FERC MIDDLE FORK AMERICAN RIVER
PROJECT 2079

1. Original License with License Amendments
   (Copied from S. Jones)

2. Historical Data with License Amendments
   (Foresthill Headquarters info)

3. Historical Index 1951 – present
   (missing years 1978, 1979, 1980 – requested again 10/24/03)
   (Purchased data from American Electronic Imaging Company.
   Most of these indexes are not on internet anymore)

4. Article 37 Stream Minimum Flow Release Violation and Water Release
   Incidents History – 1965 to present (may not be conclusive)
   (Based on records from FHHQ – Vina Kliesch)

5. Hydro Preventive Maintenance History 1978 – 1993
   (From PG&E – Guideline to see when tasks are done)
   (Hydro Preventive Maintenance History prior to 1978 stored at Foresthill
   Headquarters Office).
   (Hydro Preventive Maintenance History 1994 to present – located on Online
   Hydro Maintenance System (OHMS) computer program at Foresthill
   Headquarters Maintenance Supervisor’s Office)
   (Can be put on CD)


   (Generation for operation of project – Availability of power to use)

NOTE:
HYDRO/GENERATION DATA OCT 1966 through SEPT 2003
HARD ORIGINALS AT FORESTHILL HEADQUARTERS.
JAN 1989 TO PRESENT – ON COMPUTER
YTD SUMMARY OF ALL GROSS GENERATION HISTORY (KILOWATT
HOURS FOR HELL HOLE WATER PLANT) AND MEGAWATT HOURS FOR
FRENCH MEADOWS, MIDDLE FORK, RALSTON AND OXBO
AVAILABLE AT FORESTHILL HEADQUARTERS.
On June 15, 2004, Placer County Water Agency (Placer), licensee for the Middle Fork American River Project, FERC No. 2079, filed a revised exhibit M for approval with the Commission. Placer is proposing to revise the installed capacity at the Middle Fork Powerhouse. The project is located on the Middle Fork American and Rubicon Rivers in Placer County, California.

BACKGROUND

The Middle Fork American River Project consists of the following five developments: Ralston; Middle Fork; Oxbow; French Meadows; and Hell Hole. The license, as last amended in 1990, \(^1\) authorized the Middle Fork Powerhouse to contain two 82,000-horsepower (hp) impulse turbines, one connected to a 61,200-kilowatt (kW) generator, and the other connected to a 54,900-kW generator (Unit No. 2), for a total installed capacity of 116,160 kW. The total installed capacity of the Middle Fork American River Project was revised from 211,153 kW to 217,453 kW.

REVIEW

In its filing, Placer reports that Unit No. 2 at the Middle Fork Powerhouse was rewound during the last fall and winter seasons. The installation of the new winding was completed, and the unit returned to service on February 12, 2004. The new winding on the unit resulted in an increased capacity of Unit No. 2 from 54,900 kW to 61,200 kW. The new winding of the unit was necessary due to normal wear and tear over the past 39 years of operation. The installation of the new winding did not affect the authorized hydraulic capacity of the powerhouse, nor changed the project's operation.

\(^1\) See, Order Amending License and Revising Annual Charges, issued September 13, 1999.

According to 18 CFR §11.1 (2) (i), the authorized installed capacity means the lesser of the ratings of the generator or turbine units. Staff review of the revised Exhibit M determined that the authorized installed capacity of the project is limited by the generator nameplate at each power plant, as shown in Table 1.

Accordingly, the total authorized installed capacity for the Middle Fork Development will be revised from 116,160 kW to 122,400 kW. This order will amend the project description in the license to reflect the as-built capacity of the Middle Fork Powerhouse. This order will also revise article 41(i) of the license, regarding the annual charges for the purpose of reimbursement to the United States Government for the costs of administration of Part I of the Federal Power Act. The annual charges for the Middle Fork American River Project will be revised from 217,453 kW to 223,753 kW, effective as of February 12, 2004, which is the date that the increased capacity went on-line. The licensee will be required to install a new nameplate on Unit No. 2 at the Middle Fork Powerhouse, as directed in ordering paragraph (C) of this order.

The Director orders:

(A) The license for the Middle Fork American River Project, FERC No. 2079, is amended as provided in this order, effective the first day of the month in which this order is issued.

(B) The revised exhibit M, describing the major equipment at the Middle Fork American River Project, filed on June 14, 2004, conforms to the Commission's rules and regulations, and is approved and made part of the license. The revised exhibit M supersedes, in part, the existing Exhibit M.
(C) The project description in ordering paragraph (B)(ii) of the license is revised, in part, as follows:

(ii) All project works consisting principally of the following described development: "...Middle Fork Powerhouse, containing two 82,000-horsepower (hp) impulse turbines, connected to two 61,200-kilowatt (kW) generators, for a total installed capacity of 122,400 kW,..."

(D) Article 4.(i) of the license is revised to read:

(i) For the purpose of reimbursing the United States for the Commission costs, pursuant to the Omnibus Budget Reconciliation Act of 1986, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time. The authorized existing installed capacity for that purpose is 223,753 kW, effective as of February 12, 2004, which is the date the unit with the revised capacity went on-line.

(E) Within 60 days of the issuance of this order, the licensee shall affix a new generator nameplate with a rating of 61,200 kW to Unit No. 2 at the Middle Fork Powerhouse, and provide a photograph of the nameplate to the Commission, with a copy to the Commission's San Francisco Regional Office, for verification.

(F) The licensee shall report to the Commission any future/proposed changes to the project prior to implementing them.

(G) This order constitutes final agency action. Requests for a rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. § 385.713.

[Signature]  
Mohammad Sayyari  
Engineering Team Lead  
Division of Hydropower Administration and Compliance
ORDER APPROVING AS-BUILT EXHIBIT L DRAWINGS

(as of August 23, 2004)

On March 31, 2003, Placer County Water Agency (PCWA), licensee for the Middle Fork American River Project No. 2079, submitted as-built Exhibit L drawings and on June 17, 2003, provided microfilm copies of the Exhibit L drawings related to the Middle Fork Powerhouse Stoplog Gate Hoist work. On May 8, 2003, PCWA filed an as-built Exhibit L drawing related to the Ralston Switchyard Erosion Protection work. The Middle Fork American River Project is located on the Middle Fork of the American River and the Rubicon River and their respective tributaries in Placer and El Dorado Counties, California.

REVIEW

The Exhibit L drawings submitted on March 31 and June 17, 2003, respectively, were filed in response to a letter from the San Francisco Regional Office requesting the as-built drawings following the completion of construction. These drawings depict the new cable drum gate hoists installed at the L.J. Stephenson Power Plant as part of the Middle Fork Powerhouse Stoplog Gate Hoist work. The Exhibit L drawing filed on May 8, 2003 is for the Ralston Switchyard Erosion Protection work and depicts the constructed floodwall. The drawings conform to the Commission's rules and regulations and are approved by this order. Ordering paragraph (B) of this order will require PCWA to file copies of the approved exhibits in electronic format. 1

1 Three copies of the microfilm aperture cards for each of the as-built Exhibit L drawings were also filed. The submitted aperture cards are accepted; however, note that the approved drawings have new drawing numbers. Staff will correct the numbers on the submitted aperture cards to reflect the approved FERC drawing numbers. PCWA is requested to correct their drawing numbers to correspond with the FERC numbers and the date of this order.

---

(A) The following Exhibit L drawings filed on March 31, 2003, and May 8, 2003 are approved and made part of the license. The superseded exhibit drawings are eliminated from the license.

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>FERC Drawing No.</th>
<th>Title</th>
<th>Superseded Drawing No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>L-24</td>
<td>2079-389</td>
<td>L.J. Johnson Power Plant Floor Plans</td>
<td>2079-343</td>
</tr>
<tr>
<td>L-26</td>
<td>2079-390</td>
<td>L.J. Johnson Power Plant Switchyard Sections</td>
<td>2079-345</td>
</tr>
<tr>
<td>L-32</td>
<td>2079-391</td>
<td>Ralston Power Plant General Plan and Outdoor Arrangement</td>
<td>2079-351</td>
</tr>
</tbody>
</table>

(B) Within 90 days of the date of issuance of this order, the licensee shall file the approved exhibit drawings in electronic file formats.

The licensee shall file two separate sets of exhibit drawings in electronic format with the Secretary of the Commission, ATTN: OEP/DHAC. A third set shall be filed with the Commission's Division of Dam Safety and Inspections San Francisco Regional Office. Each drawing must be a separate electronic file, and the file name shall include: FERC Drawing Number, FERC Exhibit, Drawing Title, date of this license, and file extension [e.g., 2079-398, L-24, L J S Floor Plan, MM-DD-2004.TIF]. Electronic drawings shall meet the following format specification:

- IMAGERY: black & white raster file
- FILE TYPE: Tagged Image File Format (TIFF), CCITT Group 4
- RESOLUTION: 300 dpi
- DRAWING SIZE FORMAT: 24" X 36" (min), 28" X 40" (max)
- FILE SIZE: less than 1 MB
This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. §385.713.

William Guey-Lee
Chief, Engineering & Jurisdiction Branch
Division of Hydropower Administration
and Compliance
ORDER APPROVING RESERVOIR DRAWDOWN

Placer County Water Agency (licensee) filed on August 7, 2000, and supplemented on August 23, 2000, a request to draw down the Interbay Reservoir in order to remove a large accumulation of sediment from the reservoir. The project is located on the Middle Fork American and Rubicon Rivers, in Placer and El Dorado Counties, California. The project occupies lands of the Tahoe and Eldorado National Forests.

LICENSEE'S PROPOSAL

The licensee requests approval to draw down the Interbay Reservoir and remove about 70,000 cubic yards of sediment from the reservoir during September-October 2000. The Interbay Reservoir is located on the Middle Fork American River. The sediment was deposited during high flows in January 1997. The licensee plans to maintain the required minimum flow during the maintenance work.

AGENCY CONSULTATION

By letter dated March 23, 2000, the licensee notified various agencies, including the U.S. Forest Service (FS), U.S. Fish and Wildlife Service (FWS), California Department of Fish and Game (CDFG), National Marine Fisheries Service (NMFS), and the Environmental Protection Agency (EPA). The license has received a streambed alteration agreement from CDFG, dated August 15, 2000; a water quality certification from the California State Water Resources Control Board, dated August 10, 2000; and a special use permit, dated August 18, 2000, from the FS for the proposed work. By separate letter dated May 12, 2000, the FS recommended that all heavy equipment be washed down prior to arrival on site to prevent or minimize the spread of noxious plants.

DISCUSSION

The licensee's proposal was public noticed on August 25, 2000, with a comment period ending on September 20, 2000. No comments or requests for intervention were received.

Further, by letter dated August 21, 2000, the Commission requested concurrence from the California Office of Historic Preservation (SHPO) that no cultural or historic properties are expected to be found within the area of the reservoir and therefore the licensee's planned activities will have no effect on cultural or historic resources. No written comments from SHPO were received within the 30 day comment period.

The licensee proposes to remove sediment deposited in the Interbay Reservoir during high flows in January 1997. A temporary drawdown of the reservoir is necessary to facilitate removal of the sediment. The licensee plans to comply with the permits issued by the various agencies to minimize any potential for impacts and plans to maintain the required minimum flow during the work. Commission staff found that no cultural or historic properties listed on the National Register of Historic Places are in the area around the reservoir and determined that the proposed dredging would have no effect on cultural or historic properties. However, if any previously unidentified historic or cultural items are found during the maintenance activities, the licensee should cease work and consult with the SHPO to determine the need for additional cultural resource management measures. If needed, the licensee should prepare a cultural resource management plan. The plan should include, but not be limited to, a description of each discovered property, a description of the potential effect, the proposed measures for avoiding or mitigating the effects, documentation of consultation with SHPO, and a schedule for mitigating the impacts. The licensee should file its plan and evidence of consultation with SHPO with the Commission for approval. The Commission should reserve the right to require changes to the plan based upon the comments. The licensee should not resume work in the area until informed by the Commission that these requirements have been fulfilled. As recommended by the FS, the licensee should clean any equipment to prevent the spread of invasive plants. Based on our review, we conclude that the reservoir drawdown and sediment removal process, with the modifications discussed, should be approved.

The Director orders:

(A) the licensee's request to draw down the Interbay Reservoir and remove approximately 70,000 cubic yards of sediment, as modified in paragraph (B) and (C), is approved.
Project No. 2079-041

(B) The licensee shall wash down any equipment prior to arrival on site to prevent the spread of invasive plants.

(C) If any historic or cultural items are found during the maintenance, the licensee shall cease work and consult with the California Office of Historic Preservation (SHPO) to determine the need for additional cultural resource management measures. If needed, the licensee shall prepare a cultural resource management plan. The plan shall include, but not be limited to, a description of each discovered property, a description of the potential effect, the proposed measures for avoiding or mitigating the effects, documentation of consultation with the SHPO, and a schedule for mitigating the impacts. The licensee should file its plan and evidence of consultation with SHPO with the Commission for approval. The Commission reserves the right to require changes to the plan based upon the comments. The licensee shall not resume work in the area until informed by the Commission that these requirements have been fulfilled.

(D) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to CFR § 385.713.

George H. Taylor
Group Leader
Division of Hydropower Administration and Compliance
ORDER APPROVING REVISED EXHIBIT L

(May 08, 2000)

On March 10, 2000, Placer County Water Agency (PCWA), licensee for the Middle Fork American River Project, FERC No. 2079, filed a revised exhibit L drawing along with an aperture card showing the installation of new low level outlet guard gate at the Ralston Afterbay Dam development. The Middle Fork American River Project is located on the Middle Fork of American River and Rubicon River and their respective tributaries in Placer and El Dorado Counties, California.

BACKGROUND

In a letter dated March 4, 1998, PCWA requested comments and Commission approval to implement a Sediment Pass Through (SPT) method of operating the Ralston Afterbay Reservoir to reduce the amount of sediment deposited in the project reservoir during high-flow events. To implement the SPT, PCWA concluded installation of a guard gate for the low-level outlet at Afterbay Dam was necessary to provide a means of shutting off water flow in the low level outlet 72-inch sluice pipe, in the event the upstream gate failed to close by debris or malfunction.

REVIEW

Staff reviewed the filing and found the revised exhibit L-37 to be in substantial conformance with the Commission's rules and regulations. This order approves the filed drawing as exhibit L-37, FERC Drawing No. 2079-384 superseding FERC drawing No. 2079-356. PCWA also filed an aperture card for revised exhibit L-37. PCWA should make a note of the new drawing number for exhibit L-37. In lieu of requiring an aperture card with new drawing number, we will make note of the drawing number and the date of the order on the aperture card filed.

The Director Orders:

(A) The following as-built exhibit for the Ralston After Bay Dam development of the Middle Fork American River Project, filed on March 10, 2000, is approved and made part of the license:

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>FERC Drawing No.</th>
<th>Title</th>
<th>Supervised Drawing No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>L-37</td>
<td>2079-384</td>
<td>Ralston Afterbay Dam Plan and Sections</td>
<td>2079-356</td>
</tr>
</tbody>
</table>

The superseded Drawing No. 2079-356 is eliminated from the license.

(B) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. §385.713.

Fred E. Springer  
Director  
Division of Hydropower Administration and Compliance

RECEIVED

MAY 15 2000
PLACER COUNTY WATER AGENCY
POWER SYSTEM
ORDER APPROVING REVISED EXHIBITS L AND K

(May 08, 2000)

On February 29, 2000, Placer County Water Agency (PCWA), licensee for the Middle Fork American River Project, FERC No. 2079, filed for Commission approval revised exhibit L and K drawings along with aperture cards reflecting as-built modifications to the French Meadows Dam (L.L. Anderson Dam) Spillway. The Middle Fork American River Project is located on the Middle Fork of American River and Rubicon River and their respective tributaries in Placer and El Dorado Counties, California.

BACKGROUND

Spillway discharges of 5,500 cfs in mid May 1996, caused erosion between the French Meadows Dam Spillway escape channel and the Middle Fork of the American River. Deposited boulder, cobble and sand formed a debris dam in the American River that caused water to back up, and inundate the ring jet valve at the low-level outlet works of the French Meadows Dam. Repairs to spillway escape channel were accomplished under Articles 31, and 32 of the license for the Middle Fork American River Project.1

REVIEW

Staff reviewed the filing and found the revised exhibits K-9, L-3, L-5, and L-6 to be in substantial conformance with the Commission's rules and regulations and are approved by this order. Ordering paragraph (B) of this order assigns drawing numbers to the approved exhibits. PCWA also filed aperture cards for the revised exhibits. PCWA should make a note of the new drawing numbers for the filed exhibits. In lieu of requiring aperture cards with new drawing numbers, we will make note of the drawing numbers and the date of the order on the aperture cards filed.

1 29 FPC 460, Order Issuing License (major), issued March 13, 1963.
ORDER AMENDING LICENSE AND REVISIONING ANNUAL CHARGES

( Issued September 13, 1999 )

On August 26, 1999, Placer County Water Agency, licensee for the Middle Fork American River Project, FERC No. 2079, filed a letter with the Commission to resolve a discrepancy in the installed capacity for the Middle Fork development of the project. The project is located on the Middle Fork American and Rubicon Rivers in Placer County, California.

BACKGROUND

There are five developments that make up the Middle Fork American River Project, Railton, Middle Fork, Oxlow, Franch Meadows and Hell Hole. During an operation inspection of the project, the Commission’s San Francisco Regional Office (SFRO) found the installed capacity of one of the generators of the Middle Fork development to be 61,200 kW. The license authorizes two 8,200 horsepower impulse turbines connected to two 54,900 kW generators for a total installed capacity of 109,800 kW for the Middle Fork development.

REVIEW

In its August 26, 1999 letter, the licensee stated that the Unit 1 generator of the Middle Fork development was rewound during the Fall, 1998. The new winding design was the same as the original winding design. However, the rating for the Unit 1 generator has increased from 54,900 kW to 61,200 due to the use of better materials. Issuance of this order is necessary to revise the description of the project to reflect correct installed capacity for the Middle Fork development and revise project’s annual charges. In accordance with the Commission’s policy, the effective date for the revised annual charges will be the date the revised capacity went on-line. According to the licensee, the increased capacity went on-line on December 9, 1998. There have been no changes in the hydraulic capacity or the operation of the project as result of the rewind of

---

1 29 FPC 460, Order Issuing License (major), issued March 13, 1969.
This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. §385.713.

J. Mark Robinson
Director
Division of Licensing and Compliance
ORDER APPROVING EXHIBIT L DRAWING
(Issued January 6, 1993)

On February 9, 1993, Placer County Water Agency, licensee for the Middle Fork American River Project, FERC No. 2079, filed a revised exhibit L drawing showing the redesigned trashrack at the Duncan Diversion Dam Intake. The Middle Fork American River Project is located on the Middle Fork of American River and Rubicon River and their respective tributaries, in Placer and El Dorado Counties, California.

Review

The trashrack at the Duncan Diversion Dam Intake was redesigned to provide a larger surface area and a sloping configuration to reduce clogging of the intake, and facilitate cleaning. The revised exhibit drawing conforms to the Commission's rules and regulations and is approved by this order.

The Director Orders:

(A) The following exhibit drawing is approved and made part of the license:

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>FERC No.</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>L-45</td>
<td>2079-383</td>
<td>Duncan Creek Intake Trashrack</td>
</tr>
</tbody>
</table>

(B) Within 90 days of the date of issuance of this order, the licensee shall file three original aperture cards of the approved exhibit L drawing. The originals should be reproduced on silver or gelatin 35mm microfilm. All microfilm should be mounted on type D (3 1/4'' x 7 3/8'') aperture cards.

Prior to microfilming, the FERC Drawing Number (i.e. 2079-383) shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number should be typed on the upper right corner of each aperture card. Additionally, the Project Number, FERC exhibit (i.e. L-45), Drawing Title, and date of this order should be typed on the upper left corner of each aperture card. See Figure 1.

Figure 1. Sample Aperture Card Format

Two sets of original aperture cards should be filed with the Secretary of the Commission. The remaining set of original aperture cards should be filed with the Commission's San Francisco Regional Office.

(C) The licensee shall notify the Commission of any future proposed changes in the project prior to implementing them.

(D) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. § 385.713.

J. Mark Robinson
Director
Division of Licensing and Compliance
ORDER APPROVING RECREATION AS-BUILT DRAWINGS AND AMENDING LICENSE

(Issued May 16, 1996)

On January 31, 1996, Placer County Water Agency (Licensee) filed 24 recreation as-built drawings showing improvements made to the recreation facilities and campgrounds at the Middle Fork American River Project 1/, located on the Middle Fork American River, in Placer County, Foresthill, California. These as-built drawings were required by ordering paragraph C of the Order Approving Revised Recreation Plan with Modification and Amending License (1992). 2/

The 11 drawings listed below are acceptable and meet the requirements of the Order Approving Recreation Plan and should be approved:

<table>
<thead>
<tr>
<th>Drawing No.</th>
<th>Showing</th>
</tr>
</thead>
<tbody>
<tr>
<td>214220</td>
<td>Index of Drawings, Legend, Vicinity Map</td>
</tr>
<tr>
<td>214211</td>
<td>Site Plan - Key Map French Meadows Family Campground</td>
</tr>
<tr>
<td>214216</td>
<td>Site Plan - Key Map Lewis Family Campground</td>
</tr>
<tr>
<td>214220</td>
<td>Site Plan - Key Map Big Meadows Family Campground</td>
</tr>
<tr>
<td>214222</td>
<td>Aspen Site Plan Gates Group Campground</td>
</tr>
<tr>
<td>214226</td>
<td>Lodge Pole Site Plan/Ponderosa Site Plan Gates Group Campgrounds</td>
</tr>
<tr>
<td>214227</td>
<td>Little Wolf Site Plan Coyote Group Campground</td>
</tr>
<tr>
<td>214228</td>
<td>Brush Wolf Site Plan Coyote Group Campground</td>
</tr>
</tbody>
</table>

1/ See Order Issuing License (Major Project), 29 FPC, 460 (1963).

