

WATER AND POWER LAW GROUP PC

2140 SHATTUCK AVENUE, STE. 801

BERKELEY, CA 94704-1229

(510) 296-5588

(866) 407-8073 (E-FAX)

October 18, 2013

To: Peter Barnes
David Rose
State Water Resources Control Board

From: Nicholas Niiro

Cc: Cheryl Mulder, Forest Service
Joshua Rider, USDA OGC
Julie Tupper, Forest Service
Bruce Alpert, Butte County
Dave Steindorf, American Whitewater
Richard Roos-Collins
Julie Gantenbein

Re: **Butte County and American Whitewater's Proposed Non-Flow Recreation Measures for the Poe Project (P-2107)**

Butte County and American Whitewater (AW) recommend the following non-flow recreation measures for the new license for the Poe Project. This memo compiles our previous recommendations,¹ displaying them in a geographically linear form beginning at the upstream end of the project boundary. We believe that these measures are reasonably necessary to attain the designated uses of primary and secondary recreation and, as such, that the State Water Resources Control Board should include them in the water quality certification under Clean Water Act section 401(a).

Our recommendations include measures which Office of Energy Projects (OEP) has proposed in the Final Environmental Assessment (FEA) (2007), and those which the U.S. Forest Service has required in its Federal Power Act 4(e) conditions (2007). We believe that the State Water Board must have independent authority to assure PG&E's performance of these measures. Our recommendations to the State Water Board also include other measures which, while not proposed by OEP or required by Forest Service under their authorities, are reasonably necessary to protect recreation as required by the Clean Water Act.

We are prepared to meet with the State Water Board and Forest Service to discuss these recommendations, as well as the possibility that the Section 4(e) conditions related to flow

¹ See Butte County, "Recommended Conditions for New License" (NREA Comments), eLibrary no. 20050411-5081 (Apr. 11, 2005).

schedules should be revised in light of subsequent advances in science and policy related to conservation of foothill yellow-legged frogs. We have advised PG&E of this effort. It is our understanding that PG&E has declined our request to participate in any related negotiations between the Forest Service and us.

MANAGEMENT

1. Develop and Implement a Recreation Management Plan.

Description

We recommend the following condition: *Within one year of license issuance, the Licensee shall develop, submit for the Commission and State Water Board's approval, and thereafter implement a Recreational Management Plan to enhance recreational use of the project reaches. The Licensee shall develop the plan in consultation with the Recreational Management Team established by paragraph (B); and it shall include all comments of team members and the Licensee's responses. The plan shall include the following elements.*

- A. *Drawings and specifications for facility construction, and standards for facility maintenance. Licensee shall:*
 - 1. *Design all facilities to resist vandalism and otherwise protect public health and safety.*
 - 2. *Include in the plan:*
 - (a) *estimates of the expected level of use of each site,*
 - (b) *performance standards for the conditions of facilities appropriate to protect public health and safety, and*
 - (c) *triggers for improvements in facilities if use exceeds expectation or as appropriate for public health and safety.*
 - 3. *Inspect and maintain facilities on a weekly schedule or more frequently as determined by such inspection.*

- B. *Recreation Management Committee. Within two months of license issuance, the Licensee shall establish and thereafter administer a Recreation Management Committee that includes State Water Resources Control Board, California Department of Fish and Wildlife, California Department of Boating and Waterways, and Butte County. The Licensee shall consult with the committee to develop and implement the Recreation Management Plan and coordinate with counterpart collaborative efforts for upstream and downstream projects on the North Fork Feather River. The Licensee shall, by consensus with the committee, adopt written protocols for schedule and conduct of meetings and dispute resolution. Through this committee and as otherwise required by applicable law, the Licensee shall consult with the SWRCB, Forest Service, DFW, California Department of Boating and Waterways (DBW), and Butte County, regarding measures within their respective jurisdictions.*

Function

The New License Application (NLA)² does not provide for submittal of a Recreation Management Plan. Consistent with the Commission's standard practice, such a plan is appropriate to state the design specifications and performance standards for facilities, including the exact locations and dimensions of trails, the frequency of service for such toilets and trash receptacles, and the level of use which may justify additional capacity.

Paragraph A requires PG&E to state the design specifications and performance standards for all recreational facilities in a Recreation Management Plan. Having this information in a single, comprehensive document will facilitate affirmative and systematic maintenance over the term of the new license as necessary to accommodate increased usage. Certain existing facilities do not have adequate carrying capacity for future demand. Further, they are maintained in a manner that limits use and may result in user conflicts.³ As a result, Paragraph A requires maintenance at least weekly for trash collection and sanitation.

Paragraph B requires PG&E to establish and administer a Recreational Management Committee (RMC) as a forum for coordination between PG&E, agencies, and other stakeholders in the design and implementation of recreational measures. Other RMC members will collaborate with PG&E in the preparation of the Recreation Management Plan and, following FERC and SWRCB approval, its implementation. This paragraph is not intended to delegate any of FERC's or SWRCB's authority or PG&E's obligations to other stakeholders. Instead, it will function to resolve disputes in plan development or implementation within the range of discretion permitted by the license. The 2001 license for the Rock Creek-Cresta Project and the pending Settlement Agreement for the North Fork Feather Project require such collaboration.

Legal Status

Both OEP⁴ and the Forest Service⁵ are recommending preparation of a Recreation Management Plan. However, neither agency recommends establishment of a Recreation Management Committee that is specific to this project.⁶

² Pacific Gas and Electric Company, "Application for the New License for the Poe Project," eLibrary no. 20031223-0471 *et seq.* (Dec. 16, 2003).

³ See NREA Comments, Attachment 3, pp. 248-49.

⁴ FERC, "Final Environmental Assessment" (FEA), eLibrary no. 20070329-3045 (Mar. 29, 2007), pp. 14-15.

⁵ Forest Service, "Final Section 4(e) Terms and Conditions and Section 10(a) Recommendations" (Final 4(e) Conditions), eLibrary no. 20070528-5003 (May 28, 2007), p. 22, Condition 29. Final 4(e) Condition 29 requires PG&E to develop a "Recreation Enhancement, Construction and Implementation Plan outlining the project specific construction details and schedule for recreation projects" within 6 months of license issuance. It also lists specific recreation projects.

⁶ Condition 29 calls for memoranda of understanding to produce a Poe Interagency Recreation River Flow Management Plan.

Cost

OEP estimates the Recreation Management Plan would amount to \$10,000 (2005 dollars) in capital costs.⁷ We do not have a cost estimate for the establishment and administration of an RMC.

RECREATIONAL FACILITIES

The Poe Reach of the North Fork Feather River is a unique and valuable resource. It is one of the few reaches that offers a scenic and remote river experience.



Photograph 1. North Fork Feather River below Bardee's Bar (Dave Steindorf, April 16, 2004)

The purpose of these recommendations is to protect and enhance recreation on the Feather River, which is adversely affected under the existing license.

⁷ FEA at 219. Unless otherwise indicated, dollar amounts listed throughout this memo are in 2005 dollars.

The recommendations require enhancement of all recreational facilities in the project reaches in order to increase the number and quality of recreational opportunities. In addition to the specific justifications below, these measures will enhance tourism, which is critical to the economic development of Butte County.⁸

Demand for river recreation in Butte County will grow substantially over the term of the new license. Through 2035, population will grow at a rapid rate: in California, by 61 percent; and in Butte County, by 92 percent.⁹ Demand for river recreation will increase even more quickly. PG&E estimated that user-days in the Project reaches will increase by 94 percent, from 5,808 user-days in 2001 to 11,241 in 2035.¹⁰

2. **Construct and Maintain Recreational Facilities in the Vicinity of the Cresta Powerhouse and Permit Access to Poe Reservoir for Hand-Carried Boats and Angling.**

Description

We recommend the following condition: *Licensee shall: (a) move PG&E gate to a location on the powerhouse access road below the turn-out to the high-flat area; (b) install and maintain a new gate on the gravel access road loop at edge of the high-flat area; (c) construct and maintain a vehicular barrier, such as post, rail, or boulder which is visually appropriate, along edge of the high-flat area between the two gates; (d) install and maintain three picnic tables at the west end of the high-flat area, located to separate users and take advantage of shade; (e) install and maintain portable or vault toilets and trash receptacles in appropriate locations commensurate with use and pursuant to Forest Service use standards; and maintain these facilities weekly during the season of use or more frequently commensurate with use; and (f) with CalTrans' approval, install and maintain appropriate signage on Highway 70 to indicate recreational facilities and maintain safe traffic control.*

Permit access to Poe Reservoir for hand-carried boats and angling: (a) Licensee shall keep the access gate open during daylight hours in the summer season; (b) It shall improve existing trail from the west end of the high-flat area downstream to the eddy beach, adequate to accommodate pedestrian passage, including hand-carrying of boats such as inner tubes, kayaks, and canoes. It shall undertake brushing and trail modification for ease and safety of pedestrian use; (c) In cooperation with California Department of Fish and Wildlife (DFW), Licensee shall undertake appropriate measures to establish and maintain a viable recreational fishery; (d) With CalTrans' approval, it shall install and maintain appropriate signs on Highway 70 to indicate recreational facilities and maintain safe traffic control.

