

148 FERC ¶ 62,235
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

California Department of Water Resources
Los Angeles Department of Water and Power

Project No. 2426-218

ORDER AMENDING LICENSE AND REVISING ANNUAL CHARGES

(Issued September 30, 2014)

1. On January 15, 2014, and supplemented on April 22 and May 30, 2014, the California Department of Water Resources (DWR), licensee for the South SWP Hydropower Project No. 2426 (South SWP Project),¹ filed an application for a non-capacity amendment to conform the license to the separate issuance of conduit exemptions for the 17,000-kilowatt (kW) Alamo Powerplant and 32,400-kW Mojave Siphon Powerplant, facilities currently licensed under the South SWP Project. This requires removal of the Alamo Power Drop Development (Alamo Development) and Mojave Siphon Development from the license. The project is located on the State Water Project in San Bernardino, Los Angeles, San Luis Obispo, Ventura, and Kern Counties, California, and occupies lands within the Angeles and Los Padres National Forests.
2. DWR concurrently filed two applications² to exempt the Alamo Powerplant Project No. 14579 and the Mojave Siphon Powerplant Project No. 14580 from the licensing requirements set forth in Part I of the Federal Power Act as small conduit hydroelectric facilities.³

¹ *Cal. Dep't of Water Res. and City of Los Angeles Dep't of Water and Power*, 2 FERC ¶ 61,258 (1978) (*Cal. DWR*) (original license); 136 FERC ¶ 62,017 (2011) (changing the project name from "California Aqueduct Pump Storage Project" to "South SWP Hydropower Project").

² Final Applications for Exemption for Small Conduit Hydroelectric Facility filed on January 15, 2014, under Project Nos. 14579-000 and 14580-000.

³ Under Part I of the Federal Power Act (FPA), 16 U.S.C. §§ 792-823 (2012), the Commission issues licenses to non-federal interests authorizing the construction, operation, and maintenance of water power projects on navigable waters of the United States, on federal lands, and on streams subject to Congress' jurisdiction. Pursuant to section 30 of the FPA, the Commission is authorized to partially or completely exempt

3. As discussed below, I am amending the license. The conduit exemptions are granted in separate orders.⁴

Background

Project Facilities

4. The South SWP Project (formerly the California Aqueduct Project) was originally licensed to the California Department of Water Resources and the City of Los Angeles Department of Water and Power (LADWP) on March 22, 1978.⁵ The license, as amended, authorized the construction of six hydroelectric developments on the existing California Aqueduct, now known as the State Water Project.⁶ The State Water Project delivers an annual average flow of approximately 2.5 million acre-feet of water from

from the licensing requirements of Part I of the FPA any facility (not including a dam or other impoundment) that is constructed, operated, or maintained for the generation of electric power and uses for generation only the hydroelectric potential of a manmade conduit, which is operated for the distribution of water for agricultural, municipal, or industrial consumption, and not primarily for the generation of electricity. 16 U.S.C. § 823a(b) (2012), *amended by* Hydropower Regulatory Efficiency Act of 2013, Pub. L. No. 113-23, § 4, 127 Stat. 493, 494–95 (2013).

⁴ *Cal. DWR*, 148 FERC ¶ 62,236 (2014) (granting exemption for the Alamo Powerplant Project No. 14579); *Cal. DWR*, 148 FERC ¶ 62,237 (2014) (granting exemption for the Mojave Siphon Powerplant Project No. 14580).

⁵ *Cal. DWR*, 2 FERC ¶ 61,258 (1978). The Los Angeles Department of Water and Power is joint licensee to the extent of its interest in the Castaic Pump Storage Facility. *Id.* at 61,604 ordering para. (A). The license was made effective February 1, 1972, with an expiration date of January 31, 2022. *Id.*

⁶ The developments are Alamo Power Drop (formerly Cottonwood), Mojave Siphon, and Devil Canyon Power Drop on the East Branch; Warne (formerly Pyramid) and Castaic Power Drops on the West Branch; and the never-constructed San Luis Obispo Power Drop on the Coastal Branch. *Cal. DWR.*, 2 FERC ¶ 61,258 (1978) (issuing the original license for the California Aqueduct Project); 20 FERC ¶ 62,266 (1982) (adding the Mojave Siphon Development with 7.2 megawatts); 51 FERC ¶ 62,090 (1990) (increasing Mojave Siphon Development capacity to 32.4 megawatts); 75 FERC ¶ 62,091 (1996) (deleting the San Luis Obispo Power Drop Development from the project); 75 FERC ¶ 62,216 (1996) (increasing Alamo Development capacity from 15,000 kilowatts to 17,000 kilowatts); 136 FERC ¶ 62,017 (2011) (changing project name to South SWP Hydropower Project).

Northern California's Feather River watershed through 20 pumping plants, 34 storage facilities, and over 700 miles of aqueducts and pipelines for delivery to municipal, industrial, and agricultural users in the surrounding areas and into Southern California. After carrying water south over the Tehachapi Mountains, the aqueduct bifurcates into the West and East Branches. The East Branch is a 141-mile-long system of canals and buried pipelines which terminates at Lake Perris. Three hydroelectric developments are located along the East Branch: the Alamo Power Drop, Mojave Siphon, and Devil Canyon Power Drop Developments.

