UNITED STATES OF AMERICA 108 FERC ¶ 62, 217 FEDERAL ENERGY REGULATORY COMMISSION

Southern California Edison Company

Project No. 372-008

ORDER ISSUING NEW LICENSE (MAJOR PROJECT) (September 3, 2004)

INTRODUCTION

- 1. This order issues a new license to the Southern California Edison Company (Edison) for the continued operation and maintenance of the existing 2.52-megawatt (MW) Lower Tule River Hydroelectric Project No. 372, located in the western foothills of the Sierra Nevada Mountains, on the Middle Fork of the Tule River and its tributaries in Tulare County, California. The project occupies approximately 191 acres of federal lands¹ within the Sequoia National Forest and Giant Sequoia National Monument,² which are administered by the U.S. Forest Service (Forest Service).³
- 2. On June 12, 1998, Edison filed an application for a new license pursuant to

³Because the Lower Tule Project is located within a national forest, section 23(b)(1) of the FPA, 16 U.S.C. § 817(1), requires the project to be licensed.

¹The acreage of federal lands that the project occupies was increased in 2001, from 189.5 acres to 191.18 acres, by an order amending the license to include within the project boundary an existing access road that is used for project purposes. *See* Southern California Edison Company, 94 FERC ¶ 62,236 (2001).

The Giant Sequoia National Monument was created by presidential proclamation on April 15, 2000. *See* Presidential Proclamation No. 7295, 65 Fed. Reg. 24,095 (2000). Section 4(e) of the FPA, 16 U.S.C. § 797(e), authorizes the Commission to issue licenses for projects which are located on reservations of the United States. Section 3(2) of the FPA, 16 U.S.C. § 796(2), defines reservations as including national forests but not national monuments or national parks. However, the section 3(2) prohibition on issuing licenses for projects in national monuments or parks is not a bar to the relicensing of projects that were originally licensed before the lands they occupied were designated as national monuments or parks. *See*, e.g., Northern States Power Company, 67 FERC ¶ 61,282 (1994). Therefore, the Commission has the authority to relicense the Lower Tule Project.

sections 4(e) and 15 of the Federal Power Act (FPA),⁴ for the continued operation and maintenance of the Lower Tule Project. Based on my review of the comments and recommendations that have been filed and evaluation of the developmental and environmental effects of the proposed project and its alternatives, I conclude that relicensing the project as proposed, with staff's recommended measures, would be in the public interest.

BACKGROUND

- 3. An original license for the Lower Tule Project was issued on April 15, 1941, with a term expiring on June 15, 1970.⁵ A new license was issued on May 10, 1978, with a term expiring on June 14, 2000, thirty years from the expiration of the original license. ⁶ Following the expiration of the May 10, 1978 license, Edison continued to operate the project under annual licenses, pending disposition of Edison's new license application.⁷
- 4. On November 5, 1998, the Commission issued public notice of Edison's application, soliciting motions to intervene. Timely motions to intervene were filed by the U.S. Department of the Interior (Interior) and Trout Unlimited. Late motions to intervene were filed by the Public Utilities Commission of the State of California (California Utilities Commission) on April 14, 2000, and the California Department of Fish and Game (California Fish and Game) on October 16, 2000. The late interventions were granted on June 10, 2004.
- 5. On August 8, 2000, the Commission issued public notice that the project was ready for environmental analysis and solicited comments, recommendations, terms and conditions, and prescriptions. In response, comments and recommendations were filed by the Forest Service, Interior, and the U.S. Fish and Wildlife Service (FWS).

⁴16 U.S.C. §§ 797(e) and 808.

⁵2 FPC 920.

⁶3 FERC ¶ 61,134.

⁷See Section 15(a)(1) of the FPA, 16 U.S.C. § 808(a)(1).

⁸The motions were timely and unopposed, and therefore, automatically granted pursuant to Rule 214(c)(1) of the Commission's Rules of Practice and Procedure. 18 C.F.R.§ 385.214(c)(1) (2004).

⁹The deadline for response was extended to November 8, 2000, by notice issued on October 16, 2000.

- 6. On January 15, 2002, the Commission staff issued a draft Environmental Assessment (EA) that evaluated the potential impacts of relicensing the project. The Forest Service, the U.S. Geological Survey, FWS, and Edison filed comments in response. The Commission staff considered these comments in preparing the final EA, which was issued on June 20, 2002. The Forest Service was a cooperating agency during staff's preparation of the draft and final EAs.
- 7. The motions to intervene, comments, and recommendations have been fully considered in determining whether, and under what conditions, to issue this license.

PROJECT DESCRIPTION

- 8. The Lower Tule River Project consists of two small diversion dams, two short conduits which converge to form a 6-mile-long water conveyance system, a 2,815 footlong penstock, a powerhouse containing two turbine-generator units with a total installed capacity of 2,520 kilowatts (kW), and a 2,352-foot-long tailrace.
- 9. The Lower Tule River Project operates as a run-of-river project. The project's diversion dams divert flows up to 39 cubic feet per second (cfs) from the North and South Forks of the Middle Fork of the Tule River near the confluence of the two forks and convey the water through a 31,802-foot-long conduit to the Lower Tule powerhouse. All diverted flow is returned to the Middle Fork of the Tule River, except for a flow of 2.8 cfs, which is withdrawn from the project tailrace for domestic use by the city of Springville, California.
- 10. The diversion dams also release minimum flows to the bypassed reach of 4.7 cfs from October 1 through May 31, and 9.7 cfs from June 1 through September 30, as required by the May 10, 1978 license. The license I am issuing today requires minimum flows of 5 cfs from December 1 through May 31, 10 cfs from June 1 through September 30, and 6 cfs from October 1 through November 30. The dam located on the North Fork of the Middle Fork forms a 3.37-acre-foot forebay that has no storage and also serves as the afterbay for the Pacific Gas and Electric Company's Tule River Project No. 1333, which is also operated run-of-river. ¹⁰
- 11. Edison proposes to continue operating the project in a run-of-river mode and proposes no increased capacity or recreational facilities; no resource agency or entity recommended or requested recreational development. A more detailed project

¹⁰About 8.5 miles downstream of the Lower Tule Project, the Middle Fork of the Tule River enters Success Lake, an 82,000-acre-foot reservoir that impounds the confluence of the Middle Fork and South Fork of the Tule River. The reservoir is a component of the 2.4-MW Success Hydroelectric Project No. 3038, owned by the Lower Tule River Irrigation District and operated by the U.S. Army Corps of Engineers.

description is contained in Ordering Paragraph (B)(2).

WATER QUALITY CERTIFICATION

- 12. Under section 401(a)(1) of the Clean Water Act (CWA),¹¹ the Commission may not issue a license for a hydroelectric project unless the state water quality certifying agency has either issued water quality certification (WQC) for the project or has waived certification by failing to act on a request for certification within a reasonable period of time, not to exceed one year. Section 401(d) of the CWA¹² provides that state certification shall become a condition of any federal license or permit that is issued. Only a reviewing court may revise or delete these conditions.¹³
- 13. Edison applied to the California State Water Resources Board (California Water Board) for water quality certification for the project on June 17, 1998. By letter dated November 12, 1998, the California Water Board advised Edison that it needed the results of water temperature and flow studies and the Commission staff's Biological Assessment before it could act on its WQC application. Edison reapplied several times for a WQC, most recently on March 6, 2003.
- 14. On March 5, 2004, the California Water Board issued its water quality certification, consisting of 14 water quality conditions, which are set forth in Appendix B of this order and incorporated in the license by Ordering Paragraph (F). For the California Water Board's conditions, Article 401 requires the licensee to file plans for Commission approval, notify the Commission of planned and unplanned deviations from license requirements, and file an amendment application for long-term changes in project operations or facilities for mitigating environmental impacts.
- 15. In addition to seven standard, non-project specific conditions and reservations of authority to the California Water Board (Conditions 1-4, 6, 8, and 14), the certification requires the licensee to: (1) not pollute project-affected waters (Condition 5); (2) obtain prior approval for any project change that may materially affect the terms of the certification (Condition 7); (3) maintain a minimum flow of 5 to 10 cfs, depending on the time of the year (Condition 9); (4) develop a Native Aquatic Species Management Plan (Condition 10); (5) develop a plan for the design, construction, and maintenance of a fish return structure at the project intake and related monitoring (Condition 11); (6) obtain prior authorization for any taking of a threatened or endangered species (Condition 12); and (7) develop a water quality monitoring plan that addresses the use of algaecides

¹¹33 U.S.C. § 1341(a)(1).

¹²33 U.S.C. § 1341(d).

¹³See American Rivers, et al. v. FERC, 129 F.3d 99 (D.C. Cir. 1997).

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(Condition 13).

SECTION 4(e) OF THE FPA

- 16. Section 4(e) of the FPA¹⁴ states that the Commission may issue a license for a project within a reservation only if it finds that the license will not interfere or be inconsistent with the purposes for which the reservation was created or acquired.
- 17. I have reviewed the Organic Administration Act of 1897,¹⁵ which established the purposes for forest reservations, and the presidential proclamations that created and expanded the Sequoia National Forest.¹⁶ There is no evidence or allegation in this proceeding to indicate that relicensing of the Lower Tule Project would interfere with the purposes of the Sequoia National Forest within which the project is located. Therefore, I find that this license, as conditioned, will not interfere or be inconsistent with the purposes for which the Sequoia National Forest was created.
- 18. Section 4(e) also requires that the Commission include in licenses for projects located within a federal reservation all conditions that the Secretary of the department under whose supervision the reservation falls shall deem necessary for the adequate protection and utilization of the reservation.¹⁷ The Sequoia National Forest and the Giant Sequoia National Monument are under the supervision of the Forest Service.
- 19. On August 5, 2002, the Forest Service timely filed its conditions for the project pursuant to FPA section 4(e). The filing includes two general conditions stipulating that the licensee must obtain approval from the Forest Service for all final project design plans (Condition 1) and for any changes in the location of any constructed project features and facilities, or in the use of project lands and water (Condition 2). Consistent

¹⁴16 U.S.C. § 797(e).

¹⁵16 U.S.C. § 473 et seq.

¹⁶The Sequoia National Forest was created by executive order issued July 2, 1908 (Executive Order No. 904), and was expanded by presidential proclamation on March 2, 1909, 35 U.S. Stats. at Large 2249, 60th Congress, 1907-1909. At that time, the Organic Administration Act of 1897, 16 U.S.C. §475, stipulated that all national forest lands were established and administered only for watershed protection and timber production.

¹⁷Escondido Mutual Water Co. v. LaJolla Band of Mission Indians, 466 U.S. 765 (1984).

¹⁸The Forest Service filed preliminary section 4(e) conditions with a schedule for filing final section 4(e) conditions on October 13, 2000.

with the Commission's regulatory responsibility for project structures and operations, the Commission reserves final approval authority on such matters through the conditions included in this license.

- 20. Conditions 3 and 25, respectively, require consultation with the Forest Service on the protection and development of National Forest resources affected by the project and the posting of signs.
- 21. Condition 4 specifies a minimum flow regime, and Condition 6 requires the development of a plan for the installation of a fish return structure. Three conditions require the development of specific plans for the protection of native aquatic species (Condition 5), threatened, endangered, proposed and sensitive species (Condition 7), and wildlife (Condition 8). Conditions 9, 11, 12, 13, 14, 15, 27, and 28, respectively, require the development of plans for recreation; transportation management; visual resources; fire prevention and response; vegetation management; noxious weed control; hazardous substances; and cultural resources. Condition 10 requires the production of an interpretive book on the importance of natural resources in riparian ecosystems and hydroelectric generation in the Lower Tule River Basin.
- 22. Conditions 16, 19, 20, 21, 23, and 24 contain provisions for maintaining improvements; protecting federal property; surrendering the license; indemnifying the United States; assuming liabilities for hazards; and removing hazardous conditions. Two conditions contain prohibitions against the discharge of water pollutants (Condition 22) and the use of pesticides (Condition 26). Conditions 17 and 18 require the licensee to be subject to existing claims and to comply with all laws, ordinances, and regulations related to the project area or operations. Condition 29 reserves the Forest Service's right to file revised section 4(e) conditions under certain circumstances.
- 23. On September 17, 2002, Edison appealed section 4(e) Conditions 1 through 3, 7, and 11 through 29 to the Forest Service. ¹⁹ On October 31, 2002, the Forest Service issued its decision on Edison's appeal. ²⁰ The decision revised Condition 29 and remanded Condition 1 to the Regional Forester to determine if the condition was justified. On January 30, 2004, the Forest Service filed a letter advising the Commission that it is deleting Condition 1 from the section 4(e) conditions. No other conditions were deleted or revised.
- 24. Under section 4(e), the Commission includes in a license those conditions that relate to project works located within reservations of the United States. Because the

¹⁹Edison filed a copy of the appeal with the Commission on September 27, 2002.

²⁰The Forest Service filed a copy of its decision with the Commission on November 12, 2002.

