



# United States Department of the Interior ORIGINAL

## OFFICE OF THE SOLICITOR

Pacific Southwest Region

2800 Cottage Way

Room E-1712

Sacramento, California 95825-1890

IN REPLY  
REFER TO:

May 1, 2008

By overnight delivery

Kimberly Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street NE  
Washington, DC 20426

Subject: Don Pedro Project, FERC No. 2299-057 065  
Request for Rehearing of the Department of the Interior  
Order on Ten-Year Summary Report Under Article 58

Dear Ms. Bose:

Enclosed for filing with the Federal Energy Regulatory Commission in the above-captioned proceeding, please find the original and nine copies of the Department of the Interior's Request for Rehearing of the Commission's April 3, 2008, Order on Ten-Year Summary Report under Article 58. This filing includes an accompanying disc containing supporting evidence.

The Department's Office of the Solicitor does not have access to electronic mail, and thus must file paper copies. Please date-stamp the ninth copy and return it to me in the stamped, self-addressed envelope.

Thank you for your attention.

Sincerely,

Daniel G. Shillito  
Regional Solicitor

By: Kerry O'Hara  
Assistant Regional Solicitor

Enclosure (Request for Rehearing and Supporting Materials)

cc: Service List, Project No. 2299

2008 MAY -2 P 12:57

FILED  
OFFICE OF THE  
SOLICITOR  
MAY 1 2008

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Modesto Irrigation District	)	
Turlock Irrigation District	)	Project No. 2299-057
	)	
Don Pedro Project	)	
<hr/>	)	

U.S. DEPARTMENT OF THE INTERIOR  
REQUEST FOR REHEARING  
ORDER ON TEN-YEAR SUMMARY REPORT UNDER ARTICLE 58

Pursuant to 18 C.F.R. § 385.713, and for the reasons described herein, the Department of the Interior (Department) and its bureau the United States Fish and Wildlife Service (Service) hereby timely request rehearing of the Federal Energy Regulatory Commission's (Commission) April 3, 2008, Order on Ten-Year Summary Report Under Article 58 of the license for the Don Pedro Project (P-2299) (Project). 123 FERC ¶ 62,012. On July 25, 2005, the Department timely intervened (E-Library No. 20050726-0155) in response to the Commission's June 24, 2005, Notice announcing that the Summary Report had been filed and soliciting interventions and comments, and thus is a Party for purposes of this rehearing request. 18 C.F.R. § 385.713(b).

**I. BACKGROUND**

The Project was originally licensed in 1964. 31 FPC ¶ 510. Article 37 of the Project license established minimum flow releases for the first twenty years of Project operations (beginning after construction completion in 1971 through 1991) and provided that the Licensees would study the Tuolumne River fishery during that time. In addition, the Commission reserved its authority to revise the minimum flow requirements after twenty years. 31 FPC at pp. 526-27 (Articles 37, 39). The study period was extended by agreement among the Licensees, the

- California Department of Fish and Game (CDFG) and the Service, to end in 1998. 38 FERC ¶ 61,097 (1987) (Article 58).

In December 1992, the Commission initiated a proceeding pursuant to Article 37 to reopen the license and to determine the flows necessary to protect fishery resources in the Tuolumne River. The Service participated in a negotiated process that resulted in submission by the Licensees of a Settlement Agreement and Request for License Amendment on February 5, 1996. The Agreement included provision for the release of minimum flows from the Project in accordance with a schedule that would result in higher flows than those under the original license. The Licensees did not request Commission approval of the Settlement Agreement, but rather sought a license amendment to revise the license consistent with the Agreement. In an Order issued July 31, 1996, 76 FERC ¶ 61,117, the Commission amended the license to adopt a revised Article 37, which set minimum stream flows in the Tuolumne River in accordance with a table and schedules set forth in the license, or as agreed among the Licensees, CDFG, and the Service. The stream flow regime was based upon the life history requirements of Chinook salmon. In addition, the Order amended Article 58 to require the Licensees to implement a program to monitor Chinook salmon populations and habitat in the Tuolumne River, and required filing of the results of any fishery studies by April 1, 2005. This filing became the Summary Report.

The Service has been an active participant in this Project proceeding, dating back prior to the license amendment process. Subsequent to the license amendment, the Service actively participated in the development and review of the fishery studies and of the Summary Report. As has been brought previously to the Commission's attention by the National Marine Fisheries

Service (NMFS) and the Service, the amended license and its minimum instream flows are premised on the needs of Chinook salmon, not on the needs of *O. mykiss* (Central Valley steelhead), a species that is now listed as a threatened species under the Endangered Species Act (ESA).<sup>1</sup> The listing of the species prompted NMFS and the Service on several occasions to request that the Commission reconsider the studies and flow schedule in order to include consideration of the needs of steelhead, and to request that the Commission initiate consultation under the ESA to address Project effects to steelhead. The Service has also on several occasions requested that the license be amended to include NMFS as a party from whom the Licensees must obtain agreement prior to making any flow adjustments under Article 37, to ensure that any developed flow regime adequately considers steelhead. See Service's February 26, 2004, filing with the Commission (E-Library No. 20040301-0002).

The Service's February 26, 2004, letter further informed the Commission of the need to consider steelhead in its decisions, and that the monitoring studies and flow schedule required in the license only addressed impacts to Chinook salmon. The Service urged the Licensees to collect information through monitoring studies on steelhead for inclusion in the Summary Report, and advised that the lack of such information would prevent the Commission from making a reasoned decision as to whether additional monitoring or changes in Project structures

---

<sup>1</sup>On May 2, 2003, NOAA Fisheries petitioned the Commission to amend the license to modify Article 37 minimum flow provisions to provide for the protection of steelhead. The Commission by Order issued December 22, 2003, deferred consideration of the petition, pending the completion of informal discussions between NOAA Fisheries and the Licensees. In the subject Order, the Commission indicates that NMFS' petition will be addressed in a subsequent order. Order at 7.

and operations would be necessary to protect fishery resources in the Tuolumne River. Service's February 26, 2004, letter.

Addressing the Licensees' response to this letter, the Service clarified its concerns about fish resources to the Commission in a letter dated September 30, 2004 (E-Library No. 20041004-0047). In responding to the Licensees' comments, the Service pointed out that, while studies of Chinook salmon have substituted for steelhead studies in the past, the two fish occupy river habitats at different times and physiological stages and therefore, data on Chinook salmon will not necessarily adequately represent steelhead. The Service continued to encourage the Licensees and the Commission to develop monitoring and study plans that would include the needs of steelhead so that a reasoned decision may be made as to the measures necessary to protect fishery resources. Service's September 30, 2004, letter.

In response to the Licensees' March 25, 2005, filing of the Summary Report, the Commission by letter dated June 24, 2005, noticed the Fisheries Studies Report and Study Proposal for comment, to which the Service responded on July 21, 2005 (E-Library No. 20050725-0071). At that time, the Service recommended again that the Commission modify the Project license to monitor, protect, and improve the population and habitats of Central Valley steelhead, and informed the Commission that the monitoring studies and flow modifications failed to consider steelhead. The Service reiterated its request that Articles 37 and 58 be amended to add NMFS as a participant in the minimum stream flow and salmon habitat monitoring programs established under those articles. The Service also recommended that the license require the Licensees to develop a well-defined Adaptive Management Program, to perform test flow-related hypotheses (of new flow operations) to determine the most effective

use of instream flows to help reverse declines in the Chinook salmon population and to protect the steelhead population, and to implement nine high-priority non-flow studies to determine the effectiveness of restoration projects and to more fully evaluate other potential environmental constraints on salmonid populations. The Service's filing included scientific analysis as further support, including a "Statistical Comparison of the Chinook Salmon Population Before and After the Final Settlement Agreement."

The Service participated in a public meeting hosted by the Commission on July 25, 2006. After review of the Summary Report, the comments received in writing and at the public meeting, and the Licensees' responses to those comments, the Commission's Division of Hydropower Administration and Compliance responded to the Summary Report through a letter dated December 20, 2006, which stated:

Our general conclusion about the 10-Year Summary Report, as presented at the meeting, is that for most of the required monitoring, the data were insufficient to reach any valid conclusions about the effects of the modified streamflow releases and restoration efforts on the fisheries resources of the Tuolumne River. Some of the monitoring efforts were improperly designed or executed and could not, therefore, produce data that would allow valid conclusions. Some of the mitigative measures simply have not had sufficient time for the monitoring efforts to show any change, or the response was not great enough to detect.

Therefore, we conclude that under Article 58 of the license, further monitoring studies are needed. Additional, well-designed and well-executed studies are necessary before the effectiveness of the revised flow schedule and the non-flow mitigative measures can be determined.

Commission December 20, 2006, letter to Districts, at 2. The Commission indicated that a study plan and schedule for monitoring was necessary to address instream flow, habitat restoration, fry survival, steelhead presence/absence, predator control and river temperature, and that the study plan should be developed in cooperation with various groups, including the Tuolumne River

Technical Action Committee (TRTAC) (of which the Service is a member), the NMFS, and Non-Governmental Organizations (NGOs).

The Licensees submitted a Draft Study Plan on February 2, 2007, to which the Resource Agencies (the Service, CDFG and NMFS) filed joint comments on March 7, 2007 (E-Library No. 20070314-0089). The Agencies pointed out that the Draft Study Plan failed to include the following basic elements:

- Appropriate management questions framed as testable hypotheses;
- Metrics that can be measured at both the site-specific and population levels;
- Methods that provide relatively accurate measurements of the test metrics;
- Experimental conditions that, to the extent possible, vary one habitat variable at a time;
- Statistical designs that provide assurances that a sufficient number of observations will be made and specify how the data will be assessed to adequately test the hypotheses and reach statistically valid conclusions.

The Service further provided specific comments on the studies and submitted the Agencies' Limiting Factor Analyses, in which the Agencies developed conceptual models for the salmon and trout populations in the Tuolumne River in an attempt to explain how ecosystem processes, including flow management and restoration, affect the production of adult Chinook salmon and adult Central Valley steelhead in the Tuolumne River. Limiting Factor Analyses at 9. The Agencies recommended that these models be used to monitor the response of the salmonid populations to manipulations of flow and physical habitat and to monitor the response of individual fish to show the cause and effect mechanisms that drive the observed response of the population to the habitat manipulations. *Id.* The Limiting Factor Analyses included the Agencies' recommendations for studies that were necessary to inform these analyses and management actions that would test the hypotheses.

The Licensees submitted the Fisheries Study Plan on March 20, 2007. On June 15, 2007, the Commission Division of Hydropower Administration and Compliance issued its preliminary analysis of the Fisheries Study Plan, noting that:

Staff's review of the 10-year Summary Report determined that the data were insufficient to conclude that implementation of the 1995 settlement agreement flow schedule had produced the intended benefits in salmon production.

June 15, 2007, letter at 1. The Commission went on to state specifically that, with respect to instream flow issues, the Licensees' Study Plan did not resolve all issues for which the Commission had considered additional information to be necessary. The Commission found six issues from the study plan that remained to be resolved, including the need to provide flows higher than required by the Settlement Agreement at least once during the next four years to produce smolt production data for high flow conditions and to continue discussions with the TRTAC regarding the cost and benefits of future coded-wire tag studies. June 15, 2007, letter at 8.