Project No. 2079-028

<table>
<thead>
<tr>
<th>Drawing No. cont.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Showing</td>
</tr>
<tr>
<td>214229</td>
</tr>
<tr>
<td>214230</td>
</tr>
<tr>
<td>214231</td>
</tr>
</tbody>
</table>

During our review of these as-built exhibit drawings, discrepancies were noticed in the cataloging of some previously approved project exhibit drawings. The discrepancies are noted below:

On March 18, 1981, the Commission issued Order Amending License (Major) 3/ for the Middle Fork American River Project. Ordering paragraph C approved the following exhibit drawings:

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>FERC Drawing No. 2079-</th>
<th>Superseding</th>
</tr>
</thead>
<tbody>
<tr>
<td>J-1</td>
<td>362</td>
<td>272</td>
</tr>
<tr>
<td>K-1</td>
<td>363</td>
<td>280</td>
</tr>
<tr>
<td>L-1</td>
<td>365</td>
<td>290</td>
</tr>
<tr>
<td>L-2</td>
<td>366</td>
<td>---</td>
</tr>
</tbody>
</table>

The correct ordering paragraph should read:

Exhibit | FERC Drawing No. 2079- | FERC Drawing No. 2079- |
---------|------------------------|------------------------|
J-1      | 362                    | 272                    |
K-1      | 363                    | 280                    |
L-1      | 365                    | 290                    |
L-2      | 366                    | ---                    |

On July 24, 1984, the Commission issued an Order Approving As-Built Exhibits 4/ for the Middle Fork American River Project. Ordering paragraph A(1) approved the following exhibit drawings:

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>FERC Drawing No. 2079-</th>
</tr>
</thead>
<tbody>
<tr>
<td>J-14</td>
<td>363</td>
</tr>
<tr>
<td>K-18</td>
<td>364</td>
</tr>
<tr>
<td>L-43</td>
<td>365</td>
</tr>
<tr>
<td>L-44</td>
<td>366</td>
</tr>
</tbody>
</table>


MAY 23 1996
The correct ordering paragraph should read:

The Commission's November 19, 1980 Order Approving As-Built Exhibits J, K, and L 2/ neglected to supersede the following drawings:

Exhibit Drawing No. Superseding
J-1 2179-367 2079-362
K-1 2179-368 2079-363
K-2 2179-369 2079-364
L-1 2079-370 2079-365
L-2 2079-371 2079-366

This order will delete these drawings from the license.

The Director orders:

(A) The following 11 as-built drawings filed on January 31, 1996 are approved and made part of the license:

Exhibit Licensee Drawing No. FERC Drawing No. Showing
R-1 214210 2079-372 Index of Drawings, Legend, Vicinity Map

R-2 214211 2079-373 Site Plan - Key Map French Meadows Family Campground

R-3 214216 2079-374 Site Plan - Key Map Lewis Family Campground

(B) Within 90 days of the date of issuance of this order, the licensee shall file an original and two duplicate aperture cards of the approved drawings. The originals should be reproduced on silver or gelatin 35mm microfilm. The duplicates are copies of the originals made on Diano-type microfilm. All microfilm should be mounted on Type D (3 1/4" x 7 3/8") aperture cards.

Prior to microfilming, the FERC Drawing Number (e.g. 2079-372) shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number should be typed on the upper right corner of each aperture card.

Additionally, the Project Number, FERC Exhibit (e.g. R-1),

5/ 13 FERC § 62,182
Drawing Title, and the date of this order should be typed on the upper left corner of each aperture card. See Figure 1.

Figure 1. Sample Aperture Card Format

The original and one duplicate aperture card should be filed with the Secretary of the Commission. The remaining duplicate aperture card should be filed with the Commission’s San Francisco Regional Office.

(C) The March 18, 1981, Order Amending License, Ordering paragraph C shall read:

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>FERC Drawing No.</th>
<th>Superseding</th>
</tr>
</thead>
<tbody>
<tr>
<td>J-1</td>
<td>2079-362</td>
<td>2079-272</td>
</tr>
<tr>
<td>K-14</td>
<td>2079-363</td>
<td>2079-288</td>
</tr>
<tr>
<td>K-15</td>
<td>2079-364</td>
<td>2079-290</td>
</tr>
<tr>
<td>L-43</td>
<td>2079-365</td>
<td>--</td>
</tr>
<tr>
<td>L-44</td>
<td>2079-366</td>
<td>--</td>
</tr>
</tbody>
</table>

(D) The July 24, 1984, Order Approving As-Built Exhibits, Ordering paragraph A(1) shall read:

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>FERC Drawing No.</th>
<th>Superseding</th>
</tr>
</thead>
<tbody>
<tr>
<td>J-1</td>
<td>2079-367</td>
<td>2079-362</td>
</tr>
<tr>
<td>K-14</td>
<td>2079-368</td>
<td>2079-363</td>
</tr>
<tr>
<td>K-15</td>
<td>2079-369</td>
<td>2079-364</td>
</tr>
<tr>
<td>L-43</td>
<td>2079-370</td>
<td>2079-365</td>
</tr>
<tr>
<td>L-44</td>
<td>2079-371</td>
<td>2079-366</td>
</tr>
</tbody>
</table>

(F) This order constitutes final agency action. Requests for rehearing by the commission may be filed within 30 days of issuance of this order, pursuant to 18 C.F.R. § 385.713.

J. Mark Robinson
Director, Division of Project Compliance and Administration
ORDER AMENDING LICENSE, REVISIONING ANNUAL CHARGES, AND APPROVING REVISED EXHIBIT M

(issued August 30, 1995)

On May 3, 1995, and supplemented on June 6, 1995, Placer County Water Agency, Licensee for the Middle Fork American River Project, FERC Project No. 2079, filed a revised exhibit M to the Commission for approval. The filing was made in accordance with March 13, 1995, Order Amending License.¹

Background

There are five developments that make up the Middle Fork American River Project, Ralston, Middle Fork, Oxbow, French Meadows, and Hell Hole. The March 13, 1995 order amended the license² to reflect the installed capacity at the Oxbow powerhouse. The license was amended to show the Oxbow powerhouse as "containing one 8,700 hp Kaplan turbine connected to a 6,128 kW generator." The licensee's May 3 and June 6, 1995 filings state that the installed capacity of the turbine is 8,800 hp instead of 8,700 hp. Staff contacted the licensee and the licensee explained that the 8,800 hp turbine had been installed at the Oxbow development in 1965, and the capacity did not change at the Ralston, Middle Fork, or French Meadows developments, which went on line in 1966. The Hell Hole development was later added and went on line in 1983.

On March 15, 1995, the Commission issued a Final Rule for charges and fees for hydroelectric projects.³ The Rulemaking states that "the authorized installed capacity would be expressed in kilowatts, and would be the lesser of the capacity of the generator or the turbine... the rating on the generator's nameplate at licensing will be deemed to be the capacity of the generator..." In our review, we found that the installed capacity at the Oxbow powerhouse is limited by the generator, which has a capacity of 6,128 kW. Therefore, the total installed capacity for the five developments is 211,153 kW and not 210,428 kW.

As stated in the March 13, 1995 order. In accordance with the Rulemaking, the annual administrative charges for the Middle Fork American River Project will be based on 211,153 kW.⁴

The revised exhibit M, filed on June 6, 1995, reflects the installed capacity of 6,128 kW and other mechanical and electrical equipment at the Oxbow powerhouse.

The Director orders:

(A) The revised exhibit M, filed on June 6, 1995, conforms to the Commission's rules and regulations and is approved and made part of the license. The revised exhibit M supersedes, in part, the current exhibit M.

(B) Ordering paragraph (B)(ii) of the license is revised, in part, as follows:

All project works consisting principally of the following described developments: "... Oxbow powerhouse, contains one 8,800 hp turbine connected to a 6,128-kW generator."

(C) Paragraph (l) of Article 41 of the license, is revised to read as follows:

(i) For the purposes of reimbursing the United States for the Commission's costs, pursuant to the Omnibus Budget Reconciliation Act of 1985, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 211,153 kilowatts, effective the date of this order. Under the regulations currently in effect, projects with authorized installed capacity of less than or equal to 1.5 MW will not be assessed an annual charge.

(D) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. §385.713.

J. Mark Robinson
Director, Division of Project Compliance and Administration

¹ 70 FERC ¶62,163.
² 29 FPC 460, Order Issuing License (Major), March 13, 1963.
³ 70 FERC ¶61,293, Charges and Fees for Hydroelectric Projects, effective April 21, 1995.
⁴ The Final Rule also states that the Commission will substitute kilowatts for horsepower in stating a project's authorized installed capacity. This change is to reflect the modern usage in the rating of equipment used in hydropower projects. For annual charge purposes, the installed capacity measured in horsepower is converted to kilowatts by multiplying by 3/4. The value is rounded off.
The Director orders:

(A) The license for the Middle Fork American River Project, FERC No. 2079, is amended as provided by this order, effective the first day of the month in which this order is issued.

(B) Ordering paragraph (B)(ii) of the license is revised, in part, as follows:

All project works consisting principally of the following described developments: "... Oxbow Powerhouse, containing one 8,700 hp Kaplan turbine connected to a 6,128-kW generator,..."

(C) Within 60 days of the issuance of this order, the licensee shall file a revised exhibit A to reflect the mechanical features of the Middle Fork American River Project.

(D) Within 60 days of the issuance of this order, the licensee shall affix a new generator nameplate with a rating of 6,128 kW and provide a photograph of the new nameplate to the Commission, with a copy to the Commission's San Francisco Regional Office, for verification.

(E) The licensee shall report to the Commission any future proposed changes to the project prior to implementing them.

(F) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order pursuant to 18 C.F.R. §385.713.

I, Mark Robinson
Director, Division of Project Compliance and Administration
ORDER APPROVING SITE PLAN DRAWINGS

(issued February 15, 1995)

On November 22, 1994, Placer County Water Agency (licensee) filed site plan drawings and documentation of agency consultation showing proposed improvements to be made at the recreation facilities and campgrounds for the Middle Fork American River project. These site plan drawings and documentation of consultation were required by ordering paragraph D of Order Approving Revised Recreation Plan with Modification and Amending License (1992). Ordering paragraph D of the 1992 order requires the licensee to consult with the U.S. Forest Service (FS) and California State Historic Preservation Office (SHPO) prior to the installation of the spurs at various recreation areas and campgrounds.

Background and Consultation

Specific site drawings were submitted to the appropriate FS office for consultation and comments incorporated into the site plans.

The El Dorado National Forest was consulted concerning the Big Meadows Campground. The Forest Supervisor approved the plans in a letter dated September 15, 1994, with three modifications: (1) Sites #35 and #41 on drawings 214222 and 214223 will be changed to indicate the contractor is to carefully remove pavement; (2) archaeological monitoring will be required at each site; and (3) the barrier posts will also be cut off as close to the ground as possible with a chainsaw. The licensee agreed to these modifications.

The Tahoe National Forest was consulted concerning all the campgrounds and recreation facilities in the French Meadows area. The Forest Supervisor approved the site drawings for the French Meadows Campground.

In accordance with Section 106 of the National Historic Preservation Act, the FS consulted with the SHPO concerning potential impacts on cultural resources in two of the campgrounds. At Big Meadows Campground the El Dorado National Forest made a determination that the proposed improvements could be carried out with a No Adverse Effect determination. The SHPO concurred with this determination and a copy of this documentation was sent to the Advisory Council on Historic Preservation (Council). In a letter dated February 7, 1994, the Council did not object to the finding of no adverse effect.

Concerning the campgrounds in the French Meadows area the Tahoe National Forest made a determination that an archeological deposit located in the area is ineligible for inclusion in the National Register. The SHPO concurred with the FS conclusion that the archeological deposit discovered is ineligible for inclusion in the National Register in a letter dated August 31, 1994.

Discussion and Conclusion

The requirements of ordering paragraph D of the Order Approving Revised Recreation Plan with Modification and Amending License have been met. The requirements of Section 106 of the National Historic Preservation Act have also been met. The final site plans consisting of 24 site drawings should be approved.

The licensee is reminded that ordering paragraph C of the Order Approving Revised Recreation Plan with Modification and Amending License requires the completion of the ordered recreation facilities not later than October 31, 1996. Within 90 days of completing the improvements to the project recreation facilities, the licensee shall file as-built drawings of the facilities as constructed.

The Director orders:

(A) The licensee's site plan drawings, filed November 22, 1994, showing proposed improvements to be made at the recreation facilities and campgrounds for the Middle Fork American River project fulfill the requirements of paragraph D of the Order Approving Revised Recreation Plan with Modification and Amending License and are approved.

1 See Order Issuing License (Major Project), 29 FPC, 460 (1963).

for 18 C.F.R.

(6) This order constitutes final agency action. Requests for the reconsideration by the Commission may be filed within 30 days of the date of this order, pursuant to 18 C.F.R.

J. Mark Robin, Director, Div.

Project Compliance and

re

U.S. OFFICIAL MAIL

P-2079 127731
STEPHEN J. JONES MANAGER
PLACER COUNTY WATER AGENCY
P. O. BOX 667
FORESTHILL, CA 95631
ORDER GRANTING WAIVER FROM STREAM GAGE MAINTENANCE

(Issued August 31, 1992)

On March 16, 1992, the Placer County Water Agency (licensee) filed a request to remove a stream gage, in reference to article 6 of the license for the Middle Fork American River Project. Article 6 requires the licensee to install and maintain adequate streamflow gaging equipment to monitor stage and streamflow of the South and North Forks of Long Canyon Creek. Article 6 also requires the licensee to maintain accurate and sufficient records of the gaging data. Currently, a U.S. Geological Survey (USGS) gage continuously measures the combined required minimum flows at the confluence of the South and North Forks. Article 37 requires maintenance of a minimum flow of 5 cubic feet per second (cfs) and 2 cfs, in the North and South Forks, respectively, when diverting water for project use, or the natural flow, whichever is less.

The licensee requested permission to remove USGS stream-gaging station #11433100 located at the confluence of the North and South Forks of Long Canyon Creek. The licensee said that this gage is obsolete since the installation of USGS gages #11433085 and #11433085, located at the South and North Fork diversion dams, respectively. The licensee presently uses these gages to measure the flows from each diversion dam through the respective release pipes required by article 37. The two gages only operate when the dams are diverting water to Nell Hole Reservoir through the respective diversion tunnels; otherwise, the natural flow is released.

The licensee did not supply any evidence of consultation with the USGS, California Department of Fish and Game, or U.S. Fish and Wildlife Service concerning the request to remove the gage.

The removal of USGS stream gage #11433100 would no longer allow the licensee to gage stream stage and streamflow at the confluence of the North and South Forks of Long Canyon Creek. The data derived from the operation of this gage is not important to ensure compliance with the minimum flow requirements of article 37. The gages installed in the diversions of the North and South Forks would adequately monitor streamflow to comply with article 37 requirements. Therefore, the Commission grants the licensee a waiver of article 6 concerning their maintenance of USGS gage #11433100. The licensee should not, however, remove the gage, but instead, should allow the USGS to assume the responsibility.
Proposed Exclusion of Recreation Areas from the Approved Plan

The licensee's plan proposes to exclude recreation areas outside the project boundary that were identified in the plan as not being project related. The FS had strenuous objections to this aspect of the plan. The FS felt that project-related recreation use of the Arhart, Middle and Big Meadows Campgrounds did occur and recommended that these areas be retained in the plan.

In addition, the National Park Service in its April 7, 1988, comment letter recommended that toilets not be provided near the Duncan Creek Reservoir; increased recreational activity could adversely affect riparian habitat and cultural resources.

Because direct recreational access to the project is limited by the topography of the project impoundment, project-induced recreation use at the subject campgrounds is likely to occur. Therefore, the revised plan should be modified to retain the campgrounds as part of the approved recreation plan. Further, insufficient need has been identified to require development of the Duncan Creek site, and sensitive environmental resources exist in the area may be adversely impacted by additional recreational development. As such, continued consideration of the Duncan Creek site for future recreational development is unwarranted and it should not be approved in the plan.

Future Recreational Development

The revised plan identifies proposed project recreational development for the remaining license period (until 2013). The licensee has included triggering mechanisms in the plan to identify when future recreational development should be provided. The development may consist of an additional group campground. If certain "triggering mechanisms" contained in the plan are activated, the licensee agrees to construct these new facilities. The FS is opposed to the plan's triggering mechanisms regarding group camps but agrees with the licensee's triggering provisions regarding other construction.

1 The licensee's most recent FERC Form 80 data indicates that the current project recreation facilities consist generally of the following: Malagro Afterbay: 1 boat launch, and a picnic and access area; French Meadows: 2 boat launches 2 picnic areas, 5 campgrounds with 115 campsites, 7 group camps and 1 visitor center; Duncan Creek: 6 campsites; Hall Hole: 1 boat launch, 1 trail, 2 camping areas, and 1 visitor center.

2 The licensee's proposed triggering mechanism for group camps requires that six of seven group camps be reserved to at least 75% capacity 14 weekend days per summer (Memorial Day to Labor Day), excluding the Memorial, Labor Day and Fourth of July weekends. Excluding the major holidays, 11 summer weekends (or 22 weekend days) remain.

3 Group camps are camping areas set aside for large groups of people who wish to camp together, rather than at single family campsites.
Problems exist with the triggering mechanism scheme for group camps so the scheme should not be relied upon as the sole means of determining the recreational needs of the project. The separate group camp being used to capacity. The group camps any size group will fully utilize a given group camp regardless of size group. Thus, the licensee's triggering mechanism, requiring a site to be reserved for 75 per cent of capacity, would tend to underestimate the use of the camps. As such, the site of the group should not be considered in determining the need for new facilities. In addition, the public preference in recreation activities (if group camps fall out of favor) over the course of time.

Although the licensee's proposed triggering mechanism does not completely answer the questions of when and what recreational development is warranted, it is an indication of possible need and should be retained in the plan. If the need for new development is triggered, the licensee should file an application to amend its recreation plan to allow the Commission to evaluate the effects of the licensee's development proposals. However, the sole means to determine when additional recreation development is necessary.

Commission Order 313, in setting out the Commission's policy regarding recreational development, states:

"We...intend in connection with any application for substantial amendment to a license, reasonably related to recreation, which does not presently incorporate an article requiring the filing of a recreation use plan, the standard free access article, or the article providing for the installation of such recreation facilities as the Commission might...find...required by the public interest, to require the licensee to show cause why such articles should not be incorporated into its license, if the license is otherwise amended in response to the application."

The existing license does not contain a provision for the installation of recreation facilities after notice and opportunity for a hearing identified in order 313. In order to assure that the license contains adequate flexibility to address possible future recreation development needs, this order will amend the project license to include article 46, contained in ordering paragraph G. Inclusion of article 46 to the project license will allow for changes in recreational development based on need, and will supplement the triggering mechanisms which may not reflect totally the future recreational needs of the project. In addition, the article will permit additional recreational development as demonstrated to be necessary.

Recommendations Regarding Specific Facilities

The FS also comments that the configuration and number of camping and parking spurs (pads) proposed is inadequate to meet recreational needs. The FS asserts that the number, location, and configuration of the spurs should be determined by the specific topography of each area.

It appears that the licensee's proposal is a reasonable attempt to meet the project's recreational needs; however, additional improvements could be made. In addition, the FS states that cultural resources have been identified in the Big Meadows Campground which may affect installation or modification of that campground. FS assistance in the layout of the spurs should be helpful to the licensee in determining the exact location of the pads and avoiding unnecessary destruction of natural and cultural resources. As much, the licensee should consult with the FS and the State Historic Preservation Officer (SHPO) prior to developing site-specific plans for installation of the spurs. The site plans, along with documentation of agency consultation on the plan, should be filed for Commission approval.

By letter filed October 9, 1991, the FS commented that the Environmental Protection Agency's surface water treatment rules would apply to the campground water systems at the French Meadows Reservoir, and unless an approved water treatment system was in place by June 29, 1993, the State of California would require closure of the campground facilities. The FS recommended that the licensee's plan be modified to include a requirement that the licensee "...identify the appropriate facilities needed to treat the water systems and incorporate that information into the plan in an expedient manner...".

4 The specific facilities provided (such as vault toilets v. flush type toilets) will be determined at such time as the actual site plans for development are approved.
The existing recreation facilities at French Meadows Reservoir use a surface water system to provide potable water. U.S. Environmental Protection Agency and State of California water treatment standards will require approved treatment systems for the water supply to the campgrounds. Because a potable water supply is a part of the existing recreation facilities, the licensee is responsible for ensuring that adequate water treatment systems are installed and public use of the campground continues. It is not necessary for the licensee to include details of how it expects to meet this required standard in this recreation plan.

