The Lassen Lodge Hydroelectric Project (LLHP) is proposed as a “run-of-the-river” “Renewable/GREEN” electrical generation project that plans to “borrow” some of the steamflow from Upper South Fork Battle Creek at the proposed diversion/intake structure located 1.7 miles below the Hwy. 36 bridge just below Mineral and, through a 2.4 mile pipeline/penstock buried underground, will return 100% of the water to the creek at the proposed powerhouse/tailrace location 2.1 miles above the Ponderosa Way Bridge.

The proposed powerhouse/tailrace at the lowest end of the project is located 1.7 miles above Panther Grade, which is also the uppermost limit of the Battle Creek Salmon and Steelhead Restoration Project on South Fork Battle Creek.

LLHP is fully supportive of the Battle Creek Salmon and Steelhead Restoration Project and are working closely with Tehama County, the California State Water Resources Control Board (SWRCB), California Fish and Wildlife Service (CFWS), US Fish and Wildlife Service (USFWS), National Oceanographic and Atmospheric Administration National Marine Fisheries Service (NOAA/NMFS), US Army Corp of Engineers (ACE) and the Federal Energy Regulatory Commission (FERC) on the final licensing and permitting for the project. These license and permit processes with these agencies look closely at any potential environmental impacts of the LLHP operations so that they can be properly mitigated and not be detrimental to the habitat in and around South Fork Battle Creek both during the LLHP construction and long-term operations of the proposed hydroelectric generation project.

The Tehama County Board of Supervisors adopted a Memorandum of Understanding (MOU) on June 10, 2014 for the LLHP that they entered into with the SWRCB whereby the parties mutually agreed that, due to their position as the issuing agency for the Water Quality Certification, the SWRCB will be the lead agency for the CEQA process and will work cooperatively with the County in completing the CEQA process for LLHP. The DRAFT Environmental Impact Report (EIR) is being worked on now and will be issued for public review and comment before being finalized.

The locally visited Recreation areas around the Old Highway 36 bridge and Angel Falls are located outside the LLHP site, and access to these areas will not be impacted by the operation of the project. In these areas, all elements of the project are located underground several hundred feet up the south bank buried in a pipeline right-of-way that will not be visible. The proposed diversion/intake works is ½ mile upstream from the Old Highway 36 bridge and not visible from any existing public or private road.

The LLHP is proposed to not operate from mid to late summer to early fall during natural low streamflow periods historically experienced each year in South Fork Battle Creek.

The project site is located several miles above the Ponderosa Fire area of influence. Sediment challenges recently experienced due to rapid storm run-off in burned areas in the lower reaches of South Fork Battle Creek are not impacted or modified by the existence and/or operation of the LLHP many miles.
upstream. During large storm flow events, the project operation will go off-line and the diversion/intake structure opened to allow the natural flow of the creek to pass though the diversion/intake structure and will be unaltered during such events.

- The LLHP transmission line “point of interconnection” (POI) location along South Powerhouse Road in Manton was selected by PG&E and approved by the California Independent System Operator (CAISO) as the most appropriate location (from a PG&E Interconnection / Electrical Grid stand-point based on the locations of their existing transmission infrastructure) for the LLHP to interconnect with the existing Volta-South 60kV transmission line owned and operated by PG&E. The original interconnection request by the project was to interconnect at the South Powerhouse Substation, but PG&E ruled that out as not feasible and PG&E specifically requested of LLHP that the POI be located equidistant between the South Powerhouse Substation and the Volta Substation to help assure and augment transmission system stability.

- The LLHP transmission line is proposed to be operated at the same 60kV as the existing PG&E Volta-South transmission line that runs from the Volta Powerhouse through the center of Manton and down the west side of South Powerhouse Road that the LLHP transmission line interconnects with. The power poles proposed to be used in the Manton area are all single wooden poles with 3 electrical wires on them with some control wires strung below. They will look very much like many of the power poles existing in the neighborhood, but with less wires and cross-arms. NO METAL LATICE TOWERS ARE PROPOSED TO BE USED FOR LLHP. The transformer and substation is located adjacent to the powerhouse generation site, with only a pole mounted switch and a small operations building (no larger than 10’ by 10’) to be located at the POI site off of the east side of South Powerhouse Road.