By letter dated July 27, 2007, the Service commented to the Commission on its Preliminary Analysis (E-Library No. 20070803-0078). These comments, citing to the Limiting Factor Analyses provided with the Service's March 2007, filing, reported again to the Commission the decline by 50% in the number of adult Tuolumne River fall-run Chinook salmon, and urged the adoption of a robust study plan that would include the elements from the Limiting Factor Analyses. The Service also expressed concern that the minimum flow requirements do not protect resident and anadromous forms of rainbow trout. The Service further pointed out three substantial deficiencies in the Draft Study Plan: the insufficiency of the fishery studies; the need to evaluate the importance of winter flows on fry survival; and the need



for fish health surveys to evaluate the effects of flow on food resources, diseases and contaminants.

On April 3, 2008, the Commission issued its Order on Ten-Year Summary Report under Article 58 (123 FERC ¶ 62,012). As applicable here, the Commission's main conclusions are;

- No *O. mykiss* anadromy has been identified in the Tuolumne River, and monitoring efforts to date have been inconclusive in determining the presence or absence of steelhead populations in the Tuolumne River. Order at 26.
- There is no basis for requiring additional instream flow studies on the effects of flows on *O. mykiss*, as steelhead monitoring should first be completed in order to determine if steelhead are present in the Tuolumne River. Order at 27.
- Factors outside the river are impacting the Chinook salmon escapement. Order at 22-23.
- The information presented and analyzed to date does not warrant a change in the existing Article 37 flow requirements. Order at 23.
- The Summary Report complies with Article 58. Order at 29.

This request for rehearing challenges the Commission's Findings on these issues.

## II. STATEMENT OF ISSUES

1. The Commission should reconsider its finding that the anadromous form of *O. mykiss* (Central Valley steelhead), which is listed as threatened under the Endangered Species Act, is not present in the Tuolumne River based on recent evidence that establishes the presence of steelhead in the river. In concluding that no steelhead have been identified in the Tuolumne River, the Commission failed to properly consider evidence of steelhead presence that is in the record of this proceeding and cited in the Order at pages 24-26, failed to support its conclusions with substantial evidence, and failed to consider the recommendations of the NMFS, the Service and other resource agencies. Support for this position is found in the CDFG Final Report by Christian E. Zimmerman, et al. (USGS), 2008. "Maternal Origin and Migratory History of *Oncorhynchus mykiss* captured in rivers of the Central Valley, California," which is included on the attached disc for filing with the Commission.
2. In concluding that existing flows under Article 37 are adequate and require no modifications, the Commission erred in misinterpreting information regarding factors affecting Tuolumne River fall-run Chinook salmon, failed to support its conclusion that

there is no need to change Article 37 flow requirements, and failed to adequately consider recommendations submitted by the Service and other Resource Agencies. In addition, the Commission should consider new information provided in this rehearing request that establishes the need to increase minimum flows to assist Chinook salmon to avoid extinction in the Tuolumne River. In support of this issue, the Service cites to Mesick, C. 2008. "The High Risk of Extinction for the Natural Fall-Run Chinook Salmon Population in the Lower Tuolumne River due to Insufficient Instream Flow Releases" and the accompanying reference documents that are included on the disc provided for filing herein; and the Service's prior filings in this proceeding, including the "Limiting Factor Analyses" (E-Library No. 20070314-0089).

3. The Commission's conclusions that the Summary Report and the underlying fisheries studies and monitoring comply with Article 58 are not supported by substantial evidence and fail to adequately consider recommendations of the Service and other Resource Agencies. The Commission's Order ignores the Commission Division of Hydropower Administration and Compliance's own findings that most of the required monitoring produced data that were insufficient to reach any valid conclusions about the effects of streamflow releases and that additional, well-designed and well-executed studies are necessary before the effectiveness of the flow schedule and other measures could be determined. Commission's December 20, 2006, letter. The Service's position on this issue is supported by the following documents in the administrative record of this proceeding: the Commission's December 20, 2006, letter (E-Library No. 20061226-0011); Commission's June 15, 2007, Preliminary Analysis of the Study Plan (E-Library No. 20070619-0175); and the Limiting Factor Analyses (E-Library No. 20070314-0089).
4. The Commission failed to address the Service's request that the Commission should amend Articles 37 and 58 to ensure appropriate participation by the National Marine Fisheries Service. The Service reiterates its request that these articles be modified to include NMFS as a participating entity from which written approval must be required for flow modifications and study plans. The Service may remain as an entity to be consulted on these issues. Support for this position is provided in the Service's letters filed with the Commission, to include the Service's February 26, 2004, filing. (E-Library No. 20040301-0002).

### III. ARGUMENT

The Commission erred in issuing the Order for the following reasons:

- 1) **The Commission should reconsider its finding that the anadromous form of *O. mykiss* (Central Valley steelhead), which is listed as threatened under the Endangered Species Act, is not present in the Tuolumne River based on recent evidence that establishes the presence of steelhead in the river. In concluding that no**

**steelhead have been identified in the Tuolumne River, the Commission failed to properly consider evidence of steelhead presence that is in the record of this proceeding and cited in the Order at pages 24-26, failed to support its conclusions with substantial evidence, and failed to consider the recommendations of the NMFS, the Service and other resource agencies.**

With respect to the presence of steelhead in the Tuolumne River, the Order states:

There are opposing views regarding the presence or absence of steelhead in the Tuolumne River, and whether anadromy exists in the resident population of *O. mykiss* downstream of La Grange Dam. Anecdotal reports persist of fish with adult steelhead characteristics in the Tuolumne River, but such reports have not been confirmed.

Order at 24. The Order recites evidence provided by NMFS of steelhead populations in the river and the opinions of the Resource Agencies and NGOs at the July 2006 meeting that there was a “need to modify existing monitoring programs to include steelhead, to implement new monitoring programs related to steelhead, and to examine flows and temperatures necessary for the protection of steelhead.” Order at 25. NMFS further requested the provision of specific information concerning steelhead, as described on pages 25-26 of the Order. The Commission then concludes:

No *O. mykiss* anadromy has been identified in the Tuolumne River; however, reproductive contribution of non-anadromous parents to anadromous offspring can occur when the anadromous run size is small, suggesting a genetic compensation between the anadromous and non-anadromous life-history forms. [Citation omitted]

It is apparent that monitoring efforts, to date, have been inconclusive in determining the presence or absence of steelhead populations in the Tuolumne River. The origin and nature of rainbow trout downstream of La Grange Dam is unclear, and it is unclear if steelhead occur in the Tuolumne River downstream of La Grange Dam.

The Districts, therefore, should initiate a monitoring effort to determine if the Tuolumne River currently supports anadromous forms of rainbow trout...

Order at 26. The Commission further found no basis for requiring additional instream flow studies, finding that monitoring for steelhead should first be completed to determine if steelhead

are present in the River. Order at 27.

These conclusions are not supported by substantial evidence as required by the law. *See* 16 U.S.C. § 825l (b). In reaching these conclusions, the Commission did not consider or give proper consideration to relevant information provided by the Resource Agencies, and thus the conclusions are arbitrary, capricious and not in accordance with law. *See* 16 U.S.C. § 803(j); *Wisconsin Power & Light Company v. Federal Energy Regulatory Commission*, 363 F.3d 453, 461-466 (D.C. Cir. 2004).

- a. **The Commission must consider a recent study providing conclusive evidence that the anadromous form of *Oncorhynchus mykiss* (Central Valley steelhead) is present in the Tuolumne River.**

The Commission should reconsider its decision in light of new information presented in a paper, published March 6, 2008, in which otolith microchemistry was analyzed to determine the migratory history of Central Valley steelhead captured on several Central Valley Rivers, including the Tuolumne River. Zimmerman, et al., 2008. "Maternal Origin and Migratory History of *Oncorhynchus mykiss* captured in rivers of the Central Valley, California" (which is included on the attached disc of supporting materials to this rehearing request). An analysis of the strontium (SR) to calcium (CA) ratios (SR:Ca) across the otolith of each fish was used to describe the migratory history of that fish between freshwater and saltwater, as the concentration of strontium is generally greater in saltwater. Further, comparison of Sr:Ca in the otolith primordia and freshwater growth region was used to determine maternal origin (resident or anadromous) based on the assumption that primordial composition reflects the environment in which yolk precursors develop (in the ocean for anadromous forms). The CDFG collected 146 wild *O. mykiss* from the Tuolumne River between 2002 and 2007 for otolith microchemistry

analysis. Of the fish sampled (n= 146), eleven should be considered steelhead, as they were identified as having anadromous (steelhead) maternal origin, and one of those fish displayed an anadromous migratory history.

This new evidence establishes the presence of steelhead in the Tuolumne River. The proper standard for review of conclusions by the Commission is whether those conclusions are supported by substantial evidence. *See* 16 U.S.C. § 825l(b); *Wisconsin Power & Light*, 363 F.3d at 461-66. Although the Commission's Order implies that conclusive evidence is required (Order at 26), conclusive evidence is not the appropriate standard. Nevertheless, this study provides conclusive evidence that steelhead migrate to and successfully spawn in the Tuolumne River; thus, it provides conclusive evidence of steelhead presence in the Tuolumne River.

The evidence relied upon by the Commission in the Order is out of date. *See* Order at 18 ("The preliminary results from the CDFG otolith study indicated no anadromy was detected"). The Commission must reconsider its determination that steelhead are not present in the Tuolumne in light of this new information. *See* 18 C.F.R. § 385.713(c)(3). Further, the Commission should similarly reconsider its determination that no additional instream flow studies are required, as the prerequisite noted by the Commission in the Order at 27 (that *O. mykiss* monitoring should first determine presence) has already been met.

- b. **The Commission failed to properly consider evidence provided by the Resource Agencies regarding the presence of the anadromous form of *Oncorhynchus mykiss* (Central Valley steelhead) in the Tuolumne River and failed to support its conclusions with substantial evidence.**

In the Order, the Commission recognized that NMFS has supplied evidence of the presence of steelhead in the Tuolumne River and summarized some of this evidence. Order at

24-25. Notably, the Commission did not discuss why it did not consider evidence provided by NMFS in a November 19, 2002, letter, and again as an attachment to a June 20, 2006, filing. This evidence includes a CDFG memorandum dated May 24, 2001, "Central Valley Steelhead Genetics Study - Tuolumne River Sampling," which discusses steelhead found during sampling conducted on the Tuolumne River. In the Order, the Commission does not adequately explain why it has not considered this information from NMFS as evidence of steelhead presence, nor has the Commission provided substantial evidence establishing that there are no steelhead present in the Tuolumne River.

In addition, the Commission noted, "[a]necdotal reports persist of fish with adult steelhead characteristics in the Tuolumne River, but such reports have not been confirmed." Order at 24. For example, the Conservation Groups' Brief in Support of the Petition of the National Marine Fisheries Service for Modifying Project Structures and Operations (E-Library No. 20030606-5044, filed June 6, 2003), discusses and attaches such anecdotal reports. However, the Commission simply concludes that the reports "have not been confirmed." The Commission has not provided any analysis or justification why it has not considered these anecdotal reports to be evidence of the presence of steelhead.

The Commission failed to adequately consider evidence submitted by the Parties and failed to justify the conclusions it reached in the Order. Accordingly, the Order is not supported by substantial evidence, and the findings and conclusions should be reconsidered.

