November 14, 2011

Filed via Electronic Submittal (E-File)

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

SUBJECT: Yuba River Development Project
FERC Project No. 2246-058
Comments and Information Regarding Study Dispute

Dear Secretary Bose:

Pursuant to Section (§) 5.14(i) of Title 18 of the Code of Federal Regulations (CFR), Yuba County Water Agency (YCWA), applicant for a new license for its Yuba River Development Project, FERC Project No. 2246 (Project), files with the Federal Energy Regulatory Commission (FERC or Commission) and serves upon each of the three Study Dispute Panel Members (Panel Members) the comments and information contained in this letter and attachments.

This letter is e-filed this day with the Commission and, at the same time, sent to the e-mail addresses of each Panel Member.[1]

Specifically, the comments and information in this filing focus on the notice of dispute filed on October 20, 2011 by the United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS).

YCWA appreciates that the Panel Members are working against a very short time frame, including a holiday shortened week. Therefore, YCWA has kept this letter and the attached information as brief as possible. YCWA offers its appreciation in advance to the Panel Members for their efforts to resolve the dispute.

Besides this introductory information, this filing is divided into three main sections, each of which is described below.

[1] The attachments to this letter have not been included in the FERC filing since the material is on file for this proceeding in FERC's ELibrary. Similarly, the attachments have not been e-mailed to the Panel Members since they are large files. Instead, YCWA has sent the attachments to this letter to each Panel member via Federal Express.

- Section 1, Reference Material. This section provides a list of relevant materials, including where these can be found on YCWA's Relicensing Website (www.ycwa-relicensing.com).[2]
- Section 2, Factual Background. This section provides information regarding: 1) the Yuba River Development Project; 2) anadromous fish in the Project area; and 3) the Study Dispute. YCWA believes that the information in Section 2 constitutes *material facts* that should be considered by the Panel Members when reaching their recommendation to FERC's Director of Office of Energy Projects (Director), and by the Director when issuing his determination for each disputed study.
- Section 3, YCWA's Comments on the Disputes. In this section, YCWA provides its comments on NMFS's Study Dispute.

At the outset, YCWA notes that, on November 2, 2011, YCWA filed with FERC a Motion to Partially Dismiss the Study Dispute filed by NMFS, to the extent that the Study Dispute involves study requests related to upstream passage of anadromous fish. YCWA contends these study requests do not meet FERC's study criteria, are premature, and involve legal and policy issues that are not appropriate for decision by a technical dispute resolution panel. At the time of this filing, the Commission has not ruled on YCWA's motion.

SECTION 1 - REFERENCE MATERIAL

YCWA assumes that Panel members have copies of the major relicensing information. However, if not, the documents are available on YCWA's Relicensing Website at www.ycwa-relicensing.com. For ease of reference, the major filings and their locations on the Relicensing Website are listed below.

- FERC Documents (*On the Relicensing Website Quick Launch bar, open the item named "FERC Notices and Orders." There you will find the documents listed below.*)
  - FERC's January 1, 2011, Scoping Document 1 (SD1)
  - FERC's February 2, 2011 Transcript of FERC's Scoping Meetings
  - FERC's April 18, 2011, Scoping Document 2 (SD2)
  - FERC's September 30, 2011, Study Determination

- Filings by YCWA (*On the Relicensing Website Quick Launch bar, open the item named "FERC Filings - Relicensing" and then open the folder named "Filings by YCWA." There you will find the documents listed below.*)
  - YCWA's November 5, 2010, Pre-Application Document
  - YCWA's April 19, 2011, Proposed Study Plan
  - YCWA's August 17, 2011, Revised Study Plan

[2] YCWA has not provided to Panel Members a hardcopy or electronic copy of these materials because YCWA understands that FERC has provided the Panel Members with copies of the materials.

- YCWA's September 8, 2011 Reply to Comments on Revised Study Plan
- YCWA's November 2, 2011, Motion to Partially Dismiss NMFS's Notice of Study Dispute

- Filings by NMFS (*On the Relicensing Website Quick Launch bar, open the item named "FERC Filings - Relicensing" and then open the folder named "Filings by Others." There you will find the documents listed below.*)
  - NMFS's March 7, 2011, Comments on YCWA's Pre-Application Document and FERC's SD1
  - NMFS's July 18, 2011, Comments on YCWA's Proposed Study Plan
  - NMFS's September 1, 2011, Comments on YCWA's Revised Study Plan
  - NMFS's October 20, 2011, Notice of Dispute with FERC's Determination

YCWA is also providing to each Panel Member, as an attachment to this letter: 1) a 3 foot (ft) by 4 ft hardcopy map that shows Project facilities and features in context with the surrounding area (Attachment 1); 2) an aerial video of the Project (Attachment 2); and 3) a *.PDF of the Microsoft® PowerPoint™ presentation the describes the Project (Attachment 3). These materials are in FERC's Public Record, but may not be readily accessible by Panel Members. The Project vicinity map (Attachment 1) is Figure 6.1.2 in the PAD; the aerial video is Appendix E in the PAD; and the PowerPoint presentation was used by FERC at the February 2, 2011 scoping meeting.

SECTION 2 - FACTUAL BACKGROUND

As stated above, this section provides material facts regarding the Project, anadromous fish in the Project area, and the Study Dispute. YCWA believes that the information contained in this section should be considered as *material facts* by Panel Members when they provide their recommendation to the Director, and by the Director when issuing his determination for each disputed study.

I. Yuba River Development Project

A. The Project Includes Three Dams, One Storage Reservoir And Three Powerhouses

The existing Project, which ranges in elevation from 300 to 2,050 feet (ft), was constructed in the mid 1960's and put into service in spring 1970. The Project is located on the west slope of the Sierra Nevada in the Yuba River watershed in Yuba, Nevada, and Sierra counties, California. A portion of the area within the FERC Project Boundary is federal land managed by the United States Department of Agriculture, Forest Service, as parts of the Plumas National Forest and Tahoe National Forest. Refer to Attachment 1 for the location of Project facilities. Some information regarding major Project facilities and features is below.

- Our House Diversion Dam. A 70-ft high, 130-ft radius, double curvature, concrete arch dam located on the Middle Yuba River 12.0 miles upstream of the Middle Yuba River's confluence with the North Yuba River where together they form the Yuba River. The drainage area upstream of the dam is 144.8 square miles. The dam has a storage capacity of 280 acre-feet (ac-ft), but storage and water levels do not fluctuate under Project operations. The diversion dam has a spillway capacity of 60,000 cubic ft per second (cfs). The diversion dam has two outlets to the Middle Yuba River in addition to the uncontrolled spillway. The first outlet is a 5-ft diameter steel pipe acting as a low-level outlet and controlled by a slide gate on the upstream face of the dam with a maximum capacity of 800 cfs. The outlet centerline is at elevation 1,990 ft, and the gate is operated by use of a motor. The second outlet is a 24-inch diameter release pipe with a maximum capacity of 60 cfs located just above the low-level outlet. A downstream gate valve operated by hand controls this outlet.

- Lohman Ridge Diversion Tunnel. A 12.5-ft-high by 12.5-ft-wide tunnel that conveys a maximum flow of 860 cfs through its 19,410 ft (90% unlined and 10% lined) length from the Middle Yuba River to Oregon Creek.

- Log Cabin Diversion Dam. A 105-ft radius, concrete arch dam on Oregon Creek that has a drainage area of 29.1 square miles and a maximum spillway capacity of 12,000 cfs. The dam is located 4.1 miles upstream of Oregon Creek's confluence with the Middle Yuba River. From the confluence, the Middle Yuba River flows downstream another 4.5 miles to the confluence with the North Yuba River. The dam has a storage capacity of 90 ac-ft, but storage and water levels do not fluctuate under Project operations. The diversion dam has two outlets to Oregon Creek in addition to the uncontrolled spillway. The first outlet is a 5-ft diameter steel pipe acting as a low-level outlet and controlled by a slide gate on the upstream face of the dam with a maximum capacity of 800 cfs. The outlet centerline is at elevation 1,938 ft, and the gate is operated by use of a motor. The second outlet is an 18-inch diameter release pipe with a maximum capacity of 13 cfs located just above the low-level outlet. A downstream gate valve operated by hand controls this outlet.