Regarding the FS initial recommendation that the licensee be required to provide additional sanitary facilities at the Ralston Afterbay, the FS in its March 13, 1982 letter states that commercial rafting interests have arranged to provide sanitary facilities. The FS letter indicates that the facilities are sufficient for the present time. As such, the licensee's plan should not be modified to require construction of the additional sanitary facilities.

Schedule

The licensee proposes completion of certain recreation facilities (pages 19 through 22) by October 31, 1993. This schedule should be modified to permit the licensee additional time to design and construct the recreation facilities including the modifications to the plan contained in this order. The schedule should be revised to require completion of the facilities, not later than October 31, 1996.

Conclusion

The licensee's proposal, as modified by the ordering paragraphs, will ensure adequate recreational access to the project and should be approved. The environmental impacts of the licensee's proposal should be minor, of short duration, and similar to those associated with constructing the existing recreational facilities.

The Director orders:

(A) The licensee's revised recreation plan filed February 28, 1989, is approved as modified by the following ordering paragraphs.

(B) The Arhart, Middle Meadows and Big Meadows Campgrounds shall remain approved recreation facilities within the revised recreation plan. Future development of the Duncan Creek reservoir site is not required by this order.

(C) The licensee shall complete the ordered recreation facilities not later than October 31, 1996. Within 90 days of completing the improvements to the project recreation facilities, the licensee shall file as-built drawings of the facilities as constructed.

(D) The licensee shall consult with the FS and SHPO prior to installation of the spur and on the location and configuration of the spur. Site plan drawings and documentation of agency consultation should be filed for Commission approval at least 180 days prior to construction of those facilities.

(E) The license is amended to include the following article:

Article 46. The licensee shall construct, maintain, and operate or shall arrange for the construction, maintenance and operation of such reasonable recreational facilities, including wharves, launching ramps, beaches, picnic and camping areas, sanitary facilities, and utilities, giving consideration to the needs of the physically handicapped, and shall comply with such reasonable modifications of the project, as may be prescribed hereafter by the Commission during the term of the license upon its own motion or upon the recommendation of the Secretary of the Interior or other interested Federal or State agencies, after notice and opportunity for a hearing.

(F) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. § 385.713.

J. Mark Robinson
Director, Division of Project Compliance and Administration

6 Except for the campground water systems which must be in place by the deadlines specified by the appropriate state and federal agencies.
On October 24, 1988, the Placer County Water Agency (licensee) filed an application to amend Article 37 of the license for the Middle Fork American River Project issued on March 13, 1963. Article 37 requires the licensee to release designated flows from seven dams comprising the project. In addition, Article 37 requires the licensee to ensure that operation of the Oxbow Powerplant development does not cause vertical fluctuations greater than one foot per hour, as measured at stream gages located downstream of the project. Article 37 allows modification of this ramping rate, if the California Fish and Game (DFG) and the licensee mutually agree on an alternative ramping rate.

The licensee states that the portion of Article 37 pertaining to the Oxbow development should be amended because the river channel morphology downstream of this generating facility has changed since the license was issued. Additionally, the U.S. Geological Survey relocated the gauging station below the development. As a result of these changes, the licensee is unable to satisfy the present ramping rate requirement of Article 37.

In a letter dated September 26, 1988, DFG concurs with the licensee's proposed ramping rate modifications.

The licensee's proposed modified ramping rate would not adversely affect environmental resources downstream of the Oxbow development, nor would it affect project operation.

The Director orders:

(A) The third paragraph of Article 37 of the license issued March 13, 1963, pertaining to releases from the Oxbow Powerplant is amended as follows:

"Provided further that Oxbow Powerplant releases shall not cause vertical fluctuations in stream gages (measured in representative section) greater than three feet per hour."
UNited StAtes of ameRica
FederAl energy reGulatorY commisSion

placer county water agency ) Project No. 2079

ORDER AMENDING LICENSE (MAJOR)
(Issued March 18, 1981)

On August 25, 1980, placer county water agency (applicant) filed an
application under the federal power act, 16 u.s.c. §§791(a)825(r),
for amendment of its license for the middle fork american river
project no. 2079, located on the middle fork american and rubicon
rivers in placer county, california. 1/

applicant requests authorization to modify the project by constructing,
operating, and maintaining: (a) a powerhouse with an installed
capacity of 550 kw, at the existing outlet of the project's hell
hole dam on the rubicon river; and (b) a 2,300-foot long, 12-kv
transmission line connecting the proposed powerhouse to the project's
existing 12-kv line, west of the powerhouse. the energy generated
by the proposed powerhouse would be sold to the pacific gas and
electric company.

applicant also requests amendment of article 37 of its license
which provides for a schedule of minimum streamflow releases from
hell hole reservoir. the proposed changes would provide higher
minimum flows during the critically low rainfall period and lower
minimum flows during periods of higher rainfall. the total annual
volume of water released from the reservoir for minimum flow purposes
would remain approximately the same. the changes in minimum flow
releases are recommended by the u. s. forest service (usfs) and the
california department of fish and game (cdfg).

notice of the application has been published. no protests or
petitions to intervene have been received. cdfg and usfs filed
comments on the application and their concerns are discussed below.

minimum flow releases:

applicant proposes to revise the schedule of flow releases from
hell hole reservoir, as requested by cdfg and usfs in their letters
to the applicant. the existing and proposed minimum flow releases
are as follows:

DC-a-22

1/ Authority to act on this matter is delegated to the director,
office of electric power regulation, under section 375.308 of the
commission's regulations, 45 fed. reg. 21216 (1980), amending
44 fed. reg. 46449 (1979) and 18 c.f.r. 3.5(g) (1979).
Forecasted Runoff to Folsom Reservoir

Present Streamflows (cfs)

<table>
<thead>
<tr>
<th></th>
<th>Proposed Streamflows (cfs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000,000 or more</td>
<td>20, May 15-December 14</td>
</tr>
<tr>
<td>15, July 26-August 5</td>
<td>10, December 15-May 14</td>
</tr>
<tr>
<td>10, August 6-October 31</td>
<td></td>
</tr>
<tr>
<td>14, November 1-January 31</td>
<td></td>
</tr>
<tr>
<td>20, February 1-May 31</td>
<td></td>
</tr>
<tr>
<td>less than 1,000,000</td>
<td>8, June 1-December 31</td>
</tr>
<tr>
<td>6, January 1-March 25</td>
<td>10, June 1-October 14</td>
</tr>
<tr>
<td>8, March 26-May 31</td>
<td>6, October 15-May 31</td>
</tr>
</tbody>
</table>

CDFG and USFS stated that the revised schedule of flow releases would have a beneficial effect on the Rubicon River's fish populations. By providing higher flows during the critical low-flow period, more fish habitat could be maintained.

The proposed schedule of minimum flow releases would ensure an annual release from Hell Hole Reservoir of 11,580 acre-feet in a normal or wet year, and 5,468 acre-feet in a dry year.

Article 37 of the license is revised to incorporate the schedule of flow releases from Hell Hole Reservoir recommended by CDFG and USFS. Furthermore, the limits on total annual releases from Hell Hole and French Creek Reservoirs are eliminated from Article 37. These limits provide no fisheries benefits. Minimum storage capacity for the two reservoirs is required by Article 36 of the license.

**WETLAND PROTECTION:**

CDFG and USFS recommended that the small wet meadow formed by a seep area at the base of Hell Hole Dam should not be disturbed. Licensee states in the application that the meadow would not be disturbed during installation of the powerhouse or placement of the transmission line. A stream alteration agreement between Licensee and CDFG requires that the wet meadow area of about 50 feet by 30 feet be protected. However, should seepage increase and become a dam safety factor remedial work could be ordered that could affect the wet meadow.
SAFETY, ADEQUACY AND COMPREHENSIVE DEVELOPMENT:

The proposed powerhouse is considered safe and adequate if constructed in accordance with accepted engineering practices and construction procedures.

The proposed power plant would not be in conflict with any existing or proposed water resource development in the Rubicon River Basin. It would make efficient use of the flow and head available at the dam. Upon compliance with the terms and conditions of the license, the proposed power plant would not be inconsistent with the comprehensive plan of development of the river basin.

ECONOMIC FEASIBILITY:

Staff performed a feasibility study of the proposed power plant based on the current wholesale price of power in the area and the estimated operating cost. The study showed that construction and operation of the proposed power plant would be economically feasible.

EXHIBITS:

Exhibits J, K, L and M were filed as part of the application for amendment of license. The exhibits conform to the Commission's regulations and are approved and made part of the license. However, the design drawings are preliminary; therefore, Article 43 requires the Licensee to file prior to the start of construction, revised Exhibit L drawings showing the final design of the project works.

ENVIRONMENTAL IMPACT:

Construction of the proposed powerhouse and transmission line would have a minimal impact on the terrestrial environment, affecting a small amount of marginal wildlife habitat. Construction would result in a short-term impact on water quality, due to increased erosion and sedimentation. The stream alteration agreement between the Licensee and CDFG requires: the revegetation of disturbed areas; the use of erosion control measures; and the prohibition of discharging waste water from construction activities into the river. The agreement also requires that sufficient rock or bedrock shall be present at the section of the river receiving the outflow from the powerhouse to prevent bank erosion.

The proposed readjustment of the schedule of minimum streamflow releases from Hell Hole Reservoir would result in long-term benefits to the downstream trout fishery.

2/ The proposed power plant, with its average annual generation of 2.93 million kWh, will utilize a renewable resource that will save the equivalent of approximately 4,800 barrels of oil or 1,350 tons of coal per year.
For the above reasons, approval of the application would not constitute a major Federal action significantly affecting the quality of the human environment.

Article 38 of the License required the Licensee to take certain steps to protect environmental resources during an earlier phase of project construction. The requirements of this article are equally applicable to this phase of construction of the project and no additional article to protect the environment is necessary.

It is ordered that:

The license for Project No. 2079 is amended, effective the first day of the month in which this order is issued, as follows:

(A) The Licensee is authorized to construct, operate and maintain a powerhouse, transmission line and appurtenances at the Hell Hole Dam.

(B) Ordering paragraph (B) of the Commission's March 13, 1963, Order Issuing Major License is amended by adding the following:

Hell Hole Power Plant consists of: (a) a powerhouse containing a single generating unit with a total installed capacity of 550 kW; and (b) a 2,300-foot long, 12-kv transmission line connecting the Hell Hole Powerhouse to the 12-kv line west of the powerhouse.

(C) The following exhibits conform to the Commission's rules and regulations and are approved and made part of the license, superseding previously approved exhibits.

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>FERC Drawing No. 2079-</th>
<th>Title</th>
<th>Superseding FERC Drawing No. 2079-</th>
</tr>
</thead>
<tbody>
<tr>
<td>J-1</td>
<td>362</td>
<td>General Project Map</td>
<td>272</td>
</tr>
<tr>
<td>K-1</td>
<td>363</td>
<td>Hell Hole Reservoir</td>
<td>288</td>
</tr>
<tr>
<td>K-2</td>
<td>364</td>
<td>Hell Hole Reservoir</td>
<td>290</td>
</tr>
<tr>
<td>L-1</td>
<td>365</td>
<td>Hell Hole Powerhouse</td>
<td></td>
</tr>
<tr>
<td>L-2</td>
<td>366</td>
<td>Hell Hole Powerhouse</td>
<td></td>
</tr>
</tbody>
</table>

Exhibit M - One typewritten page entitled "General Description and Specification of Mechanical, Electrical and Transmission Equipment."

(D) Subparagraph (i) of Article 41 of the license is amended as follows:

(i) For the purpose of reimbursing the United States for the cost of administration of Part I of the Act, a reasonable annual charge as determined by the Commission in accordance with the provisions of its regulations, in effect from time to time. The authorized installed capacity for such purposes is 280,730 horsepower.
(E) Article 37 of the license is revised to read as follows:

Article 37. The Licensee shall release from Duncan Creek Diversion Dam, French Meadows Dam, Hell Hole Dam, South Long Canyon Diversion Dam, North Long Canyon Diversion Dam, Ralston or Middle Fork Interbay, and Oxbow Powerplant, sufficient flows to meet the following schedule:

<table>
<thead>
<tr>
<th>Location</th>
<th>Forecasted Runoff To Folsom Reservoir in Acre-feet 1/</th>
<th>Streamflow in Cubic Feet Per Second</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duncan Creek Diversion Dam</td>
<td>1,000,000 or more</td>
<td>8, or the natural flow, whichever is less</td>
</tr>
<tr>
<td></td>
<td>Less than 1,000,000</td>
<td>4, or the natural flow, whichever is less</td>
</tr>
<tr>
<td>French Meadows Dam</td>
<td>1,000,000 or more</td>
<td>8, at all times</td>
</tr>
<tr>
<td></td>
<td>Less than 1,000,000</td>
<td>4, at all times</td>
</tr>
<tr>
<td>Hell Hole Dam</td>
<td>1,000,000 or more</td>
<td>20, May 1 thru December 14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10, December 15 thru May 14</td>
</tr>
<tr>
<td></td>
<td>Less than 1,000,000</td>
<td>10, June 1 thru October 14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6, October 15 thru May 31</td>
</tr>
<tr>
<td>South Long Canyon Diversion Dam</td>
<td>1,000,000 or more</td>
<td>5, or the natural flow, whichever is less</td>
</tr>
<tr>
<td></td>
<td>Less than 1,000,000</td>
<td>2.5, or the natural flow, whichever is less</td>
</tr>
<tr>
<td>North Long Canyon Diversion Dam</td>
<td>Any forecast</td>
<td>2, or the natural flow, whichever is less</td>
</tr>
<tr>
<td>Ralston or Middle Fork Interbay</td>
<td>1,000,000 or more</td>
<td>23, or the natural flow, whichever is less</td>
</tr>
<tr>
<td></td>
<td>Less than 1,000,000</td>
<td>12, or the natural flow, whichever is less</td>
</tr>
<tr>
<td>Oxbow</td>
<td>Any forecast</td>
<td>75, 2/ year round</td>
</tr>
</tbody>
</table>

1/ See footnote—Article 36, 29 F.P.C. 466.

2/ Measured downstream of the confluence of the Middle Fork American River and the North Fork of the Middle Fork American River.

The Oxbow Powerplant releases shall not cause vertical fluctuation in stream stages (measured in representative section) greater than 1 foot in 1 hour. The schedule of flow releases may be temporarily modified if required by operating emergencies beyond the control of the Licensee, and for short periods of fishery management purposes upon mutual agreement among the Licensee, the U.S. Forest Service, the U.S. Fish and Wildlife Service, and the California Department of Fish and Game.
(F) The following articles are added to the license.

Article 43. The Licensee shall file, with the Commission's Regional Engineer and Director, Office of Electric Power Regulation, one copy each of the contract drawing and specifications for the proposed powerhouse 60 days prior to start of construction. The Director, Office of Electric Power Regulation may require additional contract drawings and specifications and changes in any of the plans and specifications to insure a safe and adequate project.

Article 44. The Licensee shall: (a) commence construction of the Hell Hole Powerplant within one year from the date of issuance of this order; and (b) thereafter in good faith and with due diligence construct and complete the power plant and place it in operation within four years from the date of issuance of this order.

Article 45. The Licensee shall, within one year following the date of commencement of operation of the Hell Hole Powerplant, file "as-built" Exhibits J, K and L showing the power plant and its transmission line as finally constructed and located.

(G) This order is final unless a petition appealing it to the Commission is filed within 30 days from the date of its issuance, as provided in Section 1.7(d) of the Commission's regulations, 18 C.F.R. 1.7(d) (1979), as amended, 44 Fed. Reg. 46449 (1979). The filing of a petition appealing this order to the Commission or an application for rehearing as provided in Section 313(a) of the Act does not operate as a stay of the effective date of this amendment of license or of any other date specified in this order, except as specifically ordered by the Commission.

(SEAL)

William W. Lindsay
Director, Office of Electric Power Regulation
IN TESTIMONY of its acknowledgment of acceptance of all of
the terms and conditions of this Order, ________________
____ this _____ day of _____________, 1980, has caused
its corporate name to be signed hereto by ________________
its President, and its corporate seal to be affixed hereto and
attested by ___________________________, its _____________.

Secretary, pursuant to a resolution of its Board of Directors
duly adopted on the __________ day of __________, 19___,
a certified copy of the record of which is attached hereto.

By ______________ President

Attest:

______________________________
Secretary
FEDERAL ENERGY REGULATORY COMMISSION

ORDER DISMISSING COMPLAINT

(Issued November 21, 1989)

On August 31, 1984, the California Sportfishing Protection Alliance (CSPA) filed a complaint, pursuant to Rule 206 of the Commission's Rules of Practice and Procedure, against the Placer County Water Agency (Placer County), license for the Middle Fork American River Project No. 2079, located on the Middle Fork American and Rubicon Rivers in Placer County, California. The complaint alleged that between 1966 and 1982 Placer County had repeatedly violated the minimum streamflow requirements of Article 37 of the license. Placer County filed an answer to the complaint on February 6, 1985.

Commission staff conducted a thorough investigation of CSFA's allegations and concluded that there was merit to at least some of the allegations. While the number of instances of non-compliance was found to be considerably less than alleged by CSFA, violations did occur, particularly prior to 1985, owing to gaging problems associated with changes in stream channels, equipment malfunctions, improper management, improper data-reporting procedures, and human error.

By Commission staff letter dated September 9, 1987, Placer County was informed of staff's findings. To remedy the minimum flow compliance problems, Placer County was instructed to improve its program for monitoring minimum flow compliance at all licensed project developments, enter into an agreement with the United States Geological Survey (USGS) to establish a schedule for regular visits to gaging stations, and determine the flow of the streams and rate the streams according to USGS standards. Placer County was also instructed to submit a plan by June 1, 1988, to replace or relocate historically inaccurate gages, submit within 90 days a plan for improving streamflow measuring devices at all minimum flow release points, and submit within 60 days a plan for implementing the equipment improvements Placer County had proposed in an August 9, 1985 report to the Commission's San Francisco Regional Office (SFRO). A copy of the September 9, 1987 letter to Placer County was sent to CSFA, which has made no further filings in this proceeding. By letter filed October 8, 1987, Placer County notified the Commission of its intent to comply with the directives of the Commission's September 9, 1987 letter.

By letter dated December 1, 1987, Placer County outlined its plans for replacing, relocating, and improving gaging stations for the project, and submitted a draft of its proposed agreement with the USGS concerning operation and maintenance standards. Placer County proposed a December 31, 1988 deadline for implementing its plan to improve streamflow monitoring.

The SFRO conducted inspections of the project in June of 1988 and 1989. The 1988 inspection report indicated that Placer County was in the process of implementing the proposed monitoring plan. The 1989 inspection report states that new gaging stations have been installed as proposed and that it appears that Placer County has complied with the September 9, 1987 directive to improve its program for monitoring compliance with the minimum streamflow requirements of its license.

Since, as discussed above, the improvements in streamflow monitoring sought by Commission staff have been implemented, and since Placer County has exhibited a willingness to cooperate in

2/ The project was licensed on March 13, 1963. See 29 F.P.C. 460 (1963).
3/ Id. at p. 466-57.

Project No. 2079-007

4/ In its letter, Placer County requested that the requirement to relocate the gaging station below the Bell Hole Dam project feature as specified in the September 9, 1987 letter be deleted, arguing that there were no compliance problems at that site. Staff did not specifically respond to Placer County's request, but has not required Placer County to modify its proposed plans for changes and improvements in the minimum flow monitoring system to include changes at the Bell Hole Dam. Upon review of the matter, we believe that Placer County's plans for this dam site are adequate.

5/ Concerning the proposed agreement with the USGS for periodic visits to gaging stations, the SFRO reports that the USGS did not wish to enter into such an agreement. Placer County has therefore engaged the services of a consulting hydrologist to record flow readings and monitor the gaging stations under the supervision of the USGS. We are satisfied that this arrangement can ensure minimum flow compliance.
Project No. 2079-007

resolving its minimum flow compliance problems, we believe it is
appropriate to dismiss CSEA's complaint in this proceeding.

The Commission orders:

The complaint filed in this proceeding on August 31, 1984,
by the California Sportfishing Protection Alliance is dismissed.

By the Commission.

(SEAL)

Lois D. Cashell,
Secretary.
ORDER APPROVING AS-BUILT EXHIBITS J, K AND L
AND REVISING ANNUAL CHARGES
(Released November 19, 1980)

Placer County Water Agency, Licensee for the constructed
Middle Fork American River Project No. 2079, submitted on July 20,
1965, June 10, 1968 and April 29, 1969, as-built Exhibits J, K and
L, for Commission approval pursuant to Articles 5 and 26 of its
license. 1/

The as-built Exhibits J, K and L have been examined by the Staff
and found to be in conformance with the Commission's rules and
regulations. The as-built Exhibit L drawings show that the
project was constructed in substantial conformance with the
Exhibit L drawings approved as part of the license, and that there
were no changes made in the project design that would adversely
affect the safety or adequacy of the project.

The Middle Fork American River occupies 3,811 acres of the United
States lands. Article 41 of the license is amended to reflect this.

Approval of the as-built Exhibits J, K and L is an administrative
matter and would not authorize any construction or changes in
project operation. Therefore, approval is not a major Federal
action significantly affecting the quality of the human environment.

