

35 FERC P 62244 (F.E.R.C.), 1986 WL 77260
**1 Office Director Orders

Albert R. Hunt and Betty F. Hunt

Project No. 4627-005
Order Issuing License (Minor Project)
(Issued May 8, 1986)

*63404 Kenneth M. Pusateri, Acting Director, Office of Hydropower Licensing.

Albert R. Hunt and Betty F. Hunt (Applicant) have filed a license application under Part I of the Federal Power Act (Act) to construct, operate, and maintain the Baker Creek Project, located in Humboldt County, California, on Baker Creek. The project would affect the interests of interstate commerce.

Notice of the application has been published. No protests or motions to intervene were filed in this proceeding, and no agency objected to issuance of this license. Comments received from interested agencies and individuals have been fully considered in determining whether to issue this license, as discussed below.

Summary of Findings

The design of this project is consistent with the engineering standards governing dam safety. The project will be safe if constructed, operated, and maintained in accordance with the requirements of this license. Analysis and support for related license articles are provided in the Safety and Design Assessment attached to this order.

An Environmental Assessment (EA) was issued for this project. Background information, analysis of impacts, support for related license articles, and the basis for a finding of no significant impact on the environment are contained in the EA attached to this order. Issuance of this license is not a major Federal action significantly affecting the quality of the human environment.

The Director, Office of Hydropower Licensing, concludes that the project would not conflict with any planned or authorized development, and would be best adapted to comprehensive development of the waterway for beneficial public uses.

The Director orders:

(A) This license is issued to Albert R. Hunt and Betty F. Hunt (licensee) for a period of 50 years, effective the first day of the month in which this order is issued, to construct, operate, and maintain the Baker Creek Project. This license is subject to the terms and conditions of the Act, which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the Act.

(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	FERC No.	Showing
G-1	4627-6	Project Map
G-2	4627-7	Plan and Profile

*63405 (2) Project works consisting of: (a) a 4-foot-high, 45-foot-long diversion dam at elevation 2,166 feet; (b) a 30-inch-diameter, 5,400-foot-long penstock; (c) a powerhouse containing a single 1,500-kW generating unit, operating under a head of 916 feet; (d) approximately 17,500 feet of 12.5-kV transmission line to interconnect with the existing Pacific Gas and Electric Company transmission line; and (e) appurtenant facilities.

The project works generally described above are more specifically shown and described by those portions of Exhibits A and F recommended for approval in the attached Safety and Design Assessment.

(3) 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.

2 (C) The Exhibit G described above and those sections of Exhibits A and F recommended for approval in the attached Safety and Design Assessment are approved and made part of the **license.

(D) The following sections of the Act are waived and excluded from the **license** for this minor project:

4(b), except the second sentence; 4(e), insofar as it relates to approval of plans by the Chief of Engineers and the Secretary of the Army; 6, insofar as it relates to public notice and to the acceptance and expression in the **license** of terms and conditions of the Act that are waived herein; 10(c), insofar as it relates to depreciation reserves; 10(d); 10(f); 14, except insofar as the power of condemnation is reserved; 15; 16; 19; 20; and 22.

(E) This **license** is subject to the articles set forth in Form L-15, (October 1975) [reported at 54 FPC 1883], entitled "Terms and Conditions of **License** for Unconstructed Minor Project Affecting the Interests of Interstate or Foreign Commerce," except Article 15. The **license** is also subject to the following additional articles:

Article 201. The licensee shall pay the United States the following annual charge, effective the first day of the month in which this **license** is issued:

For the purpose of reimbursing the United States for the cost of administration of Part I of the Act, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 2,000 horsepower.

Article 202. The licensee shall clear and keep clear to an adequate width all lands along open conduits and shall dispose of all temporary structures, unused timber, brush, refuse, or other material unnecessary for the purposes of the project which result from maintenance, operation, or alteration of the project works. In addition, all trees along the periphery of project reservoirs which may die during operations of the project shall be removed. All clearing of lands and disposal of unnecessary material shall be done with due diligence to the satisfaction of the authorized representative of the Commission and in accordance with appropriate Federal, state, and local statutes and regulations.