- Camptonville Diversion Tunnel. A 6,107-ft-long tunnel and has the capacity to convey 1,100 cfs of water from Oregon Creek to New Bullards Bar Reservoir on the North Yuba River. The first 4,275 ft of the conduit is an unlined, horseshoe-shaped tunnel 14.5 ft wide by 14.5 ft high, which (for the last 1,832 ft) becomes a lined, horseshoe-shaped tunnel 11.7 ft wide by 13 ft high.

- New Bullards Bar Dam. A 1,110-ft radius, double curvature, concrete arch dam located on the North Yuba River 2.3 miles upstream of its confluence with the Middle Yuba River. The dam is 645 ft high with a maximum elevation of 1,965 ft. The dam includes one low-level outlet - a 72-inch Hollow Jet Valve (invert elevation 1,395 ft) with a maximum design capacity of about 3,500 cfs at full reservoir pool, and an actual capacity of 1,250 cfs (actual release capacity is limited to 1,250 cfs because of valve vibrations at higher release rates).

- New Bullards Bar Reservoir. The storage reservoir on the North Yuba River is formed by New Bullards Bar Dam. At normal maximum water surface elevation (1,956 ft), New Bullards Bar Reservoir extends about 8.5 miles upstream, has an estimated storage capacity

of 966,103 ac-ft, a surface area of 4,790 acres, a shoreline of about 71.9 miles, and a drainage area of 488.6 square miles.

- New Colgate Power Tunnel and Penstock. The power tunnel/penstock is 5.2 miles long and composed of four different types of conveyance structures: an unlined horseshoe-shaped tunnel 26 ft square; a lined horseshoe-shaped tunnel 20 ft wide and 14.5 ft high; a lined circular tunnel 14 ft in diameter; and 2,809 ft of steel penstock with a diameter ranging from 9 ft to 14.5 ft. The tunnel and penstock have a maximum flow capacity of 3,500 cfs.
- New Colgate Powerhouse. An aboveground, steel reinforced, concrete powerhouse located adjacent to the Yuba River about 1.7 miles upstream of the normal maximum water surface elevation of the United States Army's Corps of Engineer's (USACE) Englebright Reservoir. The confluence of the North and Middle Yuba rivers is 5.8 miles upstream of New Colgate Powerhouse. The powerhouse contains two Voith Siemens Pelton type turbines with a total actual measured capacity of 340 megawatts (MW) under a design head of 1,306 ft and a measured flow of 3,430 cfs.
- Narrows 2 Powerhouse Penstock. A penstock that provides water from the USACE's Englebright Reservoir to Narrows 2 Powerhouse. The penstock is 20 ft in diameter and concrete lined in the upper 376 ft, and 14 ft in diameter and steel lined for the final 371.5 ft. The penstock has a maximum flow capacity of 3,400 cfs. Narrows 2 flow bypass is a valve and penstock branch off the main Narrows 2 penstock that was added to the Project in 2008 to provide the capability to bypass flows of up to 3,000 cfs around the Narrows 2 Powerhouse during times of full or partial Powerhouse shutdowns.
- Narrows 2 Powerhouse. The Narrows 2 Powerhouse is an indoor powerhouse located on the north bank of the Yuba River about 400 ft downstream of the base of the USACE's Englebright Dam. The powerhouse consists of one vertical axis Francis turbine with a capacity of 55 MW at a head of 236 ft and flow of 3,400 cfs.

None of the Project facilities include fish passage programs or fish exclusion screens.

For additional information regarding Project facilities and features, including photographs, refer to Attachment 3 and to Section 6.2, Project Facilities, in YCWA's PAD.

B. The Project Is Operated For Flood Control, Water Supply, and Power Generation, And In Conformance with the Lower Yuba River Accord

YCWA operates the Project in conformance with the conditions in the existing FERC Project license, the USACE flood-control criteria, the conditions in YCWA's water-right permits and licenses, YCWA's 1966 Power Purchase Contract with Pacific Gas and Electric Company (PG&E), and the Lower Yuba River Accord (Yuba Accord), the latter of which is described below. Besides these regulatory and contractual requirements, Project operations are affected by physical (e.g., size of dams and tunnels) and hydrologic (e.g., natural runoff) constraints, employee and public safety requirements and downstream water demands. The primary

purposes of the Project are flood control, water supply, power generation, recreation and environmental protection and enhancement.

YCWA typically operates New Bullards Bar Reservoir by capturing winter and spring runoff from rain and snowmelt. Consequently, New Bullards Bar Reservoir normally reaches its peak storage at the end of the spring runoff season, and then is gradually drawn down until its lowest elevation is reached in mid-winter. The reservoir does not undergo significant daily changes in elevation, but it does experience a gradual lowering from the end of the spring runoff season through mid-winter. New Bullards Bar Reservoir has mandatory flood pool criteria from October through April that affect storage. Our House and Log Cabin diversion dam impoundments have very little storage, and YCWA operates them primarily to divert water to New Bullards Bar Reservoir in spring during high flow periods.

YCWA operates New Colgate Powerhouse for peaking and the New Bullards Minimum Flow and Narrows 2 powerhouses as base load facilities.

Yuba Accord

In 2005, YCWA and 16 other interested parties signed memoranda of understanding that specify the terms of the Yuba Accord, a comprehensive, consensus-based program to protect and enhance aquatic habitat in the Yuba River downstream of Englebright Dam. The Accord was developed by a multi-agency resource team, including representatives from United States Department of Interior, Fish and Wildlife Service (USFWS), NMFS, California Department of Fish and Game (CDFG), and a group of non-governmental organizations. Following environmental review, YCWA executed the following four agreements in 2007, which together comprise the Yuba Accord: 1) the Lower Yuba River Fisheries Agreement, which specifies the Yuba Accord's Lower Yuba River minimum streamflows and creates a detailed fisheries monitoring and evaluation program; 2) the Water Purchase Agreement, under which the California Department of Water Resources (CDWR) purchases water, some of which is provided by the Yuba Accord's minimum streamflows, from YCWA for CALFED's Environmental Water Account (the first long-term acquisition of water by this program, which protects Bay/Delta fish and wildlife) and State Water Project and Central Valley Project contractors; 3) Conjunctive Use Agreements with seven of YCWA's Member Units, which specify the terms of the Yuba Accord's groundwater conjunctive-use program; and 4) amendments to the 1966 Power Purchase Contract between YCWA and the PG&E.

The Yuba Accord flow Schedules 1 and 2 were developed to essentially optimize fisheries habitat conditions during a majority[3] of years for this regulated river system. Additional flow schedules (Schedules 3 through 6) and the Accord's Conference Year provisions were developed

[3] The Yuba Accord establishes minimum streamflows in the Yuba River downstream of Englebright Dam for six water year types ranging from wet water years (Schedule 1) to dry water years (Schedule 6). In addition, Conference Years, during which YCWA will confer with agencies to allocate available water supplies and set minimum streamflows, are predicted to occur in the driest 1 percent of all years. Water years in Schedule 1 and 2, the wettest water years, are expected to occur approximately 78 percent of the time.

by the resources team for drier water year type conditions, using a "balancing of resources" approach. This package of flow schedules commits more water to minimum instream flows and provides greater reliability for both instream and consumptive uses than would be possible without the agreements.

The Yuba Accord also provided a $6 million River Management Fund for monitoring and evaluation of anadromous fish and their habitat in the Yuba River downstream of Englebright Dam. The fund is administered by the River Management Team (RMT), which is comprised of representatives of YCWA, NMFS, USFWS, CDFG, PG&E, CDWR, South Yuba River Citizens League, Trout Unlimited, Friends of the River, and The Bay Institute, all of whom are signatory to the Lower Yuba River Fisheries Agreement. The RMT, in collaboration with representatives from University of California, Davis (UC Davis) and the Pacific States Marine Fisheries Commission, has developed a Monitoring and Evaluation Program (M&E Program) to guide the efficient expenditure of the River Management Fund to evaluate the effects of implementation of the Yuba Accord on the aquatic resources of the lower Yuba River over the period extending from 2008 to 2016. The M&E Program embraces a monitoring-based adaptive management approach to increase the effectiveness of, and to address the scientific uncertainty associated with, specific monitoring and study activities, and restoration actions.