⁸ See Butte County, General Plan, Recreation Element (1971), p. 2.

⁹ See NLA at E5-139.

¹⁰ See *id.*

Function

These recommendations are intended to improve conditions for recreation below Cresta Powerhouse and on the Poe Reservoir.

The river below Cresta Powerhouse has suitable beach access. *See Photograph 2.*



Photograph 2. Poe Reservoir (David Steindorf, November 19, 2006)

The Poe Reservoir provides a quality flatwater paddling experience that is a short distance from the local communities of Chico, Oroville, and Paradise. The relatively low elevation of the Poe reservoir offers year-round opportunity for canoeists, kayakers, anglers, and picnickers. *See Photograph 3.*



Photograph 3. Poe Reservoir (David Steindorf, November 19, 2006)

This recommendation requires certain measures to improve vehicle access, including opening of the gate to provide year-round recreational access. Parking, which is restricted today to the shoulder of Highway 70, results in an unnecessarily long walk to the informal parking area and the reservoir. It is nearly one-quarter of a mile (1,193 feet) from the informal parking area to the reservoir, with an 80-foot change in elevation. *See* Photograph 4, an image from Google Earth with the route from the parking area to the reservoir indicated in yellow. This makes it difficult for boaters to carry boats from the highway to the reservoir.



Photograph 4. Route from Parking Area to Poe Reservoir (Google Earth, July 9, 2012)

PG&E has expressed concerns that more frequent usage will increase risk of vandalism to Cresta Powerhouse. Those concerns may be effectively addressed by maintaining the existing gate at the highway, limiting access to the parking area to daylight hours, increasing staff presence, and upgrading security measures along the powerhouse perimeter. The new license should require continuation of the existing screening that effectively separates the exposed sub-station and intertie from the informal parking area.

Legal Status

PG&E owns the land at this location and has the legal authority to make the necessary changes.¹¹ However, CalTrans' approval is required to install and maintain appropriate signage on Highway 70.

OEP does not recommend “[c]onstructing and maintaining recreational facilities in the vicinity of the Cresta powerhouse.”¹²

The Forest Service recommends under FPA section 10(a), but does not require under Section 4(e), that PG&E improve the existing trail and parking area and install signage near the Cresta Powerhouse on the Poe Reservoir.¹³

¹¹ PG&E, “Response to NGO NREA Recommendations” (PG&E NREA Response), eLibrary no. 20050524-0280 (May 23, 2005), p. 14.

¹² FEA at 251.

Cost

OEP estimates that Butte County/AW recommended measures would amount to \$84,000 in capital costs and \$10,000 in annual costs.¹⁴

3. Construct and Maintain Recreational Facilities at Sandy Beach.

Description

We recommend the following condition: *Licensee shall undertake measures to enhance recreational use of Sandy Beach: (1) It shall install and maintain wooden tread-edge steps on the two informal trails between the parking and beach areas; (2) In the main use season, it shall install and maintain two portable toilets and trash receptacles at appropriate locations; (3) With CalTrans' approval, it shall install and maintain appropriate signs on Highway 70 to indicate recreation facilities and maintain safe traffic control. Such signs shall include: on eastbound Highway 70, "No Left Turn"; on outbound access road, "No Right Turn"; and across Highway 70 from outbound access road, "Left Turn Only – Turn Around Available 1/4 mi. East." In addition, Licensee shall extend a traffic barrier along north side of Highway 70 into access road alignment to prevent right turns onto westbound Highway 70.*

Function

These recommendations will enhance recreational use of Sandy Beach by improving access to and around the site and providing adequate facilities for visitors. According to PG&E's Recreation User Count Survey, the highest recreational usage in the Project reaches occurs at Sandy Beach. According to PG&E's pre-2000 estimates, peak daily use is 56 user-days (NLA at E5-46); annual usage is 3,073 user-days (*id.* at E5-131); and such use will increase 1.94% per year to 4,100 in 2015 and 6,020 in 2035 (*id.*). The annual peak daily use of 56 was already exceeded in 2006. *See* Photograph 5. We note that the NLA's estimates for this and other recreational sites may substantially underestimate increased in usage in response to improved flows.

¹³ Final 4(e) Conditions at 31.

¹⁴ FEA at 220.



Photograph 5. Sandy Beach (David Steindorf, September 2, 2006)

These measures are necessary to meet existing and future recreational demand in a manner that prevents adverse impacts on environmental quality, including dispersed trash, human wastes, and trampling or other degradation of a band of riparian vegetation and possibly special status plant species.¹⁵ The NLA recommends a single portable toilet and a trash receptacle.¹⁶ To accommodate future usage, we recommend two toilets and multiple trash receptacles.

The NLA recommends a hardened trail from the parking area to Sandy Beach consistent with our recommendation.¹⁷ We concur. Improvement of the existing informal trails will avoid impacts to special status plant species and riparian vegetation. Users are less likely to stray if access trails are clearly designated and maintained. Since the channel where hardened trails or stairways will be located will be occasionally exposed to flood flows and high water velocities, the design of such facilities will be low-profile and resistant to scour loss. The gate to the site

¹⁵ See NLA at E5-167.

¹⁶ *Id.* at E5-341.

¹⁷ *Id.* at E5-341.

will be maintained for the limited purposes of site closure for reasons of public safety during flooding and other special circumstances. Further, new signage for east- and westbound Highway 70 traffic, as well as egress traffic from the site, is prudent for public safety.

Legal Status

We understand that PG&E has the necessary property rights to make the recommended changes.

CalTrans' approval would be required to install and maintain appropriate signs on Highway 70. PG&E reports that CalTrans recommended installing a "NO LEFT TURN" sign for eastbound Highway 70 traffic but rejected installing a barrier to prevent right hand turns.¹⁸ "Caltrans explained that barriers in this case could possibly cause a car in the westbound lane to hit the barrier and potentially create an accident."¹⁹

OEP recommends many of the same measures we are recommending.²⁰ However, it does not recommend a second toilet or additional trash receptacles.²¹

The Forest Service is requiring substantially the same measures we are recommending.²² However, we recommend that the State Water Board also include these measures in the 401 certification because they are necessary to protect recreation in the Poe Reach, and the Board should have independent authority to enforce compliance.

Cost

OEP estimates that its recommended Sandy Beach measures would amount to \$28,620 in capital costs and \$5,310 in annual costs. It estimates that the additional measures required by the Forest Service and recommended by Butte County/AW would increase the capital cost by \$24,380, bringing the total capital cost to \$53,000. It estimates that the additional measures would increase annual costs by \$690, bringing the total annual costs to \$6,000.

¹⁸ PG&E NREA Response at 16.

¹⁹ *Id.*

²⁰ FEA at 230. More specifically, OEP recommends that PG&E "[p]rovide recreational improvement at Sandy Beach, including a portable toilet and garbage facilities, additional signage, re-gravelling the existing road, and trimming vegetation." *Id.*

²¹ *Id.* at 251.

²² Final 4(e) Conditions at 23.

4. Construct and Maintain Recreational Facilities at Bardee's Bar.

Description

We recommend the following condition: *Licensee shall undertake measures to enhance recreational use of Bardee's Bar:*

- (1) *It shall clean up the existing site, including removal of informal pit-toilet, fire rings, abandoned buildings, and construction debris;*
- (2) *It shall install and maintain three picnic tables, including fire rings. These facilities shall be designed to separate users and take advantage of shade;*
- (3) *It shall install and maintain one vault toilet and trash receptacles at appropriate locations;*
- (4) *It shall remove or repair the abandoned bridge;*
- (5) *In cooperation with Butte County, it shall improve site access. For that purpose, it shall:*
 - (a) *install and maintain parking zones and barriers at appropriate locations to prevent damage to ecologically sensitive areas and provide for reasonable pedestrian access to the main channel and site;*
 - (b) *expand the existing crossing at Bardee's Creek to permit two-way traffic;²³*
 - (c) *remove construction and other debris at the existing failed crossings;*
 - (d) *improve the existing abandoned construction road to an all-weather casual hiking trail designed to prevent motorized uses and avoid user conflicts with other user-groups, which includes signage as to destination and mileage, between Bardee's Bar and an improved scenic point downstream of the Highway 70 bridge; and*
 - (e) *undertake appropriate measures to respond to reported accidents or problems with road maintenance that may otherwise interfere with use by 2-wheel drive vehicles, including removal of slumps, downed trees, and washouts. Licensee shall identify recurrent problems in road maintenance associated with recreational use and undertake appropriate improvements.*

Function

Bardee's Bar provides critical access for whitewater paddling and other river related recreation. See Photograph 6. These recommendations will enhance recreational use of Bardee's Bar by increasing the site's existing capacity.²⁴ PG&E estimates that annual use is 384

²³ This is a revised recommendation. Our NREA comments recommended the new license require PG&E to "construct and maintain a stable, low maintenance crossing at Bardee's Creek that will be useable by 2 wheel drive vehicles." Since that time, the County constructed a one-lane crossing at Bardee's Creek. We now recommend that PG&E expand the crossing to accommodate two lanes of traffic.