1/ Authority to act on this matter is delegated to the Director,
Office of Electric Power Regulation, under Section 375.308 of
the Commission's regulations, 45 Fed. Reg. 21216 (1980), amending
It is ordered that:

(A) The following Exhibits J, K and L drawings are approved and made part of the license for Project No. 2079.

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>FERC No. 2079</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>J-1</td>
<td>272</td>
<td>General Project Map</td>
</tr>
<tr>
<td>J-2</td>
<td>273</td>
<td>General Project Map</td>
</tr>
<tr>
<td>J-3</td>
<td>274</td>
<td>General Project Map</td>
</tr>
<tr>
<td>K-1</td>
<td>275</td>
<td>Duncan Creek Diversion</td>
</tr>
<tr>
<td>K-2</td>
<td>276</td>
<td>French Meadows Reservoir</td>
</tr>
<tr>
<td>K-3</td>
<td>277</td>
<td>French Meadows Reservoir</td>
</tr>
<tr>
<td>K-4</td>
<td>278</td>
<td>French Meadows Reservoir</td>
</tr>
<tr>
<td>K-5</td>
<td>279</td>
<td>French Meadows Reservoir</td>
</tr>
<tr>
<td>K-6</td>
<td>280</td>
<td>French Meadows Reservoir</td>
</tr>
<tr>
<td>K-7</td>
<td>281</td>
<td>French Meadows Reservoir</td>
</tr>
<tr>
<td>K-8</td>
<td>282</td>
<td>French Meadows Reservoir</td>
</tr>
<tr>
<td>K-9</td>
<td>283</td>
<td>French Meadows Reservoir</td>
</tr>
<tr>
<td>K-10</td>
<td>284</td>
<td>Hell Hole Reservoir</td>
</tr>
<tr>
<td>K-11</td>
<td>285</td>
<td>Hell Hole Reservoir</td>
</tr>
<tr>
<td>K-12</td>
<td>286</td>
<td>Hell Hole Reservoir</td>
</tr>
<tr>
<td>K-13</td>
<td>287</td>
<td>Hell Hole Reservoir</td>
</tr>
<tr>
<td>K-14</td>
<td>288</td>
<td>Hell Hole Reservoir</td>
</tr>
<tr>
<td>K-15</td>
<td>289</td>
<td>Hell Hole Reservoir</td>
</tr>
<tr>
<td>K-16</td>
<td>290</td>
<td>Hell Hole Reservoir</td>
</tr>
<tr>
<td>K-17</td>
<td>291</td>
<td>Long Canyon Diversion</td>
</tr>
<tr>
<td>K-18</td>
<td>292</td>
<td>Middle Fork Penstock, Powerhouse and Interbay</td>
</tr>
<tr>
<td>K-19</td>
<td>293</td>
<td>Middle Fork Penstock, Powerhouse and Interbay</td>
</tr>
<tr>
<td>K-20</td>
<td>294</td>
<td>Middle Fork Penstock, Powerhouse and Interbay</td>
</tr>
<tr>
<td>K-21</td>
<td>295</td>
<td>Middle Fork Penstock, Powerhouse and Interbay</td>
</tr>
<tr>
<td>K-22</td>
<td>296</td>
<td>Ralston Powerhouse and Afterbay</td>
</tr>
<tr>
<td>K-23</td>
<td>297</td>
<td>Ralston Powerhouse and Afterbay</td>
</tr>
<tr>
<td>K-24</td>
<td>298</td>
<td>Ralston Powerhouse and Afterbay</td>
</tr>
<tr>
<td>K-25</td>
<td>299</td>
<td>Tunnels</td>
</tr>
<tr>
<td>K-26</td>
<td>300</td>
<td>Tunnels</td>
</tr>
<tr>
<td>K-27</td>
<td>301</td>
<td>French Meadows Access Road</td>
</tr>
<tr>
<td>K-28</td>
<td>302</td>
<td>French Meadows Access Road</td>
</tr>
<tr>
<td>K-29</td>
<td>303</td>
<td>French Meadows Access Road</td>
</tr>
<tr>
<td>Exhibit</td>
<td>FERC No. 2079-</td>
<td>Title</td>
</tr>
<tr>
<td>---------</td>
<td>---------------</td>
<td>-------</td>
</tr>
<tr>
<td>K-30</td>
<td>304</td>
<td>Middle Fork Tunnel Access Road</td>
</tr>
<tr>
<td>K-31</td>
<td>305</td>
<td>Duncan Creek Diversion Access Road</td>
</tr>
<tr>
<td>K-32</td>
<td>306</td>
<td>Brushy Canyon Road</td>
</tr>
<tr>
<td>K-33</td>
<td>307</td>
<td>Hell Hole Rec. Sites and Access Road</td>
</tr>
<tr>
<td>K-34</td>
<td>308</td>
<td>Hell Hole Rec. Sites and Access Road</td>
</tr>
<tr>
<td>K-35</td>
<td>309</td>
<td>French Meadows Powerhouse Access Road</td>
</tr>
<tr>
<td>K-36</td>
<td>310</td>
<td>French Meadows Powerhouse Access Road</td>
</tr>
<tr>
<td>K-37</td>
<td>311</td>
<td>North Fork Long Canyon Diversion Access Road</td>
</tr>
<tr>
<td>K-38</td>
<td>312</td>
<td>Ralston Powerhouse Access Road</td>
</tr>
<tr>
<td>K-39</td>
<td>313</td>
<td>Oxbow Powerhouse Access Road</td>
</tr>
<tr>
<td>K-40</td>
<td>314</td>
<td>Ralston Tunnel Access Road</td>
</tr>
<tr>
<td>K-41</td>
<td>315</td>
<td>Ralston Ridge Road</td>
</tr>
<tr>
<td>K-42</td>
<td>316</td>
<td>Middle Fork Powerhouse Access Road</td>
</tr>
<tr>
<td>K-43</td>
<td>317</td>
<td>Middle Fork Powerhouse Access Road</td>
</tr>
<tr>
<td>K-44</td>
<td>318</td>
<td>Dolly Creek Domestic Water Supply</td>
</tr>
<tr>
<td>K-45</td>
<td>319</td>
<td>Dolly Creek Domestic Water Supply</td>
</tr>
<tr>
<td>L-1</td>
<td>320</td>
<td>Duncan Creek Diversion Dam</td>
</tr>
<tr>
<td>L-2</td>
<td>321</td>
<td>Duncan Creek Tunnel</td>
</tr>
<tr>
<td>L-3</td>
<td>322</td>
<td>French Meadows Dam</td>
</tr>
<tr>
<td>L-4</td>
<td>323</td>
<td>French Meadows Dam</td>
</tr>
<tr>
<td>L-5</td>
<td>324</td>
<td>French Meadows Dam Spillway</td>
</tr>
<tr>
<td>L-6</td>
<td>325</td>
<td>French Meadows Dam Geology</td>
</tr>
<tr>
<td>L-7</td>
<td>326</td>
<td>French Meadows Tunnel</td>
</tr>
<tr>
<td>L-8</td>
<td>327</td>
<td>French Meadows Penstock</td>
</tr>
<tr>
<td>L-9</td>
<td>328</td>
<td>French Meadows Powerhouse</td>
</tr>
<tr>
<td>L-10</td>
<td>329</td>
<td>French Meadows Powerhouse</td>
</tr>
<tr>
<td>L-11</td>
<td>330</td>
<td>French Meadows Powerhouse</td>
</tr>
<tr>
<td>L-12</td>
<td>331</td>
<td>French Meadows Powerhouse</td>
</tr>
<tr>
<td>L-13</td>
<td>332</td>
<td>Single Line Diagram</td>
</tr>
<tr>
<td>L-14</td>
<td>333</td>
<td>Hell Hole Dam</td>
</tr>
<tr>
<td>L-15</td>
<td>334</td>
<td>Hell Hole Dam</td>
</tr>
<tr>
<td>L-16</td>
<td>335</td>
<td>Hell Hole Dam</td>
</tr>
<tr>
<td>L-17</td>
<td>336</td>
<td>Hell Hole Dam Geology</td>
</tr>
<tr>
<td>L-18</td>
<td>337</td>
<td>Middle Fork Tunnel</td>
</tr>
<tr>
<td>L-19</td>
<td>338</td>
<td>Middle Fork Tunnel Intake Surge Shaft</td>
</tr>
<tr>
<td>L-20</td>
<td>339</td>
<td>Long Canyon Diversions, South Fork Dam</td>
</tr>
<tr>
<td>L-21</td>
<td>340</td>
<td>Long Canyon Diversions, North Fork Dam</td>
</tr>
<tr>
<td>Exhibit</td>
<td>FERC No. 2079</td>
<td>Title</td>
</tr>
<tr>
<td>---------</td>
<td>--------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>L-22</td>
<td>341</td>
<td>Middle Fork Penstock</td>
</tr>
<tr>
<td>L-23</td>
<td>342</td>
<td>Middle Fork Powerhouse</td>
</tr>
<tr>
<td>L-24</td>
<td>343</td>
<td>Middle Fork Powerhouse</td>
</tr>
<tr>
<td>L-25</td>
<td>344</td>
<td>Middle Fork Powerhouse</td>
</tr>
<tr>
<td>L-26</td>
<td>345</td>
<td>Middle Fork Powerhouse</td>
</tr>
<tr>
<td>L-27</td>
<td>346</td>
<td>Middle Fork Powerhouse</td>
</tr>
<tr>
<td>L-28</td>
<td>347</td>
<td>Middle Fork Powerhouse</td>
</tr>
<tr>
<td>L-29</td>
<td>348</td>
<td>Interbay Dam</td>
</tr>
<tr>
<td>L-30</td>
<td>349</td>
<td>Ralston Tunnel</td>
</tr>
<tr>
<td>L-31</td>
<td>350</td>
<td>Ralston Penstock</td>
</tr>
<tr>
<td>L-32</td>
<td>351</td>
<td>Ralston Powerhouse</td>
</tr>
<tr>
<td>L-33</td>
<td>352</td>
<td>Ralston Powerhouse</td>
</tr>
<tr>
<td>L-34</td>
<td>353</td>
<td>Ralston Powerhouse</td>
</tr>
<tr>
<td>L-35</td>
<td>354</td>
<td>Ralston Powerhouse</td>
</tr>
<tr>
<td>L-36</td>
<td>355</td>
<td>Ralston Powerhouse</td>
</tr>
<tr>
<td>L-37</td>
<td>356</td>
<td>Ralston Afterbay Dam</td>
</tr>
<tr>
<td>L-38</td>
<td>357</td>
<td>Oxbow Powerhouse</td>
</tr>
<tr>
<td>L-39</td>
<td>358</td>
<td>Oxbow Powerhouse</td>
</tr>
<tr>
<td>L-40</td>
<td>359</td>
<td>Oxbow Powerhouse</td>
</tr>
<tr>
<td>L-41</td>
<td>360</td>
<td>Oxbow Powerhouse</td>
</tr>
<tr>
<td>L-42</td>
<td>361</td>
<td>Oxbow Powerhouse</td>
</tr>
</tbody>
</table>

(B) The following superseded exhibit drawings are removed from the License for Project No. 2079.

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>FERC No. 2079</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-4</td>
<td>26</td>
</tr>
<tr>
<td>K-5</td>
<td>27</td>
</tr>
<tr>
<td>K-(10-13)</td>
<td>32-35</td>
</tr>
<tr>
<td>L-(1&amp;2)</td>
<td>65&amp;66</td>
</tr>
<tr>
<td>L-(12&amp;13)</td>
<td>75&amp;76</td>
</tr>
<tr>
<td>L-(23&amp;24)</td>
<td>86&amp;87</td>
</tr>
<tr>
<td>L-29</td>
<td>92</td>
</tr>
<tr>
<td>K-(2&amp;3)</td>
<td>115&amp;116</td>
</tr>
<tr>
<td>K-(6-9)</td>
<td>117-120</td>
</tr>
<tr>
<td>K-(14-16)</td>
<td>121-123</td>
</tr>
<tr>
<td>K-(18-20)</td>
<td>125-127</td>
</tr>
<tr>
<td>L-(3&amp;4)</td>
<td>135&amp;136</td>
</tr>
</tbody>
</table>
### Exhibit

| PFERG No. 2079- | 
|---------------|---------------|
| L-10          | 140           |
| L-(16-22)     | 143-149       |
| L-(26-30)     | 151-154       |
| L-31B         | 157           |
| L-4A          | 162           |
| L-4B          | 163           |
| L-13A         | 170           |
| J-(2&3)       | 172&173       |
| K-1           | 174           |
| K-17          | 175           |
| K-21          | 176           |
| K-24          | 177           |
| K-(27&28)     | 178&179       |
| K-(39-41)     | 180-182       |
| L-31A         | 183           |
| -1            | 184           |
| -(8&9)        | 185&186       |

(C) Article 41 of the License is revised to read as follows:

**Article 41.** The Licensee shall pay the United States the following annual charges effective March 1, 1963.

(i) For the purpose of reimbursing the United States for the cost of administration of Part I of the Act, a reasonable annual charge as determined by the Commission in accordance with the provisions of its regulations, in effect from time to time. The authorized installed capacity for such purposes is 280,000 horsepower.

(ii) For the purpose of recompening the United States for the use, occupancy, and enjoyment of 3811.0 acres of its lands, exclusive of transmission line right-of-way, an amount as may be determined from time to time pursuant to the Commission's Regulations.
(D) This order is final unless a petition appealing it to the Commission is filed within 30 days from the date of its issuance, as provided in Section 1.7(d) of the Commission's regulations, 18 C.F.R. 1.7(d) (1979), as amended, 44 Fed. Reg. 46449 (1979). The filing of a petition appealing this order to the Commission or an application for rehearing as provided in Section 313(a) of the Act does not operate as a stay of the effective date of this amendment or of any other date specified in this order, except as specifically ordered by the Commission.

{SEAL}

William W. Lindsay
Director, Office of Electric Power Regulation
ORDER AMENDING LICENSE AND GRANTING EXTENSION OF TIME
(Issued November 14, 2000)

On May 16, 2000, the Commission issued an Order Granting License Amendment and Revising Annual Charges for the French Meadows Transmission Line Project No. 2479 (the project). 1/ The project occupies federal lands in the Tahoe and Eldorado National Forests. Ordering paragraph B requires Pacific Gas and Electric Company (PG&E) to obtain Forest Service authorization for the continued use of National Forest System Lands removed from the license within 180 days from the date of the order (due date November 13, 2000).

On October 26, 2000, PG&E filed a letter requesting an extension of time until December 31, 2001, to comply with Ordering paragraph B.

PG&E states that it has met with Forest Service representatives during July and September 2000 to determine the scope of work necessary to obtain land use authorization. PG&E and the Forest Service have developed a mutual schedule that anticipates completing all necessary studies, including the environmental analysis during the summer of 2001, and issuing authorization for the project and associated roads by December 31, 2001.

Because PG&E is pursuing its obligations to comply with the conditions of the license, we will amend the license order and grant PG&E’s extension of time request.

The Director orders:

(A) Paragraph B of the Order Granting License Amendment and Revising Annual Charges issued May 16, 2000, is revised to read: "The Licensee shall obtain Forest Service authorization for the continued use of National Forest System Lands to be removed from the license by December 31, 2001."

(B) This order is issued under authority delegated to the Director and constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the issuance of this order, pursuant to 18 CFR 385.713.

J. Mark Robinson, Director
Division of Environmental and Engineering Review

1/ See 91 FERC 62,112 (2000).
**F. P. C. LICENSE 2079**

Record of Application for License and for revisions and amendments and approvals:

<table>
<thead>
<tr>
<th>Application Type</th>
<th>Date (MKE)</th>
<th>Date Filed</th>
<th>Date of Grant or Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application for License</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revision of Application 9/5/62</td>
<td></td>
<td>9/28/62</td>
<td>3/13/63</td>
</tr>
<tr>
<td>Application for Amendment of Plans</td>
<td>6/25/63</td>
<td>6/12/63</td>
<td>1/13/64</td>
</tr>
<tr>
<td>Application for Amendment of Plans</td>
<td>1/14/64</td>
<td>1/22/64</td>
<td>4/17/64</td>
</tr>
<tr>
<td>Application for Amendment of Plans</td>
<td>7/14/65</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Recreation - Pg 2, 13
ERRATA NOTICE

(April 25, 1963)

ORDER ISSUING LICENSE (MAJOR)
(issued March 13, 1963)

On page 11, under Article 37, line 2—change "French Creek Dam," to read "French Meadows Dam".

Under Location on same page change "Ralston Afterbay Dam" to read "Ralston or Middle Fork Interbay".

Joseph H. Guitride,
Secretary.

DC 23
ORDER ISSUING LICENSE (MAJOR)

(Issued March 13, 1963)

Application was filed April 11, 1962 and amended September 10, 1962, by Placer County Water Agency (Applicant) of Auburn, California, for license for a proposed project to be known as the Middle Fork American River Project, and designated as Project No. 2079, to be constructed on the Middle Fork of American River and Rubicon River and their respective tributaries, in the counties of Placer and El Dorado, California, and affecting lands of the United States within the Tahoe and Eldorado National Forests.

The Secretary of the Army and the Chief of Engineers, in reporting on the application, have advised that the proposed project will not have any measurable effect on any flood control, debris control and navigation projects of the Corps, or on flood conditions on the lower American and Sacramento Rivers, and terms and conditions in the interest of flood control or navigation are not deemed necessary for inclusion in any license for the proposed project.

The Department of the Interior, in reporting on the application, has advised it has no objection to the issuance of a license for the proposed project provided such license be conditioned upon certain consummated formal agreement and addendum thereto between Applicant and the Bureau of Reclamation, and contain certain special conditions in the interest of fish and wildlife resources and provide for possible archeological survey and salvage work in the area involved.

The Department of Agriculture, in reporting on the application, offered no objection to issuance of a license for the proposed project provided the terms and conditions of Form L-2 (17 FPC 52), with the exception of Article 13 therein, be included in any such license, together with the inclusion therein of a special condition for the suppression of fires on the lands to be occupied under the license. A Memorandum of Understanding with respect to the proposed project was signed September 13, 1962 by Applicant and on September 25, 1962 by the U.S. Forest Service, and amended and signed by Applicant on October 30, 1962 and by the U.S. Forest Service on November 2, 1962.
The Department of Fish and Game, State of California, in reporting on the application, has advised that extensive biological investigations by the Department to determine provisions to protect the fish and wildlife resources to be affected by the project resulted in the execution of an agreement between the Department and Applicant on July 30, 1952. The Department requested the inclusion in any license issued for the proposed project of a special condition in the interest of fish and wildlife resources.

The Department of Water Resources, State of California, in reporting on the application, has advised that according to the applicant for license, the proposed project would be desirable, would lead toward full basin development, would be in keeping with the concepts of the California Water Plan, and that the Department is in full accord with the plan of development.

The Commission finds:

(1) The proposed project will affect lands of the United States.

(2) Applicant is a "municipality" as defined in the Federal Power Act, and has submitted satisfactory evidence of compliance with the requirements of all applicable State laws insofar as necessary to effect the purposes of a license for the project.

(3) Public notice of the filing of the application was given as required by the Act. There are no pending protests or petitions to intervene before the Commission. There are no conflicting applications pending.

(4) The issuance of a license as hereinafter provided will not affect a Government dam or the development of any water resources for public purposes which should be undertaken by the United States.

(5) The issuance of a license as hereinafter provided will not interfere or be inconsistent with the purposes for which the Tahoe and Eldorado National Forests were created or acquired.

(6) The project is best adapted to a comprehensive plan for improving and developing a waterway or waterways for the use or benefit of interstate or foreign commerce, for the improvement and utilization of water-power development, and for other beneficial public uses, including recreational purposes, under the terms and conditions hereinafter imposed.

(7) The installed horsepower capacity of the proposed project hereinafter authorized for the purpose of computing the capacity component of the administrative annual charge is 280,000 horsepower.

(8) The amount of annual charges to be paid under the license for the purpose of reimbursing the United States for the costs of administration of Part I of the Act is reasonable as hereinafter fixed and specified, and the amount of annual charges to be paid under the license for the use, occupancy and enjoyment of its lands should be determined later as hereinafter provided.
(9) The power to be generated by the project will be sold by Applicant at step-up substations to Pacific Gas and Electric Company for public utility purposes.

(10) The exhibits designated and described in paragraph (B) below conforms to the Commission's rules and regulations and should be approved as part of the license for the project.

The Commission orders:

(A) This license is hereby issued to Placer County Water Agency of Auburn, California, (Licensee) under Section 4 (c) of the Federal Power Act (Act) for a period of 50 years, effective as of March 1, 1963, for the construction, operation and maintenance of Project No. 2079 upon Middle Fork of American River and Rubicon River and their respective tributaries, and affecting lands of the United States within the Tahoe and Eldorado National Forests, and subject to the terms and conditions of the Act which is incorporated by reference as a part of this license, and subject to such rules and regulations as the Commission has issued or prescribed under the provisions of the Act.