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portions of the Lower Tule Project to which the Forest Service's section 4(e) conditions apply are located within the Sequoia National Forest,²¹ the conditions are set forth in Appendix A and are made conditions of the license by ordering paragraph (E).

SECTION 18 FISHWAY PRESCRIPTIONS

25. Section 18 of the FPA,²² provides that the Commission shall require a licensee to construct, operate, and maintain such fishways as may be prescribed by the Secretary of the Interior or the Secretary of Commerce, as appropriate. By letter filed November 13, 2000, Interior requested that its authority to prescribe fishways pursuant to section 18 be reserved for this project. Article 404 reserves the Commission's authority to require fishways that Interior may prescribe in the future.

THREATENED AND ENDANGERED SPECIES

- 26. Section 7(a)(2) of the Endangered Species Act of 1973 (ESA),²³ requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of federally-listed threatened and endangered species, or result in the destruction or adverse modification of designated critical habitat. That section further requires formal consultation with the FWS if a proposed action may affect listed species, unless through informal consultation, the action agency and the FWS agree that the action is not likely to adversely affect listed species.
- 27. The Lower Tule Project is located within the range of the federally-listed California condor, American peregrine falcon, bald eagle, California red-legged frog, valley elderberry longhorn beetle, and Sacramento splittail, and the following species proposed for federal listing: Springville clarkia, Kelso Creek monkeyflower, green adobe-lily, and Piute Mountains navarretia.
- 28. On January 15, 2002, pursuant to section 7(a)(2) of ESA, Commission staff submitted a biological assessment (BA) to the FWS. In the BA, Commission staff concluded that, with staff's recommended measures, the proposed project: (1) would have "no effect" on the American peregrine falcon, Sacramento splittail, California redlegged frog, Kelso Creek monkeyflower, green adobe-lily, or Piute Mountains navarretia; and (2) would "not be likely to adversely affect" the California condor, bald eagle, Springville clarkia and valley elderberry longhorn beetle. Commission staff requested

²¹The project's powerhouse, substation, and transmission facilities are not located within the boundaries of the Sequoia National Forest.

²²16 U.S.C. § 811.

²³16 U.S.C. § 1536(a)(2).

formal consultation should the FWS disagree with any of these determinations.

- 29. On April 15, 2002, the FWS filed a response concurring with Commission staff's determination of "no effect" for the Sacramento splittail and California red-legged frog and "not likely to adversely affect" for the California condor or Springville clarkia, noting the proposed project includes avoidance measures for the Springville clarkia (Article 405). The FWS made no recommendations for these species in addition to the protective measures in staff's BA.²⁴
- 30. In its letter, the FWS further said that it did not concur with Commission staff's determination that the bald eagle and valley elderberry longhorn beetle are "not likely to be adversely affected," because the FWS determined that the protective measures described in the BA would not be sufficient to avoid adverse effects to these species.
- 31. On April 19, 2002, Commission staff responded by letter to the FWS, detailing additional measures to protect bald eagles from the project's transmission line. In the letter, Commission staff also informed the FWS that subsequent to the filing of Edison's application, including the results of its elderberry plant surveys, the Commission staff determined that the 11,000 foot-long transmission line previously associated with the project is not under the Commission's jurisdiction.²⁵
- 32. During a conference call on May 2, 2002, Commission staff, Edison, and the FWS agreed that additional information was needed to determine any effect from the project on the valley elderberry longhorn beetle, and Edison and the FWS agreed to a joint visit to the project area where elderberry plants are known to exist. During the joint visit, elderberry plants were surveyed for evidence of beetle presence, stem size, and the location of plants relative to maintenance and clearing areas at the project. Edison prepared the report of the joint visit, and distributed it on June 3, 2002. On June 12, 2002, Commission staff requested formal consultation with the FWS for the valley elderberry longhorn beetle, based on the additional information gathered during the visit.
- 33. In its Biological Opinion (BO) filed with the Commission on November 25, 2002, the FWS concurred that by requiring the additional protective measures in Commission staff's April 19, 2002, letter, the project was "not likely to adversely affect the bald eagle." These measures to protect the bald eagle are required by Article 406.

²⁴The FWS also clarified that the American peregrine falcon had been de-listed, and the proposal to list the Kelso Creek monkeyflower, green adobe-lily, and Piute Mountains navarretia was withdrawn.

 $^{^{25}}$ 94 FERC ¶ 62,236 (2001). After deletion of the non-primary transmission line from the project boundary, a primary transmission line of about 200 feet remained as part of the project.

- 34. For the valley elderberry longhorn beetle, the FWS concluded in its BO that the action, as proposed in the final EA, is not likely to jeopardize the continued existence of the valley elderberry longhorn beetle but is likely to adversely affect it. The FWS included in the BO an incidental take statement with 10 terms and conditions and one reasonable and prudent measure to minimize incidental taking of the beetle.²⁶
- 35. I have included conditions in the license (Article 407) that implement the pertinent terms and conditions of the incidental take statement. The conditions require the licensee to: (1) carry out the requirements of the license consistent with the FWS' 1999 Beetle Guidelines; (2) carry out the requirements of the license consistent with the minimization measures (including planting elderberry cuttings and seedlings) in FWS' 1999 Beetle Guidelines; (3) obtain the FWS' approval of conservation sites before transplanting and planting begins; (4) transplant two elderberry shrubs; (5) monitor elderberry-disturbing activities and file survey results and activity reports; (6) maintain a 60 percent survival rate for the elderberry plants during the monitoring period; (7) implement a program to educate personnel on the importance of protecting valley elderberry longhorn beetle habitat; (8) notify the FWS within three working days of the finding of any listed species or any unanticipated taking; (9) dispose of any dead or severely injured elderberry longhorn beetles in a depository; and (10) prepare a post-construction compliance report.

RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES UNDER FPA SECTION 10(j)

36. Section 10(j) of the FPA,²⁷ requires the Commission, when issuing a license, to include license conditions based upon recommendations of federal and state fish and wildlife agencies submitted pursuant to the Fish and Wildlife Coordination Act,²⁸ to "adequately and equitably protect, mitigate damages to, and enhance, fish and wildlife

²⁶Under section 7(b)(4) of the ESA, if the Secretary of the Interior, after consultation with the action agency, finds that neither the agency action nor the taking of a listed species incidental to that action will jeopardize the continued existence of the species, the Secretary shall provide the agency with a written statement that specifies the impact of any incidental taking on the species, specifies reasonable and prudent measures that the Secretary considers necessary or appropriate to minimize such impact, and sets forth terms and conditions that must be complied with by the agency or the applicant to implement the reasonable and prudent measures. Under section 7(o)(2) of the ESA, any taking that is in compliance with the terms and conditions of an incidental take statement shall not be considered a prohibited taking of the species.

²⁷16 U.S.C. § 803(j).

²⁸16 U.S.C. §§ 661, et seq.

(including related spawning grounds and habitat)" affected by the project.

37. The state fish and wildlife agency, California Fish and Game, filed a motion to intervene in the proceeding; it did not file section 10(j) recommendations. On November 13, 2000, Interior filed four recommendations on behalf of the FWS under section 10(j). Because the section 10(j) recommendations were filed late, they were considered under section 10(a) of the FPA.²⁹

AGENCY RECOMMENDATIONS UNDER FPA SECTION 10(a)(1)

- 38. In its November 13, 2000, letter, the FWS recommended that the licensee: (1) develop a flume maintenance plan; (2) release a minimum instream flow to the bypassed reach of 60 cfs from March through May, 35 cfs from June through September, and 15 cfs from October through February; and (3) design, construct, operate, and monitor a fish return structure. The FWS also recommended that a BA be completed and ESA requirements be met prior to the issuance of a license.
- 39. Staff analyzed the FWS' recommendations under section 10(a)(1) of the FPA, which requires the Commission to ensure that the project it licenses is best adapted to the comprehensive development of the waterway for all beneficial public uses. This license contains provisions consistent with two of FWS' recommendations. A water conveyance system maintenance plan, incorporating the measures from the FWS' recommended flume maintenance plan, is required by Article 403, and a fish return structure is required by Condition 6 of Appendix A and the Condition 11 of Appendix B. Consistent with FWS' recommendations, Commission staff prepared a BA and completed the ESA consultation with the FWS.
- 40. In the FEA,³⁰ Commission staff evaluated the relative benefits of the flows recommended by the FWS, as compared with those recommended by the staff and required by the WQC and 4(e) conditions. The FWS' recommended flow regime would provide between 83.5 and 100 percent of rainbow trout habitat over all seasons for adult, juvenile and fry life stages. By comparison, the minimum flows required in this license would provide between 58.2 and 100 percent of the rainbow trout habitat over all seasons for the same life stages. The FWS' recommended spring flow of 60 cfs would provide 100 percent of the potential spawning habitat, while the 5-cfs minimum flow specified in this license would provide only 7.1 percent of the potential spawning habitat in the bypassed reach. However, based on historical flow records, even under the 5-cfs minimum flow requirement, 60 cfs would be provided in the bypassed reach more than

²⁹16 U.S.C. § 803(a). As noted above, the deadline for recommendations was November 8, 2000.

³⁰See final EA at 18, 19, 25-34, 66-69, 71-73.

50 percent of the time in March, April and May. Therefore, adequate spawning flows would be provided most of the time under the conditions contained in this license. The FWS' recommended flow regime would cost \$254,300 in lost generation (6.4 GWh), while the required minimum flows would cost \$8,300 (0.21 GWh). Staff found that the FWS' flows would not provide a sufficient increase in habitat to justify the loss of power generation. Instead, this order incorporates the minimum flow regime required by Conditions 4 and 9 of the Forest Service 4(e) conditions (Appendix A) and California Water Board's WQC (Appendix B), respectively.

41. On October 13, 2000, the Forest Service filed a recommendation under section 10(a) of the FPA that Edison be required to convey water through the project for the city of Springville, California's use even when the project is not generating. For the reasons discussed below, I do not adopt this recommendation.

OTHER ISSUES

A. Springville Water Supply

- 42. Edison and the Springville Public Utility District (District) have a contractual agreement that calls for Edison to deliver water for the city of Springfield, California, through the project's water conveyance system when the project is operating.³¹ The city currently withdraws up to 2.8 cfs from the project's tailrace and pipes it to a water storage and filtration plant adjacent to the tailrace.³² Although the agreement between Edison and the District does not address water delivery when the project is not generating, Edison voluntarily delivers water through the project's water conveyance system to the city during project outages.
- 43. On October 13, 2000, the Forest Service filed a recommendation under section 10(a) of the FPA that Edison be required to convey water through the project for the city of Springville use even during outages. Although the project tailrace and the city's facilities are not located on U.S. lands, the Forest Service expressed interest in this issue because of water quality concerns associated with its highly popular campgrounds and day use facilities at Upper and Lower Coffee Camp areas along the bypassed reach.
- 44. Scheduled maintenance outages at the project generally occur for about two weeks annually, and unscheduled outages can occur during emergency plant shutdowns or when inflows are insufficient to generate. Edison proposed to continue its voluntary practice of maintaining flows through the tailrace during project outages. Edison objects, however,

³¹Letter filed October 3, 2001, from Erik T. Ostly, Assistant Lands Officer, Sequoia National Forest, Porterville, California.

³²14 FERC ¶ 62,083 at (1981).

to any license requirement that would force Edison to expend money and resources to maintain releases at a time when it is not able to produce power. Edison further states it should have the option to discontinue diversions for the city during times when there may not be sufficient water available for project generation.

45. I agree with Edison that requiring a diversion when the project is not operating would be an undue burden because of the variability of flows over different water years and seasons. Any requirement to divert water during maintenance outages, which may occur during low flow seasons, might conflict with Edison's obligations to meet the minimum flow requirements for the bypassed reach as set forth in Appendices A and B. In addition, outages, depending on the extent to which they involve the water conveyance system, can affect the capacity of the project to complete the delivery. I also note that no request for Edison to provide the city with water during outages has been filed by the city of Springfield or the District. Further, the Commission does not adjudicate water rights used for power production or for consumptive use. The adjudication and allocation of water rights is a state matter.

B. Trout Unlimited

- 46. Trout Unlimited expressed concern that the project has had a detrimental effect on the Tule River's trout fishery and available trout habitat, thereby causing members of its group to lose a significant recreational opportunity. To address this concern, Trout Unlimited recommended modifying the existing minimum flow requirements at the project to increase available trout habitat and fishing areas, but made no specific flow recommendation. The minimum flow regime required by this license will substantially increase habitat for juvenile and adult trout during the fall months.
- 47. Trout Unlimited also expressed concern that the licensee improperly applied an Instream Flow Incremental Methodology (IFIM) study from a non-project reach of the Tule River to the project reach. Trout Unlimited therefore requested a site-specific IFIM study. Edison, in consultation with resource agencies, conducted a site-specific IFIM study during 1999 that addressed Trout Unlimited's concerns and incorporated habitat mapping for the reach of concern to Trout Unlimited.

³³Pacific Gas and Electric Company, 87 FERC ¶ 61,022 at p. 61,090 (1999).