²⁴ NLA at E5-234.

user-days today and will increase to 465 user-days in 2015 and 601 user-days in 2035.²⁵ Future use may exceed the site's existing capacity.



Photograph 6. Bardee's Bar Bridge (David Steindorf, November 17, 2009)

Bardee's Bar is not adequately maintained today. Trash and informal fire-rings are scattered in many locations; several informal pit-toilets are frequently used; and slab foundations of at least one abandoned construction building obstruct access.

Paragraph (1) requires that PG&E remove various forms of debris that create risks to public safety at Bardee's Bar. These include: construction debris on the east-side channel, scattered metal, bulldozed cobble and boulder materials, and the engineered concrete slope designed to protect the soil pile from erosion. The concrete slope will function as an informal trail if modified by a narrow tread located above the slope toe. The NLA does not recommend this measure.²⁶

²⁵ See *id.* at E5-131.

²⁶ See NLA at E5-347.

Paragraph (2) requires 3 picnic tables with fire rings to encourage picnicking and longer visits to the site.

Paragraph (3) requires one vault toilet and multiple trash receptacles. This recommendation is consistent with the NLA, except that the NLA provides for a single trash receptacle.²⁷

Paragraph (4) requires the removal *or* repair of the abandoned bridge at Bardee's Bar. If the bridge is removed as recommended in the NLA (p. E5-347), PG&E should also remove the bridge piers and surface metal reinforcements as appropriate for public safety. If the bridge is not removed, we recommend improvement to form the basis of an extensive river corridor trail system that would roughly double the mileage of the proposed Poe Reach Trail alone and enhance access to the entire east-side channel for general recreational uses. A new trail section just downstream of this bridge would provide access to that entire side of the channel from Bardee's Bar to Poe Powerhouse. If so, the informal trail system along that side of the channel may be developed for casual hiking or mountain biking. This scenario also preserves the future opportunity to tie the proposed Poe Project Trail to Lake Oroville, if Department of Water Resources develops a trail along the eastern lakeshore, following the abandoned railroad alignment between the new railroad bridge at Poe Powerhouse and French Creek. Under *Paragraph (4)*, PG&E, in collaboration with other members of the Recreation Management Committee, will evaluate the comparative merits of removal or repair, and PG&E will include a final recommendation in the Recreation Management Plan.

Paragraph (5) requires an upgrade of an existing abandoned construction road that progresses from Bardee's Bar upstream towards the Highway 70 Bridge and gradually climbs above the channel. This hiking trail will terminate at a scenic overlook of the canyon, the bridge, and the railroad. This portion of the Feather River is at an elevation below the snowline and is incised into a very steep, narrow, and rugged canyon. It has high scenic qualities and is close to Oroville and Chico. If developed in conjunction with the Poe Reach Trail (*see* Condition D), it will provide scenic, all-weather hiking opportunities. Current use of a similar trail system in the South Yuba Canyon is 15-40 user-days per day in the summer season, and 5-10 user-days per day in the winter season. If the new license requires a flow schedule suitable for recreation, Butte County estimates that use of the Poe Reach Trail will average 35-70 user-days per day during the summer season and 5-10 user-days per day during the winter season. The NLA does not recommend this measure.²⁸

Butte County also recommends improvements to the access road and signage, in order to increase capacity.²⁹ Because the road's primary use is to access the powerhouse for maintenance, and because of PG&E's obligation to provide recreational facilities in consideration of its use of Project waters, we propose that the certification require PG&E to upgrade and maintain this road so that it is safely and readily passable by two wheel drive

²⁷ See *id.*

²⁸ See *id.*

²⁹ See *id.* at E5-347, E5-169.

vehicles, pursuant to the itemized estimate attached to the O'Brien Declaration (Attached). From the County's perspective, this is the most significant opportunity for improving recreational access to the lands and waters of the Poe Project.³⁰

Bardee's Bar Road, which the County maintains,³¹ is generally in good condition. There was a problem at the crossing of an unnamed stream immediately upstream of Bardee's Bar, but Butte has repaired the culvert with concrete encased culverts. However, it is only a single-lane road for much of the lower section, with no room for two vehicles to pass. If two vehicles meet, it requires one of the vehicles to back up, sometimes quite a ways up. Because of the anticipated growth in recreational use, PG&E should improve the roadway. Pursuant to *Paragraph (5)*, a roadway that accommodates two lanes of traffic will ensure safe access to Bardee's Bar. The NLA does not recommend this measure.³²

Legal Status

It is our understanding that PG&E has the necessary property rights to implement our recommendations.

OEP recommends that PG&E "[p]rovide recreational improvements at Bardee's Bar, including a permanent picnic table, trash receptacle, vault toilet, and additional signage, with 'pack-it-in/pack-it-out' policy."³³ It also recommended removal of Bardee's Bar Bridge.³⁴ OEP does not recommend any additional measures, such as additional picnic tables and fire rings and road maintenance.³⁵

The Forest Service is recommending under FPA section 10(a), but not requiring under Section 4(e), that PG&E install signage, a picnic table, a toilet, and a trash receptacle. It also

³⁰ Amended DEA Comments at 31-32.

³¹ While the County currently maintains the road, it is not required to do so under the terms of its easement with PG&E. *See* Butte County and American Rivers, "Amended Comments on Draft Environmental Assessment" (Amended DEA Comments), eLibrary no. 20060919-5052 (Sept. 19, 2006), Exhibit 17.

In 1927, PG&E's predecessor, the Great Western Power Company, granted an easement to Butte County for use of the Bardee's Bar Road where it crosses three distinct parcels of PG&E land. The approximately 7.02-mile-long Bardee's Bar Road originates at Big Bend Road and terminates at Bardee's Bar. Bardee's Bar Road was in existence when the Poe Project was constructed and currently provides access to some private lands, some Plumas National Forest lands, and the three PG&E parcels, including the one at the north end of the road where Bardee's Bar is located. FEA at 162.

³² *See* NLA at E5-347.

³³ FEA at 230.

³⁴ *Id.* at 231.

³⁵ *Id.* at 251.

recommends that PG&E coordinate maintenance of the access road with Butte County at Bardee's Bar.³⁶

Cost

OEP estimates that its recommended Bardee's Bar measures would amount to \$55,190 in capital costs and \$9,200 in annual costs.³⁷ It estimates that the additional measures required by the Forest Service and recommended by Butte County/AW (including road maintenance) would increase the capital costs by \$2,554,810, bringing the total capital costs to \$2,610,000.³⁸ It estimates that our measures would increase the annual costs by \$5,800, bringing the total annual costs to \$15,000.

OEP estimates that the removal of Bardee's Bar Bridge would amount to \$459,900 in capital costs and \$15,000 in annual costs.³⁹

OEP estimates that the Butte County/AW recommended modification of the existing abandoned construction road to an all-weather hiking trail between Bardee's Bar and scenic point would amount to \$530,000 in capital costs and \$2,000 in annual costs.⁴⁰

5. Construct and Maintain Trail between Bardee's Bar and Poe Beach.

Description

We recommend the following condition: *Within 4 years of license issuance, Licensee shall undertake measures to enhance recreational use of Poe Reach: (1) It shall construct and maintain a trail between Bardee's Bar and Poe Beach. The trail shall be aligned adjacent to the flood-trim line of the west-side channel. The trailhead at the Poe Beach end shall end at the next road turnout north of the Poe Beach turn-out; (2) Licensee shall develop four spur trails at various locations to provide pedestrian access to the river channel.*

Function

The existing, unimproved trail from Bardee's Bar to the Poe Powerhouse offers River Access to an otherwise inaccessible section of the North Fork Feather River. *See Photograph 7.* This recommendation will enhance hiking uses between Bardee's Bar and Poe Beach by providing new and improved trails in this area.

³⁶ Final 4(e) Conditions at 32.

³⁷ FEA at 221.

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ *Id.* This estimate does not factor in our modification to Paragraph (5)(b).