(B) Project No. 2079 consists of:

(i) All lands constituting the project area and enclosed by the project boundary or the limits of which are otherwise defined and/or interest in such lands necessary or appropriate for the purpose of the project, whether such lands or interests therein are owned or held by the applicant or by the United States; such project area and project boundary being more specifically shown and described by certain exhibits which formed part of the application for license, and which are designated and described as follows:

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>Sheet</th>
<th>FPC No.</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>J</td>
<td>1 (Rev. 8/1/62)</td>
<td>2079-111</td>
<td>General Project Map</td>
</tr>
<tr>
<td></td>
<td>2 (Rev. 8/1/62)</td>
<td>2079-112</td>
<td>General Project Map</td>
</tr>
<tr>
<td></td>
<td>3 (Rev. 8/1/62)</td>
<td>2079-113</td>
<td>General Project Map</td>
</tr>
<tr>
<td>K</td>
<td>1 (Rev. 8/1/62)</td>
<td>2079-114</td>
<td>Duncan Creek Diversion Project Area</td>
</tr>
<tr>
<td></td>
<td>2 (Rev. 8/1/62)</td>
<td>2079-115</td>
<td>French Meadows Reservoir Project Area</td>
</tr>
<tr>
<td></td>
<td>3 (Rev. 8/1/62)</td>
<td>2079-116</td>
<td>French Meadows Reservoir Project Area</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>2079-26</td>
<td>French Meadows Reservoir Project Area</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>2079-27</td>
<td>French Meadows Reservoir Project Area</td>
</tr>
<tr>
<td>Exhibit</td>
<td>Sheet</td>
<td>FFC No.</td>
<td>Title</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td>X</td>
<td>6 (Rev. 8/1/62)</td>
<td>2079-117</td>
<td>French Meadows Reservoir Project Area</td>
</tr>
<tr>
<td></td>
<td>7 (Rev. 8/1/62)</td>
<td>2079-118</td>
<td>French Meadows Reservoir Project Area</td>
</tr>
<tr>
<td></td>
<td>8 (Rev. 8/1/62)</td>
<td>2079-119</td>
<td>French Meadows Reservoir Project Area</td>
</tr>
<tr>
<td></td>
<td>9 (Rev. 8/1/62)</td>
<td>2079-120</td>
<td>French Meadows Reservoir Project Area</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>2079-32</td>
<td>Hell Hole Reservoir Project Area</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>2079-33</td>
<td>Hell Hole Reservoir Project Area</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>2079-34</td>
<td>Hell Hole Reservoir Project Area</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>2079-35</td>
<td>Hell Hole Reservoir Project Area</td>
</tr>
<tr>
<td></td>
<td>14 (Rev. 8/1/62)</td>
<td>2079-121</td>
<td>Hell Hole Reservoir Project Area</td>
</tr>
<tr>
<td></td>
<td>15 (Rev. 8/1/62)</td>
<td>2079-122</td>
<td>Hell Hole Reservoir Project Area</td>
</tr>
<tr>
<td></td>
<td>16 (Rev. 8/1/62)</td>
<td>2079-123</td>
<td>Hell Hole Reservoir Project Area</td>
</tr>
<tr>
<td></td>
<td>17 (Rev. 8/1/62)</td>
<td>2079-124</td>
<td>Long Canyon Diversion Project Area</td>
</tr>
<tr>
<td></td>
<td>18 (Rev. 8/1/62)</td>
<td>2079-125</td>
<td>Middle Fork Ralston Interbay Project Area</td>
</tr>
<tr>
<td></td>
<td>19 (Rev. 8/1/62)</td>
<td>2079-126</td>
<td>Middle Fork Ralston Interbay Project Area</td>
</tr>
<tr>
<td></td>
<td>20 (Rev. 8/1/62)</td>
<td>2079-127</td>
<td>Middle Fork Ralston Interbay Project Area</td>
</tr>
<tr>
<td></td>
<td>21 (Rev. 8/1/62)</td>
<td>2079-128</td>
<td>Middle Fork Ralston Interbay Project Area</td>
</tr>
<tr>
<td></td>
<td>24 (Rev. 8/1/62)</td>
<td>2079-129</td>
<td>Ralston Afterbay Project Area</td>
</tr>
<tr>
<td></td>
<td>27 (Rev. 8/1/62)</td>
<td>2079-130</td>
<td>Ralston Afterbay Project Area</td>
</tr>
<tr>
<td></td>
<td>28 (Rev. 8/1/62)</td>
<td>2079-131</td>
<td>Ralston Afterbay Project Area</td>
</tr>
<tr>
<td></td>
<td>39 (Rev. 11/20/62)</td>
<td>2079-132</td>
<td>Tunnels - Project Area</td>
</tr>
<tr>
<td></td>
<td>40 (Rev. 11/20/62)</td>
<td>2079-133</td>
<td>Tunnels - Project Area</td>
</tr>
<tr>
<td></td>
<td>41 (Rev. 11/20/62)</td>
<td>2079-134</td>
<td>Project Roads Property Map</td>
</tr>
</tbody>
</table>
(ii) All project works consisting principally of the following described developments:

Duncan Creek Diversion, a concrete gravity dam about 32 feet high with a crest length of 188 feet at an elevation of 5275 feet; and 11-foot horseshoe tunnel about 7880 feet long extending to the French Meadows Reservoir;

French Meadows Dam and Reservoir, a composite gravel and earthfill dam, on the Middle Fork of the American River, about 229 feet high with a crest length of about 2700 feet at an elevation of 5269 feet and would have 125,000 acre-feet of usable storage;

French Meadows – Hell Hole Tunnel, a 12-foot horseshoe tunnel 13,613 feet long connecting to a 6 foot 3 inch diameter penstock 655 feet in length extending to the French Meadows Powerhouse;

French Meadows Powerhouse, would contain a 24,000 horsepower reaction turbine connected to a 15,300 kilowatt generator; the tailrace would discharge into the Hell Hole Reservoir;

Hell Hole Reservoir, on the Rubicon River would be created by a rockfill dam about 110 feet high with a crest length of 1570 feet at an elevation of 4650 feet and would have 202,600 acre-feet of usable storage;

Hell Hole – Middle Fork Tunnel, a 13 foot 3 inch horseshoe tunnel 55,034 feet long connecting to a steel penstock about 3680 feet long varying from 9 feet to 7 feet 6 inches in diameter branching at a yoke to two 66 inch pipes extending to the Middle Fork Powerhouse; the North Fork Long Canyon Diversion would have 26-foot high concrete dam with a crest length of 155 feet at elevation 4695 feet and the South Fork Long Canyon Diversion would have a 26 foot high concrete gravity dam with a crest length of 230 feet at elevation 4658 feet; each would divert water to the Hell Hole – Middle Fork Tunnel by shafts to be located about midway of its length;

Middle Fork Powerhouse, would contain two 82,000 horsepower impulse turbines connected to two 54,900 kilowatt generators; the tailrace would discharge into the Middle Fork Interbay;
Middle Fork Interbay, on the Middle Fork of the American River to be created by a concrete gravity dam about 75 feet high with a 22.2 foot crest length at an elevation of 2540 feet;

Middle Fork-Ralston Tunnel, a 13 foot 3 inch horseshoe tunnel 35,326 feet long connecting to a steel penstock 1680 feet long varying in diameter from 9 foot 6 inches to 7 foot 6 inches extending to the Ralston Powerhouse;

Ralston Powerhouse, would contain one 100,000 horsepower impulse turbine connected to a 79,200 kilowatt generator; the tailrace would discharge into Ralston Afterbay.

Ralston Afterbay, on the Middle Fork of the American River would be created by a composite gravel and earthfill dam about 88 feet high, with a crest length of 525 feet long at elevation 1198 feet;

Ralston Afterbay - Oxbow Tunnel, a 16 foot horseshoe tunnel 1320 feet long connecting to an 11 foot steel penstock extending about 100 feet to the Oxbow Powerhouse;

Oxbow Powerhouse, would contain one 6700 hp Kaplan turbine connected to a 6000 kw generator, and appurtenant mechanical and electrical facilities; the location, nature and character of which are more specifically shown and described by the exhibits hereinbefore cited and by certain other exhibits which also formed part of the amended application and which are designated and described as follows:

Exhibit L:

<table>
<thead>
<tr>
<th>Sheet</th>
<th>FPC No.</th>
<th>Middle Form American River Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2079-64</td>
<td>Duncan Creek Diversion - Plan and Sections</td>
</tr>
<tr>
<td>2</td>
<td>2079-65</td>
<td>Duncan Creek - Middle Fork Tunnel Plan and Profile</td>
</tr>
<tr>
<td>3</td>
<td>2079-135</td>
<td>French Meadows Dam - Plan</td>
</tr>
<tr>
<td>4</td>
<td>2079-136</td>
<td>French Meadows Dam - Sections and Details</td>
</tr>
<tr>
<td>4A</td>
<td>2079-162</td>
<td>French Meadows Spillway Plan, Profile and Sections</td>
</tr>
<tr>
<td>4B</td>
<td>2079-163</td>
<td>French Meadows Spillway Crest Dimensions</td>
</tr>
<tr>
<td>8</td>
<td>2079-138</td>
<td>French Meadows - Head Hole Tunnel Plan and Profile</td>
</tr>
<tr>
<td>9</td>
<td>2079-139</td>
<td>French Meadows Power Plant - Penstock and Surge Shaft</td>
</tr>
<tr>
<td>10</td>
<td>2079-140</td>
<td>French Meadows Power Plant Plan and Sections</td>
</tr>
<tr>
<td>Sheet</td>
<td>PPC No.</td>
<td>Title</td>
</tr>
<tr>
<td>-------</td>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td>12</td>
<td>2079-75</td>
<td>Hell Hole Dam - Plan</td>
</tr>
<tr>
<td>13</td>
<td>2079-76</td>
<td>Hell Hole Dam - Sections and Details</td>
</tr>
<tr>
<td>13A</td>
<td>2079-170</td>
<td>Hell Hole Spillway - Plan Profile and Sections</td>
</tr>
<tr>
<td>16</td>
<td>(Rev.) 2079-143</td>
<td>Hell Hole - Middle Fork Tunnel Plan and Profile</td>
</tr>
<tr>
<td>17</td>
<td>(Rev.) 2079-144</td>
<td>Hell Hole - Middle Fork Tunnel Intake and Surge Shaft</td>
</tr>
<tr>
<td>18</td>
<td>(Rev.) 2079-145</td>
<td>Long Canyon Diversion - South Fork Dam and Shaft</td>
</tr>
<tr>
<td>19</td>
<td>(Rev.) 2079-146</td>
<td>Long Canyon Diversion - North Fork Dam and Shaft</td>
</tr>
<tr>
<td>20</td>
<td>(Rev.) 2079-147</td>
<td>Middle Fork Power Plant Penstock Plan and Profile</td>
</tr>
<tr>
<td>21</td>
<td>(Rev.) 2079-148</td>
<td>Middle Fork Power Plant Plan and Elevations</td>
</tr>
<tr>
<td>22</td>
<td>(Rev.) 2079-149</td>
<td>Middle Fork Power Plant Powerhouse Plans</td>
</tr>
<tr>
<td>23</td>
<td>2079-86</td>
<td>Middle Fork Power Plant - Sections</td>
</tr>
<tr>
<td>25</td>
<td>2079-88</td>
<td>Middle Fork - Ralston Interbay Dam Plan and Sections</td>
</tr>
<tr>
<td>26</td>
<td>(Rev.) 2079-151</td>
<td>Middle Fork - Ralston Tunnel Plan and Profile</td>
</tr>
<tr>
<td>27</td>
<td>(Rev.) 2079-152</td>
<td>Ralston Power Plant Penstock Plan and Profile</td>
</tr>
<tr>
<td>28</td>
<td>(Rev.) 2079-153</td>
<td>Ralston Power Plant Plan and Elevations</td>
</tr>
<tr>
<td>29</td>
<td>2079-92</td>
<td>Ralston Power Plant Powerhouse Plans</td>
</tr>
<tr>
<td>30</td>
<td>2079-154</td>
<td>Ralston Power Plant - Sections</td>
</tr>
<tr>
<td>31A</td>
<td>(Rev.) 2079-156</td>
<td>Ralston Afterbay Dam - Plan and Sections</td>
</tr>
<tr>
<td>31B</td>
<td>(Rev.) 2079-157</td>
<td>Oxbow Power Plant - Plans and Sections</td>
</tr>
</tbody>
</table>

Exhibit M: Comprised of five (5) pages entitled "General Description of Mechanical & Electrical Equipment".
(iii) All other structures, fixtures, equipment or facilities used or useful in the maintenance and operation of the project and located on the project area, including such portable property as may be used or useful in connection with the project or any part thereof, whether located on or off the project area, if and to the extent that the inclusion of such property as part of the project is approved or acquiesced in by the Commission; also, all riparian or other rights, the use or possession of which is necessary or appropriate in the maintenance or operation of the project.

(c) This license is also subject to the terms and conditions set forth in Form L-2, December 15, 1953, entitled "Terms and Conditions of License for Unconstructed Major Project Affecting Lands of the United States" (17 FPC 62), which terms and conditions are attached hereto and made a part hereof, except for Articles 10, 11, 13, 20 and 21 thereof, and subject to the following special conditions set forth herein as additional articles:

Article 25. The Licensee shall commence construction of the project works not later than July 1, 1963, shall thereafter in good faith and with due diligence prosecute such construction and shall complete construction of such works not later than December 31, 1966.

Article 26. The Licensee shall, within one year following completion of the construction of the project file with the Commission revised Exhibits F and K showing final project boundary prepared in accordance with the Commission's Rules and Regulations.

Article 27. The Licensee shall do everything reasonably within its power and shall require its employees, contractors and employees of contractors to do everything reasonably within their power, both independently and upon the request of officers of the Agency concerned to prevent, make advanced preparations for suppression, and suppress fires on the lands to be occupied or used under the license. The Licensee shall be liable for and pay the cost incurred by the United States in suppressing fires caused from the construction, operation, or maintenance of the project works or of the work appurtenant or accessory thereto under the license.

Article 28. The Licensee shall cooperate with the San Francisco State College in the possible survey and salvage of historical and archeological data (including relics and specimens) in the project area and shall compensate the college for the expenses incurred up to a total of $6,000, upon further order of the Commission.

Article 29. The Licensee shall, prior to impounding water, clear all lands in the bottoms and margins of: Duncan Creek Diversion, North Fork Long Canyon Diversion, South Fork Long Canyon Diversion, Middle Fork Interbay and Ralston Afterbay reservoirs up to high-water level. Licensee shall, prior to impounding water, clear all lands in French Meadow Reservoir between
elevation 5,120 feet (5 feet below minimum pool elevation) to high-water level and in Hell Hole Reservoir between elevation 4,335 feet (5 feet below minimum pool elevation) to high-water level. Licensee shall dispose of all temporary structures, unused timber, brush, refuse, or inflammable material resulting from the clearing of the lands or from the construction and maintenance of the project works. In addition, all trees along the margins of reservoirs which may die from operation of the reservoir shall be removed. The clearing of the lands and the disposal of the material shall be done with due diligence and to the satisfaction of the authorized representative of the Commission.

Article 30. The Licensee shall keep the twoainter gates of the French Meadows Spillway blocked in a fully open position by November 15 of each year and the gates shall remain in that position until the following April 1, unless special permission is obtained for a specific year from the authorized representative of the Commission.

Article 31. The Licensee shall provide protective concrete at the impact and lip areas at the angled intersection of the French Meadows Spillway and its escape channels, as shown on Drawing Exhibit L, Sheet 41 (BFC No. 2079-162), if so ordered by the Commission.

Article 32. The Licensee shall construct a stilling pool and/or other types of energy dissipating devices below each cascade of the Hell Hole spillway channel in the interest of structure safety after the spillway area foundation conditions are exposed and the quality of rock is determined; also, Licensee shall incorporate into the designs of the French Meadows and Hell Hole spillway channel walls additional protective measures against erosion, if so ordered by the Commission.

Article 33. The Licensee shall construct such unit or units which will comprehensively develop the head on the river downstream from the Cibow power-house when so ordered by the Commission upon its determination that such unit or units are economically feasible, after notice and opportunity for hearing.

Article 34. The Licensee shall construct, maintain and operate such protective devices and shall comply with such reasonable modifications of the project structures and operation in the interest of fish and wildlife resources, provided that such modifications shall be reasonable consistent with the primary purpose of the project, as may be prescribed hereafter by the Commission upon its own motion or upon recommendation of the Secretary of the Interior or the California Department of Fish and Game after notice and opportunity for hearing and upon a finding that such modifications are necessary and desirable and consistent with the provisions of the Act. Provided further, That subsequent to approval of the final design drawings prior to commencement of construction no modifications of project structures in the interest of fish and wildlife resources which involve a change in
the location, height, or main structure of a dam, or the addition of or
changes in outlets at or through a dam, or a major change in generating
units, or a rearrangement or relocation of a powerhouse, or major changes
in a spillway structure shall be required.

Article 35. Whenever the United States shall desire, in connection
with the project, to construct fish handling facilities or to improve the
existing fish handling facilities at its expense, the Licensee shall permit
the United States or its designated agency to use, free of cost, such of
Licensee's lands and interests in lands, reservoirs, waterways and project
works as may be reasonably required to complete such fish handling facili-
ties or such improvements thereof. In addition, after notice and opportunity
for hearing the Licensee shall modify the project operation as may be pre-
scribed by the Commission, consistent with the primary purpose of the proj-
et, in order to permit the maintenance and operation of the fish handling
facilities constructed or improved by the United States under the provisions
of this article. This article shall not be interpreted to place any obliga-
tion on the United States to construct or improve fish handling facilities
or to relieve the Licensee of any obligation under the license.

Article 36. The Licensee shall operate Duncan Creek Diversion, French
Meadows, and Hell Hole Reservoirs in a manner that will permit maintenance
of minimum pools according to the following schedules:

<table>
<thead>
<tr>
<th>Location and Forecasted runoff to Folsom Reservoir in Acre-feet</th>
<th>Minimum Pool in Acre-feet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>June</td>
</tr>
<tr>
<td></td>
<td>Through Sept.</td>
</tr>
<tr>
<td></td>
<td>October Through May</td>
</tr>
<tr>
<td>French Meadows Reservoir</td>
<td></td>
</tr>
<tr>
<td>More than 2,000,000</td>
<td>60,000</td>
</tr>
<tr>
<td>Less than 2,000,000 but not</td>
<td>60,000</td>
</tr>
<tr>
<td>Less than 1,200,000</td>
<td>28,000</td>
</tr>
<tr>
<td>Less than 1,200,000</td>
<td>8,700</td>
</tr>
<tr>
<td>Hell Hole Reservoir</td>
<td></td>
</tr>
<tr>
<td>More than 2,000,000</td>
<td>70,000</td>
</tr>
<tr>
<td>Less than 2,000,000 but not</td>
<td>70,000</td>
</tr>
<tr>
<td>Less than 1,200,000</td>
<td>26,000</td>
</tr>
<tr>
<td>Less than 1,200,000</td>
<td>5,500</td>
</tr>
</tbody>
</table>

1/ Unimpaired run-off of American River to Folsom Reservoir for current year, October 1 through September 30, as estimated by the California Department of Water Resources on or about April 1 of each such calendar year. The estimate shall apply for the period June 1 of each such calendar year to May 31 of the succeeding calendar year. Provided that the schedules may be modified if found appropriate to improve the fishery and recreation value to the extent mutually agreeable to the Licensee, the U.S. Forest Service, the Bureau of Sport Fisheries and Wildlife, and the California Department of Fish and Game.
Location and Forecasted Runoff to Folsom Reservoir in Acre-feet 1/ | Minimum Pool in Acre-feet June | October Through Sept. Through May
--- | --- | --- | ---
Duncan Creek Diversion Reservoir | Any | Water surface elevation at 5,259 feet

Meadows

Article 37. The Licensee shall release from Duncan Creek Diversion Dam, French Creek Dam, Hell Hole Dam, South Long Canyon Diversion Dam, North Long Canyon Diversion Dam, Ralston Afterbay Dam and Oxbow Powerplant, sufficient flows to meet the following schedule:

<table>
<thead>
<tr>
<th>Location</th>
<th>Forecasted Runoff To Folsom Reservoir in Acre-feet 1/</th>
<th>Streamflow in Cubic Feet per Second</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duncan Creek Diversion Dam</td>
<td>1,000,000 or more</td>
<td>8, or the natural flow, whichever is less</td>
</tr>
<tr>
<td></td>
<td>Less than 1,000,000</td>
<td>4, or the natural flow, whichever is less</td>
</tr>
<tr>
<td>French Meadows Dam</td>
<td>1,000,000 or more</td>
<td>8, at all times</td>
</tr>
<tr>
<td></td>
<td>Less than 1,000,000</td>
<td>4, at all times</td>
</tr>
<tr>
<td>Hell Hole Dam</td>
<td>1,000,000 or more</td>
<td>20, June 1 thru July 25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15, July 26 thru Aug. 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10, Aug. 6 thru Oct. 31</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14, Nov. 1 thru Jan. 31</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20, Feb. 1 thru May 31</td>
</tr>
<tr>
<td></td>
<td>Less than 1,000,000</td>
<td>8, June 1 thru Dec. 31</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6, Jan. 1 thru March 25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8, March 26 thru May 31</td>
</tr>
<tr>
<td>South Long Canyon Diversion Dam</td>
<td>1,000,000 or more</td>
<td>5, or the natural flow, whichever is less</td>
</tr>
<tr>
<td></td>
<td>Less than 1,000,000</td>
<td>2½, or the natural flow, whichever is less</td>
</tr>
<tr>
<td>North Long Canyon Diversion Dam</td>
<td>Any forecast</td>
<td>2, or the natural flow, whichever is less</td>
</tr>
<tr>
<td>Ralston Afterbay or Middle Fork Interbay</td>
<td>1,000,000 or more</td>
<td>23, or the natural flow, whichever is less</td>
</tr>
<tr>
<td></td>
<td>Less than 1,000,000</td>
<td>12, or the natural flow, whichever is less</td>
</tr>
<tr>
<td>Oxbow Powerplant to provide in Middle Fork of American R. below confluence with North Fork of the Middle Fork</td>
<td>Any Forecast</td>
<td>75, year-round</td>
</tr>
</tbody>
</table>

1/ See footnote - Article 36.
Provided that through mutual agreement among the Licensee, the U.S. Forest Service, the Bureau of Sport Fisheries and Wildlife, and the California Department of Fish and Game, the flow schedule for French Meadows Dam and Hell Hole Dam may be altered to improve fishery and recreational values. When the forecasted run-off is 1,000,000 acre-feet or more, total releases shall not exceed 5,500 acre-feet from French Meadows Dam nor 11,000 acre-feet from Hell Hole Dam. When the forecasted runoff is less than 1,000,000 acre-feet, total releases shall not exceed 2,700 acre-feet from French Meadows Dam nor 5,500 acre-feet from Hell Hole Dam.