5. The Alamo Development is located nine miles east of the town of Gorman, California. Its project works consist of an intake structure; a 17-foot-diameter, 41,000-foot-long steel penstock; a powerhouse containing a 17,000-kW generator connected to a 2,300-horsepower Kaplan turbine at a net effective head of 133 feet; and a 2-mile, 66-kilovolt (kV) transmission line.

6. The Mojave Siphon Development is located downstream in San Bernardino County, 10 miles north of the City of San Bernardino. Its project works consist of an intake structure; an 18-foot-diameter, 2.36-mile-long buried pipeline; an 18-foot-diameter, 600-foot-long buried penstock; a powerhouse containing three 10.8-megawatt (MW) generating units with a total installed capacity of 32.4 MW connected to a 9,600-horsepower Kaplan turbine with a design head of 85 feet; an 18-foot-diameter, 480-foot-long discharge tunnel; the 17-foot-diameter Mojave Siphon tunnel; and a 0.1-mile-long, 115-kV transmission line. The Mojave Siphon Development discharges into Silverwood Lake. Silverwood Lake is used to store water for irrigation, municipal, and recreational purposes.⁷ It is also the main water supply for the city of Los Angeles.⁸

7. The Devil Canyon Power Drop Development is located downstream approximately five miles south of Silverwood Lake. This development would continue to be licensed as part of the South SWP Project and is not described further.

Existing Operation

8. Though the South SWP Project was designed to be an integral component of the State Water Project, electricity generation is secondary to the purpose of delivering water for municipal, industrial, and agricultural use. Overall the State Water Project uses more energy than it produces. The hydroelectric developments provide a portion of the needed electricity at a lower cost than replacement power sources. DWR benefits most by using pumped storage facilities to arbitrage on-peak and off-peak electricity prices. "Run-of-

⁷ *Cal. DWR*, 51 FERC at 63,104.

⁸ *Id.* at 63,106.

aqueduct” facilities, by contrast, generate electricity continuously from the unaltered, passing flow.

9. The Alamo Development operates on a “run-of-aqueduct” basis whereby flows enter from the State Water Project into two short-term-storage forebays, pass through the single generating unit, and discharge back into the State Water Project for conveyance downstream. The net effective head of 133 feet derives from elevation change in the aqueduct, not from storage. The State Water Project in this area is a concrete-lined, open water canal.

10. The downstream Mojave Siphon Development operates on a “run-of-aqueduct” basis whereby flows enter from the State Water Project, pass through the three generating units, and discharge into Silverwood Lake.

11. Silverwood Lake is a forebay to the Devil Canyon powerplant, which has the same design capacity as the aqueduct system upstream. By manipulating the elevation of Lake Silverwood, DWR temporarily stores off-peak aqueduct flows for later on-peak release through the Devil Canyon powerplant.⁹ The Devil Canyon Development, including Silverwood Lake, would remain licensed under the South SWP Project and would continue to operate in this mode.

Proposed Action

12. DWR seeks to amend the license for the South SWP Project to conform to the separate issuance of conduit exemptions for the Alamo Powerplant Project No. 14579 and Mojave Siphon Powerplant Project No. 14580 as small conduit hydroelectric facilities. This amendment requires the removal of the Alamo and Mojave Siphon Developments from the license.

13. As exemptee for the Alamo Powerplant and Mojave Siphon Powerplant Projects, DWR would continue to operate these facilities in a “run-of-aqueduct” mode with no additional or alternate impacts to the downstream Devil Canyon Power Drop Development. The proposed amendment would not change the timing, location, or amount of water distributed to the licensee’s customers.

14. Removing these developments would reduce the total installed capacity of the South SWP Project by 49,400 kW from the present 1,679,100 kW to 1,629,700 kW. This decrease would come entirely from the portion of the total authorized installed capacity

⁹ *Cal. DWR*, 54 FPC 529, at 604-605 (reproducing Initial Decision issued January 14, 1972)

attributable to DWR rather than to LADWP, reducing this portion of the capacity from 404,100 kW to 354,700 kW.

15. The amendment of the South SWP Project would result in the removal of waters and lands from the project boundary including 119.1 acres of lands near the Alamo Development, which are owned in fee by the DWR, and 153.4 acres of lands near the Mojave Siphon Development, which include land and permanent pipeline easements owned in fee by DWR. These lands would no longer be needed to operate and maintain the amended the South SWP Project and would not become part of the exempted projects.

Consultation

16. Prior to filing the amendment application, DWR consulted with state and federal resource agencies, Indian tribes, and other interested entities. DWR incorporated or responded to all of the comments in the final amendment application that was filed with the Commission.

Public Notice

17. On June 12, 2014, Commission staff published a notice in the *Federal Register* accepting California DWR's application to amend the license and soliciting motions to intervene and protests, indicating that the application was ready for environmental analysis, and soliciting comments, recommendations, and terms and conditions.¹⁰ The notice established August 5, 2014, as the deadline for filing comments and motions to intervene. The California State Water Resources Control Board filed a timely, unopposed notice of intervention.¹¹ Kenneth Kules and the Metropolitan Water District of Southern California filed timely, unopposed motions to intervene.¹² None of the

¹⁰ 79 Fed. Reg. 33,749-50 (2014). In the prior year DWR provided the U.S. Fish and Wildlife Service (FWS) with a copy of the Initial Consultation Document on June 7, 2013, and requested comments by September 9, 2013. The document included the non-capacity license amendment application and the conduit exemption applications for the Alamo Powerplant Project and Mojave Siphon Powerplant Project. DWR did not receive any comments from FWS on the ICD.

