



**RUGRAW, LLC**

20 November 2015

Honorable Kimberly D. Bose  
Secretary, Federal Energy Regulatory Commission  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

Subject: 00-P-12496 Updated and Complete Final License Application Documents  
Issuance with Index of Documents  
Re: FERC Project No. 12496, Lassen Lodge Hydroelectric Project

Dear Kimberly:

In the furtherance of the Final License Application for the Lassen Lodge Hydroelectric Project, FERC P-12496-002, Rugraw, LLC hereby submits this Updated and Complete Project Documents Issuance to bring all stakeholders current and to allow for most efficient issuance of the Ready for Environmental Analysis (REA) notice and completion of the Environmental Impact Statement (EIS) by the FERC.

Some reports are the same as originally submitted with no modifications, and they are re-posted with their original dates. Most reports have updated descriptions for the final proposed diversion/intake structure location, Alternative transmission line route option, and to reference other relevant consultant reports completed subsequently as a part of this license application. Some reports have updates to reflect consultation with agencies and other application changes to be current as well. ALL changes are reflected as REDLINE changes. All deletions have been lined-out, but retained in the document to easily see any changes from prior issuances of these updated and complete documents.

If anyone prefers to see an “accepted changes” version with no REDLINES; if anyone would like a printed hard copy of any of the files, drawings, or maps; and/or if anyone would like access to the “cloud” document site or current documents maintained by the Applicant, please contact the Applicant.

The index of the Updated and Complete Project Documents is as follows:

**Lassen Lodge Hydroelectric Project FERC Project Number P-12496  
INDEX to License Documents**

Doc. #	Document Title	Current Issuance Date
01	.FERC FLA NO. 12496 Submission Letter Lassen Lodge Hydroelectric Project.....	April 17, 2014
02	.Initial Statement – Revision 2.....	November 20, 2015
03	.Single line Drawing Generation Site Sheet 11P0525-01.....	January 21, 2014

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04. Single line Drawing Point of Interconnect Sheet 11P0525-02.....	April 1, 2014
05. Service List Letter Mailings 2014_04_21 1 of 2.....	April 21, 2014
06. Service List Letter Mailings 2014_04_21 1 of 2.....	April 21, 2014
07. Certification of Service List LLHP Rugraw LLC .....	April 30, 2014
08. Notarized Statement Rugraw LLHP.....	August 15, 2015
09. Exhibit A - Project Description Revision 2.....	November 20, 2015
10. Exhibit E - Environmental Report Revision 1.....	November 20, 2015
11. Appendix A - Water Quality and Quality Technical Study Revision 1.....	November 20, 2015
12. Appendix B - Salmonid Habitat Assessment for Upper South Fork of Battle Creek .....	September 2013
13. Appendix C - Stream Flows and Potential Production of Spring-run Chinook Salmon and Steelhead in the Upper South Fork of Battle Creek, California .....	December 3, 2013
14. Appendix D - Biological Assessment Revision 1.....	November 20, 2015
15. Appendix E - California Red-legged Frog Site Assessment Revision 1.....	November 20, 2015
16. Appendix F - Botanical Resources Study Report Revision 1.....	November 20, 2015
17. Appendix G - Delineation of Wetlands and Other Waters Report.....	December 2013
18. Appendix H - Threatened, Endangered, and Sensitive Wildlife Species Habitat Assessment Revision 1.....	November 20, 2015
19. Appendix I - Non-Confidential Cultural Resources Inventory (2 files due to file size) Revision 1.....	November 20, 2015
20. Appendix J - Non-Confidential Historic Properties Management Plan Revision 2.....	November 20, 2015
21. Appendix K - Agency Consultation.....	Various Dates as noted
22. Exhibit F - Project Drawings.....	November 20, 2015
23. Exhibit G - Project Maps.....	August 24, 2015

The following documents have been submitted subsequent to the original license application submittal that elaborate further on and add to the documents listed above:

24. Supplemental Information for Final License Application (Sept., 2014) Revision 1....	November 20, 2015
Appendix A Agency Comment Letters on Final License Application.....	June 12, 19 and 20, 2014
Appendix B Linking Stream Carrying Capacity for Salmonids to Habitat Features.....	2009
Appendix C Prediction of Stream Carrying Capacity for Steelhead: the Unit Characteristic Method.....	2009
Appendix D-1 Panther Grade Falls Barrier Analysis.....	January 20, 2012
Appendix D-1 Panther Grade Falls Barrier Analysis Supplement .....	June 20, 2012
Appendix E Stream Monitoring Locations Map.....	August 22, 2014
25. Noxious Weed and Revegetation Management Plan (Supplement to Appendix F).....	August 15, 2014
26. September 2014 Base Streamflow Study by Doug Parkinson and Assoc. & Rugraw....	November 1, 2014
27. Hydrologic Analysis SF Battle Creek Northwest Hydraulic Consultants (NHC).....	November 28, 2014
28. Measured & Synthetic Extended Flow Record (1929-2014) (Excel File) by (NHC).....	November 28, 2014
29. Response (partial) to USFW Consultation letter of November 9, 2015 by Rugraw.....	November 16, 2015
30. Sediment Transport Analyses SF Battle Creek by (NHC) Final Report.....	November 20, 2015
31. Temperature Modeling Study by Watercourse Engineering Final Report.....	November 20, 2015
32. Fish Habitat Survey and Capacity Modeling by Cramer Fish Sciences Final Rev2....	November 20, 2015
33. Consultation Record for Additional Study Requests and Final License Update.....	November 20, 2015