- c. **The Commission failed to properly consider recommendations by NMFS and the Service regarding measures necessary for the anadromous form of Central Valley steelhead.**

In the Order, the Commission noted that the Resource Agencies and others “expressed the need to modify existing monitoring programs to include steelhead, to implement new monitoring programs related to steelhead, and to examine flows and temperatures necessary for the protection of steelhead.” Order at 25. For example, the Service provided written comments that informed the Commission of modifications to the monitoring programs and flow schedule that were necessary to address steelhead. *See, inter alia*, the Service’s September 30, 2004, letter (E-Library No. 20041004-0047). In addition, the Commission summarized the types of information regarding the effects of Project operations on steelhead that NMFS stated were needed. Order at 25-26. However, based on its incorrect conclusion that more information was necessary first to determine steelhead presence in the Tuolumne River, the Commission did not follow the recommendations of NMFS and the Service. Now that steelhead presence has been established, the Commission must revise its conclusions regarding steelhead presence and revise the Order to ensure that the recommendations of the Resource Agencies to protect steelhead are implemented. *See* 16 U.S.C. § 803(j).

The Request for Rehearing of this Order filed by NMFS also raises concerns with the Commission’s response and deferral of action on NMFS’ May 3, 2003, Petition seeking to amend the license to modify the minimum streamflows as necessary to protect both steelhead and Chinook salmon in the Tuolumne River. In that Petition, NMFS reiterated its request that the Commission initiate consultation with NMFS pursuant to ESA section 7(a)(2) regarding the impacts of the Don Pedro Project facilities and operation on Central Valley steelhead. The

Service has similarly requested that the Commission initiate consultation regarding Project effects to steelhead. *See, inter alia*, the Service's February 26, 2004, letter (E-Library No. 20040301-0002 ). The Commission noted in the Order that "the petition is currently pending before the Commission and will be addressed in a subsequent order." Order at 7. The need for the Commission to consult on Project effects to steelhead is even more compelling now, however, as the Order constitutes definite action taken by the Commission. Such agency action requires compliance by the Federal action agency with the consultation provisions in section 7 of the ESA. These Commission-ordered actions may adversely affect listed Central Valley steelhead. The Commission must initiate formal consultation with NMFS pursuant to ESA section 7(a)(2) regarding the impacts of the Don Pedro Project facilities and operation on Central Valley steelhead.

This situation is distinguished from that addressed by the Ninth Circuit Court of Appeals in *California Sportfishing Protection Alliance v. FERC*, 472 F.3d 593 (9<sup>th</sup> Cir. 2006) (*CSPA*), which concerned the ongoing operation of the DeSabra-Centerville Project under a 30-year license issued in 1980. *CSPA* at 594. In determining in *CSPA* that consultation was not required under ESA section 7(a)(2), the court focused on the triggering mechanism for consultation, which in that case would have been an agency action, not the listing of a species. *Id.* at 597. In *CSPA*, the court did not find that the Commission had proposed any affirmative act that would trigger the consultation requirements for current operations (*Id.* at 598) and that reopener provisions were not of themselves sufficient to constitute the discretionary agency involvement or control that might mandate consultation. *Id.* at 599. In *CSPA*, the court held that the



Commission was “not required to initiate separate consultation with respect to [the licensee’s] operation of the project under the existing, 1980 license agreement.” *Id.*

Here, in contrast, the Commission has clearly exercised its reserved authority under Article 58 to take action related to the results of the monitoring program called for in that Article:

Based on the information provided in the Licensees’ study results to be filed by April 1, 2005, the Commission will determine whether to require further monitoring studies and changes in project structures and operations to protect fishery resources in the Tuolumne River, after notice and opportunity for hearing.

76 FERC ¶ 61,117 (1996), Paragraph G. Upon the filing of the Summary Report, the Commission provided notice and initiated a proceeding, to which numerous parties intervened and provided comments, that culminated in the Order at issue here. The Order states specifically that it is “final agency action.” Order at 30, Paragraph E. The Commission’s action includes determinations that no change is necessary to existing flow requirements under Article 37, and whether monitoring studies will or will not be required under the license. Unlike the *CSPA* case, here the Commission has exercised its discretion under the license, it is authorizing the Licensees to take certain actions under the license related to flows and monitoring, and it is taking final agency action. Therefore, the Commission’s action triggers the consultation requirement under ESA section 7(a)(2). The Commission must immediately initiate consultation with NMFS to address Project effects to Central Valley steelhead. It further should reconsider its rejection of the recommendations of NMFS and the Service concerning measures necessary to protect Central Valley steelhead.

2. **In concluding that existing flows under Article 37 are adequate and require no modifications, the Commission erred in misinterpreting information regarding factors affecting Tuolumne River fall-run Chinook salmon, failed to support its conclusion that there is no need to change Article 37 flow requirements, and failed**

**to adequately consider recommendations submitted by the Service and other Resource Agencies. In addition, the Commission should consider new information provided in this rehearing request that establishes the need to increase minimum flows to assist Chinook salmon to avoid extinction in the Tuolumne River.**

- a. The Commission's conclusions regarding the adequacy of the flow requirements under Article 37 are based upon a misinterpretation of information.**

In the Order, the Commission concludes that modifications to the existing flow regime in Article 37 are not necessary, stating that

**[t]he information presented to date does not indicate that the flow requirements of Article 37 are responsible for the decline of Chinook salmon in the Tuolumne River. Therefore, the recommended increases in flow requirements are not warranted and the current flow requirements under Article 37 should continue to be maintained.**

**Order at 23. This conclusion is in large part based upon the Commission's interpretation of data from the Pacific Fisheries Management Council (2007) and from NMFS (Order at 22, footnotes 19 and 20), data which indicate that warm ocean temperatures in 2005 caused low escapements in fall 2007. However, poor ocean conditions in 2005 do not explain the decline in salmon population numbers in the Tuolumne River over a number of years and should not be taken out of context.**

**In addition, the Commission concludes that, because the recent data show a decline in harvest and spawning escapement since 2004 in the Sacramento and San Joaquin rivers and their tributaries, factors other than instream flows are having adverse impacts on Chinook salmon populations and therefore no changes in flow requirements are necessary. Order at 23. While other factors may have an effect, such factors do not eliminate the contribution of poor instream conditions to the decline. The Resource Agencies provided the Commission with analyses and evidence of the effects of the Project's flow schedule on Chinook salmon. *See, for example,* the**

March 5, 2007, letter to the Commission, attaching the “Limiting Factor Analyses” (E-Library No. 20070314-0089). The Commission has not adequately considered this evidence and has misinterpreted NMFS’ recent findings regarding poor ocean conditions as constituting the sole reason for the decline in Chinook salmon in the Tuolumne River.

Moreover, the Commission ignores the findings and recommendations of its own Division of Hydropower Administration and Compliance. Those findings recognized that the data obtained through the Licensees’ studies were insufficient to determine that the license flow schedule “had produced the intended benefits in salmon production” (Commission’s June 15, 2007, preliminary analysis) and that the lack of evidence of an increase in either smolt survival or spawner escapement from the flow regime illustrated the need for the collection of additional data. Commission’s December 20, 2006, letter. The preliminary analyses raised questions as to whether the flow regime was adequate to achieve the intended benefits. The Commission fails to explain how the findings in its Order respond to its own preliminary analysis and review of the Summary Report and studies.

- b. The Commission’s conclusions regarding the adequacy of the flow requirements under Article 37 are not supported by substantial evidence.**

The Order incorrectly focuses on the abnormally low escapement during fall 2007 that was likely partly caused by unsuitable ocean conditions in 2005 as evidence that factors beyond the influence of the Don Pedro Project are controlling salmon returns to the Tuolumne River. However, the Resource Agencies provided evidence that, prior to the fall of 2007, the Tuolumne River fall-run Chinook salmon population was primarily controlled by flow releases from La Grange Dam as well as flow levels in the San Joaquin River at Vernalis. A single event of

unusually poor ocean conditions in 2005 does not refute the substantial evidence that La Grange flow releases normally affect salmon production in the Tuolumne River. See Limiting Factor Analyses (E-Library No. 20070314-0089).

The Limiting Factor Analyses provided the Commission with analyses and evidence of the deleterious effects to Chinook salmon resulting from the Project license flow schedule. In that document, the Resource Agencies discussed a wide range of factors limiting Chinook salmon and Central Valley steelhead populations in the Tuolumne River, including the relationship of instream flow releases in the Tuolumne River to adult Chinook recruitment, the relationship of winter flows to the number of fry that survive to smolt size in the Tuolumne River, and the effect of spring flows on the number of smolts that survive their migration through the Tuolumne River and the Delta. In the Order, the Commission focuses mostly on another limiting factor - ocean conditions. However, as discussed above, ocean conditions are not the sole reason for the decline in Chinook salmon in the Tuolumne River, and the Commission provides no justification to refute the evidence and analyses on the record indicating deleterious effects to Chinook salmon are resulting from the Project license flow schedule. The Commission cannot ignore evidence of deleterious Project effects. The Commission must follow the recommendations of the Service and other Resource Agencies to protect fishery resources to mitigate these deleterious Project effects. See 16 U.S.C. § 803(j).

- c. **The Commission must consider the new evidence offered herein and reconsider its decision regarding the flow recommendations.**

Enclosed on the disc provided herein for consideration by the Commission is new evidence offered by the Service that indicates that the Tuolumne River fall-run Chinook salmon

population of naturally produced fish is at a high risk of extinction due to insufficient instream flow releases. See Mesick, C. 2008, "The High Risk of Extinction for the Natural Fall-Run Chinook Salmon Population in the Lower Tuolumne River due to Insufficient Instream Flow Releases." This study characterizes the risk of extinction for Chinook salmon populations based on criteria developed by Lindley and others (2007) that includes population size, rates of population decline, catastrophes, and hatchery influence. Based on population size, the Tuolumne River could be at high risk of extinction if escapement drops below a total escapement of less than 250 spawners over three consecutive years (mean of 83 fish per year) and at low risk if escapement remains above 2,500 spawners for three consecutive years (mean of 833 fish per year). Escapement rates of naturally produced fish in the Tuolumne River are probably less than a total of 250 fish between fall 2005 and fall 2007, which places the Tuolumne River at a high risk of extinction according to the recommended criteria of Lindley and others (2007). Mesick at 2.

A second threat to the viability of the natural salmonid population is a precipitous decline in escapement, which on the Tuolumne has "declined from about 16,000 adults in fall 2000 to few if any fish between fall 2005 through fall 2007." *Id.* Escapement in 2007 was catastrophically low. *Id.* at 3. The study concludes that "[t]he number of naturally produced adult salmon that return to the Tuolumne River is primarily a response of the juvenile salmon to the flows released at La Grange Dam during the winter and spring." Mesick at 3, citing Figure 1 of the Limiting Factor Analyses (E-Library No. 20070314-0089). There is a correlation between flow releases and salmon recruitment; i.e., as flows increase above 2,000 cfs, there is an exponential increase in recruitment. Mesick at 4, Figure 1, Limiting Factor Analyses. Dr.

Mesick's work includes recommendations for a minimum flow schedule that should be able to sustain both naturally producing Chinook salmon and *O. mykiss* populations that would include the following three elements:

- Pulse flows of 1,330 cfs for 45 days during April and May to provide suitable conditions for migrating juvenile salmon and Central Valley steelhead.
- Fall pulse flows of 1,500 cfs for 10 days during mid-October to attract adult Chinook salmon to the Tuolumne River and minimize straying (Mesick 2001).
- Year round base flows of 235 cfs to provide suitable water temperatures throughout the summer in 12.4 miles of habitat for *O. mykiss* and suitable spawning and rearing conditions for fall-run Chinook salmon. The minutes for the Tuolumne River Technical Advisory Committee on June 24, 2003, (included on the accompanying disc of supporting materials) discussed real-time flow management, but the Licensees never reported the results in their meeting notes or other reports to the Commission.

Mesick at 4. Dr. Mesick's report and flow recommendations are supported by substantial evidence, and constitute significant new information that the Commission must consider. See 18 C.F.R. § 385.713(c)(3).