¹¹ Timely notices of intervention filed by any state fish and wildlife, water quality certification, or water rights agency are granted by operation of Rule 214(a)(2) of the Commission's regulations. 18 C.F.R. § 385.214(a)(2) (2014).

¹² Timely, unopposed motions to intervene are granted by operation of Rule 214(c)(1) of the Commission's Rules of Practice and Procedure. 18 C.F.R. § 385.214(c)(1) (2014).

intervenors oppose the amendment. Both Kenneth Kules and the Los Angeles Department of Water and Power filed timely comments in support of the applicant's proposal. The U.S. Department of the Interior stated that it had no comments on review.

18. DWR provided the U.S. Fish and Wildlife Service (FWS) with a copy of the Initial Consultation Document (ICD) on June 7, 2013, and requested comments by September 9, 2013. The ICD includes the conduit exemption applications for Alamo Development and Mojave Siphon Development and the associated non-capacity license amendment application. DWR did not receive any comments from FWS on the ICD.

Discussion

19. So that the Commission may fulfil its obligations under the FPA, the Commission licenses *all* non-federal project works, i.e. physical structures that compose a project's complete unit of development.¹³ In an exception for unique circumstances, the Commission constrained the complete unit of development for the South SWP Project to only those facilities directly related to power generation.¹⁴ Here the applicants do not claim that the Alamo and Mojave Siphon Developments are outside the complete unit of development.

¹³ Under section 3(11) of the FPA, "'project' means complete unit of improvement or development, consisting of a power house, all water conduits, all dams and appurtenant works and structures (including navigation structures) which are part of said unit, and all storage, diverting, or forebay reservoirs directly connected therewith, the primary line or lines transmitting power therefrom to the point of junction with the distribution system or with the interconnected primary transmission system, all miscellaneous structures used and useful in connection with said unit or any part thereof, and all water rights, rights-of-way, ditches, dams, reservoirs, lands, or interest in lands the use and occupancy of which are necessary or appropriate in the maintenance and operation of such unit." 16 U.S.C. § 796(11) (2012).

¹⁴ *Cal. DWR*, 51 FPC 529, at 534 (1974). The Commission remanded a 1972 Initial Decision which included as South SWP Project works "all features necessary to transport water some 475 miles . . . for delivery of water both at termini and at Canal-side points enroute . . ." *Id.* at 615 (reproducing Initial Decision ordering para. (B)(ii)). The Commission clarified that only those portions of the project involving power generation were subject to licensing. *Id.* at 534; *Cal. DWR*, 2 FERC ¶ 61,258, at 61,604 ordering para (B)(ii) (1978) (issuing original license and accepting preceding decisions to limit licensed project works to two constructed and three unconstructed hydroelectric power developments).

20. Though the complete unit of development must be licensed, the Commission is not required to place all parts of the unit of development under a single license.¹⁵ The Commission has explained that “while the various features of a single unit of development may in some circumstances be under different licenses, the key point is that all features of a complete unit of development, a project, must be under Commission license, to enable regulation of the project under the comprehensive development standards of the FPA.”¹⁶ Under separated but complete licenses, the Commission remains able to give equal consideration to the purposes of energy conservation, fish and wildlife conservation, environmental quality, recreation, commerce, and beneficial public uses like irrigation, flood control, and water supply, within the meaning of sections 4(e) and 10(a) of the statute.¹⁷

21. Here the Commission considers for the first time whether to allow the separation of a complete unit of development into multiple exemptions rather than multiple licenses.¹⁸ Because exemptions are a limited form of licensure,¹⁹ the Commission must consider the details of DWR’s requests to ensure that the Commission would remain able to regulate the project and satisfy the comprehensive development standards of the FPA.

¹⁵ See, e.g., *Turlock Irrigation Dist.*, 144 FERC ¶ 61,051, at P 37 (2013); *Chippewa and Flambeau Improvement Co.*, 78 FERC ¶ 62,088 (1997), *order on reh'g*, 85 FERC ¶ 61,234 (1998), *order on remand*, 95 FERC ¶ 61,017 (2001), *order denying reh'g*, 95 FERC ¶ 61,237 (2001), *aff'd*, *Chippewa and Flambeau Improvement Co. v. FERC*, 325 F.3d 353 (D.C. Cir. 2003); *Erie Boulevard Hydropower, L.P.*, 100 FERC ¶ 61,321 (2002) (E.J. West P-2318, powerhouse and generating facilities, and Great Sacandaga Lake P-12252, reservoir and dam); *Orange and Rockland Utils.*, 44 FERC ¶ 61,236, at 61,869 n.30 (1988); *Finch, Pruyn, & Co.*, 33 FPC 321 (1965); *Susquehanna Power Co.*, 32 FPC 826 (1964).