Photograph 7. Location Trail between Bardee's Bar and Poe Beach (David Steindorf, April 20, 2006)

*Butte County and American Whitewater Recreational Facilities Proposal
PG&E's Poe Project (P-2107)*

The recommendation requires construction and maintenance of the Poe Reach Trail to provide low-elevation access by casual hikers to the bypass reach. This trail, routed along the west-side of the channel, will provide an 8.8-mile (roundtrip) hike between these locations, or a 12.8-mile (roundtrip) hike to a scenic overlook via the new trail proposed upstream from Bardee’s Bar (*see Paragraph (5)(d)* under Bardee’s Bar improvements). In addition, the trail will include spurs that provide access for hiking, water-contact, angling, and casual-floating in the bypass reach. The trail will be located at an elevation just above the apparent flood trimline. Where routed within the flood trimline by topography and bedrock, the trail will be constructed of appropriate materials to resist scour. The NLA does not recommend this measure.

Legal Status

The trail crosses two private parcels owned by parties other than PG&E, and Forest Service staff has made preliminary contact with these land owners.⁴¹

OEP does not recommend improvement of the trail “at this time, pending feasibility study.”⁴²

The Forest Service does not address this measure in its Final 4(e) Conditions.

Cost

OEP estimates that the feasibility study will cost \$10,000.⁴³

OEP estimates that Butte County/AW recommended trail improvement would amount to \$9,560,000 in capital costs and \$10,000 in annual costs.⁴⁴

6. Construct and Maintain Recreational Facilities at Poe Beach and Construct and Maintain Trail Along East-Side of the River Channel in the Vicinity of Poe Beach.

Description

We recommend the following condition: *Licensee shall construct and maintain a trail along east-side channel, through the boulder field on the channel margin, to connect to the rope scramble at the east-side bridge abutment for emergency egress. It shall install and maintain a sign at Poe Beach stating that casual floaters should exit the river above the bridge.*

⁴¹ *Id.* at 16.

⁴² FEA at 221.

⁴³ *Id.* at 222.

⁴⁴ *Id.*

Function

The recommended trails will enhance recreational use of Poe Beach. PG&E estimates that annual use is 735 user-days today and will increase to 981 in 2015 and 1,440 in 2035.⁴⁵ PG&E reports that existing use may exceed ecological, physical, and facility capacities.⁴⁶ Generally consistent with the NLA,⁴⁷ we recommend construction and maintenance of a trail along the east-side channel to connect to the rope scramble at the east-side bridge abutment.

Legal Status

Construction of a trail as proposed by Butte County and AW might require permission from Union Pacific Railroad.

OEP does not recommend the trail or directional signage in the FEA.⁴⁸ Rather, OEP recommends measures proposed by the Forest Service and PG&E: “provide and maintain the following improvements for the duration of the license term [for Poe Beach]: a. Replace the rope-guided trail with a combination of stairs and primitive, stable, switchback trail. The stairway and primitive trail design, construction materials, placement, and construction schedule shall be approved by the Forest Service; b. Provide signing at the bottom of the trail indicating a ‘Pack it in; Pack it out’ policy and also inform users that there is a public restroom facility at Poe Powerhouse.”⁴⁹

Cost

OEP estimates that its recommended Poe Beach measures would amount to \$39,860 in capital costs and \$310 in annual costs.⁵⁰

OEP estimates that the Butte County/AW recommended trail and directional signs for boaters would amount to \$20,000 in capital costs and \$2,500 in annual costs.⁵¹

⁴⁵ See NLA at E5-131.

⁴⁶ See *id.* at E5-171, E5-238.

⁴⁷ See NLA at E5-351.

⁴⁸ FEA at 222. OEP Staff, along with PG&E and Forest Service, did recommend recreational enhancements at Poe Beach at \$39,860 in capital costs and \$310 in annual costs. FEA at 222.

⁴⁹ Final 4(e) Conditions at 23.

⁵⁰ *Id.* at 221.

⁵¹ *Id.* at 222.

7. Construct and Maintain Recreational Facilities at the Poe Powerhouse.

Description

We recommend the following condition: *Licensee shall undertake measures to enhance recreational use in the vicinity of Poe Powerhouse:*

- (1) *It shall clean up the existing site, including removal of informal pit-toilets, fire rings, waste concrete, abandoned mid-channel pilings, and other concentrated and dispersed debris;*
- (2) *It shall install and maintain one vault toilet and trash receptacle at appropriate locations;*
- (3) *It shall improve access by:*
 - (a) *smoothing and gravel surfacing access road to the lower beach;*
 - (b) *establishing a parking zone on the firmer surface area of the lower beach with maximum capacity consistent with turn-around;*
 - (c) *undertaking minor grading in the high parking area and an existing turn-out (between railroad right of way and powerhouse) to expand parking capacity;*
 - (d) *maintaining a passing turn-out at the existing turnout along west side of powerhouse fence;*
 - (e) *constructing and maintaining a trail along the east-side in the vicinity of Poe Beach to provide for suitable and safe access for angling and other water contact recreation; and*
 - (f) *installing informational signs regarding picking up trash, forest manners, availability of parking, and other access and use conditions.*

Function

These additional measures at Poe Powerhouse are needed to meet the increased recreational usage. PG&E estimates that use is 1,175 user-days today and will increase to 1,568 in 2015 and 2,302 in 2035.⁵² Such use may approach the ecological and carrying capacity of the site.⁵³

Paragraph (1) requires site clean-up, including removal of human wastes (due to absence of toilets), dispersed trash, and metal debris and concrete waste in midchannel bars. The NLA does not recommend this measure.⁵⁴

⁵² See NLA at E5-131.

⁵³ See *id.* at E5-175.

⁵⁴ See NLA at E5-355.

Paragraph (2) requires a vault toilet and multiple trash receptacles for adequate sanitation. This recommendation is consistent with the NLA (p. E5-355), except that the NLA provides for a single trash receptacle.

Poe Powerhouse Beach has inadequate access, including parking capacity.⁵⁵ *Paragraph (2)(c)* requires expansion of an existing turn-out, just above the general entry to the powerhouse area, to provide parking space for 5-8 additional vehicles. The NLA does not recommend this measure.⁵⁶

Paragraph (3)(a) provides for improvement of the access road to the lower beach. This is consistent with the NLA.⁵⁷ *Paragraph (3)(b)* further provides for a secure turnaround on the lower beach to prevent *ad hoc* configurations. The NLA does not recommend this measure.⁵⁸

Paragraph (3)(e) provides for a trail on the east-side channel between Poe Powerhouse Beach and Poe Beach, in order to permit safe access to this reach under the new minimum flow schedule. The NLA does not recommend this measure.⁵⁹

Legal Status

OEP recommends some recreational improvements at the Poe powerhouse, including a permanent vault toilet, garbage facilities, additional parking along the road to the beach, and additional signage.⁶⁰

The Forest Service recommends under Section 10(a), but does not require under Section 4(e), that PG&E improve access road, additional parking, an additional toilet, additional trash containers, and additional signage to the Poe Powerhouse.⁶¹

Cost

OEP estimates that its recommended recreational enhancements would amount to \$61,320 in capital costs, and \$8,580 in annual costs.

⁵⁵ *See id.* at E5-174, E5-243.

⁵⁶ *See id.* at E5-355.

⁵⁷ *See id.* at E5-355.

⁵⁸ *See id.* at E5-355.

⁵⁹ *See id.* at E5-355.

⁶⁰ FEA at 230.

⁶¹ Final 4(e) Conditions at 31.

OEP estimates that the Butte County/AW recommended measures would increase the capital costs by \$18,680, bringing the total capital costs to \$80,000.⁶² It estimates that our measures would increase the annual costs by \$1,420, bringing the total annual costs to \$10,000.

FLOW INFORMATION

8. Provide Stream Flow Information to the Public.

Description

We recommend the following condition: *The Licensee should provide real-time flow information available via the Internet for the North Fork Feather River at Pulga gage. The Licensee should also provide flow information, both real time and forecasted, for the reach located downstream of the Poe Powerhouse.*⁶³

Function

Access to real-time flow information will allow the public to take advantage of more recreational opportunities.

Legal Status

This measure is being recommended/required by both OEP and the Forest Service.⁶⁴

Cost

OEP estimates that providing real-time flow information would amount to \$5,000 in capital costs and \$1,000 in annual costs.⁶⁵

⁶² FEA at 223.

⁶³ American Whitewater, "Comments and Terms and Conditions," eLibrary no. 20050411-5114 (Apr. 11, 2005), p. 4.

⁶⁴ Final 4(e) Conditions at 24.

⁶⁵ FEA at 224.