**3. The Commission's conclusions that the Summary Report and the underlying fisheries studies and monitoring comply with Article 58 are not supported by substantial evidence and fail to adequately consider recommendations of the Service and other Resource Agencies. The Commission's Order ignores the Commission Division of Hydropower Administration and Compliance's own findings that most of the required monitoring produced data that were insufficient to reach any valid conclusions about the effects of streamflow releases and that additional, well-designed and well-executed studies are necessary before the effectiveness of the flow schedule and other measures could be determined.**

- a. The Commission failed to support its conclusions related to fisheries studies with substantial evidence.**

The Order concludes that the Summary Report complies with the requirements of Article 58, and "that the information presented and analyzed to date does not warrant a change in the

existing Article 37 flow requirements.” Order at 29, 24. The Commission further declined to require the continuation of most of the studies, even those that had been proposed by the Licensees and considered necessary in the Commission’s earlier findings. These conclusions directly conflict with the earlier findings of the Commission, as evidenced in the December 20, 2006, letter. Moreover, despite the Licensees’ expressed intent in the Summary Plan to continue fall spawning surveys and water temperature monitoring through the term of the license (Order at 23), the Commission does not require the continuation of studies into the relicensing process. Order at 24. The Licensees also proposed to continue other monitoring elements (seine and snorkel surveys, spring rotary screw trapping, and invertebrate sampling) but only if adequate funding sources are available. The Commission should ensure that the Licensees fully fund any studies that are necessary to address impacts of Project operations.

The Order provides scant discussion of the rationale and no discussion of evidence that supports the Commission’s decisions regarding its failure to require the Licensees to perform studies that even its own preliminary findings consider necessary. Order at 23-24. In addition, the Commission fails to provide any rationale for its revision of the conclusions that were made by Commission’s Division of Hydropower Administration and Compliance related to the Fisheries Studies in the Commission’s December 20, 2006, letter or in its preliminary review of the Summary Report.

In its December 20, 2006, letter, the Commission summarized the proceeding related to the Summary Report, and concluded:

Our general conclusion about the 10-Year Summary Report, as presented at the meeting, is that for most of the required monitoring, the data were insufficient to reach any valid conclusions about the effects of the modified streamflow releases and restoration efforts

on the fisheries resources of the Tuolumne River. Some of the monitoring efforts were improperly designed or executed and could not, therefore, produce data that would allow valid conclusions. Some of the mitigative measures simply have not had sufficient time for the monitoring efforts to show any change, or the response was not great enough to detect.

Therefore, we conclude that under Article 58 of the license, further monitoring studies are needed. Additional, well-designed and well-executed studies are necessary before the effectiveness of the revised flow schedule and the non-flow mitigative measures can be determined.

December 20, 2006, letter at 2. Although an agency is entitled to change its course or views, "it must supply a reasoned analysis justifying the reversal." *Babbitt v. Fund for Animals*, 903 F. Supp. 96-116 (D.C. 1995)(citing *Motor Vehicle Manufacturer Association, Inc. v. State Farm Mutual Auto Insurance Co.*, 463 U.S. 19, 57, 103 S. Ct. 2856, 2874, 77 L. Ed. 2d 443 (1983)); *see also Hatch v. Federal Energy Regulatory Commission*, 654 F.2d 825, 834-35 (D.C. Cir. 1981). In this Order, the Commission fails to provide any reasoned analysis that would support the reversal of its own previous conclusions.

**b. The Commission failed to adequately consider recommendations of the Service and other Resource Agencies in its conclusions related to fisheries studies.**

The Service's extensive participation in this proceeding, which included informing the Commission on numerous occasions of the deficiencies of the Licensees' study plan, is documented in the Background Section of this rehearing request. The Service's contributions on these issues are in the Commission record and will not be repeated here. In summary, however, the Service has consistently provided substantial information and provided reasons why the Summary Report and study plan are inadequate to provide the basis for the Commission's



conclusion in the Order.<sup>2</sup> The Commission has not adequately explained in the Order why it is not following the Service's recommendations, and those of the other Resource Agencies, regarding fisheries studies. *See* 16 U.S.C. § 803(j).

Moreover, the Order points out that “[n]o party sought to raise any disagreements concerning the study elements or their design during the 10-year study period” (Order at 13), apparently to support the Commission's new view that the studies were adequate. This position inexplicably ignores the consistent comments filed by all of the Resource Agencies, expressing concerns that the studies were failing to provide the information necessary for the Commission to make a reasoned decision with respect to the study plan. It further overlooks the Commission's own views, which found the Summary Report to contain insufficient data to reach any valid conclusions, and that some of the monitoring efforts were improperly designed or executed and thus could not produce data that would allow valid conclusions. Commission December 20, 2006, letter at 2. The Commission's decision is not supported by substantial evidence and should be reconsidered in light of the extensive record documenting concerns with the existing studies and providing recommendations for necessary actions to address these inadequacies.

---

<sup>2</sup> For instance, studies are needed to determine the precise duration and timing of spring pulse flows. The need for these studies was thoroughly described in the Agencies' March 2007, filing and the Limiting Factor Analyses. The Commission's Order (and the Summary Report) fail to recognize that there are uncertainties in the timing and duration of spring pulse flows needed to sustain the salmonid populations.

4. **The Commission failed to address the Service's request that the Commission should amend Articles 37 and 58 to ensure appropriate participation by the National Marine Fisheries Service. The Service reiterates its request that these articles be modified to include NMFS as a participating and approving entity with respect to flows and studies.**

Article 37 requires the Licensees to maintain minimum streamflows in the Tuolumne River at La Grange Bridge for fish purposes in accordance with a set table and schedule, based on the Water Year classification. An alternative flow schedule may be determined by agreement among the Licensees, the Service and CDFG. Article 58 requires the Licensees to implement a monitoring program for Chinook salmon, to be developed in consultation with the Service and CDFG. NMFS was not included as an entity from whom the Districts must obtain agreement prior to proposing to the Commission an alternative flow schedule under Article 37, nor as a consulting entity in the development of the monitoring program in Article 58, even though Chinook salmon are a species under NMFS' jurisdiction.

The listing of Central Valley steelhead as a threatened species subsequent to the amendment of the Don Pedro license has made more imperative the inclusion of NMFS in the requirements under each of these license articles. As noted in the Background Section above, the Service has in several filings requested that the Commission add NMFS as an entity to be consulted to each article. The Service reiterates this request at this time, as the Commission action in response to the Summary Report and the modifications it is ordering to the license provide the window the Commission may need to make this amendment to the license requirements.

Article 37 has resulted in annual consultations among the Licensees, the Service and CDFG as to the flow schedule for that water year. Since the listing of steelhead, the Service has

deferred to NMFS in making decisions as to the appropriate flow schedule, as the flows must provide protection to both Chinook salmon and Central Valley steelhead, species which are both under NMFS' jurisdiction. The Service will continue to defer these decisions to the NMFS, as NMFS is the appropriate entity to determine the appropriate flow schedule for the species under its authority. The Service requests at this time that this practice be made official, and NMFS be added as an entity whose written agreement must be obtained prior to any annual modifications to the flow schedule under Article 37. The Service may remain as an entity to be consulted, but the actual agreement to the flow modifications must be obtained from NMFS.

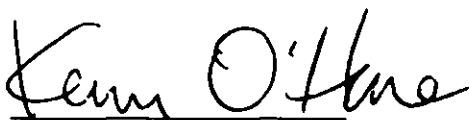
#### **IV. CONCLUSION**

The Service has provided the Commission with substantial evidence and clear support for its recommendations regarding fisheries studies and the flows that are necessary to address deleterious Project effects on Chinook salmon and *O. mykiss*. The Commission's Order inexplicably ignores the recommendations of the Resource Agencies and of its own staff in disregarding the need to modify the Article 37 flow schedule to ensure that Chinook salmon and Central Valley steelhead are protected and to ensure that sufficient studies are performed to make reasoned decisions about the needs of the fisheries resources. In addition, the Commission continues to ignore its responsibilities under the ESA to address Project effects to listed Central Valley steelhead, and has failed to consult as required under the ESA when undertaking an action. Finally, the Commission must amend the license to ensure that the NMFS is accorded its appropriate role under the annual flow modifications in Article 37 and to be consulted with respect to fishery studies.

For the above-stated reasons, the Service respectfully requests that this request for rehearing be granted.

Respectfully submitted this 1<sup>st</sup> day of May, 2008.

Daniel G. Shillito  
Regional Solicitor

A handwritten signature in black ink, appearing to read "Kerry O'Hara", written over a horizontal line.

Kerry O'Hara  
Assistant Regional Solicitor  
Attorney of Record for the Department of the Interior

## INDEX OF SUPPORTING MATERIALS INCLUDED ON DISC

1. Lindley, S.T., et al. 2007. Framework for assessing viability of threatened and endangered salmon and steelhead in the Sacramento-San Joaquin Basin. *San Francisco Estuary and Watershed Science*. Volume 5, Issue 1, Article 4.
2. Mesick, C.F. 2001. The Effects of San Joaquin River flows and Delta export rates during October on the number of adult San Joaquin Chinook salmon that stray. In: Brown, R.L., editor. Fish Bulletin 179: Contributions to the biology of Central Valley salmonids. Volume 2. Sacramento, CA: California Department of Fish and Game. Pages 139-161.
3. Mesick, C.F., et al. 2007. Provisional Draft: San Joaquin River East-side Tributary Fall-run Chinook Salmon Age Cohort Reconstruction.
4. Mesick, C.F. and D. Marston. 2007. Provision Draft: Relationships between fall-run Chinook salmon recruitment to the major San Joaquin River tributaries and streamflow, Delta exports, the Head of the Old River Barrier, and tributary restoration projects from the early 1980s to 2003.
5. Mesick, Carl. 2008. The High Risk of Extinction for the Natural Fall-Run Chinook Salmon Population in the Lower Tuolumne River due to Insufficient Instream Flow Releases.
6. Pacific Fisheries Management Council. 2006. Preseason Report 1: stock abundance analysis for 2005 ocean salmon fisheries. Chapter II - Chinook salmon assessment. February 2006. Portland, Oregon.
7. Pacific Fisheries Management Council. 2008. Record Low Salmon Fisheries Adopted. April 10, 2008.
8. Snedecor, G.W. and W.G. Cochran. 1989. Statistical Methods. Iowa State University Press, Ames, Iowa. Pages 390-393.
9. Tuolumne River Technical Advisory Committee. Technical Advisory Committee Meeting Minutes of June 24, 2003.
10. Waples, R.S., et al. 2004. Life History Divergence in Chinook Salmon: Historic Contingency and Parallel Evolution. *Evolution* 58:386-403.
11. Zimmerman, C.E., et al. 2008. Maternal Origin and Migratory History of *Oncorhynchus mykiss* captured in rivers of the Central Valley, California. California Department of Fish and Game.

**UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION**

<b>Turlock Irrigation District</b>	)	
<b>Modesto Irrigation District</b>	)	
	)	<b>Project No. 2299</b>
<b>Don Pedro Project</b>	)	
<b>Tuolumne River, California</b>	)	
	)	
	)	
<hr style="width: 50%; margin-left: 0;"/>		

**Certificate of Service**

I hereby certify that the foregoing Request for Rehearing of the Department of the Interior has this day been sent via overnight delivery for filing with the Federal Energy Regulatory Commission and served, via deposit in U.S. mail, upon each person designated on the Service List compiled by the Commission Secretary for this Project.

