Summary	10/14/10	5.15(c)(3)
All stakeholders	Study Disputes/Request to Modify Study Plan due	11/13/10	5.15(c)(4)
All stakeholders	Responses to Disputes/Study Requests	12/13/10	5.15(c)(5)
FERC	Directors Study Plan Determination	1/12/11	5.15(c)(6)
MID	Second Study Season	Spr/Sum 2010	5.15(a)
MID	Updated Study Report due	9/14/11	5.15(f)
All stakeholders	Updated Study Report Meeting	9/29/11	5.15(f)
MID	Updated Study Report Meeting Summary	10/14/11	5.15(f)
All stakeholders	Study Disputes/Request to Modify Study Plan due	11/13/11	5.15(f)
All stakeholders	Responses to Disputes/Study Requests	12/13/11	5.15(f)
FERC	Directors Study Plan Determination	1/12/12	5.15(f)
MID	Preliminary Licensing Proposal due	10/1/11	5.16(a)
All stakeholders	Comments on Preliminary Licensing Proposal	12/30/11	5.16(e)
MID	License Application filed	2/28/12	5.17
MID	Public Notice of License Application filing	3/13/12	5.17(d)(2)

Document Content(s)

EXHIBIT D

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BEFORE THE

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of: California State Water Resources Control Board, Investigation Order WR 2011-0003-EXEC.	DECLARATION OF ARTHUR F. GODWIN IN SUPPORT OF MERCED IRRIGATION DISTRICT'S REQUEST FOR STAY AND PETITION FOR RECONSIDERATION OF STATE WATER RESOURCES CONTROL BOARD INVESTIGATION ORDER WR 2011-0003-EXEC

I, ARTHUR F. GODWIN, declare:

1. I am an attorney duly admitted to practice law before all courts in the state of California.

2. I am a partner in the firm MASON, ROBBINS, BROWNING & GODWIN, the attorneys of record for Petitioner, MERCED IRRIGATION DISTRICT ("MID"). I have personal knowledge of the facts set forth in this Declaration and, if called as a witness, could and would competently testify as to those facts.

3. This declaration is made in support of MID's Request for Stay and Petition for Reconsideration of State Water Resources Control Board ("SWRCB") Investigation Order WR 2011-0003-EXEC ("Order").

4. I am familiar with SWRCB Investigation Order WR 2011-0003-EXEC as well as all of the previous proceedings regarding the Federal relicensing of the Merced River Hydroelectric Project ("Project").

5. I have personal knowledge and/or I am informed and believe, the facts stated herein and could and would competently testify thereto if called upon as a witness.

6. This declaration is based upon my personal knowledge except where otherwise indicated and I can and will competently testify thereto if called upon as a witness.

7. MID will suffer substantial harm if SWRCB does not stay the Order. The financial burden alone ($3,480,000 to $7,315,000, see attached Declaration of James Lynch ¶7.) of completing these studies prior to a determination of the validity of the Order is enormous. In addition, the Order requires the development and submittal of plans within 90 to 120 days, depending on the plan, from issuance of the Order (Order, p. 14, ¶10.) The development and submittal of a Sampling and QA-QC Water Quality Monitoring Plan, an Instream Flow Study, and a Fish Tissue Mercury Study requires MID to expend substantial resources during the time that the petition is subject to review by the SWRCB. Many of the sampling methods being requested require modifications and amendments to existing federal and state scientific collector's permits and cannot be completed within the time frame allowed in the order.

8. If the stay is granted there will be no substantial harm to other interested persons or the public because MID will still have to comply with Section 401 Clean Water Act water quality certification and all other applicable State and Federal Laws before the Project is granted a new license. Furthermore, the Order alleges no immediate harm of threat of immediate harm to persons or the public.

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9. There are substantial questions of law and fact regarding the challenged Order. SWRCB has abused its authority under State and Federal laws, which merits State Board review.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct and that this declaration was executed on the 28 day of February, 2011.

ARTHUR F. GODWIN