³⁴See Section 27 of the FPA, 16 U.S.C. § 821, which provides that nothing in Part I of the FPA "shall be construed as affecting or intending to affect or in any way to interfere with the laws of the respective States relating to the control, appropriation, use, or distribution of water used in irrigation or for municipal or other uses, or any vested right acquired therein." *See also* City and Borough of Sitka, Alaska, 94 FERC ¶ 61,327 at p. 62,220 (2001).

48. Lastly, Trout Unlimited indicated that the transition zone from coldwater to warmwater fish species historically occurred below Lower Coffee Camp, a recreation area about 2.25 miles below the diversion dams, but now occurs above Lower Coffee Camp because the project diversions have caused higher water temperatures in the bypassed reach. Trout Unlimited states that this shift of the transition zone has cut off wild rainbow trout from its spawning habitat below Lower Coffee Camp, thereby contributing to the loss of trout habitat. No documentation of the location of the historic transition zone was filed, and staff's analysis of available water temperature data found that none of the minimum flow regimes considered for this license would significantly alter water temperatures in the bypassed reach.

C. Recreation

49. Article 301 provides for the Stairs Access Area, a popular recreation site, including a parking lot, access trail, and stairs to the river, to be brought into the project boundary. The Forest Service will provide minor maintenance for the site through an agreement with Edison, owner of the site and facilities (Appendix A, Condition 9 and Article 409). Additionally, Condition 11 of Appendix A and Article 409 require Edison to produce an interpretive book targeted to fifth graders at elementary schools in the project area. The book will cover the natural resources of riparian ecosystems in the Lower Tule River Basin and the beneficial uses of basin water for hydropower purposes.

HISTORIC PROPERTIES

50. On April 24, 2002, the California State Historic Preservation Officer, the Advisory Council on Historic Preservation, and the Commission staff executed a Programmatic Agreement (PA) for managing historic properties that may be affected by relicensing of the Lower Tule Project. Edison signed the PA as a concurring party. Article 412 requires Edison to implement the PA, including the Cultural Resources Management Plan approved in Ordering Paragraph (D). This provides protection for all existing and future cultural sites located within the project boundary, and satisfies the Commission's responsibilities under section 106 of the National Historic Preservation Act, 16 U.S.C. §470f.

STATE AND FEDERAL COMPREHENSIVE PLANS

51. Section 10(a)(2) of the FPA³⁵ requires the Commission to consider the extent to which a hydroelectric project is consistent with federal and state comprehensive plans for improving, developing, or conserving waterways affected by the project.³⁶ Under section

³⁵16 U.S.C. § 803(a)(2)(A).

³⁶Comprehensive plans for this purpose are defined at 18 CFR 2.19 (2004).

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10(a)(2)(A), federal and state agencies filed 49 comprehensive plans that address various resources in California. Staff identified and reviewed nine plans relevant to the Lower Tule Project.³⁷ No inconsistencies were found.

APPLICANT'S PLANS AND CAPABILITIES

52. In accordance with sections 10(a)(2)(C) and 15(a) of the FPA,³⁸ staff has evaluated Edison's record as a licensee with respect to the following: (A) conservation efforts; (B) compliance history and ability to comply with the new license; (C) safe management, operation, and maintenance of the project; (D) ability to provide efficient and reliable electric service; (E) need for power; (F) transmission services; (G) cost effectiveness of plans; and (H) actions affecting the public. I accept the staff's findings in each of the following areas.

A. Conservation Efforts, Section 10(a)(2)(C)

53. Section 10(a)(2)(C) of the FPA requires the Commission to consider the extent of electric consumption efficiency programs in the case of license applicants primarily engaged in the generation or sale of electric power, like Edison. Edison is active in several environmentally beneficial, energy saving programs including: customer incentives, information and education, audits and surveys, and cooperative efforts with third-party contractors and other utilities. Through these programs, Edison is making a satisfactory effort to conserve electricity.

Federal: (1) North American Waterfowl Management Plan, U.S. Department of the Interior, Fish and Wildlife Service and Canadian Wildlife Service, 1986; (2) Fisheries USA: The Recreational Fisheries Policy of the U.S. Fish and Wildlife Service, U.S. Fish and Wildlife Service, undated; (3) Sequoia National Forest Land and Resource Management Plan, Sequoia National Forest, U.S. Department of Agriculture, Forest Service, 1988; and (4) The Sierra Nevada Forest Plan Amendment (Framework), U.S. Department of Agriculture, Forest Service, January 2001.

³⁷State: (1) The California Water Plan: Projected Use and Available Water Supplies to 2010, Bulletin 160-83, California Department of Water Resources, 1983; (2) California Water Plan Update, Bulletin 160-93, California Department of Water Resources, 1994; (3) Water Quality Control Plan for the Tulare Lake Basin, Second Edition – 1995, Central Valley Region Bulletin 160-93, California Water Quality Control Board, October 1994; (4) Water Quality Control Plan Report, California State Water Resources Control Board, 1975; and (5) Recreation Needs in California, California - The Resources Agency, Department of Parks and Recreation,1983.

³⁸16 U.S.C. §§ 803(a)(2) (C) and 808(a).

B. Compliance History and Ability to Comply with the New License, Section 15(a)(2)(A)

54. The staff reviewed Edison's license application and other submissions in an effort to judge its ability to comply with the articles, terms, and conditions of any license issued, and with other applicable provisions of this part of the FPA. Edison's overall record of making timely filings and compliance with its license is satisfactory. The staff concludes that Edison has or can acquire the resources and expertise necessary to carry out its plans and comply with all articles and terms and conditions of a new license.

C. Safe Management, Operation, and Maintenance of the Project, Section 15(a)(2)(B)

55. Edison owns and operates the Lower Tule Project. The staff reviewed Edison's management, operation, and maintenance of the project, including all applicable safety requirements, and found the project to be in generally satisfactory condition and adequately maintained. Staff concludes that the project works are safe and that Edison's plans to manage, operate, and maintain the project safely are adequate for future operations and would pose no threat to public safety if operated and maintained according to good engineering practices, and the normal regulations governing hydroelectric licenses.

D. Ability to Provide Efficient and Reliable Electric Service, Section 15(a)(2)(C)

- 56. Staff has reviewed Edison's plans and its ability to operate and maintain the project in a manner most likely to provide efficient and reliable electric service.
- 57. Edison has trained operating and maintenance personnel assigned to its hydro power operations. These personnel control and assure that requirements are met for the inspection, operation, and maintenance of hydroelectric equipment and structures.
- 58. Based on staff's review, Edison has been operating the project in an efficient manner within the constraints of the existing license, and it would continue to provide efficient and reliable electric service in the future.

E. Need for Power, Section 15(a)(2)(D)

- 59. To assess the need for power, the staff reviewed Edison's use of the project's power, together with that of the operating region in which the project is located.
- 60. Edison is a public utility supplying electricity to 4.3 million business and residential customers over a 50,000 square mile service area in coastal, central and southern California. The Lower Tule Project contributes to Edison's electric generating

resources by generating approximately 17,900,000 kilowatt-hours (kWh) of electricity annually.

- 61. To anticipate how the demand for electricity is expected to change in the future in the region, we looked at the regional need for power as reported by the Western Electricity Coordinating Council (WECC). The projects are located in the California-Mexico Power (CMP) area of the WECC. The CMP area encompasses most of California and a portion of Baja California in Mexico. The CMP area has a significant summer peak demand.
- 62. For the period from 2002 through 2011, WECC forecasts that peak demand and annual energy requirements in the area will grow at annual compound rates of 2.4 and 1.3 percent, respectively. Severe weather conditions in 1998 and 2000 have affected the area, resulting in numerous curtailments of service to interruptible customers. Even with assumptions about future generation and transmission extension projects, statewide and local reliability problems exist in the short term. Resource capacity margins for the CMP area range between 13.9 and 44.8 percent of firm peak demand for the next 10 years. WECC anticipates that 45,647 MW of new capacity will come on line within the next 10 years in the CMP area of the WECC region. Staff concludes that the region has a need for power over the near term and power from the project could continue to help meet that need.
- 63. Power from the Lower Tule Project would continue to be useful in meeting Edison's need as well as meeting a small part of the local and regional need for power. The project helps to displace fossil-fueled electric power generation that the region now uses, thereby conserving non-renewable fossil fuels and reducing the emission of noxious byproducts caused by fossil-fuel combustion.
- 64. The present and future use of the Lower Tule Project's power, its displacement of nonrenewable fossil-fired generation, and contribution to a resource diversified generation mix, support a finding that the power from the Lower Tule Project will help meet both the short- and long-term need for power in the region.

F. Transmission Services, Section 15(a)(2)(E)

- 65. Edison's transmission system is the most effective means currently available to transmit the project's power because it is an existing system that is designed to accommodate the project's output.
- 66. Licensing the project will have no significant effect on existing or planned transmission systems because this license authorizes the project to operate with the same installed capacity as the previous license.

G. Cost Effectiveness of Plans, Section 15(a)(2)(F)

67. Edison is not proposing any capacity expansion of the Lower Tule Project. Based on the available flow, staff would not expect additional capacity to be cost effective at this site. Staff concludes that the project, as presently configured and as operated according to this order, is consistent with environmental considerations, and fully develops and uses the economical hydropower potential of the site in a cost-effective manner.

H. Actions Affecting the Public, Section 15(a)(3)(A) and (B)

68. The Lower Tule Project generates electricity that is used to service Edison and its customers. Edison pays taxes annually to local and state governments, and the project provides employment opportunities. There is no reason to doubt that Edison will implement the various environmental enhancement measures approved in the license. These measures, discussed in the order and in the final EA, as well as the power to be generated by the project, will benefit the public.

COMPREHENSIVE DEVELOPMENT AND PROJECT ECONOMICS

- 69. Sections 4(e) and 10(a)(1) of the FPA,³⁹ require the Commission, in acting on license applications, to give equal consideration to all the power and development purposes and to the purposes of energy conservation; the protection, mitigation of damage to, and enhancement of fish and wildlife; the protection of recreational opportunities; and the preservation of other aspects of environmental quality. Any license issued shall be such as in the Commission's judgment will be best adapted to a comprehensive plan for improving or developing a waterway for all beneficial public uses.
- 70. In determining whether a proposed project will be best adapted to a comprehensive plan for developing a waterway for beneficial public purposes, the Commission considers a number of public interest factors, including the economic benefits of project power. Under the Commission's approach to evaluating the economics of hydropower projects, as articulated in Mead Corp., ⁴⁰ the Commission staff employs an analysis that uses current costs to compare the costs of the project and likely alternative power, with no forecasts concerning potential future inflation, escalation, or deflation beyond the license issuance date. The Commission staff's economic analysis provides a general estimate of the potential power benefits and the costs of a project, and reasonable alternatives to project power. The estimate helps to support an informed decision concerning what is in the public interest with respect to a proposed license. In making our decision, the Commission staff considers the project power benefits, both with the

³⁹16 U.S.C. §§ 797(e) and 803(a)(1).

⁴⁰72 FERC ¶ 61.027 (1995).

applicant's proposed mitigation and enhancement measures and with the Commission staff's modifications and additions to the applicant's proposal.

- 71. To determine whether the proposed project is currently economically beneficial, the project's cost is subtracted from the value of the project's power. Edison's proposal would produce about 17.9 gigawatt-hours (GWh) of energy annually at a cost of about 20.5 mills/kWh, or about \$366,400 per year. The staff determined the annual value of project power would be \$716,000 or 40.0 mills/kWh. Thus, Edison's power would cost about \$349,600 or 19.5 mills/kWh less than the likely alternative cost of power. When licensed in accordance with Commission staff and agency conditions adopted herein, the project power would produce about 17.7 GWh of energy annually at a cost of about 21.3 mills/kWh, or about \$376,300 per year. The staff determined that the annual value of project power with these conditions would be \$708,000, or 40.0 mills/kWh. Edison's power under these conditions would cost about \$331,700. Thus, the project's power would cost about 18.7 mills/kWh less than the likely alternative cost of power.
- 72. In analyzing public interest factors, the Commission takes into account that hydroelectric projects offer unique operational benefits to the electric utility system (ancillary benefits). These benefits include their value as almost instantaneous load-following response to dampen voltage and frequency instability on the transmission system, system-power-factor-correction through condensing operations, and a source of power available to help in quickly putting fossil-fuel based generating stations back on line following a major utility system or regional blackout. In the competitive California market, the ability of hydropower projects to provide ancillary services to the grid can increase the benefits of the project.
- 73. Issuance of a new license would provide a beneficial, dependable, and inexpensive source of electric energy; the 2.52 MW of electric energy generated from renewable resources would continue to offset the use of fossil-fueled, steam-electric generating plants, thereby conserving nonrenewable resources and reducing atmospheric pollution; and the staff-recommended and agency-required environmental protection, mitigation, and enhancement measures would protect or enhance water quality, fishery resources, terrestrial resources, including federally-listed species; improve public use of recreation facilities and access; and protect historic and archeological resources within the area affected by project operation.