¹⁶ *Orange and Rockland Utils.*, 44 FERC at 61,869 n.30.

¹⁷ 16 U.S.C. §§ 797(e), 803(a)(1) (2012).

¹⁸ The Commission has previously converted a licensed development into a conduit exemption while accepting the surrender of the license authorizations. See, e.g., *City of Escondido*, 140 FERC ¶ 62,226 (2012) (surrendering license for one powerhouse and exempting a second); *Mackay Bar Corp.*, 137 FERC ¶ 62,174 (2011) (surrendering license for powerhouse to be converted to an exemption and relocated); *City of Boulder, Colo.*, 133 FERC ¶ 62,125 (2010) (same).

¹⁹ 16 U.S.C. § 823a(a) (2012) (authorizing the Commission to treat certain facilities as exempt “in whole or in part” from the requirements of part 1 of the FPA).

22. The requested license amendment and conduit exemptions would not involve new construction or changes to the existing operation of any facility. DWR would continue to own and operate all facilities under the separate authorizations. To present, DWR has complied fully with the terms and conditions of the existing license. The amendment does not authorize any deviation from these terms and conditions as they apply to the retained developments. DWR also states that the proposed amendment would not change the timing, location, or amount of water distributed to the licensee's customers. Therefore, the Commission does not anticipate, nor has any comment raised, issues regarding energy conservation, commerce, or beneficial public uses like irrigation, flood control, or water supply, which would only be affected by a change in ownership or operations.

Environmental Review

23. Approving the proposed amendment and removing the lands from the project could potentially have environmental impacts. DWR consulted with federal and state resource agencies on these potential impacts and provided the results of those consultations in their filings. The Commission staff used the documentation from DWR's filings to conduct a complete review of any environmental impacts that could result from approving the amendment. Several resource areas, including threatened and endangered species, wildlife resources, water quality and quantity, recreation, and historic and cultural resources, are discussed below. Although a portion of the lands proposed for removal near the Mojave Siphon Development lie within a scenic area, no construction or physical or operational changes would occur as a result of the proposed amendment. Therefore, there would not be impacts to visual resources, and visual resources are not discussed below. Also, because there is no construction required for this amendment, there would be no impacts to vegetation and it is not discussed below. In addition, there would be no changes to existing land uses by approving this amendment application; therefore, land use is also not discussed below.

A. Threatened and Endangered Species

24. Section 7(a)(2) of the Endangered Species Act of 1973 (ESA)²⁰ requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of critical habitat. There are no FWS-designated critical habitat lands and no known listed endangered or threatened species within the lands to be removed for the Alamo Development.

²⁰ 16 U.S.C. § 1536(a) (2012).

25. FWS-designated critical habitat for the federally-listed endangered arroyo toad and the federally and state-listed endangered Southwestern willow flycatcher occurs within the northern portion of the Mojave Siphon Development pipelines and Check 66 lands proposed to be removed. In addition, a small population of arroyo toads is known to have occurred in Horsethief Creek within the Mojave Siphon pipeline easement.

26. However, the proposed amendment does not include any construction or other land-disturbing activities. Also, DWR maintains the buried pipelines of the Mojave Siphon using existing access roads and access manholes and does not need to perform debrushing activities in the FWS-designated critical habitat areas or perform any maintenance activities in Horsethief Creek for the proposed amendment. Since DWR is a California state agency, any future construction or major maintenance activities within the lands to be removed would require DWR to follow the California Environmental Quality Act²¹ (CEQA) and consult with all appropriate state and federal resource agencies on future activities. Based on this information, Commission staff conclude that removal of the lands from the Alamo and Mojave Siphon Developments from the project would have no effect on federally-listed species or their critical habitat.

B. Wildlife Resources

27. Wildlife present or near the Mojave Siphon Development consists of various reptile, avian, and mammal species. In particular, bald eagles, which are protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act, use Silverwood Lake, which is a component of the South SWP Project license to be retained, as part of their winter migration (early November through early April) to forage, perch, and roost at night. No nesting bald eagles have been observed in the lands to be removed at the Mojave Siphon Development. No changes in DWR policy or operations would occur from approving the proposed amendment; therefore, there would be no impacts to bald eagles that may use Silverwood Lake. In March 2013, DWR conducted a review of the California Department of Fish and Wildlife's California Natural Diversity Database and the FWS-maintained Species Lists to identify potential listed and special-status species in the Silverwood Lake 7.5 minute U.S. Geological Survey (USGS) quadrangle map, which includes the Mojave Siphon Development. However, because of a lack of suitable habitat in most areas none of the species identified are anticipated to occur on lands proposed to be removed. One exception is the area near Horsethief Creek. Horsethief Creek is an intermittent tributary to the West Fork of the Mojave River and provides some riparian, aquatic, and wetland habitats. The creek crosses perpendicular to a bridge of a DWR-maintained access road and through a 180.2-foot-long portion of the lands to be removed. This riparian area contained a small population of arroyo toads, discussed above, and provides suitable habitat for some aquatic species. A search for

²¹ CAL. PUB. RES. CODE § 21000–21177 (West 2014).

Southwestern pond turtles was previously conducted in the area and a report issued in September 1990 concluded that they did not find any turtles in the vicinity.