The primary purpose of the M&E Program is to provide the monitoring data necessary to evaluate whether implementation of the Yuba Accord will maintain fish resources (i.e., the fish community including native fish and non-native fish) of the lower Yuba River in good condition, and will maintain viable anadromous salmonid populations. The RMT has developed an M&E Program framework document that identifies data collection needs, analytic approaches and thresholds or other metrics for comparison or evaluation. The RMT has developed study plans (i.e., Protocols, which should not be confused with the relicensing study proposals) have been developed and deployed for:

- Flow and Water Temperature Monitoring
- Topographic Mapping (Digital Elevation Model, or DEM)
- Substrate and Cover Mapping
- 2D Hydrodynamic Modeling
- Morphologic Unit Classification
- Mesohabitat Classification
- Riparian Vegetation Mapping
- Acoustic Tagging and Tracking
- VAKI™ Riverwatcher Fish Counter Monitoring
- Redd Surveys
- Fish Carcass Surveys

- Snorkel Surveys
- Rotary Screw Trap (RST) Fish Collection
- Genetic Sampling and Characterization
- Otolith Sampling and Characterization

The RMT monitors data collection activities, reviews analytic techniques, performs quality assurance/quality control (QA/QC) reviews of data and products, and compiles annual data reports. Monitoring observations, data and annual reports are made available on the RMT website (www.yubaaccordrmt.com) as they become available. Additionally, the RMT provides data upon request to various other study efforts including those of RMT member entities. The RMT routinely coordinates and shares data with several other Sacramento River Valley monitoring or scientific programs, and data-shares with CDWR's Feather River monitoring programs, various CDFG monitoring programs, and research projects based at UC Davis, University of South Carolina, State University of New York, and the University of Idaho.

YCWA has been operating the Project in conformance with the Yuba Accord since 2006. The 2006, 2007 and early 2008 operations were under one-year pilot programs that were approved by the State Water Resources Control Board (SWRCB). On May 20, 2008, the SWRCB adopted its Corrected Order WR 2008-0014, which approved the long-term amendments to YCWA's water-right permits that were necessary so that YCWA may continue to implement the Yuba Accord.

For additional information regarding Project operations, see Section 6.3, Project Operations, in YCWA's PAD.

C. The Project Passes Water Around One Federal Facility – Englebright Reservoir, Which Is Not Part Of The Yuba River Development Project

Water released from the Project's New Colgate Powerhouse flows downstream in the Yuba River for about a mile and then enters the USACE's Englebright Reservoir. The average annual inflow to Englebright Reservoir, excluding releases from New Bullards Bar Reservoir, is approximately 400,000 ac-ft. USACE's Englebright Reservoir has a total storage capacity of approximately 70,000 ac-ft. However, only about the upper 10 percent of this storage is exercised. PG&E holds an appropriative water right license for the storage of up to 45,000 ac-ft in the reservoir. YCWA does not hold any storage rights in the reservoir; therefore, any water YCWA puts in the reservoir must be withdrawn by YCWA within 30 days. Englebright Dam has no low-level outlet; water from the reservoir is released for power generation at the PG&E Narrows 1 Powerhouse and YCWA's Narrows 2 Powerhouse, each of which have different intakes in Englebright Reservoir (PG&E on the south side of the reservoir and YCWA on the north side of the reservoir), or spills over the top of the dam during high flow conditions.

Additional information regarding Englebright Dam, YCWA and the Project is provided below.

- Englebright Dam was constructed from 1938 to 1941, almost 20 years prior to the formation of YCWA and more than 25 years before the Yuba River Development Project was constructed.
- Englebright Dam was built by the California Debris Commission to capture sediment produced by upstream hydraulic mining activities. YCWA had not been formed at the time the dam was planned and constructed, and Yuba County did not contribute to or participate in the construction of Englebright Dam, nor has YCWA ever been part of the California Debris Commission.
- Since its construction in 1941, Englebright Dam has completely blocked anadromous fish passage to upstream habitat. The dam does not now, and never has, included low-level outlets or fish ladders that would permit volitional upstream fish passage, nor has the USACE ever had in place a program, such as capture and haul, to pass anadromous fish upstream or downstream of Englebright Dam in a non-volitional manner.
- Englebright Dam is not part of the Yuba River Development Project facilities listed in the existing FERC license, or otherwise under FERC's jurisdiction. YCWA does not own, operate or maintain any portion of Englebright Dam.
- None of the Yuba River Development Project facilities are integral parts of Englebright Dam: YCWA's Narrows 2 Power Conduit and Narrows 2 Powerhouse, the lowermost Project facilities, are not connected or attached to Englebright Dam in any way, nor do they intersect (e.g., pass through) the dam in any way (i.e., the Narrows 2 Power Tunnel goes through the hillside, not through Englebright Dam).
- Operations of Project facilities upstream of Englebright Dam do not block anadromous fish upstream or downstream passage. Because Englebright Dam has blocked the upstream movement of anadromous fish, these fish have not occurred in the Yuba River basin upstream of Englebright Dam since at least 1941, over 25 years before the Project was constructed, and 70 years before Project Relicensing began.

II. Anadromous Resources in Project Area

A. NMFS Identified Eight Anadromous Resources Present In The Yuba River Downstream Of Englebright Dam

In its March 7, 2011 letter, NMFS identified eight anadromous resources present in the Yuba River downstream of Englebright Dam. These included:

1. Central Valley (CV) spring-run Chinook salmon (*Oncorhynchus tshawytscha*) evolutionary significant unit (ESU) - Listed as threatened under the ESA
2. CV spring-run Chinook salmon designated Critical Habitat
3. CV fall/late fall run Chinook salmon ESU - Not threatened or endangered under the ESA

4. Central Valley steelhead (*Oncorhynchus mykiss irideus*) distinct population segment (DPS) - Listed as threatened under the ESA
5. CV steelhead designated Critical Habitat
6. North American green sturgeon (*Acipenser medirostrus*) Southern DPS - Listed as threatened under the ESA
7. Southern DPS of North American green sturgeon designated Critical Habitat
8. Pacific lamprey (*Lampetra tridentata*) - Not threatened or endangered under the ESA

For an in depth discussion of the life history, distribution and abundance of CV steelhead, CV spring-run Chinook salmon and North American green sturgeon in the Yuba River, refer to Sections 7.7.4.1.9, 7.7.4.1.10 and 7.7.4.1.9.11 in YCWA's PAD. The occurrence, distribution and abundance of CV fall/late fall-run Chinook salmon and Pacific lamprey are discussed in Section 7 of YCWA's PAD.

B. Englebright Dam Blocks All Anadromous Fish Upstream Migration; No Anadromous Fish Upstream Of The Dam

As described above, USACE's Englebright Dam, constructed in 1941, blocks upstream migration of all anadromous fish in the Yuba River.

C. Essential Fish Habitat Occurs in Yuba River

Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) (16 U.S.C. §§ 1801-1891d) requires the identification of Essential Fish Habitat (EFH) for federally managed fishery species and the implementation of measures to conserve and enhance this habitat (16 U.S.C. § 1855(b)(2)). In the Mid-Pacific Region, the Pacific Fisheries Management Council designates EFH and NMFS approves the designation. EFH includes specifically identified waters and substrate necessary for fish spawning, breeding, feeding, or growth, to maturity, and therefore covers a species' full life cycle (16 U.S.C. § 1802(10)). EFH only applies to commercial fisheries, including all runs (spring-run and fall/late fall-run) of Chinook salmon. Chinook salmon habitat in the Yuba River (USGS Hydrologic Unit 18020107) has been identified as part of the Pacific salmon freshwater EFH. EFH on the Yuba River includes all water bodies NMFS believes were occupied or historically accessible to Chinook salmon within the United States Geological Survey's Hydrologic Unit Code (HUC) 18020125 (USGS 2009).