Provided further that Oxbow Powerplant releases shall not cause vertical fluctuations in stream stages (measured in representative section) greater than one foot in one hour; provided that should a cooperative study be conducted by the Licensee and the California Department of Fish and Game to determine the effect of such fluctuations, modification of this provision may be made, if mutually agreed by those agencies.

Article 38. The Licensee shall take every precaution during the construction period to prevent unnecessary destruction of fish and wildlife habitat, including the provision and enforcement of rules and regulations pertaining to those measures to govern the action of its contractors. Wherever possible, habitat along streams shall not be disturbed. However, if streamside habitat is altered during construction, it shall be left in a condition favorable to the reestablishment of stream-size vegetation. Silts, fines, and other construction debris shall not be placed in the streams, and special care shall be taken in depositing spoil from the construction of project tunnels to avoid destruction of wildlife habitat.

Article 39. The Licensee shall, after notice and opportunity for hearing, coordinate the operation of the project, hydraulically and electrically, with such other power systems and in such manner as the Commission may direct in the interest of power and other beneficial public uses of water resources, the benefits of which shall be shared equitably by the participants in such coordination. In the event the participants cannot agree thereon, the Commission shall equitably apportion the benefits after notice and opportunity for hearing upon the Commission’s own motion or upon motion of any party.

Article 40. The Licensee shall install additional capacity and make other changes in the project as directed by the Commission, to the extent it is economically sound and in the public interest to do so, after notice and opportunity for hearing.

Article 41. The Licensee shall pay to the United States the following salaries charges:
(i) For the purpose of reimbursing the United States for the cost of administration of Part I of the Act, a reasonable annual charge in accordance with the provisions of Part II of the Commission's regulations, in effect from time to time. The authorized installed capacity for such purposes is 280,000 horsepower.

(ii) For the purpose of recompensing the United States for the use, occupancy, and enjoyment of its lands, an amount to be determined hereafter by the Commission.

Article 42. The Licensee shall, within one year from the effective date of this license, file with the Commission a recreational use plan for the project which shall include not only recreational improvements which may be provided by others, but the recreational improvements the Licensee plans to provide.

(C) The exhibits designated and described in paragraph (B) above are hereby approved as part of this license.

(D) This order shall become final 30 days from the date of issuance unless application for rehearing shall be filed as provided in Section 313 (a) of the Act, and failure to file such an application shall constitute acceptance of this license. In acknowledgment of the acceptance of this license, it shall be signed for the licensee and returned to the Commission within 60 days from the date of issuance of this order.

By the Commission.

[Signature]

Joseph A. Gutride,
Secretary.
IN TESTIMONY of its acknowledgment of acceptance of all of the provisions, terms and conditions of this license Placer County Water Agency, this ___ day of ____________, 19__, has caused its corporate name to be signed hereeto by ________________________, its __________ President, and its corporate seal to be affixed hereto and attested by ________________________, its __________ Secretary, pursuant to a resolution of its Board of Directors duly adopted on the ___ day of ________________, 19__, a certified copy of the record of which is attached hereto.

PLACER COUNTY WATER AGENCY

By ________________________________ President

Attest:

______________________________ Secretary

(Executed in quadruplicate)
FEDERAL POWER COMMISSION

TERMS AND CONDITIONS OF LICENSE
FOR UNCONSTRUCTED MAJOR PROJECT
AFFECTING
LANDS OF THE UNITED STATES

Article 1. The entire project, as described in the order of the Commission, shall be subject to all the provisions, terms, and conditions of the license.

Article 2. No substantial change shall be made in the maps, plans, specifications, and statements described and designated as exhibits and approved by the Commission in its order as a part of the license until such change shall have been approved by the Commission. Provided, however, that if the Licensee or the Commission deems it necessary or desirable that said approved exhibits, or any of them, be changed, there shall be submitted to the Commission for approval amended, supplemental, or additional exhibit or exhibits covering the proposed changes which, upon approval by the Commission, shall become a part of the license and shall supersede, in whole or in part, such exhibit or exhibits theretofore made a part of the license as may be specified by the Commission.

Article 3. Said project works shall be constructed in substantial conformity with the approved exhibits referred to in Article 2 hereof or as changed in accordance with the provisions of said article. Except
when emergency shall require for the protection of life, health, or property, no substantial alteration or addition not in conformity with the approved plans shall be made to any dam or other project works under the license without the prior approval of the Commission, and any emergency alteration or addition so made shall thereafter be subject to such modification and change as the Commission may direct. Minor changes in the project works or divergence from such approved exhibits may be made if such changes will not result in decrease in efficiency in material increase in cost, or in impairment of the general scheme of development; but any of such minor changes made without the prior approval of the Commission, which in its judgment have produced or will produce any of such results, shall be subject to such alteration as the Commission may direct. The Licensee shall comply with such rules and regulations of general or special applicability as the Commission may from time to time prescribe for the protection of life, health, or property.

Article 4. The construction, operation, and maintenance of the project and any work incident to additions or alterations, whether or not conducted upon lands of the United States, shall be subject to the inspection and supervision of the Regional Engineer, Federal Power Commission, in the region wherein the project is located, or of such other officer or agent as the Commission may designate, who shall be the authorized representative of the Commission for such purposes. The Licensee shall furnish to said representative such information as he may require concerning the construction, operation,
and maintenance of the project, and of any alteration thereto, and shall notify him of the date upon which work will begin, and as far in advance thereof as said representative may reasonably specify, and shall notify him promptly in writing of any suspension of work for a period of more than one week, and of its resumption and completion. The licensee shall allow him and other officers or employees of the United States, showing proper credentials, free and unrestricted access to, through, and across the project lands and project works in the performance of their official duties.

Article 5. Upon the completion of the project, or at such other time as the Commission may direct, the licensee shall submit to the Commission for approval revised maps, plans, specifications, and statements insofar as necessary to show any divergence from or variations in the project area and project boundary as finally located or in the project works as actually constructed when compared with the area and boundary shown and the works described in the license or in the maps, plans, specifications, and statements approved by the Commission, together with a statement in writing setting forth the reasons which in the opinion of the Licensee necessitated or justified variations in or divergence from the approved maps, plans, specifications, and statements. Such revised maps, plans, specifications, and statements shall, if and when approved by the Commission, be made a part of the license under the provisions of Article 2 hereof.

Article 6. For the purpose of determining the stage and flow of the stream or streams from which water is to be diverted for the operation of the project works, the amount of water held in and withdrawn from storage, and the effective head on the turbines, the
Licensee shall install and thereafter maintain such gages and stream-gaging stations as the Commission may deem necessary and best adapted to the requirements; and shall provide for the required readings of such gages and for the adequate rating of such stations. The Licensee shall also install and maintain standard meters adequate for the determination of the amount of electric energy generated by the project works. The number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, shall at all times be satisfactory to the Commission and may be altered from time to time if necessary to secure adequate determinations, but such alteration shall not be made except with the approval of the Commission or upon the specific direction of the Commission. The installation of gages, the ratings of said stream or streams, and the determination of the flow thereof, shall be under the supervision of or in cooperation with, the District Engineer of the United States Geological Survey having charge of stream-gaging operations in the region of said project, and the Licensee shall advance to the United States Geological Survey the amount of funds estimated to be necessary for such supervision or cooperation for such periods as may be mutually agreed upon. The Licensee shall keep accurate and sufficient record of the foregoing determinations to the satisfaction of the Commission, and shall make return of such records annually at such time and in such form as the Commission may prescribe.

Article 7. In the construction and maintenance of the project, the location and standards of roads and trails, and other land uses
including the location and condition of quarries, borrow pits, spoil disposal areas, and sanitary facilities shall be, subject to the approval of the department or agency of the United States having supervision over the lands involved.

**Article 8.** In the construction and maintenance of the project works, the Licensee shall place and maintain suitable structures and devices to reduce to a reasonable degree the liability of contact between its transmission lines, and telegraph, telephone, and other signal wires or power transmission lines constructed prior to its transmission lines and not owned by the Licensee, and shall also place and maintain suitable structures and devices to reduce to a reasonable degree the liability of any structures or wires falling and obstructing traffic and endangering life on highways, streets, or railroads.

**Article 9.** The Licensee shall make provision, or shall bear the reasonable cost, as determined by the agency of the United States affected, of making provision for avoiding inductive interference between any project transmission line or other project facility constructed, operated, or maintained under the license, and any radio installation, telephone line, or other communication facility installed or constructed before or after construction of such project transmission line or other project facility and owned, operated, or used by such agency of the United States in administering the lands under its jurisdiction. None of the provisions of this article is intended to relieve the Licensee from any responsibility or requirement
which may be imposed by other lawful authority for avoiding or eliminating inductive interference.

Article II. The licensee shall prior to impounding water clear all lands in the bottoms and margins of reservoirs up to high-water level, shall clear and keep clear to an adequate width lands of the United States along open conduits, and shall dispose of all temporary structures, unused timber, brush, refuse, or inflammable material resulting from the clearing of the lands or from the construction and maintenance of the project works. In addition, all trees along the margins of reservoirs which may die from operation of the reservoir shall be removed. The clearing of the lands and the disposal of the material shall be done with due diligence and to the satisfaction of the authorized representative of the Commission.

Article III. The licensee shall clear such portions of transmission line rights-of-way across lands of the United States as are designated by the officer of the United States in charge of the lands; shall keep the areas so designated clear of new growth, all refuse, and inflammable material to the satisfaction of such officer; shall trim all branches of trees in contact with or liable to contact the transmission line; shall cut and remove all dead or leaning trees which might fall in contact with the transmission line; and shall take such other precautions against fire as may be required by such officer. No fires for the burning of waste material shall be set except with the prior written consent of the officer of the United States in charge of the lands at a time and place.
Article 12. Timber on lands of the United States cut, used, or destroyed in the construction and maintenance of the project works or in the clearing of said lands shall be paid for in accordance with the requirements of and at the current stumpage rates applicable to the sale of similar timber by the agency of the United States having jurisdiction over said lands; and all slash and debris resulting from the cutting or destruction of such timber shall be disposed of as the officer of such agency may direct.

Article 13. The Licensee shall do everything reasonably within its power and shall require its employees, contractors, and employees of contractors to do everything reasonably within their power, both independently and upon request of officers of the agency of the United States concerned, to prevent, make advance preparations for suppression, and suppress fires on lands occupied under the license.

Article 14. The operations of the Licensee so far as they affect the use, storage, and discharge from storage of waters affected by the license, shall at all times be controlled by such reasonable rules and regulations as the Commission may prescribe for the protection of life, health, and property, and in the interest of the fullest practicable conservation and utilization of such waters for power purposes and for other beneficial public uses, including recreational purposes; and the Licensee shall release water from the project reservoir at such rate in cubic feet per second, or such volume in acre-feet per specified period of time, as the Commission may prescribe for the purposes hereinbefore mentioned.
Article 15. The Licensee shall interpose no objection to, and shall in no way prevent, the use by the agency of the United States having jurisdiction over the lands of the United States affected, or by persons or corporations occupying lands of the United States under permit, of water for fire suppression from any stream, conduit or body of water, natural or artificial, used by the Licensee in the operation of the project works covered by the license, or to the use by said parties of water for sanitary and domestic purposes from any stream or body of water, natural or artificial, used by the Licensee in the operation of the project works covered by the license.

Article 16. The Licensee shall be liable for injury to, or destruction of, any buildings, bridges, roads, trails, lands, or other property of the United States, occasioned by the construction, maintenance, or operation of the project works or of the works appurtenant or accessory thereto under the license. Arrangements to meet such liability, either by compensation for such injury or destruction, or by reconstruction or repair of damaged property, or otherwise, shall be made with the appropriate department or agency of the United States.

Article 17. So far as is consistent with proper operation of the project, the Licensee shall allow the public free access, to a reasonable extent, to project waters and adjacent project lands owned by the Licensee for the purpose of full public utilization of such lands and waters for navigation and recreational purposes, including fishing and hunting, and shall allow to a reasonable extent for such purposes the construction of
access roads, wharves, landings, and other facilities on its lands
the occupancy of which may in appropriate circumstances be subject to
payment of rent to the Licensee in a reasonable amount: Provided,
that the Licensee may reserve from public access, such portions of
the project waters, adjacent lands, and project facilities as may be
necessary for the protection of life, health, and property and Provided
further, that the Licensee's consent to the construction of accessoads, wharves, landings, and other facilities shall not without its
express agreement place upon the Licensee any obligation to construct
or maintain such facilities.

Article 18. The Licensee shall allow any agency of the United
States, without charge, to construct or permit to be constructed on,
through, and across the project lands, conduits, chutes, ditches,
railroads, roads, trails, telephone and power lines, and other means
of transportation and communication not inconsistent with the enjoyment
of said lands by the Licensee for the purposes stated in the license.
This article shall not be construed as conferring upon the Licensee
any right of use, occupancy, or enjoyment of the lands of the United
States other than for the construction, operation, and maintenance of
the project as stated in the license.

Article 19. There is reserved to the appropriate department or
agency of the United States, or of the State or county involved, the
right to take over, maintain, and supervise the use of any project road
as a public road after construction of the project works is completed.

Article 20. The actual legitimate original cost of the original
project, and of any addition thereto or betterment thereof, shall be
determined by the Commission in accordance with the Act and the Commission's rules and regulations thereunder.

**Article 21.** After the first twenty (20) years of operation of the project under the license, six (6) percent per annum shall be the specified rate of return on the net investment in the project for determining surplus earnings of the project for the establishment and maintenance of amortization reserves, pursuant to Section 10 (d) of the Act; one-half of the project surplus earnings, if any, accumulated after the first twenty years of operation under the license, in excess of six (6) percent per annum on the net investment, shall be set aside in a project amortization reserve account as of the end of each fiscal year, provided that, if and to the extent that there is a deficiency of project earnings below six (6) percent per annum for any fiscal year or years after the first twenty years of operation under the license, the amount of such deficiency shall be deducted from the amount of any surplus earnings accumulated thereafter until absorbed, and one-half of the remaining surplus earnings, if any, thus cumulatively computed, shall be set aside in the project amortization reserve account; and the amounts thus established in the project amortization reserve account shall be maintained therein until further order of the Commission.

**Article 22.** No lease of the project or part thereof whereby the lessee is granted the exclusive occupancy, possession, or use of project works for purposes of generating, transmitting, or distributing power shall be made without the prior written approval of the Commission; and the Commission may, if in its judgment the situation warrants,
require that all the conditions of the license, of the Act, and of the rules and regulations of the Commission shall be applicable to such property so leased to the same extent as if the lessee were the Licensee; Provided, that the provisions of this article shall not apply to parts of the project or project works which may be used by another jointly with the Licensee under a contract or agreement whereby the Licensee retains the occupancy, possession, and control of the property so used and receives adequate consideration for such joint use, or to leases of land while not required for purposes of generating, transmitting, or distributing power, or to buildings or other property not built or used for said purposes, or to minor parts of the project or project works, the leasing of which will not interfere with the usefulness or efficient operation of the project by the Licensee for such purposes.

Article 23. The Licensee, its successors and assigns shall, during the period of the license, retain the possession of all project property covered by the license as issued or as later amended, including the project area, the project works, and all franchises, easements, water rights, and rights of occupancy and use; and none of such properties necessary or useful to the project and to the development, transmission, and distribution of power therefrom will be voluntarily sold, transferred, abandoned, or otherwise disposed of without the approval of the Commission: Provided, that a mortgage or trust deed or judicial sales made thereunder, or tax sales, shall not be deemed voluntary transfers within the meaning of this article. In the event the project
is taken over by the United States upon the termination of the license, as provided in Section 14 of the Act, or is transferred to a new licensee under the provisions of Section 15 of the Act, the Licensee, its successors and assigns will be responsible for and will make good any defect of title to or of right of user in any of such project property which is necessary or appropriate or valuable and serviceable in the maintenance and operation of the project, and will pay and discharge, or will assume responsibility for payment and discharge, of all liens or incumbrances upon the project or project property created by the Licensee or created or incurred after the issuance of the license. Provided, that the provisions of this article are not intended to prevent the abandonment or the retirement from service of structures, equipment, or other project works in connection with replacements thereof when they become obsolete, inadequate, or inefficient for further service due to wear and tear, or to require the Licensee, for the purpose of transferring the project to the United States or to a new licensee, to acquire any different title to or right of user in any of such project property than was necessary to acquire for its own purposes as Licensee.

**Article 26.** The terms and conditions expressly set forth in the license shall not be construed as impairing any terms and conditions of the Federal Power Act which are not expressly set forth herein.
The Federal Power Commission
Washington 25, D. C.

SUBJECT: Application for Amendment of Plans
Project 2079 - Placer County Water Agency

Gentlemen:

Submitted herewith is an Application for Amendment of Plans together with Verification Document and revised exhibit. The changes requested do not alter the scope of the project.

The amendments and reasons therefor are fully explained in the attached application.

Very truly yours,

PLACER COUNTY WATER AGENCY

Frank J. Paoli, Chairman

First County in California to Develop Its Own Water Resources
Before the FEDERAL POWER COMMISSION

WASHINGTON 25, D. C.

APPLICATION FOR AMENDMENT OF PLANS
FOR PROJECT 2079

BY PLACER COUNTY WATER AGENCY
PLACER COUNTY, CALIFORNIA

1. The Placer County Water Agency, herein referred to as the
"Agency", a municipality organized under the laws of the State of California,
having its office and principal place of business at Auburn, in the State of
California; licensee for a power project, designated as Project No. 2079
in the records of the Federal Power Commission, issued on the 13th day
of March, 1963, hereby makes application to said Commission for an
Amendment of Plans for said project in the manner and to the extent set
forth herein.

2. (a) Spillway

Revise spillway of the Middle Fork - Ralston Interbay Dam
as shown on Exhibit L, Sheet 25 (revised June 23, 1965) to provide dis-
charge capacity compatible with discharge capacity of the spillway for the
French Meadows Dam and Reservoir.

(b) **Foundation**

Increase depth and extent of excavation on left abutment of Middle Fork - Ralston Interbay Dam to provide adequate foundation as shown on Exhibit L, Sheet 25, revised June 23, 1965.

3. The proposed changes are necessary and desirable for the following reasons:

(a) **Spillway**

Application Exhibits as compiled in February, 1962 and filed April 11, 1962 show a side channel spillway 400 feet long at French Meadows Dam. The maximum probable flood at Interbay Dam for this plan was determined by routing the French Meadows maximum probable flood through the reservoir and over the 400 foot spillway, down the river channel to the Interbay and adding to this flow the maximum probable flood for the intervening area. This determination provided a flood peak of 48,700 c.f.s.

Subsequent studies indicated that a gated spillway would be better suited to the control of storage in the French Meadows Reservoir. Application for revision of Application for License, dated September 5, 1962, was filed with the Commission on September 10, 1962. This Application for Revision included changes to the French Meadows Dam Spillway.

A letter to the Commission dated November 2, 1962 establishes the basis for the French Meadows spillway design revision and its
effect on the maximum probable flood when routed through the reservoir.

A copy of the November 2, 1962 letter is included herewith.

These routing studies provided a new basis for development of a maximum probable flood hydrograph for Interbay Dam, with a peak of 37,400 c.f.s. Both of these hydrographs are shown in "A Study of the Maximum Probable Floods for the Middle Fork of the American River Project" dated October, 1961, revised August, 1962. A copy of this study report was furnished to the Commission. As a consequence of the reduction in flood flows the spillway capacity for the Interbay Dam is reduced as shown in Exhibit L, Sheet 25, revised June 23, 1965.

This revised spillway design has the approval of the State of California, Department of Water Resources, Division of Safety of Dams.

(b) Foundation

A fault zone was uncovered at the left abutment during cleanup for dam foundation. Under instructions from the State of California, Department of Water Resources, Division of Safety of Dams excavation and foundation designs for the left abutment were revised. These designs require extended excavation and special treatment. Letter indicating approval from the State is included.

4. The following exhibits are filed herewith, and are made a part of this application for amendment of plans:

Exhibit L, Sheet 25, Revised June 23, 1964 - Middle Fork - Ralston
Interbay Dam - Plan and Sections

IN WITNESS WHEREOF the applicant has caused its name to be hereunto signed by Frank J. Paoli, its Chairman, Board of Directors, and its corporate seal to be hereto affixed by Evlyn Broyer, its clerk, thereunto duly authorized this 14th day of July, 1965.