28. For the Alamo Development, the area surrounding the facility is highly disturbed with little potential suitable habitat for listed species. The March 2013 reviews of the California Natural Diversity Database and the FWS Species Lists identified potential listed and special-status species in the La Liebre Ranch 7.5 minute USGS quadrangle; however, because there is no suitable habitat none of those species are anticipated to occur on lands to be removed. There are also no wetlands or other sensitive habitats at the Alamo Development. Because any future construction or major maintenance activities within the lands to be removed at the Mojave Siphon and Alamo Developments would require DWR to follow CEQA, and since no construction or maintenance activities are part of the proposed amendment, approving the amendment would not result in any significant impacts to wildlife that may use either development.

29. Section 30(c) of the FPA²² requires the Commission to include in its conduit exemptions such terms and conditions as may be prescribed by federal and state fish and wildlife agencies to prevent loss of, or damage to, fish and wildlife resources and to otherwise carry out the purposes of the Fish and Wildlife Coordination Act.²³ The Commission solicited terms and conditions in its notice published June 12, 2014, for the two conduit exemptions that would result from approval of this amendment application. No federal or state fish and wildlife agency submitted terms and conditions for the exemptions.

C. Water Quantity and Quality

30. DWR continuously monitors the water quality and quantity of the California SWP via 16 automated, real-time data stations and several flow gauges. DWR's Bryte Chemical Laboratory analyzes water quality grab samples that are collected on a monthly basis. DWR's Division of Operations and Maintenance maintains the water quantity data. The water quality and quantity data is publically available on DWR's website through the California Data Exchange Center and the Water Data Library. Since, no construction or changes to project operation would occur with approving the proposed amendment, there would not be any changes or impacts to water quality and quantity.

²² 16 U.S.C. § 823a(C) (2012).

²³ 16 U.S.C. §§ 661-667e (2012).

D. Recreation

31. Regarding recreation, the majority of the lands proposed to be removed from the South SWP Project boundary are fenced and unavailable for public recreation. This is true of all lands to be removed from the vicinity of the Alamo Development. In the vicinity of the Mojave Siphon Development, a small portion of the lands lie outside the existing fence lines but are previously disturbed and owned by DWR. This includes a portion of the Pacific Crest Trail, which runs from Mexico to Canada. Other entities manage the trail. The above-ground Mojave Siphon Development structures are painted in desert colors to reduce impact to visual resources. Commission staff conclude that because there would be no new construction, change in access, or other activities resulting from changing the South SWP Project boundary, there would be no new effects to recreation.

32. The Mojave Siphon Powerplant Project would continue to discharge flows into Silverwood Lake, which then pass downstream through the Devil Canyon powerplant. Silverwood Lake provides important recreation opportunities including boating, picnic sites, swimming, and fishing.²⁴ Under the South SWP Project license Article 58, DWR must maintain the Silverwood Lake surface elevation at the highest, most practicable level commensurate with other project purposes during the summer recreation season.²⁵ Because DWR would continue to operate the removed facilities in a “run-of-aqueduct” mode, and because DWR would remain the licensee for the Devil Canyon Power Drop Development—which includes Silverwood Lake—as part of the amended South SWP Project, Commission staff conclude that the license amendment would not affect or impair DWR’s obligation to satisfy license Article 58.

E. Cultural Resources

33. Under section 106 of the National Historic Preservation Act (NHPA),²⁶ and its implementing regulations,²⁷ federal agencies must take into account the effect of any proposed undertaking on properties listed or eligible for listing in the National Register of Historic Places (NRHP, defined as historic properties), and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on any undertaking. This generally requires the Commission to consult with the State Historic Preservation Officer

²⁴ *Cal. DWR*, 51 FERC at 63,106-07.

²⁵ *Cal. DWR*, 2 FERC at 61,611.

²⁶ 16 U.S.C. § 470 *et seq.* (2012).

²⁷ 36 C.F.R. pt. 800 (2014).

to determine whether and how a proposed action may affect historic properties, and to seek ways to avoid or minimize any adverse effects.

34. Archeological site CA-SBR-7691, which was determined to be eligible for listing in the NRHP by a previous archeological survey, is partially located on lands near the Mojave Siphon Development to be removed by the amendment. Pursuant to section 106 of the NHPA, removing historic properties from the Commission's project boundary could constitute an adverse effect to the historic property. DWR consulted with the California State Historic Preservation Officer (California SHPO) about the proposed amendment. In a letter to the California SHPO on April 21, 2014, DWR requested concurrence with the project's Area of Potential Effect and with its finding that the proposed amendment would have no adverse effect on historic properties. In a letter dated May 23, 2014, the California SHPO stated that it did not object to the Area of Potential Effect and stated that DWR, a California state agency, is required by California state law to consult with the California SHPO if ground disturbing maintenance or construction activities are proposed in the future. The California SHPO agreed with DWR that despite the removal of the historic property from the project boundary, sufficient regulatory protections remain in place in the event that construction or maintenance is considered in the future near the historic property. Therefore, the California SHPO concurred with DWR's finding that the proposed amendment would have no adverse effect on historic properties.