Article 301. The licensee shall commence construction of project works within two years from the issuance date of the **license** and shall complete construction of the project within four years from the issuance date of the **license**.

Article 302. The licensee shall at least 60 days prior to start of construction, submit one copy to the Commission's Regional Director and two copies to the Director, Division of Inspections, of the final contract drawings and specifications for pertinent features of the project, such as water retention structures, powerhouse, and water conveyance structures. The Director, Division of Inspections, may require changes in the plans and specifications to assure a safe and adequate project.

Article 303. The licensee shall within 90 days of completion of construction file with the Commission revised Exhibits A, F, and G to describe and show the project “as built”.

****3 Article 401.** The licensee shall discharge from the Baker Creek Project, a continuous minimum flow of 0.25 cubic feet per second, as measured immediately downstream of the diversion structure, or inflow to the diversion structure, whichever is less, for the protection of the aquatic environment of Baker Creek. This flow may be temporarily modified if required by operating emergencies beyond the control of licensee, and for short periods upon mutual agreement between licensee and the California Department of Fish and Game.

Article 402. The licensee shall, after consultation with the Endangered Species Office of the U.S. Fish and Wildlife Service and the California Department of Fish and Game, and within 1 year from the date of issuance of the **license**, file for Commission approval, a transmission line design plan. The plan shall include: (1) detailed design drawings of the ***63406** transmission line, clearly showing phase spacing, configuration, and grounding practices, prepared in accordance with guidelines set forth in “Suggested Practices for Raptor Protection on Power Lines—the State of the Art In 1981,” Raptor Research Foundation, Inc., 1981; (2) detailed design drawings of the metal wind deflectors to be installed on the transmission line span that crosses the Van Duzen River; (3) a construction schedule; and (4) agency comments on the adequacy of the design plan. The licensee shall not commence any transmission line construction until the plan is approved by the Commission.

Article 403. The licensee shall, in a manner satisfactory to the California State Historic Preservation Officer (SHPO), implement a cultural resources management plan to avoid or mitigate impacts of the construction and operation of the project transmission line on archeological sites CA-HUM-713, -714, and -715. The plan shall consist of: (1) the procedures for avoiding impacts to the sites, as identified in the licensee’s archeological report filed with the Commission on October 26, 1984; and (2) a post-construction inspection of the sites. Within 3 years of the date of issuance of this **license**, the licensee shall file a copy of a letter from the SHPO indicating that transmission line construction avoided the identified sites. The licensee shall make available funds in a reasonable amount for any such work as required. If any previously unrecorded archeological or historic sites are discovered during the course of construction or development of any project works or other facilities at the project, construction activity in the vicinity shall be halted, a qualified archeologist shall be consulted to determine the significance of the sites, and the licensee shall consult with the SHPO to develop a mitigative plan for the protection of significant archeological or historic resources. If the licensee and the SHPO cannot agree on the amount of money to be expended on archeological or historical work related to the project, the Commission reserves the right to require licensee to conduct, at its own expense, any such work found necessary.

****4 Article 404.** The licensee shall, after consultation with the U.S. Fish and Wildlife Service, Soil Conservation Service, California Department of Conservation, California Department of Fish and Game, and California Regional Water Quality Control Board, prepare and file with the Commission, within 1 year from the date of issuance of this **license**, a plan to control erosion, dust, and slope stability, and to minimize the quantity of sediment or other potential water pollutants resulting from construction and operation of the project, including spoil disposal areas. The plan shall also include: functional design drawings and map locations of control measures, including an automatic shut-off device at the penstock to operate in the event of a pipeline or penstock rupture; an implementation schedule; monitoring and maintenance programs for project construction and operation; and provisions for periodic review of the plan and provisions for making any necessary revisions to the plan. Documentation of agency consultation on the plan and copies of any agency comments or recommendations shall be included in the filing.