DEBRIS REMOVAL

9. Inventory and Remove Any Debris in the Project Reach that is a Risk to Public Health and Safety.

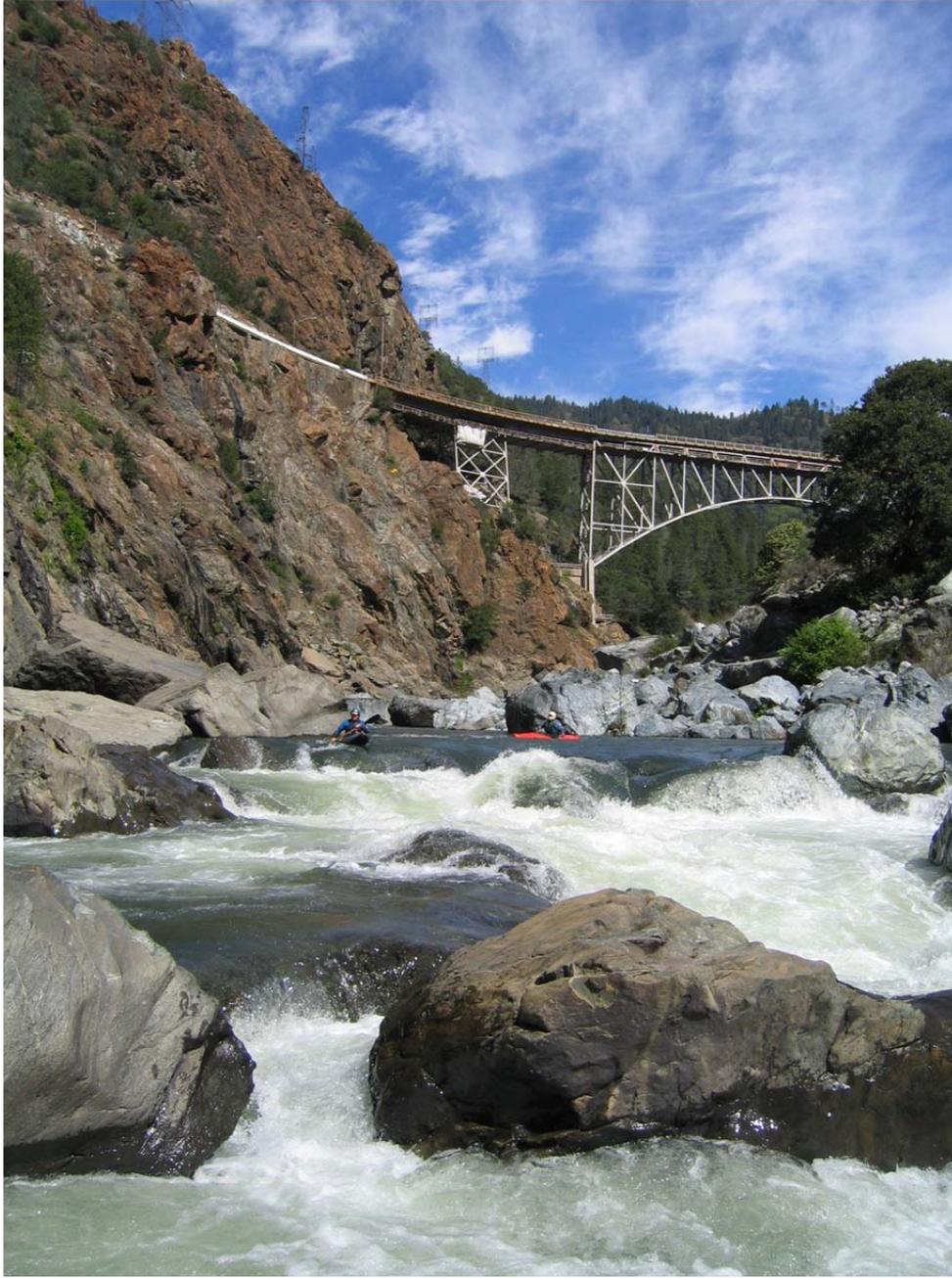
Description

We recommend the following condition: *Undertake measures to improve navigability of Project reaches. Licensee shall inventory debris and other man-made modifications within the project boundaries that are risks to public health and safety. In cooperation with CalTrans and Union Pacific and with funds from the North Fork Enhancement Fund, Licensee shall provide for the removal of the identified debris. It shall remove newly introduced debris within project boundaries over the term of the license.*

Function

Requires PG&E to inventory and remove man-made debris in the Project reaches, in order to prevent risks of injury associated with boating and other forms of recreation. Debris entering the channel from the highway, railroad, or other project operations can be a significant risk to paddlers, particularly in the more confined upper reach. *See* Photograph 8. Debris includes metal and other materials from bridge structures, cars, railroad rails, and construction. The NLA does not recommend this measure.⁶⁶

⁶⁶ See NLA at E5-341.



Photograph 8. North Fork Feather below Pulga Bridge (David Steindorf, April 16, 2004)

Legal Status

This measure is not recommended by OEP or required by Forest Service.⁶⁷

OEP estimates this measure would amount to \$6,000 in capital costs and \$1,000 in annual costs.⁶⁸

⁶⁷ FEA at 224.

FUNDING

10. Establish and Maintain a Cooperative Program for Management of Recreational Use, Law Enforcement, and Emergency Communication at the Poe Project.

Description

We recommend the following condition:

1. *In cooperation with Butte County, Forest Service, DFW, and DBW, Licensee shall establish and undertake a cooperative program for management of recreational use, law enforcement, and emergency communication at Project sites. The program shall be subject to modification on basis of performance standards included in the plan.*
2. *By March 1 of each year of the new Project license, Licensee shall provide \$120,000 per year (2006) to fund one full-time equivalent of a trained peace officer. The position shall be housed in Butte County, DFW, California Department of Parks and Recreation, or Forest Service, under a Memorandum of Understanding between them; and it may consist of a new employee or an appropriate combination of existing employees. This position shall provide law enforcement services, including patrol, criminal investigations, and search and rescue.*
3. *In cooperation with Butte County Sheriff's Office, investigate, purchase and install radio repeaters at an appropriate location to assist law enforcement and public safety personnel operating within the North Fork Feather River Canyon.*

Function

This condition will protect public safety as recreational use increases in the Project reaches. Increased use may result in vandalism to recreational facilities and parked vehicles, poaching, and other risks to public safety.⁶⁹ Photograph 9 shows an illegally dumped pickup truck bed in an otherwise picturesque grassy area that is riddled with bullet holes.

⁶⁸ *Id.*

⁶⁹ *See, e.g.,* NLA at E5-248.



Photograph 9. Bardee's Bar Parking Area (David Steindorf, March 26, 2006)

In *Paragraph* (1), Butte County recommends systematic coordination between PG&E and law enforcement agencies. *Paragraph* (2) provides that PG&E pay \$120,000 per year to fund a peace officer dedicated to river recreation.⁷⁰ Even though such law enforcement associated with river recreation is generally not the responsibility of a licensee, this measure partially mitigates the significant economic losses which the new license will cause to Butte County, as discussed below. *Paragraph* (3) provides for upgrade of the emergency communication system in the river corridor for the same reason. The NLA does not recommend either measure.

Legal Status

OEP does not recommend these measures.

The Forest Service is requiring PG&E to “coordinate with the Forest Service, Butte County, Plumas County, and California Department of Transportation to develop a Memorandum of Understanding to produce a Poe Interagency Recreation River Flow Management Plan.”⁷¹ Final 4(e) Condition 30 requires Licensee to “provide to the Forest Service \$12,000 (2007 dollars) to assist in funding a ‘River Ranger’ position.”⁷²

Cost

OEP estimates that this would cost \$120,000 annually.⁷³

11. Establish and Fund a Recreation Account as part of a “North Fork Feather Enhancement Fund” to be Used for Enhancement of River Recreation in the Feather River Basin and Elsewhere in Butte County.

Description

We recommend the following condition: *Licensee shall establish and fund a trust fund, “North Fork Feather Enhancement Fund,” to address the project’s otherwise unmitigated adverse impacts on the beneficial uses of the North Fork Feather. It shall provide: \$5 million (2006) within 6 months of license issuance and \$500,000 per year (2006, subject to CPI adjustment) in each subsequent year during the term of the new license. It shall adopt a trust instrument consistent with this Article.*

⁷⁰ See NREA Comments, Attachment 1, p. A1-4.

⁷¹ Final 4(e) Conditions at 23.

⁷² *Id.* at 24.

⁷³ FEA at 224.