Dated at Sacramento, California, this 1<sup>st</sup> day of May, 2008.

  
\_\_\_\_\_  
Dorothy Hernandez, Secretary



# United States Department of the Interior

OFFICE OF THE SOLICITOR

Pacific Southwest Region

2800 Cottage Way

Room E-1712

Sacramento, California 95825-1890

IN REPLY  
REFER TO:

May 1, 2008

By overnight delivery

Kimberly Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street NE  
Washington, DC 20426

FILED  
OFFICE OF THE  
SOLICITOR  
2008 MAY -2 P 12:59

Subject: Don Pedro Project, FERC No. 2299-057  
Request for Rehearing of the Department of the Interior  
Order on Ten-Year Summary Report Under Article 58

Dear Ms. Bose:

Enclosed for filing with the Federal Energy Regulatory Commission in the above-captioned proceeding, please find the original and nine copies of the Department of the Interior's Request for Rehearing of the Commission's April 3, 2008, Order on Ten-Year Summary Report under Article 58. This filing includes an accompanying disc containing supporting evidence.

The Department's Office of the Solicitor does not have access to electronic mail, and thus must file paper copies. Please date-stamp the ninth copy and return it to me in the stamped, self-addressed envelope.

Thank you for your attention.

Sincerely,

Daniel G. Shillito  
Regional Solicitor

A handwritten signature in black ink that reads "Kerry O'Hara".

By: Kerry O'Hara  
Assistant Regional Solicitor

Enclosure (Request for Rehearing and Supporting Materials)

cc: Service List, Project No. 2299

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Modesto Irrigation District	)	
Turlock Irrigation District	)	Project No. 2299-057
	)	
Don Pedro Project	)	
_____	)	

U.S. DEPARTMENT OF THE INTERIOR  
REQUEST FOR REHEARING  
ORDER ON TEN-YEAR SUMMARY REPORT UNDER ARTICLE 58

Pursuant to 18 C.F.R. § 385.713, and for the reasons described herein, the Department of the Interior (Department) and its bureau the United States Fish and Wildlife Service (Service) hereby timely request rehearing of the Federal Energy Regulatory Commission's (Commission) April 3, 2008, Order on Ten-Year Summary Report Under Article 58 of the license for the Don Pedro Project (P-2299) (Project). 123 FERC ¶ 62,012. On July 25, 2005, the Department timely intervened (E-Library No. 20050726-0155) in response to the Commission's June 24, 2005, Notice announcing that the Summary Report had been filed and soliciting interventions and comments, and thus is a Party for purposes of this rehearing request. 18 C.F.R. § 385.713(b).

**I. BACKGROUND**

The Project was originally licensed in 1964. 31 FPC ¶ 510. Article 37 of the Project license established minimum flow releases for the first twenty years of Project operations (beginning after construction completion in 1971 through 1991) and provided that the Licensees would study the Tuolumne River fishery during that time. In addition, the Commission reserved its authority to revise the minimum flow requirements after twenty years. 31 FPC at pp. 526-27 (Articles 37, 39). The study period was extended by agreement among the Licensees, the



California Department of Fish and Game (CDFG) and the Service, to end in 1998. 38 FERC ¶ 61,097 (1987) (Article 58).

In December 1992, the Commission initiated a proceeding pursuant to Article 37 to reopen the license and to determine the flows necessary to protect fishery resources in the Tuolumne River. The Service participated in a negotiated process that resulted in submission by the Licensees of a Settlement Agreement and Request for License Amendment on February 5, 1996. The Agreement included provision for the release of minimum flows from the Project in accordance with a schedule that would result in higher flows than those under the original license. The Licensees did not request Commission approval of the Settlement Agreement, but rather sought a license amendment to revise the license consistent with the Agreement. In an Order issued July 31, 1996, 76 FERC ¶ 61,117, the Commission amended the license to adopt a revised Article 37, which set minimum stream flows in the Tuolumne River in accordance with a table and schedules set forth in the license, or as agreed among the Licensees, CDFG, and the Service. The stream flow regime was based upon the life history requirements of Chinook salmon. In addition, the Order amended Article 58 to require the Licensees to implement a program to monitor Chinook salmon populations and habitat in the Tuolumne River, and required filing of the results of any fishery studies by April 1, 2005. This filing became the Summary Report.

The Service has been an active participant in this Project proceeding, dating back prior to the license amendment process. Subsequent to the license amendment, the Service actively participated in the development and review of the fishery studies and of the Summary Report. As has been brought previously to the Commission's attention by the National Marine Fisheries

Service (NMFS) and the Service, the amended license and its minimum instream flows are premised on the needs of Chinook salmon, not on the needs of *O. mykiss* (Central Valley steelhead), a species that is now listed as a threatened species under the Endangered Species Act (ESA).<sup>1</sup> The listing of the species prompted NMFS and the Service on several occasions to request that the Commission reconsider the studies and flow schedule in order to include consideration of the needs of steelhead, and to request that the Commission initiate consultation under the ESA to address Project effects to steelhead. The Service has also on several occasions requested that the license be amended to include NMFS as a party from whom the Licensees must obtain agreement prior to making any flow adjustments under Article 37, to ensure that any developed flow regime adequately considers steelhead. See Service's February 26, 2004, filing with the Commission (E-Library No. 20040301-0002).

The Service's February 26, 2004, letter further informed the Commission of the need to consider steelhead in its decisions, and that the monitoring studies and flow schedule required in the license only addressed impacts to Chinook salmon. The Service urged the Licensees to collect information through monitoring studies on steelhead for inclusion in the Summary Report, and advised that the lack of such information would prevent the Commission from making a reasoned decision as to whether additional monitoring or changes in Project structures

---

<sup>1</sup>On May 2, 2003, NOAA Fisheries petitioned the Commission to amend the license to modify Article 37 minimum flow provisions to provide for the protection of steelhead. The Commission by Order issued December 22, 2003, deferred consideration of the petition, pending the completion of informal discussions between NOAA Fisheries and the Licensees. In the subject Order, the Commission indicates that NMFS' petition will be addressed in a subsequent order. Order at 7.

and operations would be necessary to protect fishery resources in the Tuolumne River. Service's February 26, 2004, letter.

Addressing the Licensees' response to this letter, the Service clarified its concerns about fish resources to the Commission in a letter dated September 30, 2004 (E-Library No. 20041004-0047). In responding to the Licensees' comments, the Service pointed out that, while studies of Chinook salmon have substituted for steelhead studies in the past, the two fish occupy river habitats at different times and physiological stages and therefore, data on Chinook salmon will not necessarily adequately represent steelhead. The Service continued to encourage the Licensees and the Commission to develop monitoring and study plans that would include the needs of steelhead so that a reasoned decision may be made as to the measures necessary to protect fishery resources. Service's September 30, 2004, letter.

In response to the Licensees' March 25, 2005, filing of the Summary Report, the Commission by letter dated June 24, 2005, noticed the Fisheries Studies Report and Study Proposal for comment, to which the Service responded on July 21, 2005 (E-Library No. 20050725-0071). At that time, the Service recommended again that the Commission modify the Project license to monitor, protect, and improve the population and habitats of Central Valley steelhead, and informed the Commission that the monitoring studies and flow modifications failed to consider steelhead. The Service reiterated its request that Articles 37 and 58 be amended to add NMFS as a participant in the minimum stream flow and salmon habitat monitoring programs established under those articles. The Service also recommended that the license require the Licensees to develop a well-defined Adaptive Management Program, to perform test flow-related hypotheses (of new flow operations) to determine the most effective

use of instream flows to help reverse declines in the Chinook salmon population and to protect the steelhead population, and to implement nine high-priority non-flow studies to determine the effectiveness of restoration projects and to more fully evaluate other potential environmental constraints on salmonid populations. The Service's filing included scientific analysis as further support, including a "Statistical Comparison of the Chinook Salmon Population Before and After the Final Settlement Agreement."

The Service participated in a public meeting hosted by the Commission on July 25, 2006. After review of the Summary Report, the comments received in writing and at the public meeting, and the Licensees' responses to those comments, the Commission's Division of Hydropower Administration and Compliance responded to the Summary Report through a letter dated December 20, 2006, which stated:

Our general conclusion about the 10-Year Summary Report, as presented at the meeting, is that for most of the required monitoring, the data were insufficient to reach any valid conclusions about the effects of the modified streamflow releases and restoration efforts on the fisheries resources of the Tuolumne River. Some of the monitoring efforts were improperly designed or executed and could not, therefore, produce data that would allow valid conclusions. Some of the mitigative measures simply have not had sufficient time for the monitoring efforts to show any change, or the response was not great enough to detect.

Therefore, we conclude that under Article 58 of the license, further monitoring studies are needed. Additional, well-designed and well-executed studies are necessary before the effectiveness of the revised flow schedule and the non-flow mitigative measures can be determined.

Commission December 20, 2006, letter to Districts, at 2. The Commission indicated that a study plan and schedule for monitoring was necessary to address instream flow, habitat restoration, fry survival, steelhead presence/absence, predator control and river temperature, and that the study plan should be developed in cooperation with various groups, including the Tuolumne River

Technical Action Committee (TRTAC) (of which the Service is a member), the NMFS, and Non-Governmental Organizations (NGOs).

The Licensees submitted a Draft Study Plan on February 2, 2007, to which the Resource Agencies (the Service, CDFG and NMFS) filed joint comments on March 7, 2007 (E-Library No. 20070314-0089). The Agencies pointed out that the Draft Study Plan failed to include the following basic elements:

- Appropriate management questions framed as testable hypotheses;
- Metrics that can be measured at both the site-specific and population levels;
- Methods that provide relatively accurate measurements of the test metrics;
- *Experimental conditions that, to the extent possible, vary one habitat variable at a time;*
- Statistical designs that provide assurances that a sufficient number of observations will be made and specify how the data will be assessed to adequately test the hypotheses and reach statistically valid conclusions.

The Service further provided specific comments on the studies and submitted the Agencies' Limiting Factor Analyses, in which the Agencies developed conceptual models for the salmon and trout populations in the Tuolumne River in an attempt to explain how ecosystem processes, including flow management and restoration, affect the production of adult Chinook salmon and adult Central Valley steelhead in the Tuolumne River. Limiting Factor Analyses at 9. The Agencies recommended that these models be used to monitor the response of the salmonid populations to manipulations of flow and physical habitat and to monitor the response of individual fish to show the cause and effect mechanisms that drive the observed response of the population to the habitat manipulations. *Id.* The Limiting Factor Analyses included the Agencies' recommendations for studies that were necessary to inform these analyses and management actions that would test the hypotheses.

The Licensees submitted the Fisheries Study Plan on March 20, 2007. On June 15, 2007, the Commission Division of Hydropower Administration and Compliance issued its preliminary analysis of the Fisheries Study Plan, noting that:

Staff's review of the 10-year Summary Report determined that the data were insufficient to conclude that implementation of the 1995 settlement agreement flow schedule had produced the intended benefits in salmon production.

June 15, 2007, letter at 1. The Commission went on to state specifically that, with respect to instream flow issues, the Licensees' Study Plan did not resolve all issues for which the Commission had considered additional information to be necessary. The Commission found six issues from the study plan that remained to be resolved, including the need to provide flows higher than required by the Settlement Agreement at least once during the next four years to produce smolt production data for high flow conditions and to continue discussions with the TRTAC regarding the cost and benefits of future coded-wire tag studies. June 15, 2007, letter at 8.