In the event that the licensee does not concur with any agency recommendations, licensee shall provide a discussion of the reasons for not concurring based on actual site geological, soil, and groundwater conditions. The Commission reserves the right to require changes to the plan. Unless the Director, Office of Hydropower **Licensing**, directs otherwise, the licensee may commence ground disturbing or spoil activities at the project 90 days after filing the above plan.

Article 405. (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 other 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 shall also have continuing responsibility to supervise and control the uses 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, cancelling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

****5 *63407** (b) The types of use and occupancy of project lands and waters for which the licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) noncommercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 water craft at a time and where said facility is intended to serve single-family type dwellings; and (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline. 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 shall also ensure, to the satisfaction of the Commission's authorized representative, that the uses 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 and roads for which 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-kV 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.

****6** (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 certificates 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 one-half mile 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 five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from the edge of the project reservoir at normal maximum 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. At least 45 days before conveying any interest in project lands under this paragraph (d), the licensee must submit a letter to the Director, Office of Hydropower **Licensing**, 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.

(e) 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 *63408 appropriate, and the 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 covenants running with the land adequate to ensure that: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; and (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.

**7 (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.

(F) This order is final unless appealed to the Commission by any party within 30 days from the issuance date of this order. Filing an appeal does not operate as a stay of the effective date of this order or of any date specified in this order except as specifically directed by the Commission.

Safety and Design Assessment

Baker Creek Project

FERC Project No. 4627-005—California

I. Evaluation of Design, Construction and Performance

The Baker Creek project would consist of a 4-foot-high natural rock and concrete diversion dam, a side channel intake structure, a 30-inch-diameter and 5,400-foot-long steel penstock, and a concrete powerhouse containing a 1500-kW impulse turbine and synchronous generator.

The project is classified as having low hazard potential. The reservoir created by the small diversion dam will have a gross volume of 0.1 acre-feet and a surface area slightly larger than the existing creek bed. The proposed project structures would impound an insignificant amount of water and their failure would not endanger downstream life or property. It is concluded that the project will be safe and adequate upon compliance with the terms and conditions of the **license**.

Our review indicates that there are no engineering problems which would make construction, operation or maintenance of the project infeasible.

Construction of the project is estimated to be completed within 24 months from the date the **license** is issued. Article 301 would provide the licensee adequate time to initiate and complete construction.

Since the details of the design and construction procedures have not been finalized, article 302 should be included in the **license** requiring the licensee to submit a copy of final contract plans and specifications prior to start of construction.

Article 303 requires the filing with the Commission of "as-built" exhibits. The **license** will be amended to include these revised exhibits.

II. Exhibits

****8** The following portions of Exhibit A and the following Exhibit F drawings conform to the Commission's rules and regulations and should be included in the **license**.

Exhibit A. Pages **A-1** thru **A-6** of the application filed June 10, 1985.

Exhibit F Drawing	FERC No.	Description
1	4627-9	Diversion Structure and Conduit Details
2	4627-10	Powerhouse and Tailrace Details

***63409 Environmental Assessment**

Division of Environmental Analysis, Office of Hydropower **Licensing**

Federal Energy Regulatory Commission

March 24, 1986

Project Name: Baker Creek

FERC No. **4627**—005

A. Application

1. Application Type: Minor **License**; Date Filed: 10/26/84
2. Applicant: Albert R. Hunt and Betty F. Hunt
3. Water Body: Baker Creek; River Basin: Eel River
4. Nearest city or town: Bridgeville, CA, and Dinsmore, CA
5. County: Humboldt; State: CA

6. Federal Lands Affected (If yes, specify land management agency.) No.

B. Resource Development

1. Purpose: The proposed project would provide an estimated average of 5,730,000 kilowatthours of electrical energy per year to the Pacific Gas and Electric Company (PG&E).

2. Need for power: The project is located in the California-Southern Nevada area of Western Systems Coordinating Council (WSCC) region. The proposed project could meet a small part of the projected additional resource requirements of the area. Staff's analyses show that benefits are possible through installation of the project and, therefore, show a need for the project. From the time the project goes on-line until needed to serve load directly, it would be available to off-load existing fossil-fueled electric generating plants located in the California-Nevada and adjacent areas, and thereby, to conserve nonrenewable resources and to reduce the emissions of noxious by-products caused by the combustion of fossil fuels.