PLACER COUNTY WATER AGENCY

By

Chairman, Board of Directors

ATTEST: Evlyn Broyer
VERIFICATION

STATE OF CALIFORNIA
COUNTY OF PLACER

Frank J. Paoli, being first duly sworn deposes and says: That he is Chairman, Board of Directors of the Placer County Water Agency, the applicant for an amendment of plans for Project No. 2079, that he has read the foregoing application and knows the contents thereof; that the same are true to the best of his knowledge and belief.

[Signature]
Chairman, Board of Directors

Subscribed and sworn to me this 14 day of July 1965.

[Signature]
WAYNE WILIS, JUDGE
AUBURN JUDICIAL DISTRICT COURT
County of Placer, State of California

SEAL

My commission expires
RESOLUTION NO. 65-21
OF THE BOARD OF
DIRECTORS OF THE PLACER COUNTY WATER AGENCY
AUTHORIZING FILING OF APPLICATION FOR
AMENDMENT OF PLANS FOR PROJECT NO. 2079 WITH
FEDERAL POWER COMMISSION

BE IT RESOLVED by the Board of Directors of the Placer County Water Agency that said Board hereby approves a proposed Application for Amendment of Plans for Project No. 2079 for filing with the Federal Power Commission as presented to said Board at its regular meeting on July 14, 1965, and that the chairman of said Agency is hereby authorized and directed to sign and file said Application for Amendment of Plans with the Federal Power Commission and to make such arrangements and execute such documents for and on behalf of said Agency as may be necessary, advisable or appropriate to carry out the purposes of this resolution.

The foregoing resolution was duly passed and adopted by the Board of Directors of the Placer County Water Agency at a regular meeting thereof held on the 14th day of July, 1965, by the following vote on roll call:

AYES DIRECTORS: Lambert, Radovich, Briner and Paoli
NOES DIRECTORS: None
ABSENT DIRECTORS: Jones

Signed and approved by me after its passage this 14th day of July, 1965.

Chairman, Board of Directors,
Placer County Water Agency

ATTEST:

Clark, Placer County Water Agency
May 17, 1965

Mr. J. A. Conwell:
Project Construction Manager
McCready-Kuretsky-Engineers
P. O. Box 832
Auburn, California

Subject: Interbay Dam, No. 1030-3

Dear Mr. Conwell:

On May 17, 1965, Mr. Robert L. Polvi submitted revised plans for foundation excavation and treatments for subject dam consisting of the following drawings:

General Layout No. 111-05-201, Revision 3, May 14, 1965
Elevations No. 111-05-202, Revision 7, May 14, 1965
Sections and Details
Sheet 1 No. 111-05-203, Revision 8, May 14, 1965
Sections and Details
Sheet 2 No. 111-05-204, Revision 6, May 14, 1965

These drawings are hereby approved as to safety.

Sincerely yours,

[Signature]

Robert B. Jansen
Division Engineer
Division of Safety of Dams

M.K.E.-MIDDLEFORK
AMERICAN RIVER PROJECT
No. 1031

MAY 18, 1965
INITIAL

[Signatures]
TO: Sanford Koretsky

FROM: John M. Bernard

SUBJECT: Order Approving Revised Project Exhibits

Enclosed for your information is a copy of "Order Approving Revised Project Exhibits" from the Federal Power Commission.

Very truly yours

[Signature]
John M. Bernard
General Manager

Enc.
RESOLUTION NO. 64-4

AUTHORIZING THE CHAIRMAN TO SIGN REVISED EXHIBITS FOR FEDERAL POWER COMMISSION

WHEREAS, detailed engineering study has shown that it will be unnecessary to construct the surge shaft on the French Meadows Hell Hole Tunnel originally shown on Exhibit L, sheets 8 and 9, and Exhibit J, sheet 1, of the Placer County Water Agency's application for Federal Power Commission license; and

WHEREAS, it will be economically beneficial to eliminate the construction of this surge shaft:

NOW, THEREFORE BE IT RESOLVED by the Board of Directors of the Placer County Water Agency that the Chairman of said Agency be and is hereby authorized to sign revised plans for sheets 8 and 9 of Exhibit L and Sheet 1 of Exhibit J of the Agency's application for Federal Power Commission license,

BE IT FURTHER RESOLVED that the Agency's staff and consultants be and are hereby instructed to take all necessary action to present these revised sheets to the Federal Power Commission.

The foregoing Resolution was duly passed by the Board of Directors of the Placer County Water Agency at a regular meeting thereof held on the 14th day of January, 1964 by the following vote on roll call:

AYES DIRECTORS: Lambert, Radovich, Anderson, Briner and Paoli
NOES DIRECTORS: None
ABSENT DIRECTORS: None

Signed and approved by me after its passage this 14th day of January, 1964.

Chairman, Placer County Water Agency
Project No. 2079
Placer County Water Agency

Placer County Water Agency
1115 High Street
Auburn, California 95603

Attention: Frank J. Paoli, Chairman
Board of Directors

Gentlemen:

Enclosed is the order, designated Instrument No. 3, in the
above-entitled matter.

Very truly yours,

Joseph M. Gates, Sr.,
Secretary.
UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

Before Commissioners: Joseph C. Suichler, Chairman; L. J. O'Connor, Jr.;
Harold C. Woodward, and David S. Black.

Placer County Water Agency, Project No. 2079

ORDER APPROVING REVISED PROJECT EXHIBITS

(Issued April 17, 1954)

On January 22, 1954, Placer County Water Agency, licensee for Project No. 2079, filed for Commission approval revised Exhibits J and L drawings for the French Meadows development of the project. The filings, which were made pursuant to Articles 2 and 3 of the license, provide for the elimination of the surge shaft near the downstream portal of the French Meadows-Hell Hole Tunnel.

Through studies made by Pacific Gas and Electric Company, contractor for the purchase of the project power output, PG&E developed definite criteria for the operation of French Meadows development. On the basis of such criteria, the Licensee concluded that the surge shaft is not necessary for the operation of the French Meadows plant and related facilities; that its elimination will not impair the safe operation of the unit or diminish that plant's or the project's capacity to produce electric energy; and that such elimination will result in an estimated reduction of $240,000 in the project's capital cost.

Commission staff have reviewed the submitted designs and surge calculations and conclude that the elimination of the surge shaft from the proposed French Meadows-Hell Hole Tunnel is not detrimental to project operation and is viewed of as a relief valve at the turbines, will not result in excessive positive or negative pressures under normal load acceptance or normal or emergency load rejection operating conditions. The licensee's reduction of $240,000 in the estimated capital cost of the project is reasonable.

The Commission finds:

1. The following revised exhibits conform to the Commission's rules and regulations and should be approved as part of the license for the project:

   Exhibit J Sheet 1 revised January 13, 1954. (FPC No. 2079-184) entitled "General Project Map."
Exhibit L Sheet 8 revised January 13, 1964 (FPC No. 2079-105) entitled "French Meadows - Hell Hole Tunnel - Plan and Profile."

Exhibit L Sheet 9 revised January 13, 1964 (FPC No. 2079-136) entitled "French Meadows Power Plant and Penstock."

(2) The following described exhibits, now part of the license and which have been superseded are hereby eliminated from the license for the project:

Exhibit J Sheet 1 revised August 1, 1962 (FPC No. 2079-111) entitled "General Project Map."

Exhibit L Sheet 8 revised August 1, 1962 (FPC No. 2079-136) entitled "French Meadows - Hell Hole Tunnel - Plan and Profile."

Exhibit L Sheet 9 revised August 1, 1962 (FPC No. 2079-139) entitled "French Meadows Power Plant - Penstock and Surge Shaft."

The Commission orders:

The revised exhibits described in finding (1) above are hereby approved as part of the license for Project No. 2079, and the exhibits described in finding (2) above as being superseded are hereby eliminated from the license.

By the Commission.

Joseph H. Guitride, Secretary.
PLACER COUNTY WATER AGENCY
1115 HIGH STREET TELEPHONE 525-2411 AUBURN, CALIFORNIA—95602

January 14, 1964

The Federal Power Commission
Washington 25, D. C.

SUBJECT: Application for Amendment Plans Project 2079

Gentlemen:

Submitted herewith is an Application for Amendment of Plans together with Verification Document and revised exhibits.

The change requested does not alter the scope of the project but reflects the results of more detailed studies and computations resulting in a substantial saving in capital costs.

The change and reasons therefor are fully explained in the attached application.

Very truly yours,

PLACER COUNTY WATER AGENCY

[Signature]

Frank J. Paoli, Chairman
PLACER COUNTY WATER AGENCY
Office of the General Manager

DATE January 17, 1964

TO: Sanford Koretsky

FROM: John M. Bernard

SUBJECT: FPC Order Approving Revised Project Exhibits

Attached for your file is a copy of "Order Approving Revised Project Exhibits" dated January 17, 1964, from the Federal Power Commission.

Very truly yours,

PLACER COUNTY WATER AGENCY

John M. Bernard
General Manager

JKB/ml
Attach.

M.K.E.
ADMINISTRATIVE DEPT.
Received 1-20-64

HAK 121

File AG 62

Copy of enclosure typed for HAK.
UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION


Placer County Water Agency Project No. 2079

ORDER APPROVING REVISED PROJECT EXHIBITS
(Issued January 13, 1964)


The licensee has made additional studies since the issuance of the license and has made modifications in the design of the project. The changes which are reflected in the exhibits would:

(1) Relocate Ralston Afterbay dam about 1,200 feet downstream on the Middle Fork of the American River and change the dam from a composite and earth-fill dam about 28 feet high with a crest length of 525 feet at elevation 1198 feet to a concrete gravity dam about 85 feet high with a crest 560 feet long at elevation 1199 feet; revise the length and diameter of the Oxbow tunnel from a 16-foot horseshoe tunnel 1320 feet long connecting to an 11-foot diameter steel penstock extending about 100 feet to the Oxbow Powerhouse, to a 13-1/4-foot tunnel 403 feet long terminating at the penstock of 60-foot length; and make minor revisions in the Oxbow Powerhouse turbine setting and capacity; and

(2) Make other changes in the project boundaries primarily due to minor relocations of diversion dams or the North and South Forks of Long Canyon and realignment and minor relocations of tunnels and access roads.

The licensee has advised that further geologic studies and explorations revealed subsurface conditions that make desirable the proposed relocations, and that the proposed minor changes in the Oxbow Powerhouse turbine setting reflect the additional information furnished the licensee by turbine manufacturers.

The Department of Agriculture, in commenting on the application, advised that no special conditions for the adequate protection and utilization
of National Forest land are deemed necessary, other than those already included in the license for the project.

The proposed changes result generally in improvements in the design of the Project. No changes in the installed horsepower capacity of the project are herein involved. The Commission has reserved the right in the license to determine at a later date the amount of annual charges to reimburse the United States for the use, occupancy, and enjoyment of its lands.

The Commission finds:

(1) Exhibit J, Sheets 1, 2, and 3 (FPC Nos. 2079-161, 172 and -173), Exhibit K, Sheets 1, 17, 21, 24, 27, 28, 39, 60 and 61 (FPC Nos. 2079-162 through -162), and Exhibit L, Sheet 31A (FPC No. 2079-163) - all revised June 14, 1963 - conform to the Commission's rules and regulations and should be approved as part of the license for the project.

(2) Exhibit J, Sheets 1, 2, and 3 (FPC Nos. 2079-161, -162, and -163), Exhibit K, Sheets 1, 17, 21, 24, 27, 28, 39, 60 and 61 (FPC Nos. 2079-162, -164, -165 through -165), and Exhibit L, Sheet 31A (FPC No. 2079-165), which are now part of the license and which have been superseded, should be eliminated from the license for the project.

The Commission orders:

(A) The revised exhibits described in finding (1) above are hereby approved as part of the license for Project No. 2079.

(B) The superseded exhibits described in finding (2) above are hereby eliminated from the license for the project.

By the Commission:

/ / J. H. Gutridge
Joseph H. Gutridge,
Secretary
FEDERAL POWER COMMISSION
Washington 25, D.C.

Project No. 2079
Placer County Water Agency

Jan 16 1964

Board of Directors
Placer County Water Agency
Court House
Auburn, California

Attention: Frank J. Paoli, Chairman

Gentlemen:

The instrument designation "3" on the order entitled
"Order Approving Revised Project Exhibits" issued
January 13, 1964, was incorrect.

This should be "Instrument No. 2."

Please correct the copy sent you accordingly.

Very truly yours,

(signed) Joseph H. Gutrie
Secretary
APPLICATION FOR AMENDMENT OF PLANS

DATE       DATE OF GRANT OR APPROVAL
01/14/64    04/17/64
Before the FEDERAL POWER COMMISSION
WASHINGTON 25, D. C.

APPLICATION FOR AMENDMENT OF PLANS
FOR PROJECT 2079

BY PLACER COUNTY WATER AGENCY
PLACER COUNTY, CALIFORNIA

1. The Placer County Water Agency, herein referred to as the "Agency," a municipality organized under the laws of the State of California, having its office and principal place of business at Auburn, in the State of California; licensee for a power project, designated as Project No. 2079 in the records of the Federal Power Commission, issued on the 13th day of March, 1963, hereby makes application to said commission for an Amendment of Plans for said project in the manner and to the extent set forth herein.

2. Eliminate Surge Shaft and Shaft House shown on Exhibit J Sheet 1, Exhibit L Sheet 8 and Exhibit L Sheet 9 near the downstream portal of the French Meadows-Hell Hole Tunnel.

3. Subsequent to filing the application for the license, Pacific Gas & Electric Company, herein referred to as "Pacific," the contractors for the purchase of the power, established definite criteria for the operation of the French Meadows power plant and the related tunnel. It was determined by
more refined computations using these operational criteria that the surge shaft is not necessary in the operation of said power plant and related facilities.

It was further determined that the elimination of said surge shaft will not impair safe operation of this unit nor the project and will not diminish the plant or project capacity to produce electric energy.

It was also determined that the elimination of said shaft and shaft house will result in a substantial reduction of project capital costs. Said savings are estimated to be in the order of $240,000.

4. This change in plans was referred to Pacific for an independent review, taking into account future power market requirements. Subsequently Pacific concurred in the elimination of the surge shaft. This change is reflected in the Middle Fork Project-Power Purchase Contract between the Agency and Pacific by a specific exception that a surge shaft will not be required at French Meadows.

5. The following exhibits are filed herewith and are hereby made a part of this application for amendment of plans:

- **Exhibit J Sheet 1** - General Project Map (Revised January 13, 1964).
- **Exhibit L Sheet 8** - French Meadows-Hell Hole Tunnel, Plan and Profile (Revised January 13, 1964).
IN WITNESS WHEREOF the applicant has caused its name to be hereunto signed by Frank J. Paoli, its Chairman, Board of Directors, and its corporate seal to be hereto affixed by [signature], its clerk, thereunto duly authorized this / Day of January, 1964

PLACER COUNTY WATER AGENCY

By

[Signature]
Chairman, Board of Directors

SEAL

ATTEST:

[Signature]
STATE OF CALIFORNIA
COUNTY OF PLACER

Frank J. Paoli, being first duly sworn deposes and says: That he is Chairman, Board of Directors of the Placer County Water Agency, the applicant for an amendment of plans for Project No. 2079, that he has read the foregoing application and knows the contents thereof; that the same are true to the best of his knowledge and belief.

Chairman, Board of Directors

Subscribed and sworn to me this 15th day of January, 1964.

Notary Public in and for the County of Placer, State of California

My commission expires 1/9/66
APPLICATION FOR AMENDMENT OF PLANS

DATE
6/25/63

DATE OF GRANT OR APPROVAL
01/13/64
The Federal Power Commission,
Washington 25, D. C.

SUBJECT: Application for Amendment of License -
Project 2079

Gentlemen:

Submitted herewith is an Application for Amendment of License, together with Verification document and the revised exhibits as described in the application.

The changes requested do not alter the scope of the project, but reflect improved design based on additional field geology and survey data.

The changes and the reasons for them are detailed in the application document.

Very truly yours

PLACER COUNTY WATER AGENCY

[Signature]
Frank J. Paoli, Chairman

FJP/eb
BEFORE
THE FEDERAL POWER COMMISSION

APPLICATION FOR THE AMENDMENT OF LICENSE
FOR
MIDDLE FORK AMERICAN RIVER PROJECT

BY

PLACER COUNTY WATER AGENCY
CALIFORNIA
BEFORE THE FEDERAL POWER COMMISSION

APPLICATION FOR THE AMENDMENT OF LICENSE

1. PLACER COUNTY WATER AGENCY, a municipality organized under the laws of the State of California, licensee for a power project, designated as Project No. 2079 in the records of the Federal Power Commission, issued on the 13th day of March, 1963, hereby make application to said Commission for an amendment of the license for said project in the manner and to the extent described herein.

2. (a) Relocate Ralston Afterbay Dam approximately 1200 feet downstream from location shown on license exhibits K27, L31a, and change dam construction materials from composite gravel and earth fill to concrete gravity. Revise Oxbow Power Plant, Tunnel, and project boundaries accordingly to reflect the new location of this feature. The general description of these items as modified is now as follows:

RALSTON AFTERBAY

Dam

<table>
<thead>
<tr>
<th>Type</th>
<th>Concrete Gravity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height of Crest above Streambed</td>
<td>85 Ft.</td>
</tr>
<tr>
<td>Total Crest Length</td>
<td>560 Ft.</td>
</tr>
<tr>
<td>Elevation of Non-Overflow Crest</td>
<td>1,189 Ft.</td>
</tr>
<tr>
<td>Elevation of Overflow Crest</td>
<td>1,149 Ft.</td>
</tr>
<tr>
<td>Elevation of Streambed</td>
<td>1,104 Ft.</td>
</tr>
<tr>
<td>Outlet Capacity</td>
<td>1,425 c.f.s.</td>
</tr>
</tbody>
</table>

Spillway

| Elevation of Top of Gates | 1,179 Ft. |
| Crest Length              | 200 Ft.    |
| Gates, 5 Radial           | 32'H x 40'W |

Reservoir: Gross Storage 2,665 AF
II  OXBOW TUNNEL

Nominal Size and Shape  13' - 3" Horseshoe
Length  403 Ft.
Maximum Discharge Capacity  1,000 c.f.s.

III  OXBOW PENSTOCK AND POWER PLANT

Penstock
Length  60 Ft.
Diameter  9'-0" I.D.

Production Equipment
Installed Capacity  8,200 H. P.
Type of Turbine  Francis
Normal Tail Water Surface  1,039 Ft.
Maximum Tail Water Surface  1,140 Ft.
Maximum Static Head  89 Ft.
Elevation of L Scroll Case  1,097.5 Ft.

Transmission Equipment
Number of Transformers  1 - 36
Voltage  4.16/60 KW

(b) Changes in other project boundaries due to:

I  Realignment of centerline of Hell Hole - Middle Fork Tunnel
to accommodate relocation of tunnel in the Long Canyon Area.

II  Realignment of centerline of Middle Fork - Ralston Tunnel
to accommodate relocation of Ralston Surge Tank.

III Minor relocations of diversion dams on North and South
Forks of Long Canyon, providing smaller structures and smaller reservoir
pools. These changes, shown on the Construction Contract drawings, do
not affect the scope or operation of the project and the related "L" Exhibits
will be submitted at a future date for amendment "As Built".

(c) Changes due to additional location of section corners found
in the field and road realignment.
(6) Roads

Roads have been further studied, surveyed and redesigned for improved access at a reduction in cost.

4. The following exhibits are filed herewith, and are hereby made a part of this application for amendment of license:

Exhibit J - Sheet 1 Revised roads, tunnels and survey data.
Exhibit J - Sheet 2 Revised roads, tunnels and survey data.
Exhibit J - Sheet 3 Revised roads, tunnels and survey data.
Exhibit K - Sheet 1 Revised bearings
Exhibit K - Sheet 17 Tunnel relocated: South Fork Long Canyon pool smaller; North Fork Long Canyon dam moved upstream; North Fork diversion pipe line realigned. Section line location revised.
Exhibit K - Sheet 21 Tunnel alignment and dam axis changed.
Exhibit K - Sheet 24 Tunnel alignment changed; boundary at east end of afterbay enlarged; boundary at juncture of penstock and afterbay boundaries has been reduced. Section line locations revised.
Exhibit K - Sheet 27 Relocation of Afterbay dam; enlargement of boundary at south end of dam; access road improved.
Exhibit K - Sheet 28 Enlarged project boundary at south end of dam; section corners revised.
Exhibit K - Sheet 39 Tunnel relocations; revised survey data.
Exhibit K - Sheet 40 Tunnel alignment; revised survey data.
Exhibit K - Sheet 41 Revised roads and project boundary.
Exhibit L - Sheet 31a Relocated dam; revised features of dam, tunnel and powerhouse.
3. The proposed changes are necessary and desirable for the following reasons:

(a) Afterbay Dam

The dam was relocated when further geologic study revealed potential structural weakness of the narrow rock ridge containing the free overflow spill section on the left abutment of the dam. Design studies indicated that the concrete gravity section is the most economical structure at the lower site.

(b) Oxbow Tunnel

Changes in the tunnel and penstock follow from relocation of the dam.