- A. Governance. *The trust instrument shall provide that the U.S. Forest Service, Fish and Wildlife Service, National Marine Fisheries Service, State Water Resources Control Board, California Department of Fish and Wildlife, California Department of Boating and Waterways, and Butte County shall govern the Enhancement Fund and report annually to the Licensee and the Commission about expenditures. The trust instrument shall further provide that: (1) the Licensee may consult with these agencies but will not approve or otherwise be responsible for any funded measure; (2) the agencies shall report annually to the Licensee and the Commission regarding any expenditures; and (3) any unused funds at the end of the new license shall revert to Licensee.*
- B. Fisheries Account. *One-half of the initial and each annual contributions required by Condition 6 shall be paid over to a Fisheries Account for the enhancement of anadromous and other coldwater fisheries in the Feather River Basin or elsewhere in Butte County. The trust instrument shall provide that the account may be used to fund the removal or remediation of fish barriers that prevent access to historical habitat at locations including Butte Creek, including Little Butte Creek, Honcutt Creek, and Lower Feather River below Oroville Dam.*
- C. Recreation Account. *One-half of the initial and each annual contributions required by Condition 6 shall be paid over to a Recreation Account for the enhancement of river recreation in the Feather River Basin or elsewhere in Butte County. The trust instrument shall provide that, subject to the governance above and any further regulatory approvals and in coordination with related provisions in the new licenses for other projects in the Feather River Basin, the Recreation Account may be used to fund the following measures, among others:*
1. *An urban whitewater park below Lake Oroville.*
 2. *Feather River Corridor, which will include: (a) linkages from Lake Almanor to the Poe reaches, such as coordinated trails or shuttle service and (B) a boating trail from Oroville Dam to confluence with Sacramento River, consisting of appropriately spaced access and camping facilities.*
 3. *Trail access and boating tow services at the Bald Rock run of the Middle Fork Feather River near Oroville Reservoir.*
 4. *Improvements to Berry Road adjacent to Lake Oroville for boating access.*
 5. *Tow services below Big Bend Dam to Dark Canyon on Lake Oroville.*
 6. *Feather River Visitor Center on Highway 70.*

Function

The NLA does not recommend any off-site measure for the Project's unmitigated impacts on the beneficial uses of the NFFR. Poe Dam will continue to be an impassable barrier to upstream fish passage. Even under the proposed minimum flow schedule, the Project will continue to divert most in-flow from the bypass reach, preventing the release of such flow to further enhance coldwater fisheries. Further, the Project will continue to eliminate most of the days when inflow from the Rock Creek-Cresta Project would otherwise result in boatable flows

in the bypass reach. While it may enhance suitability for angling and wading, a new license will necessarily and significantly impair boating potential associated with the reaches' easy shuttle logistics, remarkable scenery, and proximity to Oroville, Chico, and the Sacramento and San Francisco Bay areas. By comparison with a non-power license that permits release of all inflow, a new license will reduce net economic value of all forms of river recreation by \$10.8 million per year (2005) (if the license does not require a recreational flow schedule), or \$10.1 million per year (if it does).⁷⁴

This condition requires PG&E to fund a North Fork Feather Enhancement Fund for such off-site mitigation. It requires total funding of \$20 million (2006) over a 30-year license. If the new license does not contain a recreational flow schedule, Butte County requests that this funding level be increased by \$500,000 per year, which is roughly the economic benefit of such schedule.⁷⁵

Paragraph A provides that certain public agencies responsible for resources management in the Project vicinity will govern the Enhancement Fund. PG&E's enforceable obligation will be limited to funding. The trust instrument that PG&E will establish will require that the agencies (as a condition of trusteeship) will report annually on expenditures and will be accountable for expenditures pursuant to their own public procedures and requirements not administered by the Commission.

Paragraph B provides that one-half of the funding will be used for off-site fisheries mitigation. Potential measures include purchase and enhancement of riparian lands to provide anadromous and other coldwater habitat in waters elsewhere in Butte County⁷⁶ and removal of barriers on such waters.

Paragraph C provides that the other half of the funding will be used to undertake offsite recreational measures. These agencies have considered all of the listed measures as potential off-site mitigation in the relicensing proceeding for the Project and Oroville Facilities downstream. None of these measures will require Commission approval, since the Licensee's obligation is limited to funding the Enhancement Fund. As a result, Butte County does not explain the specific benefits of these measures, although we will do so for the completeness of the record if requested by the Commission.

Legal Status

OEP and Forest Service do not recommend/require these funding measures.⁷⁷

⁷⁴ See NREA Comments, Attachment 3, p. A3-8.

⁷⁵ See *id.*

⁷⁶ See *id.*, Attachment 1, p. A1-5.

⁷⁷ FEA at 252.

Cost

OEP estimates these measures would amount to \$2,500,000 in capital costs, and \$250,000 in annual costs.⁷⁸

⁷⁸ *Id.* at 224.

Attachment

DECLARATION OF SHAWN H. O'BRIEN

I, SHAWN H. O'BRIEN, declare the following:

1. I submit this declaration in support of Butte County and American Whitewater's Comments on the Draft Environmental Assessment.

2. The facts stated herein are known personally to me. The opinions set forth in this declaration are a result of and are offered as evidence herein pursuant to my education, training and experience, and as to said opinions, I am informed and believe them to be correct. If called as a witness, I would and could competently testify to all of the aforementioned facts and opinions set forth herein.

3. I received a Bachelor of Science degree in Civil Engineering from San Jose State University in May 1980, with an emphasis in Construction and Transportation. I received a Masters in Master of Business Administration degree from U.C. Davis in August 1997, with an emphasis in Finance and Management.

4. I have been employed as a registered Professional Civil Engineer for 23 years.

5. I am a registered Professional Civil Engineer in California (36979), Oregon (58763PE) and Washington (35037).

6. I am a registered California Land Surveyor (No. 6387).

7. I have worked extensively in the area of and have managed several road and highway construction and maintenance projects.

8. As a result of my education and experience, I am familiar with road design, composition and construction techniques/methodologies, the costs of road construction and repair, and also with road wear/damage and their primary and secondary causes.

9. Generally, heavy equipment and heavy vehicles (for example, large trucks) cause the most significant road wear. Generally, road wear caused by ordinary vehicles is insignificant, when compared to wear caused by heavy equipment and heavy vehicles (for example, large trucks).

10. Lack of adequate drainage facilities, combined with heavy winter and spring runoff can frequently result in a complete or partial failure of a road's bed (foundation), which, of course, can heavily damage such a road and, hence can impact road users, by impacting driving safety.

11. As a result of my education and experience, I am familiar with road construction, reconstruction and maintenance costs.

12. I am currently employed by Butte County as the Assistant Director of the Public Works Department. I have been so employed since February, 2005.

13. During the time I have been employed by Butte County Department of Public Works, I have become familiar with County ordinances requiring that an encroachment permit be obtained prior to construction of a access to properties adjoining County roads and I have become familiar with the official records kept by the Department, including but not limited to the County's official maps maintained by the Department, records concerning County rights of way, financial records setting forth the costs of road construction and repair projects and records concerning permits issued by the Department. I am familiar with how said records have been and are created and organized and, hence, I am familiar with how to access records of the Department.

14. Bardees Bar Road is a substandard, non-surfaced road in Butte County. It is approximately 6.2 miles long and extends from its intersection with Big Bend Road to Bardees

Bar, on the North Fork Feather River.

15. The County has spent, currently spends and intends to spend, for the foreseeable future, limited time/resources maintaining Bardees Bar Road, as there has been and is limited use by county residents. I recently reviewed Public Works records concerning encroachment permits issued. The Department has issued two driveway encroachment permits to, Jamie Kern and Peggy Camp, owners of property on Bardees Bar Road.

16. I recently reviewed Public Works records concerning transportation permits issued. On January 29, 2004, the Department issued Transportation Permit #040111M for an over-legal-weight (permit required) Crane to travel to the Poe Powerhouse. The Department also issued a permit in 1997 (970534) to PG&E for a road repair of Bardees Bar Road.

17. I recently reviewed the County's official maps maintained by the Department, in order to determine how many parcels are owned by individuals other than PG&E and Union Pacific Railroad. Eight such parcels are adjacent to Bardees Bar Road.

18. I recently reviewed Department records concerning County rights of way and located, with the assistance of the Deputy County Surveyor, Stuart Edell, an 80 foot wide easement granted to the County by Great Western Power, which is for the area of the road which passes through PG&E land. Exhibit A to this declaration is said easement, which does not discuss maintenance of the Road.

19. I traveled the most of the length of Bardees Bar Road on Monday, January 30, 2006, and observed the road's condition, as well as intersections of the road with other roads and roads/driveways accessing private property along Bardees Bar Road. I also made observations of the conditions adjacent to the road in the area of the parcels referenced above.

20. PG&E's Poe Powerhouse Access Road intersects with Bardees Bar about 1.3

miles from the Big Bend Road.

21. In the area of the parcels referenced above adjacent to Bardees Bar Road, only two appear to have developed any sort of dwelling units. Use of Bardees Bar would appear to be limited to these two dwelling units, occasional recreational use, and access to the Poe Powerhouse by PG&E and the Union Pacific Rail line by Union Pacific Railroad.