- LLHP is open to the potential of PG&E “underbuild” on the project power poles to allow for enhanced electrical distribution access for local residents in the vicinity of the LLHP transmission line.

- The power generated from LLHP will be delivered to the Volta-South transmission line and be available for local dispatch by PG&E out of either the Volta or South Substations contributing to improved reliability of availability of power in the Manton area.

- LLHP represents a significant investment in the economy of Tehama County estimated to be $12 Million for the Construction of the project. This will result in local jobs, those wages being re-invested into the community, and in sales tax revenue to Tehama County for the material and equipment purchased.

- The proposed project represents long-term employment for plant operators in Tehama County for the life of the project.

- The project will also contribute Tehama County Property Taxes ongoing for the project operations contributing to the annual tax base for Tehama County.

- The site was originally proposed by the Tehama County Power Authority and they were issued FERC License to operate the project years ago. However, they were not able to gain control of the entire project land site and had to relinquish that license.
The currently proposed LLHP project site and rights were rescued from the former foreign owners when acquired in 2011. The LLHP project team has since revitalized the project and been actively and tirelessly working to progress the proposed LLHP development forward to successful licensing and permitting, including all local, state and federal environmental and cultural survey studies and reports, for the last 4 years. With the pending completion of the licensing and permitting processes, the project is targeting to start construction in the summer of 2015.

The principal owners of Rugraw, LLC, the developers of the proposed Lassen Lodge Hydroelectric Project, are native Californians who have lived and worked in California their entire lives and are passionate about locally owned, alternative, renewable, GREEN, carbon and fuel free electrical energy production that support strong local businesses, energy independence and a better environment.

The LLHP has secured a Power Purchase Agreement (PPA) awarded through a California Public Utilities Commission (CPUC) procurement process that was motivated by California State Assembly Bill AB 32 and Senate Bill SX2-1 requiring California Electrical Utilities to procure 33% of their electrical energy production from “Renewable” GREEN production sources by the year 2020. This stated “Renewable Portfolio Standard” (RPS) energy goal, that supports Local, State and National energy independence and less reliance on foreign oil imports and pandering to foreign interests, are based on the desire for cleaner air directly resulting in better public health.

The proposed 5 MW LLHP is estimated to produce approximately 26,000,000 kWhr of electricity per year. This would be sufficient to supply the electrical needs of 3,781* average California homes, displace emissions from 2,017,365** gallons of gasoline, and avoid 17,928** metric tons of carbon-dioxide - plus other harmful emissions - from being released into the atmosphere per year. Over the first 20 years of operation, as provided for in the existing PPA contract in place with LLHP, the project could displace emissions from 40** million gallons of gasoline and avoid 358,000** metric tons of CO2. (* Average Electrical usage per household per US Department of Commerce Energy Information Administration for California in 2012 = 573 kWhr/month. **Gasoline and CO2 conversations from US Environmental Protection Agency Greenhouse Gas Equivalencies Calculator)

As good neighbors, the LLHP project team looks forward to answering any questions that you might have about any of the elements of the Project. So, please feel free contact us at any time with anything on your mind.

Contacts and Additional Project Information:

Charlie Kuffner, LLHP Managing Principal, 415.652.8553; charlie.kuffner@gmail.com

Jim Tompkins, LLHP Principal, Senior Project Manager, 530.949.8284; h2owiz@sbcglobal.net

SWRCB (in cooperation with Tehama County) CEQA document website:
http://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/lassen_lodge_ferc12496/


Portion of project Map, Exhibit G, enclosed for ease of reference.