35. DWR also contacted the Native American Heritage Commission (NAHC) in a March 23, 2013, letter to request a search of the Sacred Lands File to identify any sacred lands located in or near the project lands to be removed.²⁸ The NAHC Sacred Lands File search did not identify any sacred lands within or near those lands and facilities to be removed.

F. Conclusion

36. Therefore, based on information provided by DWR, agency comments, and staff's independent analysis, I find that issuance of an amendment to the license for the South SWP Project to remove certain lands from the project boundary would not constitute a major federal action significantly affecting the quality of the human environment.

²⁸ At DWR's request, NAHC also provided a list of Native American tribes and individuals/organization that could provide additional cultural resource information for those areas. DWR sent letters to the Native American contacts provided by NAHC and invited their comments on the Initial Consultation Document. DWR conducted follow-up phone calls between June 26, 2013, and June 29, 2013, and no concerns were raised.

Complete Unit of Development

37. As stated above, the Commission must consider the details of DWR's requests to ensure that, despite the separation of the complete unit of development, the Commission would remain able to regulate the project works and satisfy the comprehensive development standards of the FPA. Having considered information provided by DWR, agency comments, and staff's independent analysis, I conclude that the Alamo and Mojave Siphon Developments can be removed from the South SWP Project license and their powerplants can be reasonably operated and regulated under separate conduit exemptions without impairing the Commission's ability to satisfy the comprehensive development standard of the FPA. Therefore, this order amends the license for the South SWP Project as in the public interest.

Administrative Conditions

A. Annual Charges

38. The Commission collects annual charges from licensees for administration of the FPA. License Article 45 provides for the collection of these funds. Ordering paragraph (F) of this order revises Article 45 to reflect the removal of the Alamo and Mojave Siphon Developments' installed capacities from the installed capacity of the South SWP Project attributable to DWR to be 354,700 kW.²⁹

B. Exhibit A

39. DWR did not file a revised Exhibit A to reflect the changes due to the approval of the proposed amendment. Ordering paragraph (G) requires DWR to file a revised Exhibit A.

C. Exhibit F and G Drawings

40. DWR did not file revised Exhibit F drawings because there are no changes as a result of this amendment to the Exhibit F drawings for the developments remaining licensed under the South SWP Project. DWR filed revised Exhibit G drawings for the South SWP Project to reflect the separation and removal of the Alamo and Mojave Siphon Developments. Commission staff reviewed and georeferenced the drawings, and found that they conform to the Commission's regulations, with the exception of being stamped by a registered land surveyor; however, DWR committed to having the drawings

²⁹ The Commission expressed capacity in horsepower in the original license. The Commission currently uses kilowatts measurement to determine annual charges. 18 C.F.R. § 11.1 (2014).

stamped following approval. Ordering paragraph (C) approves the revised Exhibit G drawings and requires DWR to have the drawings stamped by a registered land surveyor, and ordering paragraph (D) requires DWR to file the approved drawings in electronic file format. In ordering paragraph (E), Commission staff are deleting those drawings associated with the facilities that would no longer be licensed under the South SWP Project.

The Director orders:

(A) The California Department of Water Resources' request to amend the license for the South SWP Hydroelectric Project No. 2426 to conform to the issuance of conduit exemptions for the Alamo Powerplant Project No. 14579 and Mojave Siphon Powerplant Project No. 14580, which requires the removal of the Alamo Power Drop Development and the Mojave Siphon Development from the license, is approved, as described by this order.

(B) The project description for the South SWP Hydropower Project No. 2426 set forth in ordering paragraph (B)(ii) of the March 22, 1978 order issuing original license, as amended,³⁰ is revised to read as follows:

(ii) project works including: (1) the *Devil Canyon Power Drop* consisting of Cedar Springs Dam and the 74,970 acre-foot capacity Silverwood Lake; the 20,120-foot-long, 12.75-foot-diameter San Bernardino Tunnel; a 1.3-mile-long, 10-foot-diameter steel penstock; a 1.3-mile-long, 12-foot-diameter steel penstock; a powerhouse containing four generating units, two 59.85 MW units and two 80 MW units, with a total installed capacity of 279.70 MW; two tail race channels; a 640-foot-long, 115-kV transmission line; 13.2-kV leads for generators 3 and 4; and two 13.2/115-kV, 72/96 MVA step-up transformers; (2) the *Castaic Power Drop* consisting of Pyramid Dam, and the 179,000 acre-foot capacity Pyramid Lake; the 30-foot-diameter, 38,500-foot-long Angeles Tunnel; six 13.5-foot-diameter, and one 6.5-foot-diameter surface steel penstocks each 2,400-foot-long; six 200-MW reversible pump turbines and motor-generators, and one 50-MW pump-starting unit; the 30,000 acre-foot Elderberry Forebay which serves as the lower pool; and 11.4 miles of 230-kV transmission line from the Castaic Switch yard to Haskell Junction; (3) the *Warne Power Drop* consisting of Quail Lake, a 6,085 acre-foot capacity storage reservoir; an outlet structure; Quail Canal, 2.6 miles long with a capacity of 1,550 cfs; one 12-foot-diameter buried concrete pipe,

³⁰ The project description was amended in *Cal. DWR*, 20 FERC ¶ 62,266 (1982); *Cal. DWR*, 51 FERC ¶ 62,090 (1990); *Cal. DWR*, 75 FERC ¶ 62,091 (1996); and *Cal. DWR*, 75 FERC ¶ 62,216 (1996).

