

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

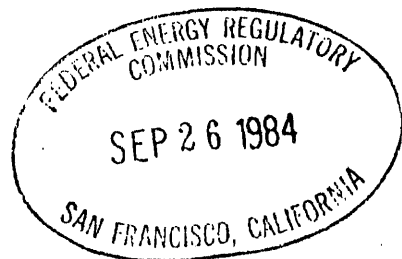
State of California Department) Project No. 2100-024
of Water Resources)

ORDER AMENDING LICENSE

(Issued September 18, 1984)

On November 21, 1983, the State of California Department of Water Resources (Licensee) filed an application to amend the license for the Feather River Project, FERC No. 2100. 1/ The amendment relates to the Thermalito Diversion Dam Powerplant and to management of Feather River fish and wildlife resources. Licensee requests: (1) that compliance with the Agreement Concerning the Operation of the Oroville Division of the State Water Project for Management of Fish and Wildlife between Licensee and the California Department of Fish and Game (DFG) dated August 26, 1983, shall constitute full compliance with Articles 29, 30, 43, 45 2/, 46 and 47 of the license for Project No. 2100; (2) that Article 29 be modified such that Licensee is not obligated to maintain a minimum flow of 600 cubic feet per second (cfs) in the Feather River downstream from the Thermalito Diversion Dam and the Feather River Fish Hatchery until after the Thermalito Diversion Dam Powerplant becomes operational; and (3) that Article 29 be modified by deleting the requirement that the Licensee prepare and submit a study to the Commission describing the impact of the 600-cfs flow on fish and wildlife resources of the Feather River.

- 1/ Authority to act on this matter is delegated to the Director, Office of Hydropower Licensing, under §375.314 of the Commission's regulations, 49 Fed. Reg. 29,369 (1984) (Errata issued July 27, 1984) (to be codified at 18 C.F.R. § 375.314). This order may be appealed to the Commission by any party within 30 days of its issuance pursuant to Rule 1902, 18 C.F.R. 385.1902, (1983). Filing an appeal and final Commission action on that appeal are prerequisites for filing an application for rehearing as provided in Section 313(a) of the Act. Filing an appeal does not operate as a stay of the effective date of this order or of any other date specified in this order, except as specifically directed by the Commission.
- 2/ Article 45 was deleted from the license for Project No. 2100 and replaced by Article 53 in the Order Amending License for Project No. 2100, dated September 30, 1980.



DC-A-11

Folsom - PSD-S
 — Barb — Lutz
 — Chas — Kern
 — Chen — Buch
 — Baka — Gami
 — Raut
 — HLCTS

-2-

The agreement between Licensee and DFG, dated August 26, 1983, is a revised and an updated version of the fish and wildlife agreement executed by Licensee and DFG, and filed for Commission approval by letter dated June 6, 1968. Licensee states that the August 26, 1983, agreement is more applicable to present operations and goals of Licensee and DFG.

Article 29

Article 29 requires Licensee to maintain a minimum flow of 600 cfs in the Feather River downstream from the Thermalito Diversion Dam project works and the Feather River Fish Hatchery 1/, and to determine the impacts of this minimum flow on fish and wildlife resources of the Feather River within 18 months of the Commission's Order Amending License for Project No. 2100, dated October 18, 1982. Licensee states that Article 29 could be interpreted to require the immediate release of a 600-cfs minimum flow at the site of the proposed Thermalito Diversion Dam Powerplant.

Licensee opposes releasing the 600-cfs flow prior to completion of the powerplant because it would be impossible to evaluate the impacts of operation of the powerplant on fish and wildlife at different flow levels when the powerplant is not yet in existence and that the additional 200-cfs flow is intended for fishery enhancement rather than mitigation. Further, requiring release of the 600-cfs flow at the powerhouse site prior to operation would result in the net annual reduction of power output from Licensee's Oroville facilities of 14,670,000 kilowatt hours. The updated fish and wildlife agreement specifically states that the 600-cfs flow shall not be released until the new powerhouse becomes operational.

Licensee requests that the fishery study required by Article 29 be deleted. Licensee and DFG believe that a 1-year study period is unrealistic since anadromous fish have up to a 5-year reproductive cycle, depending on the species. Further, impacts directly attributable to project operation would be masked by present fishery management practices, which include planting in excess of 14 million young salmon and trout in the Feather River and the manipulation of gravel riffles and pools to maximize fish production. Therefore, a fishery study to determine the impact of the minimum flow regime appears unwarranted.

Licensee's requests that Article 29 be amended to clarify that release of a 600-cfs minimum flow is not required until the powerplant is operational and to delete the requirement for a fishery impact study are granted herein.

- 1/ Prior to the Order Amending License for Project No. 2100, dated October 18, 1982, the required flow release was 400 cfs.

FILE COPIES
 KOPFLER
 FOLSOM
 GAMBLE
 LEACH
 HLCTS

P-2100-024
 Licensee File

10/27
 #27

Article 30

Article 30 requires Licensee to maintain a constant flow rate in the Feather River from the existing Sutter Butte Diversion Dam during the salmon spawning period, and to undertake measures to increase the spawning and summer holding capacity of the remaining stream areas available to salmon as determined by Licensee, DFG, and the Secretary of the Interior (Interior).