LICENSE TERM

74. Section 15(e) of the FPA, 42 specifies that any license issued shall be for a term

⁴¹The alternative power cost of 40.0 mills per kWh is based on data from the California Energy Commission.

⁴²16 U.S.C. § 808(e).

which the Commission determines to be in the public interest, but the term may not be less than 30 years nor more than 50 years. The Commission's policy establishes 30-year terms for projects with little or no proposed redevelopment, new construction, new capacity, or environmental protection, mitigation, and enhancement measures; 40-year terms for projects with a moderate amount thereof; and 50-year terms for projects with an extensive amount thereof.⁴³

- 75. The new license for this project requires little or no redevelopment and minor enhancements. Were we to follow our standard policy, the license would expire in 30 years.
- 76. The Forest Service recommended that any new license issued for the project contain an expiration date that coincides with the expiration date of the Tule River Project No. 1333, so that in the future, the Lower Tule and Tule River Projects could be evaluated at the same time in a watershed-wide analysis. When the Tule River Project was relicensed in 1993, its license expiration date was set for July 31, 2033, specifically to coincide with the expiration of the license for the Success Project No. 3038. The Forest Service states that setting the same expiration date for the Lower Tule Project license would allow all three projects to be reevaluated at the same time.
- 77. In order to facilitate the Commission's future coordinated treatment of the Lower Tule, Tule River, and Success Projects, the expiration date for the Lower Tule Project should coincide with the expiration dates for the other two projects. An expiration date of July 31, 2033, for the Lower Tule Project, however, would result in a license term of less than 30 years, the minimum permitted by the FPA. A 30-year license would expire in year 2034, about a year from the license expiration dates for the Tule River and Success Projects. Therefore, I will issue the license for the Lower Tule Project for a term of 30 years. With this license term, it will still be possible to address common issues and/or data needs for the three projects in collaboration.

SUMMARY OF FINDINGS

78. The final EA contains background information, analysis of effects, and support for related license articles. The design of this project is consistent with the engineering standards governing dam safety. The project will be safe if operated and maintained in

⁴³See Consumers Power Company, 68 FERC ¶ 61,077 at pp. 61,383-84 (1994).

⁴⁴It is the Commission's policy to coordinate to a reasonable extent the license expiration dates of projects located in the same river basin, in order that subsequent relicense proceedings can also be coordinated. *See* 18 C.F.R. § 2.23 (2004).

⁴⁵65 FERC ¶ 62.265 (1993).

accordance with the requirements of this license.

79. Based on review of the agency and public comments, recommendations, and/or mandatory conditions filed on this project, review of the environmental and economic effects of the proposed project, and its alternatives, and analysis pursuant to sections 4(e) and 10(a) of the FPA, I conclude that issuing a new license for the Lower Tule Project as proposed, with the required environmental measures and other special license conditions, will be best adapted to the comprehensive development of the Tule River for beneficial public uses.

ORDERING PARAGRAPHS AND PROJECT DESCRIPTION

The Director Orders:

- (A) This license is issued to Edison (licensee) to operate and maintain the Lower Tule River Hydroelectric Project, for a period of 30 years, effective the first day of the month in which this order is issued. This license is subject to the terms and conditions of the Federal Power Act (FPA), which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the FPA.
 - (B) The project consists of:
- (1) All lands, to the extent of the licensee's interests in those lands, enclosed by the project boundary shown by Exhibit G;

Exhibit G	FERC Drawing No. 372-	Showing
Sheet G-1	1015	Detail Map - Project
Sheet G-2	1016	Detail Map - Project
Sheet G-3	1017	Detail Map - Project
Sheet G-4	1018	Detail Map - Project
Sheet G-5	1019	Detail Map - Project

- (2) Project works consisting of: (a) a 15-foot-high, 44-foot-long concrete diversion dam on the North Fork of the Tule River; (b) a 5-foot-high, 113-foot-long, rubble masonry diversion dam on the South Fork of the Middle Fork of the Tule River; (c) a 31,802-foot-long flow line; (d) a 2,815-foot-long steel penstock varying in diameter; (e) a 3.37 acre-foot forebay; (f) a 44-foot-wide by 39-foot-long reinforced concrete powerhouse; (g) two impulse turbine driven generating units with a total installed capacity of 2,520 kilowatts; (h) a 2,352-foot-long concrete tailrace; (i) an above ground 66-kilovolt transmission line about 200 feet long; and (k) other appurtenant facilities.
 - (3) The project works generally described above are more specifically shown and

described by those portions of Exhibits A and F shown below:

Exhibit A: The following sections of Exhibit A filed on June 12, 1998:

Sections 4.4, 4.6, 4.7, 4.8, and Table A-1, entitled "Lower Tule River Hydroelectric Project, FERC No. 372 Project Data," describing the mechanical, electrical and transmission equipment within the application for license.

Exhibit F: The following sections of Exhibit F filed on June 12, 1998:

Exhibit F drawing	FERC No. 372 -	Showing
Sheet No. 1	1001	Diversion dams and regulating reservoir
Sheet No. 2	1002	Steel truss river crossing
Sheet No. 3	1003	Y branch spillway and fishwheel
Sheet No. 4	1004	Typical timber bents
Sheet No. 5	1005	Steel truss highway crossing
Sheet No. 6	1006	Canal-flume transitions
Sheet No. 7	1007	Waste gate structure
Sheet No. 8	1008	Inverted siphon (Sta. 265+59 to Sta. 274+14)
Sheet No. 9	1009	Spillway in flumes (Sta. 263+69 and Sta. 341+25)
Sheet No. 10	1010	Penstock plan and profile
Sheet No. 11	1011	Plan of powerhouse and switchyard
Sheet No. 12	1012	Cross sections of powerhouse and switchyard
Sheet No. 13	1013	Spillway ahead of double barrel siphon
Sheet No. 14	1014	Double barrel siphon

- (4) All of the structures, fixtures, equipment or facilities used to operate or maintain the project and located within the project boundary, all portable property that may be employed in connection with the project and located within or outside the project boundary, and all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.
- (C) The Exhibits A, F, and G as designated in Ordering Paragraph (B) above, are approved and made part of this license.
- (D) The following plan is approved and made a part of this license: The Cultural Resources Management Plan for the Southern California Edison Company's Tule River Project (FERC Project No. 372), Tulare County, California, filed February 2, 2002.
- (E) This license is subject to the conditions submitted by the Forest Service under section 4(e) of the Federal Power Act, as those conditions are set forth in Appendix A to

this order to the extent those conditions apply to project lands and facilities located within the Sequoia National Forest.

- (F) This license is subject to the conditions of the water quality certification, submitted by the State of California, State Water Resources Control Board under section 401 of the Clean Water Act, as those conditions are set forth in Appendix B to this order.
- (G) This license is subject to the articles set forth in Form L-1, entitled "Terms and Conditions of License for Constructed Major Project Affecting Lands of the United States," 54 FPC 1799 (October 1975), and the following additional articles:

Article 201. Administrative Annual Charges. The licensee shall pay the United States the following annual charges, effective the first day of the month in which this license is issued, for the purposes of: (1) reimbursing the United States for the cost of administration of Part I of the Federal Power Act, as determined in accordance with provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 2,520 kilowatts; and (2) recompensing the United States for the use, occupancy, and enjoyment of 191.18 acres of its lands, other than for the use of transmission lines.

Article 202. Amortization Reserves. Pursuant to Section 10(d) of the Federal Power Act, a specified reasonable rate of return upon the net investment in the project shall be used for determining surplus earnings of the project for the establishment and maintenance of amortization reserves. The licensee shall set aside in a project amortization reserve account at the end of each fiscal year one half of the project surplus earnings, if any, in excess of the specified rate of return per annum on the net investment. To the extent that there is a deficiency of project earnings below the specified rate of return per annum for any fiscal year, the license shall deduct the amount of that deficiency from the amount of any surplus earnings subsequently accumulated, until absorbed. The licensee shall set aside one-half of the remaining surplus earnings, if any, cumulatively computed, in the project amortization reserve account. The licensee shall maintain the amounts established in the project amortization reserve account until further order of the Commission.

The specified reasonable rate of return used in computing amortization reserves shall be calculated annually based on current capital ratios developed from an average of 13 monthly balances of amounts properly included in the licensee's long-term debt and proprietary capital accounts as listed in the Commission's Uniform System of Accounts. The cost rate for such ratios shall be the weighted average cost of long-term debt and preferred stock for the year, and the cost of common equity shall be the interest rate on 10-year government bonds (reported as the Treasury Department's 10-year constant maturity series) computed on the monthly average for the year in question plus four percentage points (400 basis points).

Article 203. *Headwater Benefits*. If the project is directly benefited by the construction work of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement during the term of the original license (including extensions of that term by annual licenses), and if those headwater benefits were not previously assessed and reimbursed to the owner of the headwater improvement, the licensee shall reimburse the owner of the headwater improvement for those benefits, at such time as they are assessed, in the same manner as for benefits received during the term of this new license.

Article 204. *Exhibit drawings*. The licensee shall file, in aperture card and electronic file formats, the revised exhibit drawings described in Article 301(a) through 301(c): (1) Four sets of the approved exhibit drawings shall be reproduced on silver or gelatin 35mm microfilm. All microfilm shall be mounted on type D (3-1/4" X 7-3/8") aperture cards. Prior to microfilming, the FERC Drawing Number (e.g., P-1234-1001 through P-1234###) shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number shall be typed on the upper right corner of each aperture card. Additionally, the Project Number, FERC Exhibit (e.g., F-1, G-1, etc.), Drawing Title, and date of this license shall be typed on the upper left corner of each aperture card.

Two of the sets of aperture cards along with form FERC-587 shall be filed with the Secretary of the Commission, ATTN: OEP/DHAC. The third set shall be filed with the Commission's Division of Dam Safety and Inspections San Francisco Regional Office. The remaining set of aperture cards and a copy of Form FERC-587 shall be filed with the Bureau of Land Management office at the following address:

State Director
Bureau of Land Management
Branch of Adjudication and Records (CA-943.5)
2800 Cottage Way, Suite W1834
Sacramento, CA 95825-1886
ATTN: FERC Withdrawal Recordation

(2) 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. The drawings must be identified as (CEII) material under 18 CFR §388.113(c). Each drawing must be a separate electronic file, and the file name shall include: FERC Project-Drawing Number, FERC Exhibit, Drawing Title, date of this license, and file extension [e.g., P-1234-####, G-1, Project Boundary, MM-DD-YYYY.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 desired, (200 dpi min) DRAWING SIZE FORMAT – 24" X 36" (min), 28" X 40" (max) FILE SIZE – less than 1 MB desired

Each Exhibit G drawing that includes the project boundary must contain a minimum of three known reference points, arranged in a triangular format. The latitude and longitude coordinates, or state plane coordinates, of each reference point must be shown and identified on the drawing.

(3) The licensee shall file three separate sets of the project boundary data in a georeferenced vector electronic file format (such as ArcView shape files, GeoMedia files, MapInfo files, or any similar format) with the Secretary of the Commission, ATTN: OEP/DHAC. The file name shall include: FERC Project Number, data description, date of this license, and file extension [e.g., P-1234, boundary vector data, MM-DD-YYYY. SHP]. The geo-referenced 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. A single electronic boundary data file is preferred and must contain all reference points shown on the individual project boundary drawings. The latitude and longitude coordinates, or state plane coordinates, of each reference point must be shown. The data must be accompanied by a separate text file describing the 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 shall include: FERC Project Number, data description, date of this license, and file extension [e.g., P-1234, project boundary metadata, MM-DD-YYYY.TXT].

Article 301. *Revised Exhibits*. (a) Within 90 days of the date of license issuance, the licensee shall submit, for Commission approval and in accordance with the format described in Article 204, revised Exhibit A, F, and G drawings, as appropriate, to reflect the Commission's March 21, 2001 decision (94 FERC ¶ 62,236) to remove the non-primary transmission line from the project boundary.

(b) Within 45 days of the date the Commission approves the Recreation Plan required by Article 409, the licensee shall submit revised Exhibit A, F, and G drawings, as appropriate, for Commission approval and in accordance with the format described in Article 204. The exhibits shall show any existing, new, and/or modified project facilities, as approved. The revised project boundary shall include and clearly identify the Stairs Access Area and include the parking lot, stairs, and access trail to the Tule River. Along with the drawings, the licensee shall include a written statement clarifying the precise ownership and acreage of the Stairs Access Area. The exhibits shall have sufficient detail to accurately show the design and location of project features and boundaries.

- (c) Within 90 days of completion of construction of the fish return structure required by Condition No. 6 in Appendix A and Condition No. 11 in Appendix B, the licensee shall submit, for Commission approval and in accordance with the format described in Article 204, revised Exhibit A, F, and G drawings, as appropriate, to show this project structure as-built.
- (d) For all revised exhibits required by this article, the licensee shall submit six copies to the Commission, one copy to the Commission's San Francisco Regional Director, and one to the Director, Division of Hydropower Administration and Compliance.