By letter dated July 27, 2007, the Service commented to the Commission on its Preliminary Analysis (E-Library No. 20070803-0078). These comments, citing to the Limiting Factor Analyses provided with the Service's March 2007, filing, reported again to the Commission the decline by 50% in the number of adult Tuolumne River fall-run Chinook salmon, and urged the adoption of a robust study plan that would include the elements from the Limiting Factor Analyses. The Service also expressed concern that the minimum flow requirements do not protect resident and anadromous forms of rainbow trout. The Service further pointed out three substantial deficiencies in the Draft Study Plan: the insufficiency of the fishery studies; the need to evaluate the importance of winter flows on fry survival; and the need

for fish health surveys to evaluate the effects of flow on food resources, diseases and contaminants.

On April 3, 2008, the Commission issued its Order on Ten-Year Summary Report under Article 58 (123 FERC ¶ 62,012). As applicable here, the Commission's main conclusions are;

- No *O. mykiss* anadromy has been identified in the Tuolumne River, and monitoring efforts to date have been inconclusive in determining the presence or absence of steelhead populations in the Tuolumne River. Order at 26.
- There is no basis for requiring additional instream flow studies on the effects of flows on *O. mykiss*, as steelhead monitoring should first be completed in order to determine if steelhead are present in the Tuolumne River. Order at 27.
- Factors outside the river are impacting the Chinook salmon escapement. Order at 22-23.
- The information presented and analyzed to date does not warrant a change in the existing Article 37 flow requirements. Order at 23.
- The Summary Report complies with Article 58. Order at 29.

This request for rehearing challenges the Commission's Findings on these issues.

## II. STATEMENT OF ISSUES

1. The Commission should reconsider its finding that the anadromous form of *O. mykiss* (Central Valley steelhead), which is listed as threatened under the Endangered Species Act, is not present in the Tuolumne River based on recent evidence that establishes the presence of steelhead in the river. In concluding that no steelhead have been identified in the Tuolumne River, the Commission failed to properly consider evidence of steelhead presence that is in the record of this proceeding and cited in the Order at pages 24-26, failed to support its conclusions with substantial evidence, and failed to consider the recommendations of the NMFS, the Service and other resource agencies. Support for this position is found in the CDFG Final Report by Christian E. Zimmerman, et al. (USGS), 2008. "Maternal Origin and Migratory History of *Oncorhynchus mykiss* captured in rivers of the Central Valley, California," which is included on the attached disc for filing with the Commission.
2. In concluding that existing flows under Article 37 are adequate and require no modifications, the Commission erred in misinterpreting information regarding factors affecting Tuolumne River fall-run Chinook salmon, failed to support its conclusion that

there is no need to change Article 37 flow requirements, and failed to adequately consider recommendations submitted by the Service and other Resource Agencies. In addition, the Commission should consider new information provided in this rehearing request that establishes the need to increase minimum flows to assist Chinook salmon to avoid extinction in the Tuolumne River. In support of this issue, the Service cites to Mesick, C. 2008. "The High Risk of Extinction for the Natural Fall-Run Chinook Salmon Population in the Lower Tuolumne River due to Insufficient Instream Flow Releases" and the accompanying reference documents that are included on the disc provided for filing herein; and the Service's prior filings in this proceeding, including the "Limiting Factor Analyses" (E-Library No. 20070314-0089).

3. The Commission's conclusions that the Summary Report and the underlying fisheries studies and monitoring comply with Article 58 are not supported by substantial evidence and fail to adequately consider recommendations of the Service and other Resource Agencies. The Commission's Order ignores the Commission Division of Hydropower Administration and Compliance's own findings that most of the required monitoring produced data that were insufficient to reach any valid conclusions about the effects of streamflow releases and that additional, well-designed and well-executed studies are necessary before the effectiveness of the flow schedule and other measures could be determined. Commission's December 20, 2006, letter. The Service's position on this issue is supported by the following documents in the administrative record of this proceeding: the Commission's December 20, 2006, letter (E-Library No. 20061226-0011); Commission's June 15, 2007, Preliminary Analysis of the Study Plan (E-Library No. 20070619-0175); and the Limiting Factor Analyses (E-Library No. 20070314-0089).
4. The Commission failed to address the Service's request that the Commission should amend Articles 37 and 58 to ensure appropriate participation by the National Marine Fisheries Service. The Service reiterates its request that these articles be modified to include NMFS as a participating entity from which written approval must be required for flow modifications and study plans. The Service may remain as an entity to be consulted on these issues. Support for this position is provided in the Service's letters filed with the Commission, to include the Service's February 26, 2004, filing. (E-Library No. 20040301-0002).

### III. ARGUMENT

The Commission erred in issuing the Order for the following reasons:

- 1) **The Commission should reconsider its finding that the anadromous form of *O. mykiss* (Central Valley steelhead), which is listed as threatened under the Endangered Species Act, is not present in the Tuolumne River based on recent evidence that establishes the presence of steelhead in the river. In concluding that no**



**steelhead have been identified in the Tuolumne River, the Commission failed to properly consider evidence of steelhead presence that is in the record of this proceeding and cited in the Order at pages 24-26, failed to support its conclusions with substantial evidence, and failed to consider the recommendations of the NMFS, the Service and other resource agencies.**

With respect to the presence of steelhead in the Tuolumne River, the Order states:

There are opposing views regarding the presence or absence of steelhead in the Tuolumne River, and whether anadromy exists in the resident population of *O. mykiss* downstream of La Grange Dam. Anecdotal reports persist of fish with adult steelhead characteristics in the Tuolumne River, but such reports have not been confirmed.

Order at 24. The Order recites evidence provided by NMFS of steelhead populations in the river and the opinions of the Resource Agencies and NGOs at the July 2006 meeting that there was a “need to modify existing monitoring programs to include steelhead, to implement new monitoring programs related to steelhead, and to examine flows and temperatures necessary for the protection of steelhead.” Order at 25. NMFS further requested the provision of specific information concerning steelhead, as described on pages 25-26 of the Order. The Commission then concludes:

**No *O. mykiss* anadromy has been identified in the Tuolumne River; however, reproductive contribution of non-anadromous parents to anadromous offspring can occur when the anadromous run size is small, suggesting a genetic compensation between the anadromous and non-anadromous life-history forms. [Citation omitted]**

**It is apparent that monitoring efforts, to date, have been inconclusive in determining the presence or absence of steelhead populations in the Tuolumne River. The origin and nature of rainbow trout downstream of La Grange Dam is unclear, and it is unclear if steelhead occur in the Tuolumne River downstream of La Grange Dam.**

**The Districts, therefore, should initiate a monitoring effort to determine if the Tuolumne River currently supports anadromous forms of rainbow trout...**

Order at 26. The Commission further found no basis for requiring additional instream flow studies, finding that monitoring for steelhead should first be completed to determine if steelhead

are present in the River. Order at 27.

These conclusions are not supported by substantial evidence as required by the law. *See* 16 U.S.C. § 8251 (b). In reaching these conclusions, the Commission did not consider or give proper consideration to relevant information provided by the Resource Agencies, and thus the conclusions are arbitrary, capricious and not in accordance with law. *See* 16 U.S.C. § 803(j); *Wisconsin Power & Light Company v. Federal Energy Regulatory Commission*, 363 F.3d 453, 461-466 (D.C. Cir. 2004).

- a. **The Commission must consider a recent study providing conclusive evidence that the anadromous form of *Oncorhynchus mykiss* (Central Valley steelhead) is present in the Tuolumne River.**

The Commission should reconsider its decision in light of new information presented in a paper, published March 6, 2008, in which otolith microchemistry was analyzed to determine the migratory history of Central Valley steelhead captured on several Central Valley Rivers, including the Tuolumne River. Zimmerman, et al., 2008. "Maternal Origin and Migratory History of *Oncorhynchus mykiss* captured in rivers of the Central Valley, California" (which is included on the attached disc of supporting materials to this rehearing request). An analysis of the strontium (SR) to calcium (CA) ratios (SR:Ca) across the otolith of each fish was used to describe the migratory history of that fish between freshwater and saltwater, as the concentration of strontium is generally greater in saltwater. Further, comparison of Sr:Ca in the otolith primordia and freshwater growth region was used to determine maternal origin (resident or anadromous) based on the assumption that primordial composition reflects the environment in which yolk precursors develop (in the ocean for anadromous forms). The CDFG collected 146 wild *O. mykiss* from the Tuolumne River between 2002 and 2007 for otolith microchemistry

analysis. Of the fish sampled (n= 146), eleven should be considered steelhead, as they were identified as having anadromous (steelhead) maternal origin, and one of those fish displayed an anadromous migratory history.

This new evidence establishes the presence of steelhead in the Tuolumne River. The proper standard for review of conclusions by the Commission is whether those conclusions are supported by substantial evidence. *See* 16 U.S.C. § 825l(b); *Wisconsin Power & Light*, 363 F.3d at 461-66. Although the Commission's Order implies that conclusive evidence is required (Order at 26), conclusive evidence is not the appropriate standard. Nevertheless, this study provides conclusive evidence that steelhead migrate to and successfully spawn in the Tuolumne River; thus, it provides conclusive evidence of steelhead presence in the Tuolumne River.

The evidence relied upon by the Commission in the Order is out of date. *See* Order at 18 ("The preliminary results from the CDFG otolith study indicated no anadromy was detected"). The Commission must reconsider its determination that steelhead are not present in the Tuolumne in light of this new information. *See* 18 C.F.R. § 385.713(c)(3). Further, the Commission should similarly reconsider its determination that no additional instream flow studies are required, as the prerequisite noted by the Commission in the Order at 27 (that *O. mykiss* monitoring should first determine presence) has already been met.

- b. **The Commission failed to properly consider evidence provided by the Resource Agencies regarding the presence of the anadromous form of *Oncorhynchus mykiss* (Central Valley steelhead) in the Tuolumne River and failed to support its conclusions with substantial evidence.**

In the Order, the Commission recognized that NMFS has supplied evidence of the presence of steelhead in the Tuolumne River and summarized some of this evidence. Order at

24-25. Notably, the Commission did not discuss why it did not consider evidence provided by NMFS in a November 19, 2002, letter, and again as an attachment to a June 20, 2006, filing. This evidence includes a CDFG memorandum dated May 24, 2001, "Central Valley Steelhead Genetics Study - Tuolumne River Sampling," which discusses steelhead found during sampling conducted on the Tuolumne River. In the Order, the Commission does not adequately explain why it has not considered this information from NMFS as evidence of steelhead presence, nor has the Commission provided substantial evidence establishing that there are no steelhead present in the Tuolumne River.

In addition, the Commission noted, "[a]necdotal reports persist of fish with adult steelhead characteristics in the Tuolumne River, but such reports have not been confirmed." Order at 24. For example, the Conservation Groups' Brief in Support of the Petition of the National Marine Fisheries Service for Modifying Project Structures and Operations (E-Library No. 20030606-5044, filed June 6, 2003), discusses and attaches such anecdotal reports. However, the Commission simply concludes that the reports "have not been confirmed." The Commission has not provided any analysis or justification why it has not considered these anecdotal reports to be evidence of the presence of steelhead.

The Commission failed to adequately consider evidence submitted by the Parties and failed to justify the conclusions it reached in the Order. Accordingly, the Order is not supported by substantial evidence, and the findings and conclusions should be reconsidered.