In the North Yuba River, NMFS has designated Chinook salmon EFH to Salmon Creek, near Sierra City. In the Middle Yuba River, NMFS's designated EFH includes the lower river, near where the North Fork joins. In the South Yuba River, NMFS's designated EFH includes 1-2 miles upstream to about the town of Washington.

III. The Study Dispute

A. FERC's Determination Directed YCWA To Perform 44 Studies

The Commission's September 30, 2011 Study Plan Determination directed YCWA to: 1) perform 31 studies proposed by YCWA in its Revised Study Plan; 2) slightly modify and perform six studies proposed by YCWA in its Revised Study Plan; 3) significantly modify five studies proposed by YCWA in its Revised Study Plan and, after providing agencies and other Relicensing Participants a 30-day review period, file with FERC the modified study plans with evidence of consultation within 90 days of the Determination; and 4) develop two new studies and, after providing agencies and other Relicensing Participants a 30-day review period, file with FERC the new study plans with evidence of consultation within 90 days of the Determination. In sum, FERC directed YCWA to perform 44 studies.

Table 1 lists the studies proposed by YCWA in its Revised Study Plan and the studies the Commission directed YCWA to perform in its Determination. In addition, the table lists studies that YCWA, in a letter dated October 28, 2011, advised FERC it would put on hold (i.e., not begin the study or study plan modifications directed by FERC in its Determination) pending the outcome of NMFS's Study Dispute, and the reason(s) each study was placed on hold. At the time of this filing, the Commission has not replied to YCWA's October 28 letter.

Table 1. Studies proposed by YCWA in its Revised Study Plan, studies ordered by FERC in its Determination, and the status of YCWA's implementation of studies.

Study No.	Study Description	Included in YCWA's 8/17/11 Revised Study Plan	Included in FERC's 9/30/11 Study Determination	Implementation Status as of 10/21/11	
				Begun	On Hold
1.1	Channel Morphology Upstream of Englebright Reservoir	X	X	--	X[1]
1.2	Channel Morphology Downstream of Englebright Dam	X	Modify, Consult and File by 12/29/11	--	X[1]
2.1	Hydrologic Alteration	X	Modify	--	X[2]
2.2	Water Balance/Operations Model	X	X	X	--
2.3	Water Quality	X	Modify	X	--
2.4	Bioaccumulation	X	X	X	--
2.5	Water Temperature Monitoring	X	X	X	--
2.6	Water Temperature Model	X	X	X	--
3.1	Aquatic Macroinvertebrates Upstream of Englebright Reservoir	X	Modify	X	--
3.2	Aquatic Macroinvertebrates Downstream of Englebright Dam	X	Modify	X	--
3.3	Special-Status Aquatic Mollusks	X	X	X	--
3.4	Special-Status Amphibians – Foothill Yellow-Legged Frog Surveys	X	X	X	--
3.5	Special-Status Amphibians – Foothill Yellow-Legged Frog Habitat Modeling	X	X	X	--
3.6	Special-Status Turtles – Western Pond Turtle	X	X	X	--
3.7	Reservoir Fish Populations	X	X	X	--

Table 1. (continued)

Study No.	Study Description	Included in YCWA's 8/17/11 Revised Study Plan	Included in FERC's 9/30/11 Study Determination	Implementation Status as of 10/21/11	
				Begun	On Hold
3.8	Stream Fish Populations Upstream of Englebright Reservoir	X	X	X	--
3.9	Non-ESA-Listed Fish Populations Downstream of Englebright Dam	X	X	X	--
3.10	Instream Flow Upstream of Englebright Reservoir	X	X	X	--
3.11	Entrainment	X	Modify, Consult and File by 12/29/11	X	--
3.12	New Colgate Powerhouse Ramping	--	Develop, Consult and File by 12/29/11	--	X[3]
4.1	Special-Status Wildlife – California Wildlife Habitat Relationships	X	Modify	X	--
4.2	Special-Status Wildlife – Bats	X	X	X	--
5.1	Special-Status Plants	X	X	X	--
6.1	Riparian Habitat Upstream of Englebright Reservoir	X	Modify, Consult and File by 12/29/11	--	X[4]
6.2	Riparian Habitat Downstream of Englebright Dam	X	Modify, Consult and File by 12/29/11	--	X[4]
6.3	Wetlands	X	X	X	--
7.1	ESA-Listed Plants	X	X	X	--
7.2	Narrows 2 Powerhouse Intake	X	X	--	X[5]
7.3	ESA-Listed Amphibians – California Red-Legged Frog	X	X	X	--
7.4	ESA-Listed Wildlife – Valley Elderberry Longhorn Beetle	X	X	X	--
7.5	CESA-Listed Plants	X	X	X	--
7.6	CESA-Listed and Fully Protected Wildlife – California Wildlife Habitat Relationships	X	X	X	--
7.7	CESA-Listed and Fully Protected Wildlife – Bald Eagle	X	X	X	--
7.8	ESA/CESA-Listed Salmonids Downstream of Englebright Dam	X	X	X	--
7.9	North American Green Sturgeon Downstream of Englebright Dam	X	X	X	--
7.10	Instream Flow Downstream of Englebright Dam	X	Modify		X[6]
7.11	Assessment of Narrows 2 Powerhouse as a Barrier to Anadromous Fish Upstream Migration	X	Modify, Consult and File by 12/29/11	--	X[5]
2.6	Water Temperature Model	X	X	X	--
7.12	Evaluation of Project Effects on Daguerre Point Dam's and Hallwood-Cordua's Fish Facilities	--	Develop, Consult and File by 12/29/11	--	X[7]
8.1	Recreation Use and Visitor Surveys	X	X	X	--
8.2	Recreational Flow	X	X	X	--
9.1	Primary Project Roads and Trails	X	X	X	--
10.1	Visual Quality	X	X	X	--
12.1	Historic Properties	X	X	X	--

Table 1. (continued)

Study No.	Study Description	Included in YCWA's 8/17/11 Revised Study Plan	Included in FERC's 9/30/11 Study Determination	Implementation Status as of 10/21/11	
				Begun	On Hold
13.1	Native American Traditional Cultural Properties	X	X	X	--
	Subtotal	*42*	*44*	*34*	*10*
	Total	**44**			

[1] YCWA placed Studies 1.1 and 1.2 on hold for two reasons. First, at page 29 of Enclosure A of its October 20, 2011 letter, NMFS states it does not agree with the Determination regarding the two studies. Second, to accommodate NMFS's requested Effects of the Project and Related Activities on Coarse Substrate for Anadromous Fish Study, the Determination directed YCWA to modify Studies 1.1 and 1.2 (pages 54 and 55 of Appendix A to FERC's Determination). Resolution of the dispute could result in FERC modifying the Determination regarding these studies.

[2] YCWA placed Study 2.1 on hold because, to accommodate element #8 of NMFS's requested Effects of the Project and Related Activities on Hydrology for Anadromous Fish Study, the Determination directed YCWA to modify Study 2.1 (page 50 of Appendix A to FERC's Determination). Resolution of the dispute could result in FERC modifying the Determination regarding this study.

[3] YCWA placed Study 3.12 on hold for two reasons. First, at numerous places in its October 20, 2011 letter, NMFS states that it disagrees with the Determination regarding studies to address anadromous fish passage and effects at Project facilities upstream of Englebright Dam (e.g., page 25 of Enclosure A). Second, to accommodate element #4 of NMFS's requested Effects of the Project and Related Activities on Hydrology for Anadromous Fish Study, the Determination directed YCWA to modify Study 3.12 (page 47 of Appendix A to FERC's Determination). Resolution of the dispute could result in FERC modifying the Determination regarding this study.