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The Final Reports on Sediment Transport, Temperature Modeling, and Fish Habitat Survey and Capacity Modeling dated November 20, 2015 supersede the Interim Reports and any Agency Consultation Memos or Versions of these documents issued prior to the Final Reports issuance of November 20, 2015.

The following documents have been submitted that document  
Supplemental Adjacent and Underlying Property Owners, Political  
Subdivision, and Service List Distributions:

- 34. Notice to Supplemental Adjacent and Underlying Property Owners Service List .....August 15, 2014
- 35. Supplemental Service List Property Owners and Political Subdivisions .....August 15, 2014
- 36. Supplemental Service List Certified Mail Receipts .....August 15, 2014
- 37. Rugraw LLC Response to FERC July 3, 2014 letter.....August 19, 2014 Updated November 20, 2015
- 38. Notice to Adjacent Property Owners Alternate Transmission Route Service List.....September 28, 2015
- 39. Supplemental Service List Property Owners Alternate Transmission Line Route.....September 28, 2015
- 40. Supplemental Service List Cert. Mail Receipts Alternate Transmission Line Route...September 28, 2015
- 41. Project Service List Updated.....November 20, 2015

Due to document file size limits in the FERC e-library, some documents may have to be posted in multiple parts. Identification for multiple parts shall be signified by letters after the document number. e.g. Exhibit E, Appendix I consists of four document volumes: 19A, 19B, 19C and 19D.

The following Confidential Documents have been posted to the Privileged  
section of the FERC e-library as noted:

- 42. Appendix H-II Confidential Threatened, Endangered, and Sensitive Wildlife Species Habitat Assessment Revision 1..... November 20, 2015
- 43. Appendix I-II Confidential Cultural Resources Inventory (FERC e-Filed May 2, 2014)  
See Tetra Tech Transmittal Letter Dated ..... May 1, 2014
- 44. Appendix J-II Confidential Historic Properties Management Plan (FERC e-Filed May 2, 2014)  
See Tetra Tech Transmittal Letter Dated ..... May 1, 2014
- 45. PPA SDG&E Rugraw Lassen Lodge Hydro (FERC e-Filed ..... October 23, 2013

A summary of the major Updates for each of the project documents is as noted below:

- 02. Initial Statement – Revision 2. Updated to reflect final Diversion/Intake structure dimensions and Alternative Transmission Line Route.
- 09. Exhibit A - Project Description Revision 2. Updated to reflect final Diversion/Intake structure dimensions and Alternative Transmission Line Route.
- 10. Exhibit E - Environmental Report Revision 1. Updated to reflect final Diversion/Intake structure dimensions, Alternative Transmission Line Route, Agency Consultation and additional environmental consultant report findings.
- 11. Appendix A - Water Quality and Quality Technical Study Revision 1. Updated only to reflect Final Diversion/Intake structure dimensions and Alternative Transmission Line Route.

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14. Appendix D - Biological Assessment Revision 1. Updated only to reflect Final Diversion/Intake structure dimensions and Alternative Transmission Line Route
15. Appendix E - California Red-legged Frog Site Assessment Revision 1. Updated only to reflect Final Diversion/Intake structure dimensions and Alternative Transmission Line Route.
16. Appendix F - Botanical Resources Study Report Revision 1. Updated only to reflect Final Diversion/Intake structure dimensions and Alternative Transmission Line Route
18. Appendix H – Non-Confidential Threatened, Endangered, and Sensitive Wildlife Species Habitat Assessment Revision 1. Updated only to reflect Final Diversion/Intake structure dimensions and Alternative Transmission Line Route
19. Appendix I - Non-Confidential Cultural Resources Inventory (2 files due to file size) Revision 1. Updated only to reflect Final Diversion/Intake structure dimensions and Alternative Transmission Line Route
20. Appendix J - Non-Confidential Historic Properties Management Plan Revision 2. Updated only to reflect Final Diversion/Intake structure dimensions and Alternative Transmission Line Route