Article 30 is hereby deleted from the license for Project No. 2100, as the non-project Sutter Butte Dam no longer exists. Flows are presently maintained pursuant to Articles 29 and 53.

Article 43

Article 43 requires Licensee, for the conservation and development of fish and wildlife resources, to construct, maintain and operate, or arrange for the construction, maintenance or operation of such facilities and comply with such reasonable modifications of project structures and operations as may be ordered by the Commission upon its own motion or recommendations of Interior or DFG.

Article 43 cannot be satisfied by the provisions of the updated agreement. Article 43 provides for changes to the project that may be needed in the future to protect and enhance fish and wildlife resources. Issuance of an order stating that the agreement complies fully with Article 43 would preclude the Licensee from any further responsibility for protection and enhancement of project area fish and wildlife resources except as outlined in the agreement.

Article 46

Article 46 requires Licensee to prevent damage to fish and wildlife resources resulting from construction and operation of the project, and that special precautions be taken to prevent pollutants from entering the Feather River, protect gravel in the Feather River downstream from the Thermalito Diversion Dam, and to prevent project borrow areas from becoming sources of silts or fines.

The updated agreement specifies with greater detail the duties of Licensee and DFG with respect to spawning gravel maintenance. The agreement states that each year by June 1, DFG will recommend to Licensee for mutual agreement a spawning gravel maintenance program to be implemented that calendar year. Therefore, execution of the provisions of the updated agreement will generally comply with Article 46.

Article 47

Article 47 requires Licensee to permit the United States or its designated agency to manage project lands, water areas, and waterways, as may be necessary to prevent and alleviate waterfowl crop-depredation damages on land adjoining the project.

Issuance of an order stating that the updated agreement complies with Article 47 would preclude the Federal government from protecting crops on lands adjoining the project should the need arise. Further, the updated agreement does not specifically address this article.

Article 53

Article 53 specifies minimum flow releases from the Thermalito Afterbay River Outlet in accordance with an agreement between Licensee and DFG, dated July 19, 1967. The updated agreement clarifies the flow table in Article 53 to delete a redundant section. The revised flow table specifies flow regimes for a below-normal water year and for normal and above-normal water years.

Article 53 is, therefore, revised herein to reflect the flows of the updated agreement.

Conclusion

Execution of the provisions of the updated agreement will generally satisfy compliance with Articles 29 and 53, as amended herein, and Article 46, and will provide for protection and enhancement of fish and wildlife resources of the Feather River. Further, Article 43 of the license provides a mechanism for any future measures deemed necessary for the protection and enhancement of fish and wildlife resources at Project No. 2100. Approval of this action will not constitute a major Federal action significantly affecting the quality of the human environment.

It is ordered that:

(A) Article 29 of the license be revised to read as follows:

Article 29. Licensee shall operate the project works in such a manner so as to maintain a minimum flow of 600 cubic feet per second (cfs), within the Feather River downstream from the Thermalito Diversion Dam and the Feather River Fish Hatchery, upon completion of construction of the Thermalito Diversion Dam powerplant, for the protection and enhancement of fish and wildlife resources in the Feather River. A minimum flow of 400 cfs shall be provided until the completion of construction of the powerplant. These flows may be temporarily modified if required by operating emergencies beyond the control of Licensee, and for short periods upon mutual agreement between Licensee and the California Department of Fish and Game.

(B) Article 30 of the license is hereby deleted.

(C) Article 53 of the license be amended to read as follows:

Article 53. Based upon the April through July unimpaired runoff of the Feather River near Oroville of the preceding water year (October 1 through September 30), Licensee shall release water from the Thermalito Afterbay river outlet necessary to maintain flows in the Feather River immediately below said outlet and to the mouth of the Feather River at Verona in accordance with the following schedule, provided that such additional releases will not cause Oroville Reservoir to be drawn below elevation 733 feet (approximately 1,500,000 acre-feet).

The Preceding April through July Unimpaired Runoff 1/ of the Feather River near Oroville, Percent of Normal 2/	Minimum Flow Schedule in Feather River Below Thermalito Afterbay		
	October through February	March	April through September
55% or greater	1,700 cfs	1,700 cfs	1,000 cfs
Less than 55%	1,200 cfs	1,000 cfs	1,000 cfs

1974

1/ As computed for inclusion in Water Resources' Bulletin 120, "Water Conditions in California-Fall Report."

2/ Normal is defined as the April through July 1911-1960 mean unimpaired runoff near Oroville of 1,942,000 acre-feet.

If the April 1 runoff forecast in a given water year indicates that, under normal operation of Project 2100, the reservoir level will be drawn to elevation 733 feet (approximately 1,500,000 acre-feet), releases for fish life in the above schedule may suffer monthly deficiencies in the same proportion as the respective monthly deficiencies imposed upon deliveries of water for agricultural use from the Project. However, in no case shall the fish water releases in the above schedule be reduced by more than 25 percent.

(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 385.1902 of the Commission's regulations, 18 C.P.R. 385.1902 (1983).

Quentin A. Edson
Director, Office of
Hydropower Licensing