Article 302. Supporting Design Report and Plans and Specifications. At least 60 days before starting construction of the fish return structure, the licensee shall submit one copy to the Division of Dam Safety and Inspections, San Francisco Regional Engineer, and two copies to the Commission (one of these shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), of a supporting design report and final contract plans and specifications. The Commission may require changes to the plans and specifications to assure the work is completed in a safe and environmentally sound manner. Construction may not commence until authorized by the Regional Engineer.

Article 303. *Quality Control and Inspection Program*. At least 60 days before starting construction of the fish return structure or ground disturbance activities, the licensee shall submit one copy to the Division of Dam Safety and Inspections, San Francisco Regional Engineer, and two copies to the Commission (one of these shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), of the Quality Control and Inspection Program (QCIP) for the Commission's review and approval. The QCIP shall include a sediment and erosion control plan.

Article 304. *Contractor Designed Cofferdams*. Before starting construction of the fish return structure, the licensee shall review and approve the design of contractor designed cofferdams. At least 30 days before starting construction of the cofferdams, the licensee shall submit one copy to the Division of Dam Safety and Inspections, San Francisco Regional Engineer, and two copies to the Commission (one of these copies shall be a courtesy copy to the Director, Division of Dam Safety and Inspections) of the approved cofferdam construction drawings and specifications and the letters of approval.

Article 305. *Temporary Emergency Action Plan*. At least 60 days before starting construction of the fish return structure, the licensee shall submit one copy to the Division of Dam Safety and Inspections, San Francisco Regional Engineer, and two copies to the Commission (one of these shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), of the Temporary Emergency Action Plan (TEAP) for the Commission's review and approval. The TEAP shall describe emergency procedures

in case failure of a cofferdam, large sediment control structure, or any other water retaining structure that could endanger construction workers or the public. The TEAP shall include a notification list of emergency response agencies, a plan drawing of the proposed cofferdam arrangement, the location of safety devices and escape routes, and a brief description of testing procedures.

Article 401. Commission Approval, Reporting, and Filing of Amendments.

Requirement to File Plans for Commission Approval

Various conditions of this license found in the U. S. Forest Service's (Forest Service's) final conditions issued pursuant to Section 4(e) of the Federal Power Act (Appendix A) and the California State Water Resources Control Board's (California Water Board) Water Quality Certification conditions issued pursuant to Section 401 of the Clean Water Act (Appendix B) require the licensee to prepare plans and reports in consultation with state and federal agencies for approval by the Forest Service or California Water Board for submittal to the Commission and implement specific measures without prior Commission approval. Each such plan and report shall also be submitted to the Commission for approval. These plans are listed below.

Water Board Condition No.	Forest Service Condition No.	Plan Name	Due Date
13		Water Quality Monitoring Plan	Within 1 year of license issuance
10	5	Native Aquatic Species Management Plan	Within 1 year of license issuance
11	6	Fish Return Plan	Within 6 months of license issuance
	8	Wildlife Drowning Prevention Plan	Within 1 month of license issuance
	9	Project Recreation Plan	Within 6 months of license issuance
	10	Tule River Interpretive Book Plan	Within 6 months of license issuance
	11	Transportation System Management Plan	Within 1 year of license issuance
	12	Visual Resource Plan	Within 1 year of license issuance
	13	Fire Prevention and Response Plan	Within 1 year of license issuance

Water Board Condition No.	Forest Service Condition No.	Plan Name	Due Date
	14	Vegetative Management Plan	Within 1 year of license issuance
	15	Noxious Weed Management Plan	Within 1 year of license issuance
	27	Hazardous Substance Plan	Within 1 year of license issuance and at least 60 days prior to land disturbance

The licensee shall submit to the Commission documentation of its consultation, copies of comments and recommendations made in connection with the plan, and a description of how the plan accommodates the comments and recommendations. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information. The Commission reserves the right to make changes to any plan submitted. Upon Commission approval the plan becomes a requirement of the license, and the licensee shall implement the plan or changes in project operations or facilities, including any changes required by the Commission.

Requirement to Notify Commission of Planned and Unplanned Deviations from License Requirements

Forest Service Condition No. 4 in Appendix A and California Water Board Condition No. 9 in Appendix B would allow the licensee to temporarily modify minimum instream flow requirements under certain conditions. The Commission shall be notified prior to implementing such modifications, if possible, or in the event of an emergency, as soon as possible, but no later than 10 days after each such incident. The California Department of Fish and Game and the U.S. Fish and Wildlife Service shall also be notified prior to implementing any modifications to the minimum flows required by Forest Service Condition No. 4 and California Water Board Condition No. 9.

Requirement for Commission Approval

Certain Forest Service conditions in Appendix A and California Water Board conditions in Appendix B contemplate unspecified long-term changes to project operations or facilities for the purpose of mitigating environmental impacts. These changes may not be implemented without prior Commission authorization. These conditions are listed below.

Project No. P-372-008

Water	Forest	Modification	
Board	Service		
Condition	Condition		
No.	No.		
2		Additions or modifications to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.	
7		Any changes that would have a significant or material effect on the findings, conclusions, or conditions of the Water Board's certification	
8		Operational changes to coordinate Lower Tule Project operations with other water development projects to protect beneficial uses of water	
10	5	Actions to protect or enhance habitat for native aquatic species in the project area	
	3 and 29	Changes to the project and its operation from revised Forest Service conditions arising (1) from the licensee's annual consultation with the Forest Service; (2) through the Forest Service administrative appeal process; or (3) from resolution of a conflict between a 4(e) condition and a water quality certification condition.	

Article 402. *Streamflow Monitoring Plan*. Within six months of license issuance, the licensee shall file for Commission approval a plan to document compliance with the minimum flow required by Condition No. 4 (Appendix A) and Condition No. 9 (Appendix B). The plan shall include, at a minimum: (1) the method of collecting and recording the data; (2) the locations, design, and calibration of the existing monitoring equipment and proposed equipment, if any; (3) a schedule for installing any proposed flow monitoring equipment, if needed; and (4) a provision for providing data to the resource agencies in a timely manner.

The licensee shall prepare the plan after consultation with the U.S. Forest Service, U.S. Fish and Wildlife Service, the U.S. Geological Survey, the California State Water Resources Control Board, and the California Department of Fish and Game. The licensee shall include with the plan documentation of agency consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on site-specific information.

The Commission reserves the right to require changes to the plan. No ground-disturbing or land-clearing activities for the installation of any monitoring devices shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 403. Water Conveyance System Maintenance Plan. Within six months of the date of issuance of this license, the licensee shall file, for Commission approval, after consultation with the U.S. Forest Service, the U.S. Fish and Wildlife Service, and the California Department of Fish and Game, a Water Conveyance System Maintenance Plan for the project's water conveyance system. The purposes of the plan shall be to determine whether minor adjustments in frequency and/or seasonal timing of sediment flushing, treatment of algal and fauna encrustations, and use or type of algaecide in the conveyance system would be beneficial to aquatic resources in the Tule River, and to minimize effects on the federally-listed valley elderberry longhorn beetle (Desmocerus californicus dimorphus), as required in Article 407.

The plan shall include, but need not be limited to: (1) a schedule for sediment releases; (2) methods and a schedule for managing algal and fauna encrustations of the conveyance system; (3) designation of avoidance areas along the water conveyance system where the valley elderberry longhorn beetle's host plant, the elderberry plant, has one or more stems measuring 1.0 inch or greater in diameter at ground level; (4) an evaluation of the algaecides applied to the water conveyance flow; and (5) conclusion as to whether adjustments in Article 403 (1) through (4) shall further benefit the resources.

The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the consulted agencies, and specific descriptions of how the consulted agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the consulted agencies to comment and to make recommendations prior to filing the plan for Commission approval. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on project-specific information.

The Commission reserves the right to require changes to the plan. The plan shall not be implemented until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the Water Conveyance System Maintenance Plan, including any changes required by the Commission.

Article 404. *Fishway Reservation*. Authority is reserved to the Commission to require the licensee to construct, operate, and maintain, or to provide for the construction,

operation, and maintenance of, such fishways as may be prescribed by the Secretary of the Interior, pursuant to section 18 of the Federal Power Act.

Article 405. Springville clarkia Management Plan. Within one year of license issuance, the licensee shall file for Commission approval a Springville clarkia Management Plan that incorporates the measures below to minimize effects within the project boundary on the Springville clarkia (Clarkia springvillensis Vasek), proposed to be federally-listed as threatened. The licensee shall develop the plan in consultation with the U.S. Forest Service, U.S. Fish and Wildlife Service, and the California Department of Fish and Game.

The plan shall include, but need not be limited to the following provisions for Springville clarkia (clarkia): (1) clarkia surveys shall be conducted prior to routine or non-routine vegetation brushing during the clarkia flowering season, with the locations of clarkia marked and avoided; (2) routine vegetation brushing along the water conveyance system, penstock, and adjacent access roads shall be limited to July 15 through November 15 in areas known to contain clarkia; (3) routine, annual clearing of vegetation from the wooden water conveyance system footings shall be performed between July 15 and January 15; (4) during brush removing operations, the piling of cut brush within current, marked clarkia colonies shall be strictly avoided; and (5) the licensee's personnel shall be kept informed of clarkia management measures through the Endangered Species Alert Program (Article 408).

The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the consulted agencies, and specific descriptions of how the consulted agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the consulted agencies to comment and to make recommendations prior to filing the plan for Commission approval. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on project-specific information.

The Commission reserves the right to require changes to the plan. The plan shall not be implemented until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the Springville clarkia Management Plan, including any changes required by the Commission.

Article 406. *Bald Eagle Protection Plan*. Within six months of the date of issuance of this license, the licensee shall file, for Commission approval, after consultation with the U.S. Fish and Wildlife Service and the California Department of Fish and Game, a Bald Eagle Protection Plan. The purpose of the plan shall be to protect the federally-listed bald eagle (*Haliaeetus leucocephalus*) and other raptors within the Lower Tule Hydroelectric Project area. The licensee shall use "Suggested Practices for

Raptor Protection on Power Lines: The State of the Art in 1981" by Richard R. Olendorff as guidance for the plan.

The plan shall include, but need not be limited to: (1) a report of impact(s), such as collision and electrocution, of the project's approximate 211 feet of transmission lines on the bald eagle and other raptors; (2) non-disturbance of bald eagle nests; (3) removing or trimming of nests other than bald eagle nests, if needed, to avoid electrocution of raptors; (4) a provision to construct and maintain perch guard(s) to prevent bald eagles from perching on the distribution lines and perch site(s) that are above the danger level of the distribution lines; (5) use of non-conductive material (e.g. paint or PVC pipe) that shall cover elements within the wingspan of a bald eagle; (6) inspection of the project distribution lines every six months; and (7) a schedule for implementation of the plan.

The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the consulted agencies, and specific descriptions of how the consulted agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the consulted agencies to comment and to make recommendations prior to filing the plan for Commission approval. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on project-specific information.

The Commission reserves the right to require changes to the plan. The plan shall not be implemented until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the Bald Eagle Protection Plan, including any changes required by the Commission.

Article 407. Valley Elderberry Longhorn Beetle Management Plan. Within one year of license issuance, the licensee shall file, for Commission approval, after consultation with the U.S. Fish and Wildlife Service (FWS), U.S. Forest Service, and California Department of Fish and Game (DFG), a Valley Elderberry Longhorn Beetle Management Plan. The plan shall be consistent with the 1999 guidelines of the FWS to protect the valley elderberry longhorn beetle and its habitat, including elderberry plants with stems 1 inch or greater in diameter at ground level, and with the terms and conditions of the incidental take statement filed with the Commission by FWS on November 25, 2003.

The plan shall include, at a minimum, provisions for: (1) implementing each of the terms and conditions of the FWS's incidental take statement, pages 16 through 19; (2) complying with the reporting requirements of the FWS's incidental take statement, pages 19 and 20; (3) filing with the Commission a copy of any report sent to the (a) Sacramento U.S. Fish and Wildlife Service, Chief, Endangered Species Division; (b) Entomology Department of the California Academy of Sciences, Senior Curator of Coleoptera; or (c)

California DFG, Wildlife Habitat Data Analysis Branch; and (3) a schedule for implementation of the plan.

The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the plan accommodates the comments of the agencies. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No land-disturbing activities shall begin until the Commission notifies the licensee that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 408. Endangered Species Alert Plan. Within six months of the date of issuance of this license, the licensee shall file, for Commission approval, after consultation with the U.S. Forest Service, U.S. Fish and Wildlife Service, and the California Department of Fish and Game, a plan for an Endangered Species Alert Program. The purpose of the plan shall be to provide the licensee's personnel with a means for identifying the potential occurrence of species that are protected by the Endangered Species Act and protected as sensitive species by the Forest Service. The plan shall include, but need not be limited to: (1) the species to be included in the program, including federally-listed species, species proposed for federal listing, and Forest Service sensitive species found at the Lower Tule Project; (2) a program manual for each species to include a photograph, description, natural history information, map showing the species distribution in relation to the project facilities, habitat protection procedures for project-related activities, and a discussion of potential conflict with project operations; (3) a schedule for training the licensee's personnel; and (4) a provision for evaluating a conflict between a proposed project-related activity and an identified species. Materials in the licensee's existing Endangered Species Alert Program may be incorporated into the plan required by this article.