- c. **The Commission failed to properly consider recommendations by NMFS and the Service regarding measures necessary for the anadromous form of Central Valley steelhead.**

In the Order, the Commission noted that the Resource Agencies and others “expressed the need to modify existing monitoring programs to include steelhead, to implement new monitoring programs related to steelhead, and to examine flows and temperatures necessary for the protection of steelhead.” Order at 25. For example, the Service provided written comments that informed the Commission of modifications to the monitoring programs and flow schedule that were necessary to address steelhead. *See, inter alia*, the Service’s September 30, 2004, letter (E-Library No. 20041004-0047). In addition, the Commission summarized the types of information regarding the effects of Project operations on steelhead that NMFS stated were needed. Order at 25-26. However, based on its incorrect conclusion that more information was necessary first to determine steelhead presence in the Tuolumne River, the Commission did not follow the recommendations of NMFS and the Service. Now that steelhead presence has been established, the Commission must revise its conclusions regarding steelhead presence and revise the Order to ensure that the recommendations of the Resource Agencies to protect steelhead are implemented. *See* 16 U.S.C. § 803(j).

The Request for Rehearing of this Order filed by NMFS also raises concerns with the Commission’s response and deferral of action on NMFS’ May 3, 2003, Petition seeking to amend the license to modify the minimum streamflows as necessary to protect both steelhead and Chinook salmon in the Tuolumne River. In that Petition, NMFS reiterated its request that the Commission initiate consultation with NMFS pursuant to ESA section 7(a)(2) regarding the impacts of the Don Pedro Project facilities and operation on Central Valley steelhead. The

Service has similarly requested that the Commission initiate consultation regarding Project effects to steelhead. *See, inter alia*, the Service's February 26, 2004, letter (E-Library No. 20040301-0002 ). The Commission noted in the Order that "the petition is currently pending before the Commission and will be addressed in a subsequent order." Order at 7. The need for the Commission to consult on Project effects to steelhead is even more compelling now, however, as the Order constitutes definite action taken by the Commission. Such agency action requires compliance by the Federal action agency with the consultation provisions in section 7 of the ESA. These Commission-ordered actions may adversely affect listed Central Valley steelhead. The Commission must initiate formal consultation with NMFS pursuant to ESA section 7(a)(2) regarding the impacts of the Don Pedro Project facilities and operation on Central Valley steelhead.

This situation is distinguished from that addressed by the Ninth Circuit Court of Appeals in *California Sportfishing Protection Alliance v. FERC*, 472 F.3d 593 (9<sup>th</sup> Cir. 2006) (*CSPA*), which concerned the ongoing operation of the DeSabra-Centerville Project under a 30-year license issued in 1980. *CSPA* at 594. In determining in *CSPA* that consultation was not required under ESA section 7(a)(2), the court focused on the triggering mechanism for consultation, which in that case would have been an agency action, not the listing of a species. *Id.* at 597. In *CSPA*, the court did not find that the Commission had proposed any affirmative act that would trigger the consultation requirements for current operations (*Id.* at 598) and that reopener provisions were not of themselves sufficient to constitute the discretionary agency involvement or control that might mandate consultation. *Id.* at 599. In *CSPA*, the court held that the

Commission was “not required to initiate separate consultation with respect to [the licensee’s] operation of the project under the existing, 1980 license agreement.” *Id.*

Here, in contrast, the Commission has clearly exercised its reserved authority under Article 58 to take action related to the results of the monitoring program called for in that Article:

Based on the information provided in the Licensees’ study results to be filed by April 1, 2005, the Commission will determine whether to require further monitoring studies and changes in project structures and operations to protect fishery resources in the Tuolumne River, after notice and opportunity for hearing.

76 FERC ¶ 61,117 (1996), Paragraph G. Upon the filing of the Summary Report, the Commission provided notice and initiated a proceeding, to which numerous parties intervened and provided comments, that culminated in the Order at issue here. The Order states specifically that it is “final agency action.” Order at 30, Paragraph E. The Commission’s action includes determinations that no change is necessary to existing flow requirements under Article 37, and whether monitoring studies will or will not be required under the license. Unlike the *CSPA* case, here the Commission has exercised its discretion under the license, it is authorizing the Licensees to take certain actions under the license related to flows and monitoring, and it is taking final agency action. Therefore, the Commission’s action triggers the consultation requirement under ESA section 7(a)(2). The Commission must immediately initiate consultation with NMFS to address Project effects to Central Valley steelhead. It further should reconsider its rejection of the recommendations of NMFS and the Service concerning measures necessary to protect Central Valley steelhead.

2. **In concluding that existing flows under Article 37 are adequate and require no modifications, the Commission erred in misinterpreting information regarding factors affecting Tuolumne River fall-run Chinook salmon, failed to support its conclusion that there is no need to change Article 37 flow requirements, and failed**

**to adequately consider recommendations submitted by the Service and other Resource Agencies. In addition, the Commission should consider new information provided in this rehearing request that establishes the need to increase minimum flows to assist Chinook salmon to avoid extinction in the Tuolumne River.**

- a. The Commission's conclusions regarding the adequacy of the flow requirements under Article 37 are based upon a misinterpretation of information.**

In the Order, the Commission concludes that modifications to the existing flow regime in Article 37 are not necessary, stating that

**[t]he information presented to date does not indicate that the flow requirements of Article 37 are responsible for the decline of Chinook salmon in the Tuolumne River. Therefore, the recommended increases in flow requirements are not warranted and the current flow requirements under Article 37 should continue to be maintained.**

**Order at 23. This conclusion is in large part based upon the Commission's interpretation of data from the Pacific Fisheries Management Council (2007) and from NMFS (Order at 22, footnotes 19 and 20), data which indicate that warm ocean temperatures in 2005 caused low escapements in fall 2007. However, poor ocean conditions in 2005 do not explain the decline in salmon population numbers in the Tuolumne River over a number of years and should not be taken out of context.**

**In addition, the Commission concludes that, because the recent data show a decline in harvest and spawning escapement since 2004 in the Sacramento and San Joaquin rivers and their tributaries, factors other than instream flows are having adverse impacts on Chinook salmon populations and therefore no changes in flow requirements are necessary. Order at 23. While other factors may have an effect, such factors do not eliminate the contribution of poor instream conditions to the decline. The Resource Agencies provided the Commission with analyses and evidence of the effects of the Project's flow schedule on Chinook salmon. *See, for example*, the**



March 5, 2007, letter to the Commission, attaching the “Limiting Factor Analyses” (E-Library No. 20070314-0089). The Commission has not adequately considered this evidence and has misinterpreted NMFS’ recent findings regarding poor ocean conditions as constituting the sole reason for the decline in Chinook salmon in the Tuolumne River.

Moreover, the Commission ignores the findings and recommendations of its own Division of Hydropower Administration and Compliance. Those findings recognized that the data obtained through the Licensees’ studies were insufficient to determine that the license flow schedule “had produced the intended benefits in salmon production” (Commission’s June 15, 2007, preliminary analysis) and that the lack of evidence of an increase in either smolt survival or *spawner escapement* from the flow regime illustrated the need for the collection of additional data. Commission’s December 20, 2006, letter. The preliminary analyses raised questions as to whether the flow regime was adequate to achieve the intended benefits. The Commission fails to explain how the findings in its Order respond to its own preliminary analysis and review of the Summary Report and studies.

**b. The Commission’s conclusions regarding the adequacy of the flow requirements under Article 37 are not supported by substantial evidence.**

The Order incorrectly focuses on the abnormally low escapement during fall 2007 that was likely partly caused by unsuitable ocean conditions in 2005 as evidence that factors beyond the influence of the Don Pedro Project are controlling salmon returns to the Tuolumne River. However, the Resource Agencies provided evidence that, prior to the fall of 2007, the Tuolumne River fall-run Chinook salmon population was primarily controlled by flow releases from La Grange Dam as well as flow levels in the San Joaquin River at Vernalis. A single event of

unusually poor ocean conditions in 2005 does not refute the substantial evidence that La Grange flow releases normally affect salmon production in the Tuolumne River. *See Limiting Factor Analyses* (E-Library No. 20070314-0089).

The Limiting Factor Analyses provided the Commission with analyses and evidence of the deleterious effects to Chinook salmon resulting from the Project license flow schedule. In that document, the Resource Agencies discussed a wide range of factors limiting Chinook salmon and Central Valley steelhead populations in the Tuolumne River, including the relationship of instream flow releases in the Tuolumne River to adult Chinook recruitment, the relationship of winter flows to the number of fry that survive to smolt size in the Tuolumne River, and the effect of spring flows on the number of smolts that survive their migration through the Tuolumne River and the Delta. In the Order, the Commission focuses mostly on another limiting factor - ocean conditions. However, as discussed above, ocean conditions are not the sole reason for the decline in Chinook salmon in the Tuolumne River, and the Commission provides no justification to refute the evidence and analyses on the record indicating deleterious effects to Chinook salmon are resulting from the Project license flow schedule. The Commission cannot ignore evidence of deleterious Project effects. The Commission must follow the recommendations of the Service and other Resource Agencies to protect fishery resources to mitigate these deleterious Project effects. *See* 16 U.S.C. § 803(j).

- c. **The Commission must consider the new evidence offered herein and reconsider its decision regarding the flow recommendations.**

Enclosed on the disc provided herein for consideration by the Commission is new evidence offered by the Service that indicates that the Tuolumne River fall-run Chinook salmon

population of naturally produced fish is at a high risk of extinction due to insufficient instream flow releases. See Mesick, C. 2008, "The High Risk of Extinction for the Natural Fall-Run Chinook Salmon Population in the Lower Tuolumne River due to Insufficient Instream Flow Releases." This study characterizes the risk of extinction for Chinook salmon populations based on criteria developed by Lindley and others (2007) that includes population size, rates of population decline, catastrophes, and hatchery influence. Based on population size, the Tuolumne River could be at high risk of extinction if escapement drops below a total escapement of less than 250 spawners over three consecutive years (mean of 83 fish per year) and at low risk if escapement remains above 2,500 spawners for three consecutive years (mean of 833 fish per year). Escapement rates of naturally produced fish in the Tuolumne River are probably less than a total of 250 fish between fall 2005 and fall 2007, which places the Tuolumne River at a high risk of extinction according to the recommended criteria of Lindley and others (2007). Mesick at 2.

A second threat to the viability of the natural salmonid population is a precipitous decline in escapement, which on the Tuolumne has "declined from about 16,000 adults in fall 2000 to few if any fish between fall 2005 through fall 2007." *Id.* Escapement in 2007 was catastrophically low. *Id.* at 3. The study concludes that "[t]he number of naturally produced adult salmon that return to the Tuolumne River is primarily a response of the juvenile salmon to the flows released at La Grange Dam during the winter and spring." Mesick at 3, citing Figure 1 of the Limiting Factor Analyses (E-Library No. 20070314-0089). There is a correlation between flow releases and salmon recruitment; i.e., as flows increase above 2,000 cfs, there is an exponential increase in recruitment. Mesick at 4, Figure 1, Limiting Factor Analyses. Dr.

Mesick's work includes recommendations for a minimum flow schedule that should be able to sustain both naturally producing Chinook salmon and *O. mykiss* populations that would include the following three elements:

- Pulse flows of 1,330 cfs for 45 days during April and May to provide suitable conditions for migrating juvenile salmon and Central Valley steelhead.
- Fall pulse flows of 1,500 cfs for 10 days during mid-October to attract adult Chinook salmon to the Tuolumne River and minimize straying (Mesick 2001).
- Year round base flows of 235 cfs to provide suitable water temperatures throughout the summer in 12.4 miles of habitat for *O. mykiss* and suitable spawning and rearing conditions for fall-run Chinook salmon. The minutes for the Tuolumne River Technical Advisory Committee on June 24, 2003, (included on the accompanying disc of supporting materials) discussed real-time flow management, but the Licensees never reported the results in their meeting notes or other reports to the Commission.