[4] YCWA placed Studies 6.1 and 6.2 on hold for two reasons. First, at pages 30 through 32 of Enclosure A of its October 20, 2011 letter, NMFS notes that these two studies are closely related to its requested study, and specifically states NMFS does not agree with the Determination regarding Study 6.1. Second, to accommodate NMFS's requested Effects of the Project and Related Activities on Large Wood and Riparian Habitat for Anadromous Fish Study, the Determination directed YCWA to modify Studies 6.1 and 6.2 (pages 55 and 56 of Appendix A to FERC's Determination). Resolution of the dispute could result in FERC modifying the Determination regarding these studies.

[5] YCWA placed Studies 7.2 and 7.11 on hold for two reasons. First, at numerous places in its October 20, 2011 letter (e.g., pages 8 through 23 of Enclosure A), NMFS states that it disagrees with the Determination regarding FERC's treatment of the Narrows 2 Powerhouse as a barrier to anadromous fish upstream migration. Second, to accommodate elements #1, #2 and #8 of NMFS's requested Effects of the Project and Related Activities on Fish Passage for Anadromous Fish Study, the Determination directed YCWA to modify Study 7.11 (pages 40 through 41 and 44 of Appendix A to FERC's Determination). Resolution of the dispute could result in FERC modifying the Determination regarding this study.

[6] YCWA placed Study 7.10 on hold because, to accommodate element #5 of NMFS's requested Effects of the Project and Related Activities on Hydrology for Anadromous Fish Study, the Determination directed YCWA to modify Study 7.10 (pages 48 and 49 of Appendix A to FERC's Determination). Resolution of the dispute could result in FERC modifying the Determination regarding this study.

[7] YCWA placed Study 7.12 on hold for two reasons. First, at page 17 in Enclosure A of its October 20, 2011 letter, NMFS states it seeks additional information regarding Project effects on Daguerre Point Dam and Hallwood-Cordua diversions and fish screens. Second, to accommodate element #3 of NMFS's requested Effects of the Project and Related Activities on Fish Passage for Anadromous Fish Study, the Determination directed YCWA to develop a study plan for Study 7.12 (page 42 of Appendix A to FERC's Determination). Resolution of the dispute could result in FERC modifying the Determination regarding this study.

B. One Notice of Dispute Filed

On October 20, 2011, NMFS filed with FERC a dispute regarding the Commission's Determination. No other notices of disputes were filed.

C. NMFS's Studies in Dispute Require Some Clarification by Panel Members

Page 2 of NMFS's October 20, 2011 Notice of Study Dispute and page 3 of Enclosure A to NMFS's October 20, 2011 letter identified as "in dispute" seven studies that were requested by NMFS and not adopted by the Commission in its Determination. Further, page 5 of Enclosure A of NMFS's October 20, 2011 letter states that "*NMFS's Requests, filed in this ILP, are included in their entirety in Enclosure B of this Notice of Study Dispute filing.*" YCWA believes there are some inconsistencies that warrant clarification by the Panel Members regarding the disputed studies. These are:

- As described above, page 5 of Enclosure A of NMFS's October 20, 2011 letter states that "*NMFS's Requests, filed in this ILP, are included in their entirety in Enclosure B of this Notice of Study Dispute filing*." YCWA believes the study requests in Enclosure B are identical to the study requests in Enclosure F of NMFS's March 7, 2011 letter, and Enclosure A does not include the additional elements and sub-elements added to NMFS's study requests in Enclosure B of NMFS's July 18, 2011 letter. In its July 18 letter, NMFS added a new study element (Element 8) to NMFS's Request #2, and added seven new elements (Elements 8.1 through 8.7) to NMFS's Request #8. YCWA encourages the Panel Members to confirm with NMFS whether these new elements are part of NMFS's studies in dispute.
- Enclosure B to NMFS's October 20, 2011 letter included two copies of the study named Effects of the Project and Related Activities on the Loss of Marine-Derived Nutrients in the Yuba River, both of which are referred to by NMFS as "NMFS Request #6." YCWA assumes these two are redundant and the result of a copying error. YCWA encourages the Panel Members to confirm with NMFS that the two copies of NMFS's Request #6 are identical.
- Enclosure B to NMFS's October 20, 2011 letter included a study named Effects of Project and Related Activities on Aquatic Benthic Macroinvertebrates for Anadomous Fish, which NMFS referred to as "NMFS Request #7." Since this study request is not listed in the main text of NMFS's October 20, 2011 letter as in dispute, YCWA assumes this requested study is not part of NMFS's formal dispute even though it is attached to the Notice of Dispute and page 5 of Enclosure A of NMFS's October 20, 2011 letter, states that "*NMFS's Requests, filed in this ILP, are included in their entirety in Enclosure B of this Notice of Study Dispute filing*." YCWA encourages the Panel Members to confirm with NMFS that NMFS's Request #7 is not in dispute.

D. YCWA Believes 7 Studies Requested By NMFS That Were Not Adopted By FERC Are In Dispute, And That The Studies Collectively Include 54 Elements

At this time and pending the above clarifications, YCWA believes NMFS's dispute includes seven studies that were proposed by NMFS and not adopted by FERC. Each study included elements, each of which could be considered a separate study. In total, the seven studies include 54 elements or sub-elements.[4] The NMFS-requested studies and elements in dispute are:

[4] This total includes Element 8 to NMFS's Request #2 and Elements 8.1 through 8.7 to NMFS's Request #8, which were not included in Enclosure A of NMFS's October 20, 2011 letter, but added by NMFS to its requested studies in NMFS's July 18, 2011 letter.

1. Effects of the Project and Related Activities on Fish Passage for Anadromous Fish (also referred to by NMFS as "NMFS Request #1")
   - Element #1: Information about Hydraulic Conditions Near Project Facilities
   - Element #2: Information about Fish Presence and Migration Behavior from Downstream of Project Facilities to Upstream of Project Facilities
   - Element #3: Specific Fish Passage Information/Study Request at Daguerre Point Dam
   - Element #4: Fish Passage Information/Study Request at Narrows I, Narrows 2, Englebright Dam, New Colgate Powerhouse, New Bullards Bar Dam and Our House and Log Cabin Dams
   - Element #5: [This element number appears to have been skipped by NMFS.]
   - Element #6: Specific Information/Study Request about Fish Passage Upstream of Narrows I and 2/Englebright Dam Complex; and Upstream of Other Project Facilities
   - Element #7: Specific Information/Study Request about Reservoir Fish Passage Conditions Upstream of Englebright, Bullards Bar, Our House and Log Cabin Dams
   - Element #8: Specific Information/Study Request about of Fish Passage Conditions Over the Length of Daguerre Reservoir and its Tail Water Pools; Englebright Reservoir, and New Bullards Bar Reservoir and Tail Water Pools
   - Element #9: Fish Passage Conditions in the South Yuba River
   - Element #10: Fish Passage Conditions in the Vicinity and Upstream of New Colgate Powerhouse and New Bullards Bar Reservoir
   - Element #11: Fish Passage Conditions in the Middle Yuba River
   - Element #12: Fish Passage Conditions in the Upper North Yuba River
   - Element #13: Pilot Field Experiments for Anadromous Fish Reintroduction

2. Effects of the Project and Related Activities on Hydrology for Anadromous Fish (also referred to by NMFS as "NMFS Request #2")
   - Element #1: Data Development
   - Element #2: Peak Flows
   - Element #3: Dam Spills
   - Element #4: Ramping
   - Element #5: Floodplains
   - Element #6: Natural Gradient/Impediment Barriers
   - Element #7: Bay/Delta
   - Element #8: Quantification of Hydrograph Components

3. Effects of the Project and Related Activities on Water Temperature for Anadromous Fish Migration, Holding, Spawning and Rearing Needs (also referred to by NMFS as "NMFS Request #3")
   - Element #1: Temperature Monitoring
   - Element #2: Temperature Refugia
   - Element #3: Temperature Modeling