3. Hydroelectric power and resource utilization: The proposed project is economically feasible based on the sale of project power at prices established in the power sale contract between the applicant and PG&E. The project would not conflict with any proposed or existing development of Baker Creek, makes good use of the flow and fall of the creek, and would be best adapted to the comprehensive development of Baker Creek upon compliance with the terms and conditions of the **license**.

C. Proposed Project and Alternatives

1. Description of the proposed action: The proposed project would consist of: (1) a 4-foot-high, 45-foot-long diversion structure; (2) a 30-inch-diameter, 5,400-foot-long penstock; (3) a powerhouse containing a single 1,500-kilowatt generating unit; and (4) a 12.5-kilovolt, 17,500-foot-long transmission line. The project would operate run-of-river, and would operate approximately 6 to 7 months per year (L-1).

2. Applicant's Proposed Mitigative Measures

a. Construction: The Applicant proposes to: (i) revegetate disturbed areas; (ii) restrict construction to low-flow period to minimize sedimentation; and (iii) avoid archeological sites along the transmission line right-of-way.

b. Operation: The Applicant proposes to: (i) install an emergency shut-off valve at the penstock; (ii) release a minimum flow of 0.25 cfs to protect instream resources; (iii) install metal wind deflectors at 10-foot intervals along the transmission line span that crosses the Van Duzen River to protect the peregrine falcon from collision hazards; and (iv) design the transmission line to minimize electrocution hazards to large raptors.

****9** 3. Section 4(e) Conditions

4. Alternatives to the Proposed Action

a. No other reasonable action alternatives have been found.

b. Alternative of no action: No action would be denial of the **license** application.

D. Affected Environment

1. Brief descriptions of the resources are given below.

a. Geology and Soils

Significant features include: The project area is situated in an area of moderate to steep hills.

b. Streamflow

low flow: 0.9 cfs; flow parameter: ave. monthly flow—September

high flow: 59.4 cfs; flow parameter: ave. monthly flow—January; average flow: 21.3 cfs.

Remarks: Flow data are 17-year averages. Baker Creek nearly dries up during August and September.

c. Water Quality

The existing water quality conditions are: good to excellent due to the undeveloped nature of the basin.

d. Fisheries

Anadromous: None—.: *A natural boulder barrier located downstream of the project blocks the upstream migration of steelhead *63410 trout [letter from California Department of Fish and Game (DFG) dated 9/18/85].

Resident: None

Significant features include: none.

e. Vegetation (cover type—dominant species)

oak woodlands—Oregon white oak and California black oak

riparian—black willow, red alder, and bigleaf maple

meadow—perennial grasses and forbs

coniferous forest—Douglas fir

Significant features include: Tracy's sanicle (*Sanicula tracyi*), a candidate species for Federal listing as threatened or endangered, may occur in the project area [letter from U.S. Fish and Wildlife Service (FWS) dated 5/6/83]. The applicant's botanical survey did not find evidence that the species occurs in the project area (L-2).

f. Wildlife

Species inhabiting the project area include: mule deer, black bear, mountain quail, band-tailed pigeon, brush rabbit, and red-tailed hawk.

Significant features include: none.

g. Archeological

Known sites occur within the project impact areas. Description: three archeological sites are within the proposed transmission line route right-of-way, and one near the penstock right-of-way.

Remarks: The sites would be avoided during construction.

h. Historical

There are no sites of historical significance in the project impact areas.

i. Visual Quality

The significant visual features of the area include: none.

j. Recreation

The existing recreational use(s) of the area include: fishing, hunting, and nature observation.

k. Land Use

Land use in the project area includes: timber harvesting, grazing, and recreation.

l. Socioeconomics

The economic and social well-being of the area is influenced by: agriculture and the forest products industry.

m. Ambient noise quality is: good.

n. Ambient air quality is: good.

o. Other resources include: none.