**22. Exhibit F, Drawings:**

- a. Exhibit F, Drawings have been updated to reflect the final location and orientation of the diversion structure, as well as a proposed location of an “Alternate” “Gen-tie” transmission line route option at the northwest portion of the project where the Switchyard and Point of Interconnection to the PG&E Grid is proposed to be located.
- b. Upon consideration of feedback from the California Department of Fish and Wildlife consultation with a stated preference for an integrated fish screen structure and feedback from the Sedimentation Study on optimum sediment pass-through of the diversion structure in a relatively “straight” stretch of the stream, the now integrated diversion/fish screen/intake structure is proposed to be finally sited just upstream and around a bend in the stream from the originally proposed location. The Operating Water Surface Level has been maintained at elevation 4,310 feet as originally proposed, so, based on the relocation of the integrated diversion/fish screen/intake structure, the retention pond is now smaller than originally proposed as shown on the updated Exhibit F drawings and is noted to have been reduced from 0.5 acres to 0.4 acres in the application documents.
- c. Upon consideration of comments from Manton community members regarding the potential routing of the “Gen-tie” transmission line through the southern portion of Manton, the Applicant has proposed an “Alternate” transmission route option to also be considered in the environmental review process. This “Alternate” route, as shown on the most northwestern part of updated Exhibit F, continues on county right of way on the southern side of Hazen Road west past and not north up Manton School Road then turns north to be run on the east side of South Powerhouse Road up to the Point of Interconnection with the PG&E Grid as shown. As a part of the Alternate transmission line route option, the Applicant has also offered to construct and maintain a forest fire fuel break along the transmission route along the south side of Hazen Road.
- d. The Entire Exhibit F, Drawings, has been reissued to have a complete drawing set. However, only the following drawings have been updated as noted. The others remain the same as submitted in the original issuance of Exhibit F.

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- e. Sheet F-1 of 23 - Add "Alternate" transmission route option and update final proposed diversion structure location.
- f. Sheet F-3 of 23 – Change length of 48 inch diameter HDPE penstock pipe from originally proposed 7,314 LF to final proposed 7,565 LF to reflect final proposed intake location.
- g. Sheet F-4 of 23 – Change length of 48 inch diameter HDPE penstock pipe from originally proposed 7,314 LF to final proposed 7,565 LF to reflect final proposed intake location.
- h. Sheet F-5 of 23 – Change length of 48 inch diameter HDPE penstock pipe from originally proposed 7,314 LF to final proposed 7,565 LF to reflect final proposed intake location and change final proposed location of integrated diversion/fish screen/intake structure.
- i. Sheet F-6 of 23 – Change final proposed location of integrated diversion/fish screen/intake structure.
- j. Sheet F-7 of 23 – Change diversion structure to incorporate bottom opening sluice channels on either side of as well as pneumatically operable sediment by-pass gates in the middle of the structure. Change originally proposed fish screen and intake structure to a "canal" fish screen/intake structure integrated into the diversion such as to allow fish entering the fish screen/intake structure to swim back out to the retention pond There has also been a juvenile fish return pipe added at the downstream end of the fish screen and updated fish bypass to meet with CDFW consultation and CDFW and NOAA/NMFS published design standards.
- k. Sheet F-7.1 – Sheet eliminated from current drawing set. Information moved to updated Sheet F-8.
- l. Sheet 8 of 23 – Update diversion, intake and fish bypass drawing sections.
- m. Sheet 9 of 23 – Update intake and fish ladder/bypass passage drawing section.
- n. Sheet 23 of 23 - Add "Alternate" transmission route option.

**23. Exhibit G, Map**

- a. Upon consideration of comments from Manton community members regarding the potential routing of the "Gen-tie" transmission line through the southern portion of Manton, the Applicant has proposed an "Alternate" transmission route option to also be considered in the environmental review process. This "Alternate" route, as shown on the most northwestern part of updated Exhibit G, continues on county right of way on the southern side of Hazen Road west past and not north up Manton School Road then turns north to be run on the east side of South Powerhouse Road up to the Point of Interconnection with PG&E Grid as shown. As a part of the Alternate transmission line route option, the Applicant has also offered to construct and maintain a forest fire fuel break along the transmission route along the south side of Hazen Road.
- b. 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

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adjacent to the "Alternate" transmission line for 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 updated Exhibit G dated 8/24/2015. A copy of the Supplementary Service list for the "Alternate" transmission line adjacent property owners, a copy of the notice and copies of the Certified mail letters sent to these property owners are included in the upload to the FERC e-library with this notice to show proof of these notices being properly delivered.

Thank you for your interest in the licensing process for the Lassen Lodge Hydroelectric Project and your time to review the studies, reports, maps and drawings.

Please inform the Applicant if there are any questions or comments on these revised updated and complete final license documents.

Respectfully Submitted,



Charlie Kuffner  
Managing Partner  
Rugraw, LLC

Encl: As note in Index of Documents above;  
Cc: Adam Beeco – FERC;  
Jim Tompkins – Rugraw, LLC

Document Content(s)

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