



Revision 1 November 2015 ~~19 August 2014~~

Timothy J. Welch, Chief West Branch
Division of Hydropower Licensing
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Subject: Responses to the FERC Application Deficiencies and Additional Information Requests
letter dated July 3, 2014
Re: FERC Project No. 12496, Lassen Lodge Hydroelectric Project

Dear Timothy:

Rugraw, LLC hereby submits responses to the FERC Application Deficiencies and Additional Information Requests letter dated July 3, 2014.

Schedule A items:

1. General Content Requirements

Pursuant to Section 4.32(a)(2) of the Commission's regulations requiring the listing of every political subdivision and federal facility in the general area of the project that would likely be interested in, or affected by, the application including counties, cities/towns, irrigation districts, and Indian tribes, the list of these political subdivisions are as follows:

- 1.1. The County of Tehama, CA, which has jurisdiction over the entire Project site: County Administrator Bill Goodwin, 727 Oak Street, Red Bluff, CA 96080;
- 1.2. The Tehama County unincorporated town of Mineral, CA – approximately 1.5 miles east of eastern most portion of the Project. No unique local government - overseen by the County of Tehama, address in Section 1.1 above.
- 1.3. The Tehama County unincorporated town of Manton, CA – approximately 1 mile north of the western most portion of the Project. No unique local government - overseen by the County of Tehama, address in Section 1.1 above.
- 1.4. United States of America Bureau of Land Management - County of Tehama APN No. 13-20-06 that is not affected by but is adjacent to a portion of the Project: P.O. BOX 100, MINERAL, CA 96063.
- 1.5. United States of America Forest Service - County of Tehama APN Nos. 11-11-06, 13-09-04 and 13-09-11 that are not affected by but are adjacent to portions of the Project: 2250 RIVERSIDE DRIVE, SUSANVILLE, CA 96130
- 1.6. Redding Rancheria (Native American Tribe). Consulted with in the preparation of the DRAFT Historic Properties Management Plan (HPMP) included as Appendix J to Attachment E of the license application: James Hayward Sr., Cultural Resource Program, 2000 Redding Rancheria Road, Redding, CA 96001

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- 1.7. Maidu, Pit River-Atsugewi (Native American Tribe). Consulted with in the preparation of the DRAFT Historic Properties Management Plan (HPMP) included as Appendix J to Attachment E of the license application: Beverly Ogle, 29855 Plum Creek Road, Paynes Creek, CA 96075
- 1.8. Greenville Rancheria of Maidu Indians (Native American Tribe). Consulted with in the preparation of the DRAFT Historic Properties Management Plan (HPMP) included as Appendix J to Attachment E of the license application: Lacie Miles, EPA Director Tribal Representative, PO Box 279, Greenville, CA 95947
- 1.9. Enterprise Rancheria of Maidu Indians (Native American Tribe). Consulted with in the preparation of the DRAFT Historic Properties Management Plan (HPMP) included as Appendix J to Attachment E of the license application: Art Angle, 2133 Monte Vista Ave., Oroville, CA 95966

The Applicant has provided certified mail notification of the filing of the application to entities noted in this Section 1. These notices included the required content of the notice: the Applicant's name, business address and telephone number, and a copy of the Exhibit G. A copy of the Supplementary Service list, a copy of the notice, and copies of the Certified mail letters sent have been uploaded to the FERC e-library to show proof of these notices being properly distributed

2. Exhibit G

Pursuant to Section 4.32 (a)(3) of the Commission's regulations, the Applicant has provided certified mail notification of the filing of the application to owners of property underlying or adjacent to the Project. These notices included the required content of the notice: the Applicant's name, business address and telephone number, and a copy of the Exhibit G. A copy of the Supplementary Service list, a copy of the notice and copies of the Certified mail letters sent have been uploaded to the FERC e-library to show proof of these notices being properly distributed.

3. Verification of application facts (under oath)

Pursuant to Section 4.32(a)(4) of the Commission's regulations, the Applicant has provided a statement as to any facts alleged in the application or other materials filed, are subscribed and verified under oath. A notarized document verifying the contents of the application dated 8/15/'14 has been uploaded to the FERC e-library.

Schedule B items:

1. Initial Statement

Under item (8) in the Initial Statement, the Applicant stated that 1.5 miles of transmission line that will be located along county roads and 3.4 acres of associated right-of-way acreage will be affected. This information was incorrectly included as affecting "Lands of the United States." This use of the public county roads and associated rights-of-way, are not considered lands of the United States. These 3.4 acres of affected area are lands owned by the county and not owned by United States, and, therefore should not be considered lands of the United States.

The Applicant has revised the Initial Statement to reflect this correction. Both a REDLINE changed version and the Final Revision version dated August 15, 2014 have been uploaded to the FERC e-library.

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2. Exhibit A

The terms of the Power Purchase Agreement between the Applicant and San Diego Gas and Electric Co. (SDG&E) are confidential. However, based upon FERC's request to evaluate the price the power is contracted to be sold at, including the Time of Delivery (TOD) factors and estimated production in different time periods, the Applicant has requested, and SDG&E has agreed, that the Applicant may share with the FERC as "privileged information" the terms of the PPA. Accordingly the Applicant has uploaded a copy of the PPA as "privileged information" to the FERC e-library. This should hopefully address both the issues of On-Peak and Off-Peak Power Values and Estimates of Seasonal Power Generation addressed by the Commission.