22. Aside from PG&E's Poe Powerhouse Access Road, there are only three accesses to private property on Bardees Bar Road which in my opinion are lawful, the two previously mentioned driveway encroachments and one access near Big Bend Road. It is likely that this last access road predates the County ordinance which requires that encroachment permits be obtained, prior to construction of access to properties adjoining County roads.

23. A small slide had occurred on Bardees Bar Road, prior to my visit, between the Powerhouse access road and the intersection of Big Bend Road. It occurred in a section of the road within an easement granted to the County by the Great Western Power Company of California in 1927. Based upon my education and experience, in my opinion, factors that may have contributed to the slide are the inadequacy of the ditches that feed the culvert, which drains runoff from above the road bed in that area, to accommodate heavy winter and spring runoff, in the aftermath of a fire in the Poe area several years ago. The slide has heavily damaged the road and resulted in partial failure of the road's bed, which had caused an unsafe driving condition in the area of the slide, as of the date of my visit. In this area, the road was barely passable on the date of my visit. The Department has conducted only minor repairs to the road since the slide.

24. In my opinion, it is necessary to reconstruct Bardees Bar Road along its entire length and repair it in the location of the slide and in several other areas where the road bed has completely washed out, to ensure the safety of the traveling public which uses Bardees Bar

Road. The repair in the location of the slide will require re-establishment of the flow lines in the ditches that feed the culvert, as well as a substantial amount of excavation, filling and regrading of the travel way. The road reconstruction and repair, as set forth in Exhibit B to this declaration, an itemized estimate, will cost approximately \$2.6 million.

25. I was present at an onsite meeting held to discuss the possible repair of the slide on Monday, January 30, 2006. Representatives from Butte County Department of Public Works, PG&E and the Union Pacific Railroad also were present. At the above referenced meeting, a PG&E representative requested that Butte County repair and improve Bardees Bar Road, particularly in the area of the slide, so that PG&E could transport new penstocks, via heavy equipment, to the Poe Powerhouse area.

26. Union Pacific Railroad representatives indicated that Union Pacific Railroad uses the road to periodically to transport maintenance equipment to the railway and to relieve/exchange train crews.

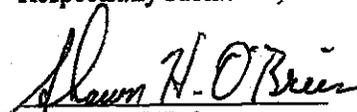
27. Based upon my education and experience, as well as remarks made by the PG&E representative at the above referenced meeting and observations I made of Bardee's Bar Road during my visit on Monday, January 30, 2006, it is my opinion that the majority of the wear on the section of the road used by PG&E occurs as a result of the fact that PG&E uses heavy equipment, including large trucks, on that section of the road, which includes the area in which the slide occurred, which has been heavily damaged, and is likely still in an unsafe condition.

28. I declare under penalty of perjury of the laws of the State of California and the United States of America that the foregoing is true and correct, except as to opinions expressed herein, and as to those opinions, I am informed and believe them to be correct, and that this declaration was executed this 18th day of September, 2006, at the office of the Butte County

*Declaration of Shawn O'Brien
Butte County and AW's DEA Comments
PG&E, Poe Project (P-2107-016-CA)*

Counsel at 25 County Center Drive, Oroville, California 95965.

Respectfully submitted,



Shawn H. O'Brien,
Assistant Director of the
Public Works Department,
BUTTE COUNTY

To COUNTY OF BUTTE

THIS INSTRUMENT, made this 30th day of September, 1927, by and between GREAT WESTERN POWER COMPANY OF CALIFORNIA, a California Corporation, party of the first part, and COUNTY OF BUTTE, a political subdivision of the State of California, party of the second part,

WITNESSETH: That for good and valuable consideration, said party of the first part hereby grants unto said party of the second part a right of way and easement for roadway uses and purposes over and across lands in Butte County, California, described as follows, viz.:

A strip of land 80.0 (eighty) feet wide, being forty (40.0) feet on each side of the surveyed center line of the Hog Wallow Gap-Pulga Road as surveyed by the County Road Engineer of Butte County, California, and described as follows:

Beginning at a point in the Section line common to sections 25 and 36 of T. 22 N., R. 4 E., M.D.M. 248.0 feet westerly along said Section line from the S. E. Corner of the S.W. Quarter of S. W. Quarter of said section 25. Said point of beginning being designated as Engineer's Station 10+22.0 of said road survey.

Thence N. 23° 44' W. 29.0 feet; thence on a curve to the left having a radius of 200.00 feet a distance of 77.0 feet; thence on a curve to the right having a radius of 70.0 feet a distance of 70.3 feet; thence continuing on a curve to the right having a radius of 125.0 feet a distance

DEEDS of 127.7 feet; thence N. 65° 18' E. 161.0 feet; thence on a curve to the right having a radius 217 of 250.0 feet a distance of 42.6 feet; thence on a curve to the left having a radius of 250.0 feet a distance of 86.2 feet; thence N. 55° 18' E. 243.0 feet; thence on a curve to the left having a radius of 125.0 feet a distance of 104.46 feet; thence on a curve to the right having a radius of 200.0 feet a distance of 89.83 feet; thence N. 33° 08' E. 66.8 feet; thence on a curve to the left having a radius of 100.0 feet a distance of 30.8 feet; thence N. 15° 28' E. 103.2 feet; thence on a curve to the left having a radius of 50 feet a distance of 42.9 feet; thence on a curve to the right having a radius of 60 feet a distance of 92.6 feet; thence on a curve to the left having a radius of 125 feet a distance of 80.8 feet; thence N. 17° 33' E. 46.2 feet; thence on a curve to the left having a radius of 250.0 feet a distance of 39.4 feet; thence N. 8° 31' E. 126.0 feet; thence on a curve to the left having a radius of 250.0 feet a distance of 20.21 feet to a point in the East and West center line of the S. W. Quarter of said Section 25, said Township and range, said point being also designated as Engineer's Station 27+28.00 of said road survey and containing an area of 3.13 acres.

Also a strip of land eighty (80) feet wide, being forty (40) feet on each side of the surveyed center line of the Hog Wallow Gap-Pulga Road as surveyed by the County Road Engineer of Butte County, California and described as follows:

Beginning at a point in the West line of the Northeast Quarter of the Southeast Quarter of Section 13, T. 22 N., R. 4 E., M.D.B. & M., 458.5 feet northerly along said line from the Southeast corner of the Northwest Quarter of Southeast Quarter of Said Section 13; said point being designated as Engineers Station 220+83.0 of said road survey; thence on a curve to the right having a radius of 50.0 feet a distance of 40.0 feet. Tangent to said curve at the point of beginning bears N. 19° 22' E.; thence on a curve to the left having a radius of 50.0 feet a distance of 54.2 feet; thence on a curve to the right having a radius of 50.0 feet a distance of 131.0 feet; thence on a curve to the left having a radius of 50.0 feet a distance of 41.0 feet; thence on a curve to the right having a radius of 100.0 feet a distance of 102.6 feet; thence on a curve to the left having a radius of 150.0 feet a distance of 127.6 feet; thence continuing on a curve to the left having a radius of 50.0 feet a distance of 40.2 feet; thence on a curve to the right having a radius of 50.0 feet a distance of 61.5 feet; thence South 38° 00' East 69.8 feet; thence on a curve to the left having a radius of 125.0 feet a distance of 12.2 feet; thence South 44° 13' East a distance of 49.8 feet; thence on a curve to the left having a radius of 70.0 feet a distance of 115.7 feet; thence on a curve to the right having a radius of 70.0 feet a distance of 34.2 feet thence continuing on a curve to the right having a radius of 200.0 feet a distance of 111.8 feet; thence on a curve to the left having a radius of 125.0 feet a distance of 126.2 feet; thence on a curve to the right having a radius of 70.0 feet a distance of 101.8 feet; thence on a curve to the left having a radius of 125.0 feet a distance of 88.3 feet; thence on a curve to the right having a radius of 125.0 feet a distance of 96.0 feet; thence on a curve to the left having a radius of 100.0 feet a distance of 63.7 feet; thence South 86° 45' East a distance of 77.0 feet to a point on the Section line between Section 13, T. 22 N. R. 4 E., M.D.B.&M., and Section 18 T. 22 N., R 5 E., M.D.B.&M., said point being designated as Engineer's Station 236+27 of said road survey; said point being 198.5 feet northerly from the Southeast corner of the Northeast quarter of the Southeast Quarter of Section 13, T. 22 North, Range 4 East, M.D.B.&M., and containing an area of 2.84 acres.

Also a strip of land eighty (80) feet wide, being forty (40) feet on each side of the surveyed center line of the Hog Wallow Gap-Pulga Road as surveyed by the County Road Engineer of Butte County, California, and described as follows.