5.6 miles long, which would bifurcate into two 8.6-foot-diameter buried steel penstocks at the powerhouse; two 37.5-MW generators connected to an impulse-type turbine operating under a static head of 739 feet; 3 miles of 220-kV transmission line; and a tailrace channel; (4) recreational developments; and (5) appurtenant facilities.

(C) The following exhibit drawings, filed on January 15, 2014, once stamped by a registered land surveyor, conform to the Commission's rules and regulations, and are approved and made part of the license:

Exhibit	FERC Drawing No.	Superseded FERC Drawing No.	Title
G-1	2426-501	2426-383 2426-384	East Branch Boundary Map
G-2	2426-502	2426-461 2426-462	East Branch Boundary Map

(D) Within 45 days of the date of issuance of this order, as directed below, the licensee must have the drawings stamped by a registered land surveyor and file two sets of the approved exhibit drawings, form FERC-587, and GIS data in electronic file format on CD disks with the Secretary of the Commission, ATTN: OEP/DHAC.

a) Digital images of the approved exhibit drawings must be prepared in electronic format. Prior to preparing the digital images, the FERC Project-Drawing Number (i.e., P-2426-500 and P-2426-501) must be shown in the margin below the title block of the approved drawing. Each drawing must be a separate electronic file, and the file name must include: FERC Project-Drawing Number, FERC Exhibit, Drawing Title, date of this order, and file extension in the following format [P-2426-500, G-1, East Branch Project Boundary Map, MM-DD-YYYY.TIF].

Each Exhibit G drawing that includes the project boundary must contain a minimum of three known reference points (i.e., latitude and longitude coordinates, or state plane coordinates). The points must be arranged in a triangular format for GIS georeferencing the project boundary drawing to the polygon data, and must be based on a standard map coordinate system. The spatial reference for the drawing (i.e., map projection, map datum, and units of measurement) must be identified on the drawing and each reference point must be labeled. In addition, each project boundary drawing must be stamped by a registered land surveyor. All digital images of the exhibit drawings must meet the following format specification:

IMAGERY: black & white raster file
FILE TYPE: Tagged Image File Format, (TIFF) CCITT Group 4
(also known as T.6 coding scheme)

RESOLUTION: 300 dpi desired, (200 dpi min)
SIZE FORMAT: 22" x 34" (min), 24" x 36" (max)
FILE SIZE: less than 1 MB desired

A third set (Exhibit G only) and a copy of Form FERC-587 must be filed with the Bureau of Land Management office at the following address:

Bureau of Land Management
Branch of Adjudication and Records (CA-943.5)
2800 Cottage Way, Suite W1623
Sacramento, CA 95825-1886
ATTN: FERC Withdrawal Recordation

Form FERC-587 is available through the Commission's website at the following URL: <http://www.ferc.gov/docs-filing/forms/form-587/form-587.pdf>. Although instruction no. 3 requires microfilm copies of the project boundary maps in aperture card format, electronic copies that meet the digital specifications in this ordering paragraph should be substituted. If the FERC-587 cannot be downloaded from the Internet, a hard copy may be obtained by mailing a request to the Secretary of the Commission.

b) Project boundary GIS data must be in a georeferenced electronic file format (such as ArcView shape files, GeoMedia files, MapInfo files, or a similar GIS format). The filing must include both polygon data and all reference points shown on the individual project boundary drawings. An electronic boundary polygon data file(s) is required for each project development. Depending on the electronic file format, the polygon and point data can be included in single files with multiple layers. The georeferenced electronic boundary data file must be positionally accurate to ± 40 feet in order to comply with National Map Accuracy Standards for maps at a 1:24,000 scale. The file name(s) must include: FERC Project Number, data description, date of this license, and file extension in the following format [P-2426, boundary polygon/or point data, MM-DD-YYYY.SHP]. The filing must be accompanied by a separate text file describing the spatial reference for the georeferenced data: map projection used (i.e., UTM, State Plane, Decimal Degrees, etc.), the map datum (i.e., North American 27, North American 83, etc.), and the units of measurement (i.e., feet, meters, miles, etc.). The text file name must include: FERC Project Number, data description, date of this license, and file extension in the following format [P-2426, project boundary metadata, MM-DD-YYYY.TXT].

In addition, for those projects that occupy federal lands, a separate georeferenced polygon file(s) is required that identifies transmission line acreage and non-transmission line acreage affecting federal lands for the purpose of meeting the requirements of 18 CFR §11.2. The file(s) must also identify each federal owner (e.g., BLM, USFS, Corps of Engineers, etc.), land identification (e.g., forest name, Section 24 lands, national park

name, etc.), and federal acreage affected by the project boundary. Depending on the georeferenced electronic file format, the polygon, point, and federal lands data can be included in a single file with multiple layers.