3. Exhibit G

The new roads planned to be constructed for the project to access the Diversion Works and the Powerhouse are extensions just off of existing roads completely within the defined areas of the Project right along the pipeline/penstock (Diversion Works) and right between the Powerhouse and the Substation site where the new Project access roads tie into existing roads. Exhibit G has been modified to note within the defined Project area where these new roads are located. There is no impact to the Project area or potentially impacted additional property owners due to these new Project access roads.

4. Exhibit E - Aquatic Resources

[Page E-52] The Applicant plans to do the in-water work activities during the lowest flow period of the year, typically in the months of August and September – annual season dependent. The Applicant has been in contact with and will work with the California Department of Fish and Wildlife (CDF&W) to obtain the required 1603 instream alteration permits for such activities and will work closely with CDF&W to assure compliance with the requirements of these permits.

[Page E-54] Expected maximum approach velocity across the fish screen face is less than 0.40 ~~0.33~~ feet per second (fps). This figure was determined in subsequent consultation with CDFW due to the intake and control structure as finally designed has been determined to be a "canal" style fish screen structure. 0.40 fps is the appropriate value per the CDFW and NOAA/NMFS design standards for canal fish screen locations in the likely proximity of trout fry, which would be the case for the resident trout found in SF Battle Creek in the proximity of the planned project intake/diversion site.

[Page E-56] In the event of sudden, unexpected project shutdown, the instream flows within the project bypass reach will be maintained as follows: Immediately upon receipt of any fault by the installed project control system, be it electrical or mechanical, the turbine nozzle deflectors in the powerhouse will deploy and deflect the water flow off the turbine runner. The turbine/generator will be immediately separated from the power grid and the water flow through the pipeline/penstock will continue unimpeded through the tailrace. The water flow through the pipeline and through the bypass reach is controlled by multiple water level transducers within the intake and screen control structures. The system will have a minimum water level set-point engineered and programmed to assure the continuous minimum bypass flow be maintained at all times during project operational periods. If the continually-monitored water surface level begins to approach this minimal set point, the control system will automatically adjust the flow through the turbine nozzles to maintain the required instream bypass flow. In the unlikely event of a catastrophic failure, such as penstock rupture, the immediate drop in the water surface elevation will be noted by sensors at the diversion and by pressure sensors installed in the water conveyance system. This will trigger the cessation of flow

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through the water conveyance system by an immediate closure of the isolation gate located within the screen control structure. In such an unanticipated pipeline/penstock failure and shutdown, such event could result in all stream flow passing over/through the diversion and through the bypass reach..

5. Exhibit E - Terrestrial Resources

Vegetation Clearing and Ground Disturbance:

In response to the comment regarding page E-77, the Applicant estimates that 11.37 acres will be temporarily disturbed and 68.79 acres that will be permanently disturbed by the construction of the proposed project. The temporary disturbance is predominately associated with the pipeline/penstock construction. The permanent disturbance is made up of the Project facilities comprised of the physical facilities (e.g. Diversion Works, Powerhouse, Substation, Switchyard) and the transmission right-of way (ROW), which will be permanently disturbed predominately as related to just the limitation of the height of growth of vegetation so as not to interfere with the safe operation of the transmission line. A summary of the habitat types that make up the estimated temporarily and permanently disturbed acres by the construction of the proposed project is as follows:

Summary of Permanent and Temporary Impacted Acres

Habitat Type	Permanent Impacted Acres	Temporary Impacted Acres	Total Impacted Acres
Annual Grassland	4.69		4.69
Blue Oak Woodland	3.18		3.18
Blue Oak-Foothill Pine-Interior Live Oak	3.87		3.87
Disturbed	0.89	0.28	1.16
Irrigated Hayfield	0.19		0.19
Masticated Woodland	0.65		0.65
Mixed Chaparral	0.24		0.24
Montane Chaparral	6.46		6.46
Montane Hardwood	2.30		2.30
Montane Hardwood-Conifer	7.68		7.68
Old Orchard	0.00		0.00
Plantation	1.17	1.12	2.29
Ponderosa Pine	2.01		2.01
Residential-Developed	0.02		0.02
Riparian	0.31		0.31
Riverine-Montane Riparian	0.69		0.69
Road	3.08		3.08
Rock	0.57		0.57
Rubus armeniacus	0.18		0.18
Sierran Mixed Conifer	30.60	9.97	40.57
Wetland	0.01		0.01
Total Acres	68.79	11.37	80.16

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Threatened and Endangered Species

In response to the comment regarding page 5-6 of Appendix H (Threatened, Endangered, and Sensitive Wildlife Species Habitat Assessment), a copy of the CONFIDENTIAL report on Threatened and Endangered Species has been uploaded to the FERC e-library as “privileged information”.

Revegetation and Invasive Plant Species Management

In response to the comment regarding page E-79 of the application, the Applicant has contracted with Tetra Tech to provide a comprehensive Noxious Weed Management and Revegetation Plan. A detailed plan of action and cost budgets are included in this Plan as requested by the FERC. This Plan has been uploaded to the FERC e-library.

We have done our best to provide a complete response to all items. Please inform the Applicant if additional information in regard to any of these issues addressed might still be required.

Respectfully Submitted,

Charlie Kuffner
Managing Partner
Rugraw, LLC

Encl: Supplemental Service List
Cc: Adam Beeco – FERC;
Jim Tompkins – Rugraw, LLC;
Phillip Leapley – Tetra Tech