4. Effects of the Project and Related Activities on Coarse Substrate for Anadromous Fish: Sediment Supply and Transport (also referred to by NMFS as "NMFS Request #4)
   - Element #1: Develop Sediment Supply Estimates to Project Affected Reaches
   - Element #2: Coarse Level Stratification and Study Site Selection
   - Element #3: Assessment of Channel Morphology and Fluvial Processes
   - Element #4: Calculation of Bed Mobility and Sediment Transport Capacity
   - Element #5: Evaluate Coarse Sediment Storage in Project Affected Reaches
   - Element #6: Synthesize Study Results to Evaluate Ecological and Geomorphic Impacts

5. Effects of the Project and Related Activities on Large Wood and Riparian Habitat for Anadromous Fish (also referred to by NMFS as "NMFS Request #5")
   - Element #1: LWD Removal from Project Works
   - Element #2: LWD Survey
   - Element #3: Evaluation of Project Effects on LWD and LWD Budget
   - Element #4: Riparian Habitat and Vegetation

6. Effects of the Project and Related Activities on the Loss of Marine-Derived Nutrients in the Yuba River (also referred to by NMFS as "NMFS Request #6")
   - Element #1: Estimate an Historic Mass of Marine-Derived N Transported Annually by Chinook Salmon (All Runs) to the Yuba River
   - Element #2: Estimate an Historic Mass of Marine-Derived N Transported Annually by Spring-Run Chinook Salmon to the Yuba River
   - Element #3: Estimate the Current Annual Mass of Marine-Derived N Transported by Chinook Salmon to the Yuba River
   - Element #4: Estimate the Current Annual Mass of Marine-Derived N Transported by Phenotypic "Spring-Run" Chinook Salmon to the Yuba River
   - Element #5: Estimate the Annual Loss, from Historic to Current Levels, of Marine-Derived N to the Yuba River
   - Element #6: Estimate the Annual Loss, from Historic to Current Levels, of Marine-Derived N to the Upper Yuba

- Element #7: Compare the Difference of Marine Derived N Incorporated into Periphyton and Aquatic Macroinvertebrates Collected in the Upper and Lower Yuba Rivers

7. Anadromous Fish Ecosystem Effects (also referred to by NMFS as "NMFS Request #8")
   - Element #1: Adult Migration
   - Element #2: Holding
   - Element #3: Spawning
   - Element #4: Incubation/Emergence
   - Element #5: Fry/Juvenile Rearing
   - Element #6: Fry/Juvenile Outmigration
   - Element #7: Population Structure and Dynamics
   - Element #8.1: Information on Hydraulic Conditions Near Project Facilities
   - Element #8.2: Information about Fish Presence and Migration Behavior from Downstream of Project Facilities to Upstream of Project Facilities
   - Element #8.3: Physical Aspects of Narrows I, Narrows 2, Englebright Dam, New Colgate Powerhouse, New Bullards Bar Dam and Our House and Log Cabin Dams that Affect Fish and Ecosystem Integrity
   - Element #8.4: Reservoir Fish Habitat Conditions Upstream of Englebright, Bullards Bar, Our House, and Log Cabin Dams
   - Element #8.5: Fish Habitat Conditions in the Vicinity of New Colgate Powerhouse to New Bullards Bar Dam
   - Element #8.6: Fish Habitat Conditions in the Middle Yuba River
   - Element #8.7: Fish Habitat Conditions in the Bullards Reservoir

E. Since The PAD Was Issued, YCWA Has Held Over 35 Meetings With Relicensing Participants In Attempts To Reach Agreement On Studies; NMFS Has Attended 5 Of The Meetings

While not required by FERC's Integrated Licensing Process (ILP) regulations, YCWA has held over 35 meetings with Relicensing Participants in an attempt to reach agreement on as many study plans as possible with as many Relicensing Participants as possible. YCWA set meeting dates in consultation with Relicensing Participants and provided notices of meetings. NMFS staff has attended or participated by teleconference in five of the meetings.

F. YCWA Held Meetings with NMFS and FERC Regarding Endangered Species Act Consultation

In addition, YCWA held meetings with FERC staff and NMFS's Protected Resources Division staff to discuss coordination with NMFS's Endangered Species Act (ESA) information needs. Some of these meetings were also attended by Habitat Conservation Division staff.

G. YCWA Modified Some Studies and Added A Study To Address NMFS's Comments

NMFS's March 7, 2011 comments on YCWA's PAD included many of the studies requested by NMFS and not adopted by FERC in its Determination (Enclosure F of NMFS's March 7, 2011 letter). For the most part, the studies were not adopted by YCWA in its Proposed Study Plan, and NMFS reiterated its requests in its July 18, 2011 comments on YCWA's Proposed Study Plan. After considerable discussion, YCWA did not adopt, for the most part,[5] the requested studies in its Revised Study Plan, and NMFS reiterated its requests in its September 1, 2011 comments on YCWA's Revised Study Plan.

H. FERC Modified Portions Of YCWA's Proposed Studies and Added Two New Studies To Address NMFS's Requested Studies

In response to NMFS's September 1, 2011 comments on YCWA's Revised Study, FERC modified about 10 of YCWA's proposed studies and directed YCWA to perform two new studies (i.e., new in that they were not proposed by YCWA in its Revised Study Plan).

I. NMFS's Dispute Does Not Identify If Any Elements Of Its 7 Requested Studies Have Been Addressed To NMFS's Satisfaction

NMFS's Study Dispute does not identify where FERC, by modifying and adding studies in its Determination, has addressed to NMFS's satisfaction all or any portions of its seven requested studies. Therefore, one must assume that all 54 elements in NMFS's seven studies remain in dispute.

[5] YCWA made substantial changes to its Channel Morphology Upstream of Englebright Reservoir Study (Study 1.1), Channel Morphology Downstream of Englebright Reservoir Study (Study 1.2), Riparian Habitat Upstream of Englebright Reservoir Study (Study 6.1) and Riparian Habitat Downstream of Englebright Reservoir Study (Study 6.2) based on discussions with NMFS and other Relicensing Participants, and added Study 7.11, Assessment of Narrows 2 Powerhouse as a Barrier to Anadromous Fish Upstream Migration to address NMFS's interests.

J. NMFS's Section 18 Fishway Prescription Authority Is Limited To "*Physical Structures, Facilities, Or Devices*" And "*Measures Related To Such Physical Structures, Facilities, Or Devices*"

Section 1701(b) of the Energy Policy Act of 1992 (Pub. L. 102-486, 106 Stat. 3008) vacated FERC's then-existing regulatory definition of "fishway," and provided guidance on any future regulatory definition of the term. Specifically, Congress stated that:

> "…the items which may constitute a 'fishway' under section 18 for the safe and timely upstream and downstream passage of fish shall be limited to physical structures, facilities, or devices necessary to maintain all life stages of such fish, and project operations and measures related to such structures, facilities, or devices which are necessary to ensure the effectiveness of such structures, facilities, or devices for such fish. [Emphasis added.]

K. FERC's Seven Study Dispute Criteria Bear Highlighting

Section 5.14(k) states that the Panel shall make and deliver to the Director "…*a finding, with respect to each information or study request in dispute, concerning the extent to which each criterion set forth in § 5.9(b) is met or not met, and why, and make recommendations regarding the disputed study request based on its findings. The panel's findings and recommendations must be based on the record in the proceeding*."

With that direction in mind, YCWA believes it is useful to include Section 5.9(b) of title 18 CFR here. This regulation provides the criteria the Panel Members must address in its recommendations to the Director. These study request criteria are:

1. Describe the goals and objectives of each study proposal and the information to be obtained;
2. If applicable, explain the relevant resource management goals of the agencies or Indian tribes with jurisdiction over the resource to be studied;
3. If the requester is not a resource agency, explain any relevant public interest considerations in regard to the proposed study;
4. Describe existing information concerning the subject of the study proposal, and the need for additional information;
5. Explain any nexus between project operations and effects (direct, indirect, and/or cumulative) on the resource to be studied, and how the study results would inform the development of license requirements;
6. Explain how any proposed study methodology (including any preferred data collection and analysis techniques, or objectively quantified information, and a schedule including appropriate filed season(s) and the duration) is consistent

with generally accepted practice in the scientific community or, as appropriate, considers relevant tribal values and knowledge; and

7. Describe considerations of level of effort and cost, as applicable, and why any proposed alternative studies would not be sufficient to meet the stated information needs.