(c) Oxbow Power Plant

Minor revision in centerline of unit elevation due to additional information from turbine manufacturers.

(d) Power Tunnels

The Hell Hole - Middle Fork Tunnel realignment was designed to locate the tunnel in a more favorable rock structure in the Long Canyon area, as determined by further geological exploration.

The Middle Fork - Ralston Tunnel realignment was designed to locate the Ralston Surge Tank in a more favorable rock structure as determined by further geological exploration.

(e) Diversion Dams

The diversion dams on the North and South Forks of Long Canyon were relocated to provide smaller and more economical structures.
IN WITNESS WHEREOF the applicant has caused its name to be hereunto signed by Frank J. Paoli, its Chairman, Board of Directors, and its corporate seal to be hereto affixed by Evlyn Broyer, its clerk, thereunto duly authorized this 25th day of June, 1963.

PLACER COUNTY WATER AGENCY

By [Signature]
Chairman, Board of Directors

SEAL

ATTEST:

[Signature]
Clerk to the
Placer County Water Agency
STATE OF CALIFORNIA
COUNTY OF PLACER

Frank J. Paoli, being first duly sworn deposes and says: That he is Chairman, Board of Directors of the Placer County Water Agency, the applicant for an amendment to the license for Project No. 2079, that he has read the foregoing application and knows the contents thereof; that the same are true to the best of his knowledge and belief.

[Signature]
Chairman, Board of Directors

Subscribed and sworn to me this 2nd day of July, 1963.

[Signature]
Notary Public in and for the County of Placer, State of California

MILDRED B. WARFORD
My Commission Expires April 7, 1966
McCREARY - KORETSKY - ENGINEERS

1140 Howard Street, San Francisco 3, California, Himlock 1-4563

November 2, 1962
AG 6.2

Federal Power Commission
Washington, D. C.

Attention: Mr. Thomas M. Crum
Division of Licensed Projects

Subject: Project 2079 California
Placer County Water Agency

Gentlemen:

This letter is in response to, and in confirmation of, a telephone conversation with your Mr. A. H. Ronka.

The points discussed in this letter, as well as in the telephone conversation, relate to, and elaborate on, the supplemental back-up information requested in the FPC letter dated October 13, 1962 and answered and discussed in a letter dated October 26, 1962, from Mr. Frank J. Paoli, Chairman, Board of Directors, Placer County Water Agency to Mr. J. H. Guttridge, Secretary, Federal Power Commission.

The following covers the questions put by Mr. Ronka and is reply to them:

(1) The maximum probable floods at our proposed Hell Hole and French Meadows Reservoirs were determined as described in the monograph already forwarded to you. There is no question raised regarding the determination of those flood flows.

(2) This maximum probable flood was routed through each of the reservoirs for the spillway under consideration. In the case of Hell Hole, there has been no change in the spillway since the original submittal.

(3) In the case of French Meadows, the original spillway gave us a certain spillway design flood based on the maximum probable flood referred to above as a reservoir inflow. Since the original submittal the spillway has been changed from a 400 foot wide
The following tabulation is a summary of the above mentioned routings:

<table>
<thead>
<tr>
<th>Maximum Probable Flood (Reservoir Inflow for Routing Studies)</th>
<th>Hell Hole Reservoir</th>
<th>Current Spillway Reservoir</th>
<th>Muley (Abandoned) Reservoir</th>
</tr>
</thead>
<tbody>
<tr>
<td>69,000 cfs</td>
<td>29,300 cfs</td>
<td>29,500 cfs</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spillway Crest Length</th>
<th>350 Ft.</th>
<th>40 Ft.</th>
<th>400 Ft.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Maximum Rise in Water Surface over Crest for Routing of Maximum Probable Flood</th>
<th>13.2 Ft.</th>
<th>18.4 Ft.</th>
<th>6.4 Ft.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Spillway Design Flood (Maximum Reservoir Outflow Computed in Routing of Maximum Probable Flood)</th>
<th>58,800 cfs</th>
<th>12,200 cfs</th>
<th>25,000 cfs</th>
</tr>
</thead>
</table>

Attached is one print each of a graphical computation for the routings, as well as an inflow-outflow hydrograph for each of the three cases described above. These are based on detailed numerical computations which can readily be deduced from a study of them.

In the Discussion of Question 1 of the attachment to Mr. Paul's letter of October 19 referred to above, it is pointed out that the French Meadows spillway gates are under a mandatory requirement of being blocked open from November 15 to April 1. This requirement must be imposed on this project feature in order
to satisfy State of California Supervisor, Safety of Dams. This period during which the gates are blocked open is the only one during which the maximum probable flood can occur. The purpose of installing the gates is so that they can be lowered on April 1 in order to catch the snowmelt runoff, which can be quite accurately predicted by that date. Thus, for the maximum probable flood routing we can take advantage of the lower crest elevation (with gates raised) at French Meadows, and yet by lowering the gates on April 1 we can retain a significant amount of storage from the snowmelt runoff which comes subsequent to that date. Our cost estimates show a considerable economy in the French Meadows feature with the gated spillway over the ungated spillway.

We hope the above fully answers the questions raised by Mr. Ronka. If there is anything further, please do not hesitate to phone us, and we will expedite their answers.

Very truly yours,

McCreaRy • KoreTSky • ENGINEERS

Sanford Koretsky

SK:mm
Enclosures
cc: Federal Power Commission
    San Francisco
Federal Power Commission
Washington 25, D. C.

Attention: Mr. Joseph H. Gutrice, Secretary

Re: Federal Power Commission Project
No. 2079 - Placer County Water Agency

Gentlemen:

We have discovered a typing error on our letter revision dated September 5, 1962, to license application on our project referred to above. On page three of said letter revision, the third sentence of the second full paragraph contains the words "Ralston Interbay - Oxbow Power Unit". This should be changed to read "Ralston Afterbay - Oxbow Power Unit".

This communication is being sent to the same distribution as received the letter revision of September 5, 1962.

We regret the inconvenience that this correction may cause you.

Very truly yours,

Frank J. Paoli
Chairman.

FJP:dl
cc: Federal Power Commission
Regional Office
555 Battery Street
San Francisco, California
The Federal Power Commission
Washington 25, D. C.

Subject: Application for License - Project 2079

Gentlemen:

The Placer County Water Agency in March of this year filed with the Federal Power Commission an application, dated March 23, 1962, for a license to authorize the construction, operation and maintenance of power project works on the Middle Fork of the American River in California. This project had been previously designated as Project 2079 in the records of the Commission.

Because of circumstances related below, the Agency hereby requests that the revisions described and documented herein be made to its application.

The Placer County Water Agency, herein referred to as "the Agency", negotiated agreement with the United States Department of Interior, Bureau of Reclamation, herein referred to as "the Bureau", relative to the location and position of adjoining project features on the Middle Fork of the American River and the right of the Agency to divert and purchase water as evidenced by letter from the Bureau dated February 23, 1962 - Exhibit E-1 of the application - and acceptance by the Agency by resolution dated March 13, 1962 - Exhibit E-2 of the application - filed in the application described above.

One condition of the Bureau's letter of February 23, 1962, provided for withdrawal by the Agency of its protest to water right permit requests by the Bureau for Auburn Reservoir and for withdrawal by the Bureau to permits requested by the Agency for its Middle Fork American River Project. The Agency by letter dated May 9, 1962, from its attorneys - Kronick, Moskovitz and Vanderlaan - to the State Water Rights Board withdrew protests to the Bureau's applications. (See Exhibit E-9.)
The Bureau did not withdraw its protests to the Agency's application. Instead, the Secretary of the Interior, in compliance with a statement of policies, standards and procedures (May 15, 1962) approved by the President, by telegram to the State Water Rights Board on May 22, 1962, requested that the hearing scheduled for May 22, 1962, at 10 o'clock A.M. on the Agency's application to appropriate water be continued to provide time for the Bureau to resudy its project on the North and Middle Forks of the American River. By agreement between the interested parties, the hearing of the State Water Rights Board was continued until July 17, 1962.

On July 16, 1962, the Bureau, by letter of that date, requested that the Agency accept certain amendments to the agreement cited in Exhibits E-1 and E-2. The vital modification requested by the Bureau consists of changing the maximum reservoir water surface elevation for the Bureau's proposed Auburn Dam and Reservoir from 934.5 feet to 1140. feet. The Bureau's letter of July 16, 1962, is included herewith, and it is hereby requested that this letter be included as Exhibit E-6 of the application.

It has been determined by the Agency that the condition requested by the Bureau can be accommodated by modifying the Agency's Project (FPC - 2079) in the manner described herein. The Agency has by resolution dated July 16, 1962, accepted the Bureau's requested changes to its February 23, 1962, letter. This acceptance is offered as Exhibit E-7 of the application.

By letter dated July 16, 1962, to the California State Water Rights Board, the Bureau withdrew protests to the Agency's applications to appropriate water. This letter is hereby offered as Exhibit E-8 to be included with the application for license.

The pertinent amendment requested by the Bureau's July 16, 1962 letter, and agreed to by the Agency, that effects the Agency's project reads as follows:

"Paragraph (j) is amended to read as follows:

(j) Acceptance by your Agency of a maximum water surface elevation of the proposed Auburn Reservoir up to 1140 feet and willingness of your Agency to construct and operate its project so as not to include any feature which would be interfered with by maximum water surface elevation of 1140 feet, provided, however, that the Agency shall not be precluded
from later including features which are consistent
with the maximum water surface elevation of Auburn
Dam and Reservoir as actually constructed."

To comply with the July 16, 1962, understanding and agree-
ment between the Agency and the Bureau, the Agency proposes (1)
to eliminate the American Bar Unit described in the application and
consisting of dam and reservoir, powerplant and afterbay, (2) relo-
cate the Ralston Powerplant downstream as far as natural conditions
permit, (3) provide an afterbay to reregulate the discharges from
the Ralston plant, (4) provide a small powerplant downstream from
the afterbay dam to function as a reregulating device and to gen-
erate electric energy from the intervening drop between the Ralston
plant and the Bureau's proposed Auburn Reservoir, thus comprehen-
sively developing the full head in the river.

The Bureau's planning for the Auburn Dam and Reservoir Pro-
ject has not been completed, and the actual maximum water surface
elevation has not been conclusively determined. According to the
Bureau's July 16 letter, Exhibit E-6, quoted above, the Bureau con-
cedes the right of the Agency to develop any remaining difference of
elevation between the Agency's project and the Bureau's Auburn Reser-
voir. It is therefore the Agency's intention to construct the Ralston
Afterbay-Oxbow Power Unit whenever it becomes economically feasible,
and/or such other Unit or Units as will comprehensively develop the
head on the river whenever the Bureau finally determines the maxi-
mum water surface elevation for the Auburn Reservoir Project, and
whenever such development is demonstrated to be economically fea-
sible; and the Agency requests that these conditions be included as
conditions of the license sought by this application.

Because it is necessary for the Agency to revise Project 2079
to accommodate the requirements of the Bureau, it appears desirable
at the same time to include revisions to the application reflecting in-
terim refinements in location developed by more recent field surveys,
extploration, investigations and final design considerations; and to in-
form the Commission regarding project progress. Such revisions
are of a secondary nature and do not affect the scope of the project.
Revisions, therefore, also include the following:

(a) Revisions in tunnel and powerplant locations, other
    than the American Bar and Ralston sheets, to conform
to results from geologic explorations.

(b) Revision in powerplant equipment rating to conform
to final design refinements.

(c) Revision of road locations.
The following numbered paragraphs have been revised, and revised paragraphs are hereby submitted:

Paragraph 6 - Description of Works - Revised to eliminate reference to American Bar Dam and Powerplant, include the Oxbow Unit and substitute revised values in tabulations.

Paragraph 9 - Scheme of Development - Revised to eliminate reference to American Bar Dam and Powerplant, to include the Oxbow plant and to substitute appropriate values of plant capacities.

Paragraph 12 - The following exhibits have been revised, added, or deleted; and these revised exhibits are filed herewith and hereby made a part of the application:


Exhibit E-3a - Agreement between the Agency and the California Department of Fish and Game.

Exhibit E-6 - U.S.B.R. letter of July 16, 1962, revising previous agreement.

Exhibit E-7 - Placer County Water Agency's Resolution of Acceptance dated July 16, 1962.


Exhibit E-9 - Agency's letter of May 9, 1962, withdrawing protests to the Bureau's Water Rights Applications.

Exhibit G - Added Exhibit G-2 - To show the effect of reduction of capital cost and revenue due to the substitution of the Oxbow unit for the American Bar Unit and related revisions.

Exhibit H - Proposed Operation of Project - Revised to reflect substitution of the Oxbow unit for the American Bar Unit.

Exhibit H - Sheet 1 - Revised by substitution of Ralston Afterbay and Oxbow Powerplant for the American Bar Dam, Powerplant and Afterbay and relocation of Ralston Powerplant.
Exhibit I - Estimate of the Dependable Capacity - Revised to reflect the substitution of the Oxbow unit for the American Bar Unit and the modified head on the Ralston Powerplant.

Exhibit I - Sheet 3 - Deleted.

Exhibit I - Sheet 3a - Ralston Afterbay - Flow duration curve.

Exhibit I - Sheet 4 - Revised Middle Fork-Ralston capacity curve. Deleted American Bar capacity curve and added Oxbow capacity curve. Revised Ralston tailwater curve.

Exhibit J - Sheet 1 - Location of French Meadows-Hell Hole Tunnel refined as result of recent geological explorations.

Exhibit J - Sheet 2 - Location of Hell Hole-French Meadows Tunnel refined as result of recent geological survey.


Exhibit K - Sheet 1 - Access road relocation.

Exhibit K - Sheet 2 - Access road relocation.

Exhibit K - Sheet 3 - Access road relocation.

Exhibit K - Sheet 6 - French Meadows-Hell Hole Tunnel.

Exhibit K - Sheet 7 - French Meadows-Hell Hole Tunnel.

Exhibit K - Sheet 8 - Access road relocation.

Exhibit K - Sheet 9 - Revised dam height and spillway.

Exhibit K - Sheet 14 - French Meadows Powerplant relocation.

Exhibit K - Sheet 15 - French Meadows Powerplant relocation.

Exhibit K - Sheet 16 - Hell Hole-Middle Fork Tunnel location.
Exhibit K - Sheet 17 - Hell Hole-Middle Fork Tunnel and Long Canyon Diversions location.

Exhibit K - Sheet 18 - Hell Hole-Middle Fork Tunnel location.

Exhibit K - Sheet 19 - Hell Hole-Middle Fork Tunnel location.

Exhibit K - Sheet 20 - Middle Fork Powerplant location.

Exhibit K - Sheet 21 - Revised Middle Fork-Ralston Tunnel.

Exhibit K - Sheet 22 - Deleted exhibit.

Exhibit K - Sheet 23 - Deleted exhibit.

Exhibit K - Sheet 24 - Ralston Powerplant location revised.

Exhibit K - Sheet 25 - Deleted exhibit.

Exhibit K - Sheet 26 - Deleted exhibit.

Exhibit K - Sheet 27 - Ralston Afterbay and Oxbow Powerplant added.

Exhibit K - Sheet 28 - Ralston Afterbay and Oxbow Powerplant added.

Exhibit K - Sheet 29 - Deleted exhibit.

Exhibit K - Sheet 30 - Deleted exhibit.

Exhibit K - Sheet 31 - Deleted exhibit.

Exhibit K - Sheet 32 - Deleted exhibit.

Exhibit K - Sheet 33 - Deleted exhibit.

Exhibit K - Sheet 34 - Deleted exhibit.
Exhibit K - Sheet 35 - Deleted exhibit.

Exhibit K - Sheet 36 - Deleted exhibit.

Exhibit K - Sheet 37 - Deleted exhibit.

Exhibit K - Sheet 38 - Deleted exhibit.

Exhibit K - Sheet 39 - French Meadows-Hell Hole Tunnel and Hell Hole-Meadows Dam - revised location.

Exhibit K - Sheet 39 - Hell Hole-French Meadow Tank Tunnel and Middle Fork-Edematan Tunnel location.

Exhibit L - Sheet 3 - General revision.

Exhibit L - Sheet 5 - Revised French Meadows dam and spillway.

Exhibit L - Sheet 6 - Revised dam height and spillway.

Exhibit L - Sheet 7 - Revised dam height and spillway.

Exhibit L - Sheet 8 - Revised dam location.

Exhibit L - Sheet 9 - Revised powerplant and penstock location.

Exhibit L - Sheet 10 - Revised generator and transformer capacity.

Exhibit L - Sheet 11 - Revised generator and transformer capacity.

Exhibit L - Sheet 12 - Revised tunnel location.

Exhibit L - Sheet 13 - Revised tunnel location.

Exhibit L - Sheet 14 - Revised dam and spill location.

Exhibit L - Sheet 20 - Revised powerplant and tunnel location.
Exhibit L - Sheet 21 - Revised generator capacity.
Exhibit L - Sheet 22 - Revised bus capacity.
Exhibit L - Sheet 24 - Revised generator and transformer capacity.
Exhibit L - Sheet 26 - Revised tunnel location.
Exhibit L - Sheet 27 - Revised powerplant and tunnel location.
Exhibit L - Sheet 28 - Revised transformer capacity.
Exhibit L - Sheet 30 - Revised powerplant elevation.
Exhibit L - Sheet 31 - Revised generator and transformer capacity.
Exhibit L - Sheet 31a - Added Ralston Afterbay.
Exhibit L - Sheet 31b - Oxbow Powerplant (plans and sections)
Exhibit L - Sheet 32 - Deleted exhibit.
Exhibit L - Sheet 33 - Deleted exhibit.
Exhibit L - Sheet 34 - Deleted exhibit.
Exhibit L - Sheet 35 - Deleted exhibit.
Exhibit L - Sheet 36 - Deleted exhibit.
Exhibit L - Sheet 37 - Deleted exhibit.
Exhibit L - Sheet 38 - Deleted exhibit.
Exhibit L - Sheet 39 - Deleted exhibit.
Exhibit L - Sheet 40 - Deleted exhibit.
Exhibit L - Sheet 41 - General revision.
Exhibit L - Sheet 42 - General revision.
Exhibit M - Revised description of electrical and mechanical equipment and added Oxbow Powerplant.

Exhibit N - Revised to reflect the changes described herein.

Exhibit O - Sheet 1 - American Bar Dam, Powerplant and Afterbay deleted. Ralston Afterbay Dam and Oxbow Powerplant added.

Exhibit O - Sheet 2 - American Bar Dam deleted.

Enclosed herewith as a part of this revision of the application for license for Project 2079 are an original and nineteen conformed copies of all revisions noted herein and dated August 1, 1962.

Very truly yours,

PLACER COUNTY WATER AGENCY

Frank J. Paoli, Chairman
23 March 1962

The Federal Power Commission
Washington 25, D. C.

Subject: Application for License - Project 2079

Gentlemen:

The Placer County Water Agency, having conducted the required surveys and geologic investigations and completed preliminary designs on its Middle Fork American River Project under permit number 2079, herewith respectfully submits application for a license. This application has been prepared in conformity with Rules of Practice and Procedure, Regulations under the Federal Power Act and in compliance with said rules. One executed copy and 19 conformed copies of the application together with tracings and one print each of all maps, drawings and charts are filed herewith.

Two copies of the application and two prints of each of the tracings have been forwarded to the Federal Power Commission Regional Office in San Francisco.

Application for the preliminary permit was filed by the County of Placer on March 29, 1951, and amended August 6, 1958, by its successor for the development of water and power projects, the Placer County Water Agency. The preliminary permit was issued effective December 1, 1959. On June 27, 1961, request was made to further amend the application by filing amended Exhibits "H" and "I" for the purpose of effecting the withdrawal of additional lands of the United States which investigations and surveys have shown to be required for the project. Upon request by the Agency, the Commission, on September 15, 1961, extended the time of the Preliminary Permit to and including November 30, 1962.

As required by the terms and conditions of the Preliminary Permit, the Agency has accomplished the following:

1. In cooperation with and under the direction of the U. S. Geological Survey, installed and maintained two stream-gaging stations.

2. Conducted geologic and soils investigations by sinking test pits and making borings and performing related engineering work.
3. Submitted progress reports each six months to the Regional Director, Federal Power Commission, San Francisco, California.

4. Consulted regional and local officers of the United States Forest Service and complied with requirements relative to surveys and explorations. Discussions are now in progress directed toward concluding a Memorandum of Agreement.

5. Conducted negotiations with California Department of Fish and Game and the United States Fish and Wildlife Service relative to flow releases for the enhancement of fish and wildlife resources. Agreements have been reached as demonstrated by Exhibits E-3 and E-4.

6. Consulted the University of California, Department of Anthropology and made arrangements for any archeological surveys and excavations that may be required to be carried out at the appropriate time.

In addition to the foregoing required actions, the following arrangements have been achieved:

1. Negotiations have been carried out with the U.S. Bureau of Reclamation culminating in an agreement as evidenced by Exhibits E-1 and E-2.

2. Negotiations with the Pacific Gas and Electric Company regarding the sale by the Agency and purchase by the Company of project capacity and energy have resulted in a statement of intent by the Company; see letter and attachments in the Appendix to this application.

The agency is prepared, if required and requested by the Commission, to promptly submit supporting data for the technical aspects of the attached application for a license.

Very truly yours,

PLACER COUNTY WATER AGENCY

Frank J. Paoli, Chairman