E. Consultation and Compliance

1. Fish and Wildlife Consultation (Fish & Wildlife Coordination Act)

(a) Fish & Wildlife Service (FWS): Yes

(b) State(s): Yes

(c) National Marine Fisheries Service (NMFS): Yes

(d) Remarks:

2. Terms and Conditions for Exemptions from **Licensing** [18 C.F.R. §4.106(b) or 4.94(b)]—Not applicable.

3. Section 7 Consultation (Endangered Species Act)

****10** (a) Listed Species: peregrine falcon

(b) Not required.

(c) Remarks: By letter dated 10/12/83, FWS indicated that if metal wind deflectors or bright red spherical markers were installed the falcon would be protected. See G(2).

4. Section 401 Certification (Clean Water Act)—Waived: (10/24/84)

5. Cultural Resource Consultation (Historic Preservation Act)

(a) Register Status: None

(b) State Historic Preservation Officer (SHPO): Yes

(c) National Park Service (NPS):

(d) Council: Not required

(e) Further consultation requirements: Not required

(f) Remarks: The SHPO stated that the recommendations contained in the applicant's archeological report were appropriate. The SHPO requested that a post-construction inspection of known archeological sites be conducted (letter dated 11/2/83).

6. Recreation Consultation [Federal Power Act, §10(a)]

(a) U.S. Owners: No

(b) NPS: Yes

(c) State(s): Yes

(d) Remarks: The agencies did not recommend development of any recreational facilities.

7. Wild and Scenic Rivers (Wild and Scenic Rivers Act)

(a) Status: Listed; Determination completed: 5/17/85; Administering agency: Department of the Interior (Interior)

(b) Remarks: The proposed transmission line would cross the Van Duzen River, designated as a unit of the National Wild and Scenic Rivers System. By letter dated 5/17/85, Interior concluded that the transmission line would not be "on" the wild and scenic river (Attachment A).

***63411** *F. Intervening and Commenting Agencies*

1. The following entities provided comments on the application in response to the public notice dated 11/7/85. (commenting entity—date of letter)

Army Corps of Engineers—1/2/86

Resources Agency of California—1/6/86; 1/9/86

2. The Applicant responded to the comments by letter dated 1/8/86.

G. Discussion of Environmental Issues

Mitigative measures recommended by Staff are in addition to those proposed by the applicant, Section C(2), and those conditions identified in Sections C(3) and E(2), as appropriate. There are 5 issues addressed below.

1. Issue: The project would reduce flows in a 1-mile-long section of Baker Creek.

Comments: none.

Applicant's Response: See C(2)(b)(ii).

Conclusions and recommendations: The applicant's proposed minimum flow release of 0.25 cfs from the diversion structure would protect instream resources. Therefore, the licensee should be required to release the proposed flow release.

2. Issue: The transmission line facilities would be located within the foraging range of the peregrine falcon, and would pose a collision hazard to the falcon.

Comments: See E(3)(c).

Applicant's Response: See C(2)(b)(iii).

Conclusions and Recommendations: The installation of the metal wind deflectors on the conductors as proposed by the applicant, would adequately protect the falcon. The applicant, however, has not provided specific design details of the deflectors. The licensee should file design drawings of the deflectors, prepared after consultation with FWS's Endangered Species Office.

3. Issue: The transmission line, if not constructed properly, would pose an electrocution hazard to large raptors.

**11 Comments: none.

Applicant's Response: See C(2)(b)(iv).

Conclusions and Recommendations: Proper design of the transmission line would protect large raptors from electrocution hazards. The applicant has not provided specific design drawings of the proposed line. Therefore, the licensee should prepare a transmission line design plan in accordance with accepted raptor protection guidelines (L-3).

4. Issue: Archeological sites could be affected by construction of the project transmission line.

Comments: See E(5)(f).

Applicant's Response: none.