The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the consulted agencies, and specific descriptions of how the consulted agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the consulted agencies to comment and to make recommendations prior to filing the plan for Commission approval. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on project-specific information.

The Commission reserves the right to require changes to the plan. The plan shall not be implemented until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the Endangered Species Alert Plan, including any changes required by the Commission.

Article 409. Recreation Plan. Within 6 months of the date of issuance of this license, the licensee shall file for Commission approval, after consultation with the U.S. Forest Service (Forest Service), the National Park Service, the California Department of Parks and Recreation, and the California State Historic Preservation Office, a Recreation Plan for the Lower Tule Hydroelectric Project. The plan shall include, but not be limited to, provisions for the following: (1) the Stairs Access Area, which includes a parking lot, an access trail, and stairs to the Lower Tule River, including: (a) identification of any repairs and maintenance; (b) the method(s) and frequency of inspection for public safety; and (c) method of payment, schedule of payment, and method for adjusting for inflation of an annual contribution of \$1,500 to the Forest Service for maintenance; (2) an outline of the Tule River Interpretive Book that shall provide for a description and importance of the riparian habitat in the Lower Tule River Basin and the beneficial uses of water for hydroelectric processes, an estimated cost for developing and providing an initial 5,000 copies of the interpretive book, as required by Forest Service Condition No. 10, and a proposal for updating the book over the term of the license; and (3) an implementation schedule. The licensee shall also provide directional and interpretive signs.

The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the consulted agencies, and specific descriptions of how the consulted agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the consulted agencies to comment and to make recommendations prior to filing the plan for Commission approval. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on project-specific information.

The Commission reserves the right to require changes to the plan. The plan shall not be implemented until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the Recreation Plan, including any changes required by the Commission.

Article 410. *Monitor Recreation Use*. The licensee, after consultation with the U.S. Forest Service, the National Park Service, and the California Department of Parks and Recreation, shall monitor recreation use of the project area to determine whether existing recreation facilities are meeting recreation needs. Concurrent with the filing of FERC Form 80, required by Section 8 of the Commission's Regulations (18 CFR 8.11), the licensee shall file a report with the Commission on the monitoring results. This report shall include: (1) recreation use figures; (2) a discussion of the adequacy of the

licensee's recreation facilities at the project site to meet recreation demand; (3) a description of the methodology used to collect all study data; (4) if there is a need for additional facilities, measures proposed by the licensee to accommodate recreation needs in the project area; (5) documentation of agency consultation, copies of agency comments and recommendations on the report after it has been prepared and provided to the consulted agencies; and (6) specific descriptions of how the consulted agencies' comments and recommendations are accommodated by the report based on project-specific information.

The licensee shall allow a minimum of 30 days for the consulted agencies to comment and to make recommendations prior to filing the report with the Commission. The Commission reserves the right to require changes to the report. No recommendations or proposals from the report shall be implemented until the licensee is notified by the Commission that the report is approved. Upon Commission approval, the licensee shall implement the report, including any changes required by the Commission.

Article 411. Visual Resources Management Plan. At least 90 days before the start of any project-related land-disturbing or land clearing activities, the licensee shall file for Commission approval a Visual Resources Management Plan to avoid or minimize disturbances to the quality of the existing visual resources at the Lower Tule Project. The plan shall include, at a minimum, the licensee's specific proposals for: (1) blending the project works into the existing landscape character; (2) revegetating, stabilizing, and landscaping (i) new project-related construction areas and areas immediately adjacent to these new construction sites if disturbed by previous project-related construction; and (ii) areas that presently affect the visual resources at the project; (3) grading, planting grasses, repairing slopes due to project-related erosion, and preventing future erosion; (4) an implementation schedule; (5) monitoring and maintenance programs for project construction and operation; and (6) provisions for the plan's periodic review and revision.

The licensee shall prepare the plan after consultation with the U.S. Forest Service and State Water Resources Control Board, as appropriate. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agency, and specific descriptions of how the agency's comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agency to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on visual and landscape conditions at the site

The Commission reserves the right to require changes to the plan. No land-clearing or land-disturbing activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 412. *Historic Properties*. The licensee shall implement the "Programmatic Agreement Among the Federal Energy Regulatory Commission, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer and the USDA Sequoia National Forest Regarding Implementation of the Cultural Resource Management Plan for Routine Operation and Maintenance of Southern California Edison's Lower Tule River Hydroelectric Project (FERC Project No. 372)", executed on April 24, 2002, including but not limited to the Cultural Resources Management Plan (CRMP) associated with the Programmatic Agreement. The CRMP, dated December 1997, is approved in Ordering Paragraph D of this license and the licensee shall implement its provisions. The Commission reserves the authority to require changes to the CRMP at any time during the term of the license. In accordance with the CRMP, the licensee shall obtain approval from the Commission, after consultation with the California State Historic Preservation Officer, before engaging in any ground-disturbing activities or taking any other action that may affect historic properties within the project's Area of Potential Effect.

Article 413. *Use and Occupancy*. (a) In accordance with the provisions of this article, the licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain types of use and occupancy, without prior Commission approval. The licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the licensee also shall have continuing responsibility to supervise and control the use and occupancies, for which it grants permission, and to monitor the use of, and ensure compliance with, the covenants of the instrument of conveyance for, any interests that it has conveyed, under this article.

If a permitted use and occupancy violates any condition of this article or any other condition imposed by the licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this article is violated, the licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, canceling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

(b) The type of use and occupancy of project lands and water for which the licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 watercraft at a time and where said facility is intended to serve single-family type dwellings; (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline;

and (4) food plots and other wildlife enhancement.

To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the licensee shall require multiple use and occupancy of facilities for access to project lands or waters. The licensee also shall ensure to the satisfaction of the Commission's authorized representative that the use and occupancies for which it grants permission are maintained in good repair and comply with applicable state and local health and safety requirements.

Before granting permission for construction of bulkheads or retaining walls, the licensee shall: (1) inspect the site of the proposed construction; (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site; and (3) determine that the proposed construction is needed and would not change the basic contour of the reservoir shoreline.

To implement this paragraph (b), the licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project lands and waters, which may be subject to the payment of a reasonable fee to cover the licensee's costs of administering the permit program. The Commission reserves the right to require the licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (b) and to require modification of those standards, guidelines, or procedures.

(c) The licensee may convey easements or rights-of-way across, or leases of, project lands for: (1) replacement, expansion, realignment, or maintenance of bridges or roads where all necessary state and federal approvals have been obtained; (2) storm drains and water mains; (3) sewers that do not discharge into project waters; (4) minor access roads; (5) telephone, gas, and electric utility distribution lines; (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or underground major telephone distribution cables or major electric distribution lines (69 kilovolts or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project reservoir.

No later than January 31 of each year, the licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.

(d) The licensee may convey fee title to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary state and federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary federal and state water quality

certification or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary federal and state approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 watercraft at a time and are located at least 0.5 mile (measured over project waters) from any other private or public marina; (6) recreational development consistent with an approved Exhibit R or approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is 5 acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from project waters at normal surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year.

- (e) At least 60 days before conveying any interest in project lands under this paragraph (d), the licensee must submit a letter to the Director, Office of Energy Projects, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked exhibit G or K map may be used), the nature of the proposed use, the identity of any federal or state agency official consulted, and any federal or state approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the licensee to file an application for prior approval, the licensee may convey the intended interest at the end of that period.
- (1) The following additional conditions apply to any intended conveyance under paragraph (c) or (d) of this article: (1) Before conveying the interest, the licensee shall consult with federal and state fish and wildlife or recreation agencies, as appropriate, and the California State Historic Preservation Officer;
- (2) Before conveying the interest, the licensee shall determine that the proposed use of the lands to be conveyed is not inconsistent with any approved Exhibit R or approved report on recreational resources of an Exhibit E; or, if the project does not have an approved Exhibit R or approved report on recreational resources, that the lands to be conveyed do not have recreational value;
- (3) The instrument of conveyance must include the following covenants running with the land: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; (ii) the grantee shall take all reasonable precautions to ensure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project; and (iii) the grantee shall not unduly restrict public access to project waters; and
- (4) The Commission reserves the right to require the licensee to take reasonable remedial action to correct any violation of the terms and conditions of this article, for the

protection and enhancement of the project's scenic, recreational, and other environmental values.

- (f) The conveyance of an interest in project lands under this article does not in itself change the project boundaries. The project boundaries may be changed to exclude land conveyed under this article only upon approval of revised Exhibit G or K drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance, flowage, recreation, public access, protection of environmental resources, and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this article from the project shall be consolidated for consideration when revised Exhibit G or K drawings would be filed for approval for other purposes.
- (g) The authority granted to the licensee under this article shall not apply to any part of the public lands and reservations of the United States included within the project boundary.
- (H) The licensee shall serve copies of any Commission filing required by this order on any entity specified in the order to be consulted on matters related to that filing. Proof of service on these entities must accompany the filing with the Commission.
- (I) This order is issued under authority delegated to the Director and is final unless a request for rehearing is filed within 30 days from the date of its issuance, as provided in section 313(a) of the FPA. The filing of a request for rehearing does not operate as a stay of the effective date of this license or of any other date specified in this order, except as specifically ordered by the Commission. The licensee's failure to file a request for rehearing shall constitute acceptance of this license.

J. Mark Robinson
Director
Office of Energy Projects

APPENDIX A

[Forest Service 4(e) Conditions Issued August 5, 2002]

LICENSE CONDITIONS NECESSARY FOR PROTECTION AND UTILIZATION OF THE SEQUOIA NATIONAL FOREST GIANT SEQUOIA NATIONAL MONUMENT FOR FERC PROJECT NO. 372, LOWER TULE HYDROELECTRIC PROJECT SOUTHERN CALIFORNIA EDISON COMPANY

Condition 1: Forest Approval of Final Design: Deleted [by Forest Service]

Condition 2: Approval of Changes After Initial Construction

Notwithstanding any Commission approval or license provisions to make changes to the project, the Licensee shall get written approval from the Forest Service prior to making any changes in the location of any constructed project features or facilities, or in the uses of project lands and waters, or any departure from the requirements of any approved exhibits filed with the Commission. Following receipt of such approval from the Forest Service, and at least 60 days prior to initiating any such changes or departure, the Licensee shall file a report with the Commission, describing the changes, the reasons for the changes, and showing the approval of the Forest Service for such changes. The Licensee shall file an exact copy of this report with the Forest Service at the same time it is filed with the Commission. This article does not relieve the Licensee from the amendment or other requirements of Article 2 or Article 3 of this license.

Condition 3: Consultation

Each year, during the 60 days preceding the anniversary date of the license, the Licensee shall consult with the Forest Service with regard to measures needed to ensure protection and utilization of the National Forest resources affected by the project. Within 60 days following such consultation, the Licensee shall file with the Commission evidence of the consultation with any recommendations made by the Forest Service. The Forest Service reserves the right, after notice and opportunity for comment and administrative review, to require changes in the project and its operation through revision of the 4(e) conditions that require measures necessary to accomplish protection and utilization of national forest resources.

Condition 4: Minimum Stream Flow Requirement

During operation of the facilities authorized by this license, the Licensee shall maintain the following continuous, minimum flows or the natural flows, whichever are less, from either diversion dam, as measured at or immediately below the junction of the North and South Forks of the Middle Fork of the Tule River, a total flow of not less than 10 cubic

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feet per second (cfs) during the period from June 1 through September 30. From October 1 through November 30, a total flow of not less than 6 cfs shall be maintained. During the remainder of the year, the period of December 1 through the May 31, a flow of 5 cfs shall be released from either diversion dam, as measured at or immediately below the junction of the North and South Forks of the Middle Fork of the Tule River. Instream flows will be monitored at United States Geologic Survey (USGS) gauging station 11202710, which is located immediately downstream from the confluence of the North and South Forks of the Middle Fork of the Tule River.

Written consent from the Forest Service will allow the flows in this condition to be temporarily modified, during and to the extent required: 1) for performance of required maintenance of the diversions, their outlet facilities, water conveyance systems, and minimum flow release facilities; 2) by operating emergencies beyond the control of the Licensee; 3) for short periods of time for fishery management purposes upon mutual agreement between the Licensee and the California Department of Fish and Game; 4) in the interest of public safety. The Licensee shall notify the Forest Supervisor at least five working days prior to any such departure, except during emergencies.

Condition 5: Native Aquatic Species Management Plan

The Licensee shall file with the Director, Office of Hydropower Licensing, within one year following the acceptance of the license, a plan developed by the Licensee, in consultation with the California Department of Fish and Game, U.S. Fish and Wildlife Service, and approved by the Forest Service, for the management of native aquatic species and associated habitat within the project area. The purpose of the Native Aquatic Species Management Plan is to determine trends within these associations, possible effects (positive and negative) from project operations on native aquatic species, and to assure that the flows are beneficial to those native aquatic species identified as key species of concern.