SECTION 3 - YCWA'S COMMENTS ON NMFS'S STUDY DISPUTE

A. The Primary Study Criteria The Panel Should Use To Evaluate NMFS's Study Dispute Are In Criteria 4 and 5: Whether The Information Developed By The Requested Studies Is Needed, Whether There Is Any Nexus Between Project Operations and Effects On The Resource Requested To Be Studied, And Whether The Requested Studies Would Inform The Development Of License Requirements Under Section 18

YCWA believes the primary criteria the Panel Members should use to determine whether or not the additional studies requested by NMFS are needed are: 1) whether the information that would be developed by the requested studies is needed (Criterion 4); 2) whether there is any nexus between Project operations and effects on the resource requested to be studied (Criterion 5); and 3) whether the requested studies would inform license requirements (Criterion 5), specifically the development of Fishway Prescription requirements, in the new license.

For the reasons discussed in Part III.C on the following pages of these comments, YCWA believes that, under these criteria, and to the extent that NMFS' Study Dispute pertains to anadromous fish passage upstream of Englebright Dam, the dispute is without merit. The dam is not part of the Project and not under FERC's jurisdiction. While the relicensing will certainly consider how the Project, in combination with the dam, cumulatively affects fish passage, additional information is not needed to perform this analysis under relicensing. If NMFS needs additional information regarding fish passage at Englebright Dam to exercise its authority and management in other proceedings, those other proceedings are the appropriate venues for that information gathering.

Similarly, application of Criteria 4 and 5 demonstrates that the Study Dispute, to the extent the Study Dispute involves additional data gathering regarding anadromous fish upstream of Englebright Dam, is without merit because anadromous fish do not occur upstream of the dam.

The only logical way for NMFS to exercise its Section 18 Fishway Prescription authority at this time would be for NMFS to reserve that authority now, to be exercised in the future if anadromous fish populations ever are established upstream of Englebright Dam. Such a reservation would not require any additional studies under relicensing.

B. NMFS's Comments Regarding Need For Information Under ESA and Magnuson-Stevens Fishery Conservation and Management Act Should Be Irrelevant To The Panel

Besides addressing the need for the information from the requested studies for Section 18, Fishways Prescriptions, NMFS's Study Dispute states that NMFS needs the information from its seven requested studies to support its decisions under ESA and the Magnuson-Stevens Fishery Conservation and Management Act (MSA), and for other reasons. The Commission's regulations are plain that the only basis upon which NMFS may dispute a study plan determination is "with respect to studies pertaining directly to the exercise of" NMFS's Section 18 authority (see 18 C.F.R. § 5.14(a)). Further, neither the ESA, MSA nor any other statutory responsibility of NMFS provides a nexus to NMFS' requested studies as they pertain to this relicensing, because there currently are no anadromous fish in the Project reaches.

C. FERC's September 30, 2011 Study Plan Determination Properly Concluded That The Studies Requested By NMFS And Not Ordered By FERC Would Not Be Appropriate

FERC's September 30, 2011 Study Plan Determination discusses in detail each of NMFS's seven requested studies, concludes that YCWA should amend some of its study plans to address some of the elements in NMFS's requests, and explains why FERC rejected the other elements of NMFS's requests. Each of NMFS's study requests, FERC's responses and NMFS's disputes is discussed below.

NMFS Request # 1 – Effects of the Project and Related Activities on Fish Passage for Anadromous Fish

Most of the elements of this NMFS study request concern fish-passage conditions at various locations upstream of USACE's Englebright Dam, which, as discussed above, has blocked upstream migration of all anadromous fish on the Yuba River since 1941. In rejecting most of the elements, FERC's Determination states at page 38:

> We do not agree with NMFS's reasoning with respect to the role of YCWA's Narrows 2 powerhouse and upstream fish migration. The Corps' Englebright dam, constructed on the Yuba River, is a federal facility and blocked upstream fish passage for almost 25 years before the development of the Narrows 2 powerhouse. . . . The Narrows 2 powerhouse is located nearly 400 feet downstream from Englebright dam. Therefore, any project effects on upstream fish passage are limited to the 400 feet between the Narrows 2 powerhouse outlet and Englebright dam, which is the next barrier for upstream fish passage.
>
> Further, NMFS has not shown that fish passage above Englebright dam would be reasonably certain to occur in the near future.

Nevertheless, FERC ordered YCWA to modify its proposed Study 7.11, and to develop a new study to analyze Project effects on fish-passage conditions at Daguerre Point Dam and at the Hallwood-Cordua fish screen to address parts of NMFS's Request #1 that concern anadromous fish in the Yuba River downstream of Englebright Dam. (See FERC September 30, 2011 Study Plan Determination, pp. 39-44.)

NMFS's October 20, 2011 Study Dispute asserts that FERC should order YCWA to study fish-passage conditions upstream of Englebright Dam because of a 2010 Montgomery-Watson Harza (MWH) report to NMFS on fish-passage options for the Yuba River and because passage of anadromous fish upstream of Englebright Dam may occur in the future. (NMFS's October 20, 2011 Study Dispute, pp. 7-23.) However, NMFS has not demonstrated that the conclusions in FERC's Study Plan Determination regarding the very limited effects of YCWA's Narrows 2 Powerhouse on upstream anadromous fish passage or the uncertainties regarding future fish passage above Englebright dam are incorrect. Panel Members therefore should accept FERC's conclusions and reject NMFS's arguments on this point.

NMFS's Study Dispute (p. 21) states that the D. C. Circuit Court of Appeals, in *Wisconsin Power & Light Co. v. Federal Energy Regulatory Comm'n*, 363 F.3d 453 (D.C. Cir. 2004) stated that, in reviewing fishway prescriptions, the Service "must provide substantial evidence to show that fishery resources will be adversely affected by a particular project." NMFS has not demonstrated that the Yuba River Development Project has any such adverse effects, and NMFS therefore has not demonstrated that FERC should require YCWA to conduct the study elements of NMFS's Request #1 that have not been ordered by FERC.

NMFS's arguments regarding the FERC proceeding concerning the Applegate Dam Hydroelectric Project (see NMFS's Study Dispute, p. 22) should be rejected because, in that matter, there were definitive plans to introduce anadromous fish at the Project and such introductions actually had occurred before FERC issued its order. See *Symbiotics LLC, 129 FERC* ¶ 62,207, at p. 45 (2009). In contrast, no such introductions have occurred here, and, while there have been some discussions about proposals for such introductions, there are no specific or definitive plans for such introductions. Issues of whether Yuba River Development Project operations will need to be modified if such introductions occur, and if so, how, can best be addressed in such plans for introduction. Also, as FERC's Determination points out, FERC will reserve its own and NMFS's authorities, through standard license reopeners, to require YCWA to take appropriate actions regarding any such introductions that might occur in the future. (See FERC Determination, p. 38-39.)

NMFS Request # 2 – Effects of the Project and Related Activities on Hydrology for Anadromous Fish

FERC's Study Plan Determination discusses why FERC is not requiring YCWA to study the issues associated with anadromous fish upstream of Englebright Dam, and why FERC is requiring YCWA to study some of the information sought in several elements of NMFS's

Request #2. (FERC Determination, pp. 44-50.) NMFS's Dispute does not discuss any of these provisions of FERC's Determination. (NMFS's Dispute, pp. 23-25.) These provisions of the Determination explain why NMFS's Request #2 should be denied.

NMFS Request # 3 – Effects of the Project and Related Activities on Water Temperatures for Anadromous Fish Migration, Holding, Spawning, and Rearing Needs

FERC's Study Plan Determination discusses in detail NMFS's Request #3 and FERC's response. NMFS's Dispute does not discuss any of these provisions of FERC's Determination. (NMFS's Dispute, pp. 25-27.) These provisions of the Determination explain why NMFS's Request #3 should be denied.