Conclusions and Recommendations: The applicant's proposal to locate the transmission line poles to avoid known archeological sites would be sufficient to protect these sites. The licensee should implement its cultural resources management plan that included proposed measures to avoid the sites and a post-construction inspection of the sites. If any unknown cultural resources are discovered during construction, the licensee should undertake appropriate measures to protect the resources.

5. Issue: Erosion, soil mass movement, or other adverse impacts to geological or soil resources could result from construction and operation of the project.

Comments: none.

Applicant's Response: none.

Conclusions and Recommendations: The preparation and implementation of a detailed plan to control erosion, dust, slope stability, and sedimentation, prepared after consultation with the appropriate agencies, would be necessary to minimize impacts to soil resources and water quality. The plan should include design drawings of the proposed automatic shut-off device at the penstock.

H. Summary of Environmental Impacts

1. Assessment of adverse and beneficial impacts expected from the project as proposed by the applicant (P); the proposed project with Staff's recommended mitigation (Ps) [Section G]; and any other alternative considered(A).*

a. Geology/Soils—P:1AS; Ps:1AS

Remarks: a. Increased erosion would occur during the construction period. See G(5).

b. Streamflow—P:1AL; Ps1AL

b. Flows in about 1 mile of Baker Creek would be reduced. See G(1).

c. Water quality: Temperature—P:0; Dissolved oxygen—P:0; Turbidity and sedimentation—P:1AS; Ps:1AS

c. Increases in stream sedimentation would occur during the construction period. See G(5).

d. Fisheries: Anadromous—P:0; Resident—P:0

e. Vegetation—P:1AS

Remarks: e. Approximately 17 acres of vegetation would be disturbed, but most would be revegetated.

f. Wildlife—P:1AS; Ps:1AS

*63412 Remarks: f. Wildlife would be affected by increased noise levels and human activity during construction. See G(2) and G(3).

g. Archeological—P:0; Ps:O

Remarks: g. See G(4).

h. Historical—P:O

i. Visual quality—P:1AL

Remarks: i. Presence of project facilities would reduce the area's visual quality.

j. Recreation—P:O

k. Land use—P:O

Remarks: l. Socioeconomics—P:1BL

l. The project would generate local tax revenues.

m. Noise quality—P:1AS

n. Air quality—P:1AS

m., n. Ambient noise and air quality levels would increase during the construction period.

12 * For **licenses, the assessment reflects the adoption of any Federal land management agency 4(e) conditions, in addition to the Applicant's proposed mitigation. For exemptions, the assessments reflect any terms and conditions set by the agencies, in addition to the Applicant's proposed mitigation. Assessment symbols indicate the following impact levels:

0 = No impact; 1 = Minor impact; 2 = Substantial impact; 3 = Major impact; A = Adverse; B = Beneficial; L = Long-term impact; S = Short-term impact.

(e.g., 1BL = Minor, beneficial, long-term impact)

2. Impacts of the No-action Alternative

The environmental resources of the project area would not be altered. Electrical power that would be generated by the proposed hydroelectric project would have to be generated from a coal, oil, or nuclear fueled electrical facility.

3. Recommended Alternative (including proposed, required, and recommended mitigative measures): Proposed Project

4. Reason(s) for the Selection of the Preferred Alternative

The proposed project is preferred over the no-action alternative because the project purpose can be achieved without significant environmental impacts.

I. Summary of Unavoidable Adverse Environmental Impacts and Beneficial Impacts

The project would result in minor, shortterm increase in noise levels, dust, and exhaust emissions from construction activities, and erosion and sedimentation from disturbance of land surfaces. Wildlife would be disturbed by increased noise levels and human activity and by habitat alteration. Visual quality of the project area would be reduced.

J. Conclusion

Finding of No Significant Impact. Approval of the recommended alternative [H(3)] would not constitute a major Federal action significantly affecting the quality of the human environment; therefore, an Environmental Impact Statement (EIS) will not be prepared.

K. List of Preparers (name—position title)

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Edwin Slatter—Archeologist

Michael Keane—Civil Engineer

Martin Thrope—Electrical Engineer

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