Mesick at 4. Dr. Mesick's report and flow recommendations are supported by substantial evidence, and constitute significant new information that the Commission must consider. See 18 C.F.R. § 385.713(c)(3).

**3. The Commission's conclusions that the Summary Report and the underlying fisheries studies and monitoring comply with Article 58 are not supported by substantial evidence and fail to adequately consider recommendations of the Service and other Resource Agencies. The Commission's Order ignores the Commission Division of Hydropower Administration and Compliance's own findings that most of the required monitoring produced data that were insufficient to reach any valid conclusions about the effects of streamflow releases and that additional, well-designed and well-executed studies are necessary before the effectiveness of the flow schedule and other measures could be determined.**

**a. The Commission failed to support its conclusions related to fisheries studies with substantial evidence.**

The Order concludes that the Summary Report complies with the requirements of Article 58, and "that the information presented and analyzed to date does not warrant a change in the

existing Article 37 flow requirements.” Order at 29, 24. The Commission further declined to require the continuation of most of the studies, even those that had been proposed by the Licensees and considered necessary in the Commission’s earlier findings. These conclusions directly conflict with the earlier findings of the Commission, as evidenced in the December 20, 2006, letter. Moreover, despite the Licensees’ expressed intent in the Summary Plan to continue fall spawning surveys and water temperature monitoring through the term of the license (Order at 23), the Commission does not require the continuation of studies into the relicensing process. Order at 24. The Licensees also proposed to continue other monitoring elements (seine and snorkel surveys, spring rotary screw trapping, and invertebrate sampling) but only if adequate funding sources are available. The Commission should ensure that the Licensees fully fund any studies that are necessary to address impacts of Project operations.

The Order provides scant discussion of the rationale and no discussion of evidence that supports the Commission’s decisions regarding its failure to require the Licensees to perform studies that even its own preliminary findings consider necessary. Order at 23-24. In addition, the Commission fails to provide any rationale for its revision of the conclusions that were made by Commission’s Division of Hydropower Administration and Compliance related to the Fisheries Studies in the Commission’s December 20, 2006, letter or in its preliminary review of the Summary Report.

In its December 20, 2006, letter, the Commission summarized the proceeding related to the Summary Report, and concluded:

Our general conclusion about the 10-Year Summary Report, as presented at the meeting, is that for most of the required monitoring, the data were insufficient to reach any valid conclusions about the effects of the modified streamflow releases and restoration efforts

on the fisheries resources of the Tuolumne River. Some of the monitoring efforts were improperly designed or executed and could not, therefore, produce data that would allow valid conclusions. Some of the mitigative measures simply have not had sufficient time for the monitoring efforts to show any change, or the response was not great enough to detect.

Therefore, we conclude that under Article 58 of the license, further monitoring studies are needed. Additional, well-designed and well-executed studies are necessary before the effectiveness of the revised flow schedule and the non-flow mitigative measures can be determined.

December 20, 2006, letter at 2. Although an agency is entitled to change its course or views, "it must supply a reasoned analysis justifying the reversal." *Babbitt v. Fund for Animals*, 903 F. Supp. 96-116 (D.C. 1995)(citing *Motor Vehicle Manufacturer Association, Inc. v. State Farm Mutual Auto Insurance Co.*, 463 U.S. 19, 57, 103 S. Ct. 2856, 2874, 77 L. Ed. 2d 443 (1983)); *see also Hatch v. Federal Energy Regulatory Commission*, 654 F.2d 825, 834-35 (D.C. Cir. 1981). In this Order, the Commission fails to provide any reasoned analysis that would support the reversal of its own previous conclusions.

**b. The Commission failed to adequately consider recommendations of the Service and other Resource Agencies in its conclusions related to fisheries studies.**

The Service's extensive participation in this proceeding, which included informing the Commission on numerous occasions of the deficiencies of the Licensees' study plan, is documented in the Background Section of this rehearing request. The Service's contributions on these issues are in the Commission record and will not be repeated here. In summary, however, the Service has consistently provided substantial information and provided reasons why the Summary Report and study plan are inadequate to provide the basis for the Commission's

conclusion in the Order.<sup>2</sup> The Commission has not adequately explained in the Order why it is not following the Service's recommendations, and those of the other Resource Agencies, regarding fisheries studies. See 16 U.S.C. § 803(j).

Moreover, the Order points out that "[n]o party sought to raise any disagreements concerning the study elements or their design during the 10-year study period" (Order at 13), apparently to support the Commission's new view that the studies were adequate. This position inexplicably ignores the consistent comments filed by all of the Resource Agencies, expressing concerns that the studies were failing to provide the information necessary for the Commission to make a reasoned decision with respect to the study plan. It further overlooks the Commission's own views, which found the Summary Report to contain insufficient data to reach any valid conclusions, and that some of the monitoring efforts were improperly designed or executed and thus could not produce data that would allow valid conclusions. Commission December 20, 2006, letter at 2. The Commission's decision is not supported by substantial evidence and should be reconsidered in light of the extensive record documenting concerns with the existing studies and providing recommendations for necessary actions to address these inadequacies.

---

<sup>2</sup> For instance, studies are needed to determine the precise duration and timing of spring pulse flows. The need for these studies was thoroughly described in the Agencies' March 2007, filing and the Limiting Factor Analyses. The Commission's Order (and the Summary Report) fail to recognize that there are uncertainties in the timing and duration of spring pulse flows needed to sustain the salmonid populations.

4. **The Commission failed to address the Service's request that the Commission should amend Articles 37 and 58 to ensure appropriate participation by the National Marine Fisheries Service. The Service reiterates its request that these articles be modified to include NMFS as a participating and approving entity with respect to flows and studies.**

Article 37 requires the Licensees to maintain minimum streamflows in the Tuolumne River at La Grange Bridge for fish purposes in accordance with a set table and schedule, based on the Water Year classification. An alternative flow schedule may be determined by agreement among the Licensees, the Service and CDFG. Article 58 requires the Licensees to implement a monitoring program for Chinook salmon, to be developed in consultation with the Service and CDFG. NMFS was not included as an entity from whom the Districts must obtain agreement prior to proposing to the Commission an alternative flow schedule under Article 37, nor as a consulting entity in the development of the monitoring program in Article 58, even though Chinook salmon are a species under NMFS' jurisdiction.

The listing of Central Valley steelhead as a threatened species subsequent to the amendment of the Don Pedro license has made more imperative the inclusion of NMFS in the requirements under each of these license articles. As noted in the Background Section above, the Service has in several filings requested that the Commission add NMFS as an entity to be consulted to each article. The Service reiterates this request at this time, as the Commission action in response to the Summary Report and the modifications it is ordering to the license provide the window the Commission may need to make this amendment to the license requirements.

Article 37 has resulted in annual consultations among the Licensees, the Service and CDFG as to the flow schedule for that water year. Since the listing of steelhead, the Service has



deferred to NMFS in making decisions as to the appropriate flow schedule, as the flows must provide protection to both Chinook salmon and Central Valley steelhead, species which are both under NMFS' jurisdiction. The Service will continue to defer these decisions to the NMFS, as NMFS is the appropriate entity to determine the appropriate flow schedule for the species under its authority. The Service requests at this time that this practice be made official, and NMFS be added as an entity whose written agreement must be obtained prior to any annual modifications to the flow schedule under Article 37. The Service may remain as an entity to be consulted, but the actual agreement to the flow modifications must be obtained from NMFS.


#### **IV. CONCLUSION**

The Service has provided the Commission with substantial evidence and clear support for its recommendations regarding fisheries studies and the flows that are necessary to address deleterious Project effects on Chinook salmon and *O. mykiss*. The Commission's Order inexplicably ignores the recommendations of the Resource Agencies and of its own staff in disregarding the need to modify the Article 37 flow schedule to ensure that Chinook salmon and Central Valley steelhead are protected and to ensure that sufficient studies are performed to make reasoned decisions about the needs of the fisheries resources. In addition, the Commission continues to ignore its responsibilities under the ESA to address Project effects to listed Central Valley steelhead, and has failed to consult as required under the ESA when undertaking an action. Finally, the Commission must amend the license to ensure that the NMFS is accorded its appropriate role under the annual flow modifications in Article 37 and to be consulted with respect to fishery studies.

For the above-stated reasons, the Service respectfully requests that this request for rehearing be granted.

Respectfully submitted this 1<sup>st</sup> day of May, 2008.

Daniel G. Shillito  
Regional Solicitor

A handwritten signature in black ink, appearing to read "Kerry O'Hara", written over a horizontal line.

Kerry O'Hara  
Assistant Regional Solicitor  
Attorney of Record for the Department of the Interior

## INDEX OF SUPPORTING MATERIALS INCLUDED ON DISC

1. Lindley, S.T., et al. 2007. Framework for assessing viability of threatened and endangered salmon and steelhead in the Sacramento-San Joaquin Basin. *San Francisco Estuary and Watershed Science*. Volume 5, Issue 1, Article 4.
2. Mesick, C.F. 2001. The Effects of San Joaquin River flows and Delta export rates during October on the number of adult San Joaquin Chinook salmon that stray. In: Brown, R.L., editor. Fish Bulletin 179: Contributions to the biology of Central Valley salmonids. Volume 2. Sacramento, CA: California Department of Fish and Game. Pages 139-161.
3. Mesick, C.F., et al. 2007. Provisional Draft: San Joaquin River East-side Tributary Fall-run Chinook Salmon Age Cohort Reconstruction.
4. Mesick, C.F. and D. Marston. 2007. Provision Draft: Relationships between fall-run Chinook salmon recruitment to the major San Joaquin River tributaries and streamflow, Delta exports, the Head of the Old River Barrier, and tributary restoration projects from the early 1980s to 2003.
5. Mesick, Carl. 2008. The High Risk of Extinction for the Natural Fall-Run Chinook Salmon Population in the Lower Tuolumne River due to Insufficient Instream Flow Releases.
6. Pacific Fisheries Management Council. 2006. Preseason Report 1: stock abundance analysis for 2005 ocean salmon fisheries. Chapter II - Chinook salmon assessment. February 2006. Portland, Oregon.
7. Pacific Fisheries Management Council. 2008. Record Low Salmon Fisheries Adopted. April 10, 2008.
8. Snedecor, G.W. and W.G. Cochran. 1989. Statistical Methods. Iowa State University Press, Ames, Iowa. Pages 390-393.
9. Tuolumne River Technical Advisory Committee. Technical Advisory Committee Meeting Minutes of June 24, 2003.
10. Waples, R.S., et al. 2004. Life History Divergence in Chinook Salmon: Historic Contingency and Parallel Evolution. *Evolution* 58:386-403.
11. Zimmerman, C.E., et al. 2008. Maternal Origin and Migratory History of *Oncorhynchus mykiss* captured in rivers of the Central Valley, California. California Department of Fish and Game.

**UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION**

<b>Turlock Irrigation District</b>	)	
<b>Modesto Irrigation District</b>	)	
	)	<b>Project No. 2299</b>
<b>Don Pedro Project</b>	)	
<b>Tuolumne River, California</b>	)	
	)	
_____	)	

**Certificate of Service**

I hereby certify that the foregoing Request for Rehearing of the Department of the Interior has this day been sent via overnight delivery for filing with the Federal Energy Regulatory Commission and served, via deposit in U.S. mail, upon each person designated on the Service List compiled by the Commission Secretary for this Project.

Dated at Sacramento, California, this 1<sup>st</sup> day of May, 2008.

  
\_\_\_\_\_  
Dorothy Hernandez, Secretary