NMFS Request # 4 – Effects of the Project and Related Activities on Coarse Substrate for Anadromous Fish: Sediment Supply, Transport and Storage

FERC's Study Plan Determination explains that, although YCWA did not adopt NMFS's Request #4 in its entirety, YCWA did address components of the requested information in YCWA's Studies 1.1 and 1.2. (FERC Determination, pp. 54-55.) NMFS's Dispute acknowledges that NMFS's Request #4 and YCWA's Studies 1.1 and 1.2 are "closely related," but nevertheless disputes FERC's conclusions. (NMFS Study Dispute, pp. 27-30.) However, NMFS does not explain how it believes Studies 1.1 and 1.2 should be amended to address NMFS's concerns. Absent such an explanation, NMFS's Request #4 should be denied.

NMFS Request # 5 – Effects of the Project and Related Activities on Large Wood and Riparian Habitat for Anadromous Fish

FERC's Determination explains that, although YCWA did not adopt NMFS's Request #5 in its entirety, YCWA did address components of the requested information in YCWA's Studies 6.1 and 6.2. (FERC Determination, pp. 55-56.) NMFS's Dispute acknowledges that NMFS's Request #5 and YCWA's Studies 6.1 and 6.2 are "closely related," but nevertheless disputes FERC's conclusions. (NMFS's Study Dispute, pp. 30-32.) However, NMFS does not explain how it believes Studies 6.1 and 6.2 should be amended to address NMFS's concerns. Absent such an explanation, NMFS's Request #5 should be denied.

NMFS Request # 6 – Effect of the Project Related Activities on Loss of Marine-Derived Nutrients in the Yuba River

FERC's Study Plan Determination explains that, for the upper Yuba River, YCWA does not need to develop the requested information because YCWA's Project facilities do not block the upstream passage of anadromous fish. (FERC Determination, p. 57.) For the lower Yuba River, FERC concluded that, because the loss or reduction in marine-derived nutrients probably resulted from the construction of Englebright Dam and other land management practices, and because the Yuba River Development Project does not block upstream passage between the Pacific Ocean and Englebright Dam, YCWA should not be required to conduct the requested

analysis. (FERC Determination, pp. 56-57.) NMFS's Dispute does not discuss these conclusions in FERC's Determination. (NMFS's Study Dispute, pp. 33-35.) These conclusions of the Determination explain why NMFS's Request #6 should be denied.

NMFS Request # 8 – Anadromous Fish Ecosystem Effects: Synthesis of the Direct, Indirect, and Cumulative Effects of the Project and Related Facilities on Anadromous Fish

FERC's Study Plan Determination explains that this NMFS request is not for a study, but is a request for synthesis and analysis of information that will result from YCWA's proposed studies and other available sources, and that the study plan phase is not the appropriate time for this analysis. FERC also notes that YCWA will need to prepare the appropriate analyses in its preliminary and final license applications, and that NMFS will have opportunities to comment at that time. (FERC Determination, pp. 57-58.) NMFS's Dispute does not discuss these conclusions in FERC's Determination. (NMFS's Study Dispute, pp. 35-37.) These conclusions of the Determination explain why NMFS's Request #8 should be denied.

D. Refer To YCWA's Previous Filings Regarding Technical Merit Of NMFS's Requests

For details regarding YCWA's comments on the technical aspects of NMFS's seven requested studies, please refer to the appropriate provisions in YCWA's Proposed Study Plan and Revised Study Plan, which are listed below. YCWA has not repeated these comments here for the sake of brevity in this letter.

In the Proposed Study Plan, Panel Members are directed to the following sections:

- Section 3.1.2, Comment Letters that Requested a Study Modification of New Study for Anadromous Fish Upstream of Englebright Dam (pages 3-2 through 3-8). This section also discusses the evidence put forward by NMFS to argue that anadromous fish will occur upstream of Englebright Dam in the reasonably foreseeable future.
- Section 3.1.4.10, Effects of the Project and Related Activities on Fish Passage for Anadromous Fish (pages 3-52 through 3-54)
- Section 3.1.4.11, Effects of the Project and Related Activities on Hydrology for Anadromous Fish (pages 3-54 through 3-56)
- Section 3.1.4.12, Effects of the Project and Related Activities on Water Temperature for Anadromous Fish (pages 3-56 and 3-57)
- Section 3.1.4.13, Effects of the Project and Related Activities on Coarse Substrate for Anadromous Fish (pages 3-57 and 3-59)
- Section 3.1.4.14, Effects of the Project and Related Activities on Large Wood and Riparian Habitat for Anadromous Fish (pages 3-59 through 3-62)Section 3.1.4.15, Effects of the

Project and Related Activities on the Loss of Marine-derived Nutrients in the Yuba River (pages 3-62 and 3-63

- Section 3.1.4.17, Anadromous Fish Ecosystem Effects Analysis (pages 3-64 through 3-67)

In the Revised Study Plan, Panel Members are directed to the following sections:

- Section 3.2.1.1, Study 1.1 - Channel Morphology Upstream of Englebright Reservoir (page 3-6)
- Section 3.2.1.2, Study 1.2 - Channel Morphology Downstream of Englebright Dam (pages 3-6 through 3-8)
- Section 3.2.1.16, Study 3.10 – Instream Flow Upstream of Englebright Reservoir (pages 3-16 and 3-17)
- Section 3.2.1.18, Study 6.1 – Riparian Habitat Upstream of Englebright Reservoir (pages 3-19 and 3-20)
- Section 3.2.1.19, Study 6.2 – Riparian Habitat Downstream of Englebright Dam (pages 3-20 and 3-21)
- Section 3.2.1.24, Study 7.8 – ESA/CESA-Listed Salmonids Downstream of Englebright Dam (page 3-23 and 3-24)
- Section 3.2.1.26, Study 7.10 – Instream Flow Downstream of Englebright Dam (page 3-25)
- Section 3.2.2.1, Effects of the Project and Related Activities on Fish Passage for Anadromous Fish (pages 3-31 through 3-41)
- Section 3.2.2.2, Effects of the Project and Related Activities on Hydrology for Anadromous Fish (pages 3-41 through 3-43)
- Section 3.2.2.3, Effects of the Project and Related Activities on Water Temperature for Anadromous Fish Migration, Holding, Spawning and Rearing Needs (pages 3-43 through 3-45)
- Section 3.2.2.4, Effects of the Project and Related Activities on Coarse Substrate for Anadromous Fish: Sediment Supply, Transport and Storage (pages 3-45 through 3-47)
- Section 3.2.2.5, Effects of the Project and Related Activities on Large Wood and Riparian Habitat for Anadromous Fish (page 3-47 through 3-49)
- Section 3.2.2.6, Effects of the Project and Related Activities on Loss of Marine-Derived Nutrients in the Yuba River (page 3-49 through 3-51)
- Section 3.2.2.7, Anadromous Fish Ecosystem Effects: Synthesis of the Direct Indirect and Cumulative Effects of the Project and Related Facilities on Anadromous Fish (page 3-52 through 3-56)

If you have any questions regarding this letter, please contact me.

Sincerely,

YUBA COUNTY WATER AGENCY

Curt Aikens
General Manager

Attachments:

Attachment 1 – Hardcopy of Project Vicinity Map
Attachment 2 – Aerial Video of Project
Attachment 3 – PowerPoint™ Presentation on Project

Distribution List w/Attach:

Panel Member Stephen P. Bowler
Fisheries Biologist, Office of Energy Projects
Federal Energy Regulatory Commission
888 1st St. NE, PJ 14.3
Washington, D.C. 20426
Stephen.Bowler@ferc.gov

Panel Member David K. White
Fisheries Engineer, Habitat Conservation Division
United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service
Southwest Region
777 Sonoma Avenue
Santa Rosa, CA 95404-4731
David.K.White@noaa.gov

Panel Member Richard Craven
Craven Environmental Consultants
19710 Schaefer Drive
Oregon City, OR 97045
503-970-9652
richard.e.craven@gmail.com

Distribution List w/out Attach:

Alan Mitchnick – FERC DC
Kenneth Hogan – FERC DC
Relicensing Participants via e-mail