Specific objectives of the management plan are as follows: The plan will identify fish, reptile, and amphibian species present and describe the status of the native aquatic species in the project area. The California roach represents the fish species of concern in the native association, although hardhead minnow is also of interest. Western pond turtle and foothill yellow-legged frog should also be addressed in the management plan. Potential threats to the habitat and to the native aquatic species communities within the project area will be described. Protective actions against noted threats will be identified and described. Habitat and native aquatic species monitoring will be conducted every five years to establish trends within these associations over the term of the license. Actions to protect and/or enhance habitats within the project area will be identified when monitoring indicates declines in the associations. Possible beneficial actions will be described in the 5-year monitoring report updates.

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The Licensee shall not commence activities the Forest Service determines to be affected by the plan until after 60 days following the filing date, unless the Director, Office of Hydropower Licensing, prescribes a different commencement schedule.

Condition 6: Fish Entrainment

Within 6 months following the date of issuance of this license, the Licensee, in consultation with the Forest Service, California Department of Fish and Game, and U.S. Fish and Wildlife Service, shall develop a plan for the design, construction and maintenance of a fish bypass, whereby fish trapped in the project intake sandbox are safely returned to the Lower Tule River.

<u>Condition 7: Protection of Threatened, Endangered, Proposed for Listing, and Sensitive Species</u>

Before taking actions to construct new project features (including but not limited to proposed recreation developments) that may affect a species proposed for listing, or listed under the federal Endangered Species Act, or that may affect that species' critical habitat, or a Forest Service sensitive species or its habitat, the Licensee shall prepare a Biological Evaluation evaluating the potential impact of the action on the species or its habitat and submit it to the Forest Service for approval. In consultation with the Commission, the Forest Service may require mitigation measures for the protection of the affected species.

Condition 8: Wildlife Drowning Prevention Plan

The Licensee will be responsible for the maintenance of four deer/wildlife crossings along open sections of the flume and wildlife water guzzlers located in several locations below the flume. The Licensee shall monitor the flume during routine flume inspections for deer/wildlife mortality for three years, beginning three months from the date of issuance of the license. Should mortality occur within this three-year period, the Licensee shall note the species affected and approximate date and location. Annually, during this three-year period, the Licensee shall submit a written report of the monitoring results to the Forest Service. At the end of the three-year monitoring period, the Licensee, in consultation with the Forest Service and California Department of Fish and Game, shall determine the need for escape structures. The Forest Service reserves the right to require the Licensee to construct escape structures, if needed.

Condition 9: Project Recreation Plan

The Licensee shall, upon acceptance of the license, commence payment of funds to the Forest Service, in the initial amount of \$1,500 (calendar year 2002 cost base, escalated every five years by the Gross National Product Deflator) to cover clean-up and minor maintenance expenses, associated with the project-related recreation use at the parking

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lot, access trail, and stairs to the Lower Tule River in T20S, R30E, Section 27. The Licensee will be responsible for major maintenance at the site. The Licensee will enter into a Memorandum of Agreement (MOA) and collection agreement with the Forest Service, which will set forth the details, responsibilities, and payment. Within 6 months following the date of issuance of this license, the Licensee, in consultation with the Forest Service, shall develop a plan whereby the Licensee will do tri-annual safety inspections and identified repairs to the parking lot, access trail, and stairs to the Lower Tule River in T20S, R30E, Section 27.

Condition 10: Tule River Interpretive Book

Within one year following the date of issuance of this license, the Licensee, in consultation and agreement with the Forest Service, shall produce a Tule River Interpretive Book and provide an initial 5,000 copies. This interpretive book is intended primarily for distribution within local elementary schools (e.g., Springville and Porterville schools). The book will target students in the fifth grade and describe the natural resources in riparian zones within the Lower Tule River Basin. It will emphasize the importance of riparian ecosystems to plants, animals, and humans and the need to protect natural resources within these riparian zones. It will also discuss the beneficial uses of basin water for hydropower purposes. The materials used to develop the book shall be available to the Forest Service for additional interpretive opportunities.

Condition 11: Transportation System Management Plan

The Licensee shall file with the Director, Office of Hydropower Licensing, within one year following the acceptance of the license, a Transportation System Management Plan, approved by the Forest Service, for protection and maintenance of roads associated with this license. At a minimum, the plan should include a map showing all roads associated with this project, identify the uses (e.g., recreation, facility access) of the roads, condition surveys, construction/reconstruction needs, road closure, safety, jurisdiction (e.g., county, state), and identify roads with respect to the project boundary and maintenance responsibilities.

The United States shall have unrestricted use of any road constructed within the project area for all purposes deemed necessary or desirable in connection with the protection, administration, management, and utilization of federal lands or resources and shall have the right to extend rights and privileges for use of the right-of-way and road thereon to states and local subdivisions thereof, as well as to other users, including members of the public, except contractors, agents, and employees of the Licensee; provided, that the agency having jurisdiction shall control such use so as not to unreasonably interfere with use of the road by the Licensee or cause the Licensee to bear a share of the cost of maintenance greater than the Licensee's use bears to all use of the road.

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The Licensee shall confine all project vehicles, including, but not limited to, administrative and transportation vehicles and construction and inspection equipment, to roads or specifically designed access routes. The Forest Service reserves the right to close any and all such routes where damage is occurring to the soil or vegetation, or if requested by the Licensee, to require reconstruction/construction by the Licensee to the extent needed to accommodate the Licensee's use. The Forest Service agrees to provide notice to the Licensee and FERC prior to road closures, except in an emergency, in which case notice will be provided as soon as practicable.

Condition 12: Visual Resource Plan

The Licensee shall file with the Director, Office of Hydropower Licensing, within one year following the acceptance of the license, a Visual Resource Plan (VRP), approved by the Forest Service, for protection of National Forest System visual resources affected by the project. At a minimum, the VRP should address project facilities, such as clearings, spoil piles, diversion structures, penstocks, pipes, ditches, powerhouses, other buildings, transmission lines, corridors, and access roads. The VRP should address facility configurations, alignments, building materials, colors, landscaping, and screening.

Condition 13: Fire Prevention and Response Plan

The Licensee shall file with the Director, Office of Hydropower Licensing, within one year following the acceptance of the license, a Fire Prevention and Response Plan, approved by the Forest Service, which shall set forth in detail the plan for prevention, reporting, control, and extinguishing of fires in the vicinity of the Licensee's project, consistent with the Tule River District fire suppression plan. Such plans shall be reviewed and revised at intervals of not more than three years.

Condition 14: Vegetation Management Plan

The Licensee shall file with the Director, Office of Hydropower Licensing, within one year following the acceptance of the license, a Vegetation Management Plan, approved by the Forest Service, for the protection and maintenance of forest resources associated with vegetation management near project facilities. The plan must be consistent with the Standards and Guidelines for affected management areas in the Sequoia National Forest Land and Resource Management Plan. The plan, at a minimum, must address access routes, season of operations, cultural resources, consultation with local Native Americans regarding gathering, slash treatment, vegetation treatment (falling, limbing, topping, chemical treatments), wildlife and botanical concerns, noxious weeds, visually sensitive areas, and Forest Service notification procedures.

Condition 15: Noxious Weed Management Plan

The Licensee shall file with the Director, Office of Hydropower Licensing, within one year following the acceptance of the license, a Noxious Weed Management Plan, approved by the Forest Service, for the purpose of controlling and containing the spread of noxious weeds. The plan must be consistent with the Standards and Guidelines for affected management areas in the Sequoia National Forest Land and Resource Management Plan. The plan, at a minimum, must include: (a) Inventory, mapping and monitoring; (b) Prevention strategies for invasive plant species (such as cleaning equipment, use of weed free materials); (c) Treatment of new and established infestations; (d) Education program for project employees.

The Forest Service reserves the right to require additional 4(e) conditions necessary to implement the plan.

Condition 16: Maintenance of Improvements

The Licensee shall maintain the improvements and premises to standards of repair, orderliness, neatness, sanitation, and safety. For example, trash, debris, unusable machinery, etc., will be disposed of separately; other materials will be stacked, stored neatly, or within buildings. Disposal will be at an approved, existing location, except as otherwise agreed to by the Forest Service.

Condition 17: Existing Claims

The license shall be subject to all valid claims and existing rights.

Condition 18: Compliance with Regulations

The Licensee shall comply with the regulations of the Department of Agriculture and all federal, state, county, and municipal laws, ordinances, or regulations in regard to the area or operations covered by this license, to the extent federal law does not preempt ordinances or regulations.

Condition 19: Protection of United States Property

The Licensee shall exercise diligence in protecting from damage the land and property of the United States covered by and used in connection with this license.

Condition 20: Surrender of License

As a condition of any transfer of the license or sale of the project, the Licensee shall guarantee or assure, in a manner satisfactory to the Forest Service, that the costs of

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surrender and restoration will be provided for by the Licensee or transferee. If deemed necessary by the Forest Service to assist it in evaluating the Licensee's proposal, the Licensee shall conduct an analysis, using experts approved by the Forest Service, to estimate the potential costs associated with surrender and restoration of the project area to Forest Service specifications. In addition, the Forest Service may require the Licensee to pay for an independent audit of the transferee to assist the Forest Service in determining whether the transferee has the financial ability to fund the surrender and restoration work specified in the analysis.

Condition 21: Self Insurance

The Licensee shall indemnify, defend, and hold the United States harmless for any costs, damages, claims, liabilities, and judgments arising from past, present, and future acts or omissions of the Licensee in connection with the use and/or occupancy authorized by this license. This indemnification and hold harmless provision applies to any acts and omissions of the Licensee or the Licensee's heirs, assigns, 6agents, employees, affiliates, subsidiaries, fiduciaries, contractors, or lessees in connection with the use and/or occupancy authorized by this license which result in: (1) violations of any laws and regulations which are now or which may in the future become applicable, and including, but not limited to environmental laws, such as the Comprehensive Environmental Response Compensation and Liability Act, Resource Conservation and Recovery Act, Oil Pollution Act, Clean Water Act, Clean Air Act; (2) judgments, claims, demands, penalties, or fees assessed against the United States; (3) costs, expenses, and damages incurred by the United States; or (4) the release or threatened release of any solid waste, hazardous substances, pollutant, contaminant, or oil in any form in the environment.

Condition 22: Water Pollution

The Licensee shall discharge no waste or byproduct if it contains any substances in concentrations that would result in violation of water quality standards set forth by the state; would impair present or future beneficial uses of water; would cause pollution, nuisance, or contamination; or would unreasonably degrade the quality of any waters in violation of any federal or state law. During any new construction and during operation and maintenance of the project, the Licensee shall prevent water pollution by using management practices identified as necessary by the Forest Service.

Condition 23: Damage – High Hazard

The Licensee is hereby made liable for all injury, loss, or damage to the United States land and property, including, but not limited to fire suppression costs, directly or indirectly resulting from or caused by the Licensee's power lines covered by this license, or any other high risk use and occupancy of the area covered by this license, regardless of whether the Licensee is negligent or otherwise at fault, provided that the maximum liability without fault shall not exceed \$1,000,000 for any one occurrence, and provided

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further that the Licensee shall not be liable when such injury, loss, or damage results wholly, or in part, from a negligent act of the United States, or from an act of a third party not involving the facilities of the Licensee.

Determination of liability for injury, loss, or damage, including fire suppression costs, in excess of the specified maximum, shall be according to the laws governing ordinary negligence.

Condition 24: Risks and Hazards

The Licensee is responsible for inspecting its site, right-of-way, and immediate adjoining area for dangerous trees, hanging limbs, and other evidence of hazardous conditions and is responsible for removing such hazards, after securing permission from the Forest Service, except in an emergency where there is an imminent risk of death or injury to the public or facilities, in which case the Licensee shall notify the Forest Service of the action as soon as possible.

Condition 25: Signs

The Licensee shall consult with the Forest Service prior to erecting signs related to safety issues on the area covered by this license. Prior to the Licensee erecting any other signs or advertising devices on the area covered by this license, the Licensee must obtain the approval of the Forest Service as to location, design, size, color, and message. The Licensee shall not be required to consult or obtain the prior approval of the Forest Service regarding signs on Licensee owned land that will not be visible from National Forest System land. The Licensee shall be responsible for maintaining all Licensee erected signs to neat and presentable standards.

Condition 26: Pesticide Use Restrictions

Pesticides may not be used to control undesirable woody and herbaceous vegetation, aquatic plants, insects, rodents, etc., without the prior written approval of the Forest Service. The Licensee shall submit a request for approval of planned uses of pesticides. The report must cover annual planned use and be updated as required by the Forest Service. The Licensee shall provide information essential for review in the form specified. Exceptions to this schedule may be allowed only when unexpected outbreaks of pests require control measures that were not anticipated at the time the report was submitted. In such an instance, an emergency request and approval may be made.