Beginning at a point in the North and South center line of Section 7, T. 22 N., R. 5 E., M.D.B.&M., 836.4 feet northerly along said center line from the one-quarter Section corner between Sections 7 and 18, said Township and Range, said point being also designated as Engineer's Station 308+10 of the Pulga Road Survey; thence on a curve to the right having a radius of 50.0 feet a distance of 76.4 feet tangent to said curve at point of beginning bears South 8° 58' East; thence on a curve to the left having a radius of 125.0 feet a distance of 39.5 feet; thence South 24° 55' East a distance of 56.8 feet.

Thence on a curve to the left having a radius of 100.0 feet a distance of 132.3 feet; thence North 78° 40' East a distance of 164.6 feet; thence on a curve to the left having a radius of 150.0 feet a distance of 40.5 feet; thence on a curve to the right having a radius of 150.0 feet a distance of 74.0 feet; thence South 89° 05' East a distance of 62.4 feet; thence on a curve to the left having a radius of 70.0 feet a distance of 26.2 feet; thence North 70° 25' East a distance of 113.0 feet; thence on a curve to the left having a radius of 70.0 feet a distance of 55.6 feet; thence on a curve to the right having a radius of 50.0 feet a distance of 28.3 feet; thence North 56° 40' East a distance of 145.5 feet; thence on a curve to the left having a radius of 70 feet a distance of 70.7 feet; thence North 2° 30' West a distance of 82.0 feet; thence on a curve to the right having a radius of 125.0 feet a distance of 139.8 feet; thence on a curve to the left having a radius of 125.0 feet a distance of 52.8 feet; thence North 38° 40' East a distance of 27.0 feet; thence by the following courses and distances:

- North 23° 50' East 60.2 feet.
North 26° 37' East 268.0 feet.
North 3° 31' East 303.8 feet.
North 34° 56' East 436.6 feet.
North 27° 22' East 149.9 feet.
North 46° 58' East 443.2 feet.
North 35° 37' East 148.5 feet.
North 29° 33' East 347.4 feet.
North 15° 43' East 231.5 feet.
North 53° 7' East 195.9 feet.
North 44° 53' East 100.0 feet.
North 19° 21' East 377.0 feet.
North 10° 09' East 342.0 feet.
North 13° 41' East 391.5 feet.
North 14° 31' East 145.7 feet.
North 0° 02' West 195.9 feet.
North 9° 20' East 296.4 feet.
North 22° 06' East 42.0 feet.

To a point in the Section line between Sections 7 and 8 T. 22 N., R. 5 E., M.D.B.&M., said point being designated as Engineer's Station 370+42 and being 326.45 feet southerly along said Section line between Sections 7 and 28, said Township and Range from the Section corner common to Sections 5, 6 and 7 and 8, T. 22 N., R. 5 E., M.D.B.&M., and containing an area of 10.96 acres.

The right of way and easement hereby granted is for the purpose of a public highway, and is granted without any warranty either express or implied.

IN WITNESS WHEREOF, said first party has executed these presents on the day and year first hereinabove written

Description Approved) GREAT WESTERN POWER COMPANY OF CALIFORNIA,
O.K. HPM.B)
By A. Emory Wishon Vice President
Ch. Eng.) By W. H. Spaulding Secretary

STATE OF CALIFORNIA,)
City and County of San Francisco) ss.

On this 11th day of October in the year One Thousand Nine Hundred and Twenty-seven before me CATHERINE E. KEITH, a Notary Public in and for the said City and County, residing therein, duly commissioned and sworn, personally appeared A. Emory Wishon and W. H. Spaulding known to me to be the Vice President and Secretary, respectively of Great Western Power Company of California, the Corporation described in and that executed the within instrument, and also known to me to be the persons who executed it on behalf of the Corporation therein named, and they acknowledged to me that such Corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, at my office in the City and County of San Francisco, the day and year in this certificate first above written.

(SEAL) Catherine E. Keith...Notary Public
in and for the City and County of San Francisco, State of California.

My term expires October 20, 1930.

ACCEPTANCE OF DEED FOR PUBLIC HIGHWAY

At this time a deed is received from GREAT WESTERN POWER COMPANY OF CALIFORNIA, as being forty feet in width on each side of the following described center lines, as described more particularly in that certain deed duly made September 30, 1927, and executed and acknowledged on October 11, 1927, by A. Emory Wishon, its Vice President and W. H. Spaulding, its Secretary, reference to said deed being particularly had for a more definite and complete description of the said tracts conveyed.

After due consideration, it is moved by Supervisor Roehr, seconded by Supervisor Craig, that the said Deed be and the same is hereby accepted and that the land therein described be and the same is hereby declared a PUBLIC HIGHWAY OF THE COUNTY OF BUTTE, and the Clerk is directed to file the aforesaid deed for record, in the office of the County Recorder of Butte County.

VOTE: Ayes: SUPERVISORS CRAIG, MEEKER, ROEHR, AND PORTER
NOES: NONE Absent: SUPERVISOR WHITE.

State of California) ss.
County of Butte)
I, C. F. BELDING, County Clerk and Ex-Officio Clerk of the Board of Supervisors of the County of Butte, State of California, DO HEREBY CERTIFY that the foregoing is a true and correct copy of an order duly passed and adopted, accepting deed from Great Western Power Company, a corporation, by the said Board of Supervisors of Butte County, at its session held, October 25th, 1927, as the same appears of record in the minutes of said Board of Supervisors, remaining of record and now on file in this office.

IN WITNESS WHEREOF I have hereunto set my hand and affixed the Official Seal of the said Board of Supervisors at my office in the City of Oroville, California, this 25th day of October 1927.

(SEAL) C. F. Belding, County Clerk
By L. McCoy, Deputy County Clerk.

Recorded at the request of B. I. McCoy, Nov 4, 1927, at 40 min. past 11 o'clock A.M. in Book 217, page 130 of Deeds, Butte County Records.
B. I. McCoy Recorder.

217

DEEDS 217

Bardee's Bar Road

Re-licensing of Poe Power Plant encourages expansion of recreational uses in the area. This will bring in more people who will have to traverse Bardee's Bar, a substandard County maintained gravel road. Bardee's Bar will need to be improved in order to accommodate the increased use.

PG&E should be required to design and rebuild Bardee's Bar Road to the following minimum standards:

Geometric design criterion: County Improvement Standards, Caltrans Highway Design Manual, Plans and Specifications

Min. surface required: double chip seal coat over 6" of compacted Class 2 AB

Max. cut slope: 1' vert. to 1.5' horz.

Max fill slope 1' vert. to 2' horz.

It is anticipated that the existing alignment will be used in most cases, however; modification of the existing cuts and fills to accommodate design standards may require additional right of way. PG & E owns land on either side of Bardee's Bar Road. An alternative to granting additional right of way would be the construction of retaining walls.

Approximate cost to design and construct the improvements to Bardee's Bar:

Rebuild approx. 6.2 miles of Bardee's Bar Road	\$210,000/mile	\$1,302,000
Double chip road surface	\$100,000/mile	\$ 620,000
Repair failed section		<u>\$ 200,000</u>
Sub Total Construction Costs		\$2,122,000

Design and Construction Management costs (20% of construction costs)	\$	424,400
--	----	---------

Environmental documents	\$	30,000
-------------------------	----	--------

Geotechnical consultant to review failed section	\$	<u>30,000</u>
--	----	---------------

Estimated Total costs		\$2,606,400
------------------------------	--	--------------------

Estimated costs do not include any additional right of way, retaining walls or environmental mitigation costs.

Bardee's Bar Road

Re-licensing of Poe Power Plant encourages expansion of recreational uses in the area. This will bring in more people who will have to traverse Bardee's Bar, a substandard County maintained gravel road. Bardee's Bar will need to be improved in order to accommodate the increased use.

PG & E should be required to design and rebuild Bardee's Bar Road to the following minimum standards:

Geometric design criterion: County Improvement Standards, Caltrans Highway Design Manual, Plans and Specifications

Min. surface required: double chip seal coat over 6" of compacted Class 2 AB

Max. cut slope: 1' vert. to 1.5' horz.

Max fill slope 1' vert. to 2' horz.

It is anticipated that the existing alignment will be used in most cases, however; modification of the existing cuts and fills to accommodate design standards may require additional right of way. PG & E owns land on either side of Bardee's Bar Road. An alternative to granting additional right of way would be the construction of retaining walls.

Approximate cost to design and construct the improvements to Bardee's Bar:

Rebuild approx. 6.2 miles of Bardee's Bar Road	\$210,000/mile	\$1,302,000
Double chip road surface	\$100,000/mile	\$ 620,000
Repair failed section		<u>\$ 200,000</u>
Sub Total Construction Costs		\$2,122,000
Design and Construction Management costs (20% of construction costs)		\$ 424,400
Environmental documents		\$ 30,000
Geotechnical consultant to review failed section		<u>\$ 30,000</u>
Estimated Total costs		\$2,606,400

Estimated costs do not include any additional right of way, retaining walls or environmental mitigation costs.