(E) The following exhibits are deleted from the South SWP Hydroelectric Project No. 2426:

Exhibit	FERC Drawing No.	Title
L-42-e	2426-432	Alamo Powerplant Plan and Profile
L-43-f	2426-433	Alamo Powerplant Plan and Section
F-1	2426-306	Mojave Siphon Powerplant General Plan and Profile
F-1	2426-434	Mojave Siphon Powerplant General Plan and Profile
F-1A	2426-435	Mojave Siphon Powerplant General Site Plan
F-1B	2426-480	Mojave Siphon Powerplant Valve Vaults General Plan
F-1C	2426-478	Mojave Siphon Powerplant Valve Vaults Conceptual Views
F-2	2426-307	Mojave Siphon Powerplant Intake Plan and Section
F-2	2426-438	Mojave Siphon Powerplant Intake Plan and Section
F-2A	2426-439	Mojave Siphon Powerplant Plan and Profile
F-2B	2426-440	Mojave Siphon Powerplant Plan and Profile
F-2C	2426-441	Mojave Siphon Powerplant Plan and Profile
F-2D	2426-442	Mojave Siphon Powerplant Plan and Profile
F-2E	2426-443	Mojave Siphon Powerplant Plan and Profile
F-2F	2426-444	Mojave Siphon Powerplant Plan and Profile
F-2G	2426-445	Mojave Siphon Powerplant Plan and Profile
F-2H	2426-446	Mojave Siphon Powerplant Plan and Profile

Exhibit	FERC Drawing No.	Title
F-2I	2426-479	Mojave Siphon Powerplant Valve Vaults Plan and Profile
F-2J	2426-448	Mojave Siphon Powerplant Typical Section
F-2K	2426-449	Mojave Siphon Powerplant Temporary Diversion Plan and Sections
F-3	2426-308	Mojave Siphon Powerplant Plan and Transverse Sections
F-3	2426-482	Mojave Siphon Powerplant Valve and Vaults Manifold Plan
F-4	2426-309	Mojave Siphon Powerplant Tunnel Elevation and Sections
F-4A	2426-451	Mojave Siphon Powerplant Floor Plan – Elev. 3214.00
F-4B	2426-452	Mojave Siphon Powerplant Floor Plan – Elev. 3198.00
F-4C	2426-453	Mojave Siphon Powerplant Floor Plan – Elev. 3182.00
F-4D	2426-454	Mojave Siphon Powerplant Transverse Section
F-5	2426-310	Mojave Siphon Powerplant Single Line Diagram
F-5	2426-455	Mojave Siphon Powerplant Tunnel – Elevation and Section
F-5A	2426-456	Mojave Siphon Powerplant Inlet and Discharge Lines Plan and Profile
F-5B	2426-457	Mojave Siphon Powerplant Inlet and Discharge Lines Sections
F-6	2426-458	Mojave Siphon Powerplant Single Line Diagram
F-7A	2426-459	Mojave Siphon Powerplant Geologic Map
F-7B	2426-460	Mojave Siphon Powerplant Geologic Sections
F-22	2426-481	Mojave Siphon Powerplant Valve Vaults Typical Sections
F-23	2426-483	Mojave Siphon Powerplant Valve Vaults Site Work Plan – Sheet 1
F-24	2426-484	State Water Facilities Valve Vaults Valve Vault Structure Roof Plan

Exhibit	FERC Drawing No.	Title
F-25	2426-485	Mojave Siphon Powerplant Valve Vaults Valve Vault Structure Floor Plan
F-26	2426-486	Mojave Siphon Powerplant Valve Vaults Valve Vault Structure Sections – Sheet 1
F-27	2426-487	Mojave Siphon Powerplant Valve Vaults Valve Vault Structure Sections – Sheet 2
F-28	2426-488	Mojave Siphon Powerplant Valve Vaults Valve Vault Structure Sections – Sheet 3
F-29	2426-489	Mojave Siphon Powerplant Valve Vaults Ventilation and Drainage Plan and Sections
F-30	2426-490	Mojave Siphon Powerplant Valve Vaults Air and Vacuum Value Installation Partial Plan and Section
F-31	2426-491	Mojave Siphon Powerplant Valve Vaults CO2 Protection General Arrangement – I
F-32	2426-492	Mojave Siphon Powerplant Valve Vaults CO2 Protection General Arrangement – II

(F) Paragraph (A)(1) of Article 45 of the license for the South SWP Hydroelectric Project No. 2426 is revised to read as follows:

Article 45. The Licensees shall pay to the United States the following annual charges effective the date that this order is issued:

A. 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.

(1) The State of California Department of Water Resources. The authorized installed capacity is 354,700 kilowatts effective the first day of the month in which the Alamo Power Drop Development and Mojave Siphon Development were removed from the licensed project.

(G) Within 45 days of the date of issuance of this order, the licensee must file a revised Exhibit A to reflect the administrative changes approved by this order.

(H) This order constitutes final agency action. Any party may file a request for rehearing of this order within 30 days from the date of its issuance, as provided in section 313(a) of the FPA, 16 U.S.C. § 8251 (2012), and the Commission's regulations at 18 C.F.R. § 385.713 (2014). The filing of a request for rehearing does not operate as a

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stay of the effective date of this order, or of any other date specified in this order. Failure to file a request for rehearing shall constitute acceptance of this order.

Kelly Houff
Chief, Engineering Resources Branch
Division of Hydropower Administration
and Compliance