The Licensee shall use on National Forest System land only those materials registered by the U.S. Environmental Protection Agency for the specific purpose planned. The Licensee must strictly follow label instructions in the preparation and application of pesticides and disposal of excess materials and containers.

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Condition 27: Hazardous Substance Plan

Within one year following the date of acceptance of this license and at least 60 days before starting any activities the Forest Service determines to be of a land disturbing nature on National Forest System land, the Licensee shall file with the Director, Office of Hydropower Licensing, a plan approved by the Forest Service for oil and hazardous substances storage and spill prevention and cleanup.

The plan must be consistent with the Sequoia National Forest hazardous waste and spill prevention plan. At a minimum, the plan must require the Licensee to: (1) maintain in the project area, a cache of spill cleanup equipment suitable to contain any spill from the project; (2) periodically inform the Forest Service of the location of the spill cleanup equipment on National Forest System land and of the location, type, and quantity of oil and hazardous substances stored in the project area; and (3) inform the Forest Service immediately of the nature, time, date, location, and action taken for any spill.

The Licensee shall not commence activities that the Forest Service determines to be affected by the plan until after 60 days following the filing date, unless the Director, Office of Hydropower Licensing, prescribes a different commencement schedule.

Condition 28: Cultural Resources Management Plan

The licensee shall implement the Cultural Resources Management Plan submitted in the Project Application and approved by the State Historic Preservation Officer to protect cultural resources.

Condition 29: Forest Service Reserves the Right to Revise Section 4(e) Conditions

The Forest Service reserves the right to submit final Section 4(e) conditions to FERC for inclusion in the new license for the Lower Tule Hydroelectric Project, FERC No. 372, that may be revised: (1) through the Forest Service administrative appeal process; and (2) to resolve a conflict between a 4(e) condition and a water quality certification condition.

APPENDIX B

[State of California, State Water Resources Control Board Water Quality Certificate Conditions issued March 5, 2004]

IN THE MATTER OF WATER QUALITY CERTIFICATION FOR THE SOUTHERN CALIFORNIA EDISON COMPANY LOWER TULE RIVER HYDROELECTRIC PROJECT FEDERAL ENERGY REGULATORY COMMISSION (FERC) PROJECT NO. 372

- 1. This certification is subject to modification or revocation upon administrative or judicial review including review and amendment pursuant to California Water Code section 13330 and California Code of Regulations, title 23, division 3, chapter 28, article 6 (commencing with § 3867.)
- 2. The SWRCB may add to or modify the conditions of this certification, as appropriate, to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.
- 3. Notwithstanding any more specific conditions in this certification, the project shall be operated in a manner consistent with all water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.
- 4. In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under any state or federal law. For the purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this certification. In response to a suspected violation of any condition of this certification, the SWRCB may require the holder of any federal permit or license subject to this certification to furnish, under penalty of perjury, any technical or monitoring reports the SWRCB deems appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In response to any violation of the conditions of this certification, the SWRCB may add to or modify the conditions of this certification as appropriate to ensure compliance.
- 5. In order to protect the beneficial use designations identified in the Tulare River Basin Plan, the operation of the project shall not add the following substances to surface waters:

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• Taste or odor-producing substances that impart undesirable tastes to domestic and municipal water supplies or odors to fish flesh or other edible products of aquatic origin or that cause nuisance or adversely affect beneficial uses;

- Perceptible floating material including, but not limited to, solids, liquids, foams or scums that could result in degradation of water quality;
- Suspended or settleable material in concentrations that cause a nuisance or adversely affect beneficial uses;
- Oil, greases, waxes or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water;
- Toxic pollutants present in the water column, sediments, or biota in concentrations that adversely affect beneficial uses; that produce detrimental response in human, plant, animal or aquatic life; or that bioaccumulate in aquatic resources at levels that are harmful to human health; and
- Coliform organisms attributable to human wastes.
- 6. This certification is not intended and shall not be construed to apply to issuance of any FERC license or FERC license amendment other than the FERC license specifically identified in Licensee's application for certification.
- 7. Any change to the Lower Tule River Hydroelectric Project, including project operation, that would have a significant or material effect on the findings, conclusions, or conditions of this certification must be submitted to the Chief of the Division of Water Rights for prior review and written approval.
- 8. The SWRCB may add or modify the conditions of this certification as appropriate to coordinate the operations of this project and other water development projects, where coordination of operations is reasonably necessary to achieve water quality standards to protect beneficial uses of water.
- 9. During operation of the Lower Tule River Project as authorized by the new license, the Licensee shall maintain either the following continuous, minimum instream flows or the upstream flows entering the project, whichever are less:

10 cfs from June 1 through September 30; 6 cfs from October 1 through November 30; and 5 cfs from December 1 through May 31.

The minimum instream flows shall be monitored for compliance at U.S. Geological Survey gauging station #11202710, which is located immediately downstream from the

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confluence of the North and South Forks of the Middle Fork of the Tule River. The Licensee shall report to the Chief of the Division of Water Rights in writing any violation of the minimum instream flow requirements within 30 days of the violation. The Licensee shall document the causes of the violation and report any actions taken by the Licensee to correct the problem.

With the written consent of the Chief of the Division of Water Rights, Licensee may make temporary decreases in the minimum flow requirements of this certification during and to the extent required for performance of required maintenance of the dams, their outlet facilities, and minimum stream flow release facilities. The Licensee shall obtain the concurrence of the USFS and the California Department of Fish and Game (DFG) prior to seeking approval from the Chief of the Division of Water Rights for any temporary stream flow modifications. The Licensee shall notify the Chief of the Division of Water Rights at least five working days prior to any such planned reduction in stream flows. The Licensee also may modify the minimum flow requirement temporarily in the event of operating emergencies beyond the control of the Licensee or in the interest of public safety, in which case the Licensee shall notify the Chief of the Division of Water Rights, the USFS and FERC as soon a practicable alter making such an emergency flow modification but not later than ten calendar days after each such modification.

10. The Licensee shall develop within one year of issuance of a new project license, in consultation with the DFG, U.S. Fish and Wildlife Service (USFWS), USFS and the SWRCB staff a Native Aquatic Species Management Plan (NASMP) for the management of native aquatic species and their associated habitats within the project affected reach, and submit the plan to the Chief of the Division of Water Rights for approval. After notice and an opportunity for hearing, the Division Chief may modify the NASMP as appropriate. Within 45 days of approval, the Licensee shall file the NASMP with the FERC and subsequently implement the plan. The NASMP and its objectives shall remain in effect for the life of the new project license. The purpose of the NASMP is to monitor trends within the native aquatic species' associations for possible effects (positive and negative) from project operations, and to assure that the minimum stream flows are beneficial to those native aquatic species identified as key native aquatic species of special concern. The species of special concern include the California roach (Lavinia symmetricus), Sacramento sucker (Catastoinus occidentalis), Sacramento pike-minnow (Ptychocheillus grandis), foothill yellow-legged frog (Rana boylii) and western pond turtle (Clemmys marmorata).

Specific components of NASMP include but are not limited to the following:

(1) The Licensee shall identify, in the NASMP fish, reptile, and amphibian species present in the project area and describe the status of the native aquatic species within the project reach.

(2) The NASMP shall describe potential threats to the habitat, including food sources, of the species of concern and of any other species identified in the NASMP and to the native aquatic species communities within the project area. The plan shall include actions the Licensee proposes to take against those potential threats if they are identified in the ongoing monitoring programs described below.

- (3) The NASMP shall include a monitoring program to establish population trends of the native aquatic species. The monitoring program shall be approved by the Chief of the Division of Water Rights prior to submittal to FERC for approval. The monitoring program described in the NASMP shall commence at the beginning of the first practicable sampling season after FERC issues the license and SCE accepts it and every five years thereafter.
- (4) The monitoring program shall include a water temperature element. The Licensee shall monitor water temperatures throughout the stream reach dewatered as a result of the project. Water temperature data shall be collected from May 15 through September 15 of each year and shall be incorporated into the monitoring report described in condition 5 below. The water temperature data collected and reported shall include but not be limited to the mean daily, daily maximum and daily minimum temperatures. If temperature data indicates that water temperatures may be the most critical factor limiting the populations of species of special concern, the five-year report described in condition 5 shall include actions the Licensee proposes to take to minimize water temperature impacts to the extent that they are no longer the limiting factor affecting the species of special concern.
- (5) The Licensee shall prepare a monitoring report within six months of the completion of the initial five-year monitoring cycle and within six months of each successive five-year monitoring cycle. The monitoring report is to be provided to the DFG, USFWS, USFS and the Chief of the Division of Water Rights. The monitoring report shall include population and water temperature data and shall identify actions the Licensee may take to protect and/or enhance habitats within the project boundaries when the population trend data indicate declines in the species of special concern. Based on the report, the Division Chief may, after notice and opportunity for hearing, require reasonable changes in project operations designed to enhance or more filly protect habitat conditions or aquatic communities. Licensee shall only be responsible for project-related controllable factors.
- (6). The NASMP is required as a condition of this certification and is also

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required under Water Code section 13383, subdivision (b).

The SWRCB reserves its jurisdiction to use appropriate administrative procedures to require appropriate releases from the Licensees' diversions or other appropriate actions to maintain the native aquatic species in "good condition" pursuant to California Fish and Game Code section 5937. The definition of species in good condition articulated by Dr. Peter Moyle in the Putah Creek testimony, and referenced in the article, "Fish Health and Diversity: Justifying Flows for a California Stream," by Moyle, et al, in Fisheries, Vol. 23, No. 7, (July 1998), will be used to evaluate the status of aquatic species in the Middle Fork of the Tule River project reach.

- 11. Within six months of acceptance of the license issued by FERC, the Licensee, in consultation with the USFS, DFG, and USFWS shall develop a plan for the design, construction and maintenance of a fish bypass, whereby fish trapped in the project intake sandbox are safely returned to the Middle Fork of the Tule River. The plan shall include a monitoring program to assure that the fish bypass is meeting the goal of returning fish safely to the Middle Fork of the Tule River. The Licensee shall construct the fish bypass as soon as practicable after approval by FERC of the design plan. The Licensee shall notify the Chief of the Division of Water Rights when FERC has approved the plan for the fish bypass structure. At that time, the Licensee shall also provide the Chief of the Division of Water Rights with a time schedule for construction of the required fish bypass structure. If construction is delayed, the Licensee shall provide the Division Chief with a revised time schedule. The Licensee shall also notify the Division Chief when the structure is operational.
- 12. This certification does not authorize any act which results in the taking of a threatened or endangered species or any act, which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish & G. Code § 2050-2097) or the federal Endangered Species Act (16 U.S.C. § 1531 1544). If a "take" will result from any act authorized under this certification or water rights held by the Licensee, the Licensee shall obtain authorization for the take prior to any construction or operation of the project. The Licensee shall be responsible for meeting all requirements of the applicable Endangered Species Act for the project authorized under this certification.
- 13. The Licensee shall develop within one year of issuance of a new project license, in consultation with the Central Valley RWQCB and the SWRCB staff a water quality monitoring program that specifically addresses the use of algaecides within project facilities and their effects on biological resources and other beneficial uses within the North Fork and South Fork of the Middle Fork of the Tule River as well as the Middle Fork of the Tide River below the confluence of the project diversions. The Licensee shall submit the plan to the Executive Officer or designee of the Central Valley RWQCB and Chief of the Division of Water Rights for approval. Within 45 days of approval, the

Licensee shall file the plan with the FERC and subsequently implement the plan. The water quality monitoring program shall include at a minimum the use of benthic macroinvertebrate rapid bioassessment protocols to assess potential adverse impacts resulting from the use of algae control chemicals. The monitoring schedule shall include the first five years post-licensing during which algaecides or other pesticides are used.

The monitoring program shall commence at the beginning of the first practicable sampling season as described in the plan. At the end of each year monitored, the Licensee shall provide the RWQCB and the Chief of the Division of Water Rights with a report describing the results of the monitoring program and any actions the Licensee proposes to take to avoid water quality impacts to the beneficial uses of the North Fork and South Fork of the Middle Fork of the Tule River as well as the Middle Fork of the Tule River. Alter notice and an opportunity for hearing, the Division Chief may modify the plan as appropriate. If so required by the Central Valley RWQCB, the Licensee shall apply to the Central Valley RWQCB for a National Pollutant Discharge Elimination System (NPDES) permit for use of algaecides within project features-or apply for modification of an existing NPDES permit. If the Licensee applies for an NPDES permit or modification of an existing permit, the Licensee shall timely provide to the Central Valley RWQCB all information required by the Central Valley RWQCB to issue a permit.

14. Licensee shall comply with any applicable requirements of state law consistent with the Clean Water Act requiring fees to cover SWRCB costs in administering the certification Program, including sections 1071 and 3833.1 of title 23, California Code of Regulations. Pursuant to title 23, California Code of Regulations, section 3860(c), this certification is conditioned upon total payment of any fee required under this Chapter and owed by the applicant.