Project Information	
1. Project Title:	Sierra Pacific Power Company Hobart Substation Rebuild Project
2. Lead Agency and Address	California Public Utilities Commission Division 505 Van Ness Avenue San Francisco, CA 94102
3. Contact Person and Phone Number	John Boccio, Project Manager Energy Division Phone: (415) 703-2641
4. Project Location:	The Proposed Project is located on private property in eastern Nevada County, approximately five miles north of the Town of Truckee and two miles east of the Hobart Mills area. The project site is adjacent to the Tahoe National Forest approximately 0.75 miles north of Prosser Creek Reservoir, near the intersection of Old Reno Road (County Road 886E) and Dog Valley Road (County Road 889). The site is located at 15702 Dog Valley Road.
5. Project Sponsor's Name and Address:	Sierra Pacific Power Company 6100 Neil Road Reno, NV 89520
6. General Plan Designation	County of Nevada – Forest 160 (160 acre minimum parcel size)
7. Zoning:	Timberland Production Zone (TPZ)-160

2.1 PROJECT OVERVIEW

The existing Hobart Substation was built in the early 1960s and currently serves approximately 40 customers in the Hobart Mills area. The purpose of the Proposed Project would be to upgrade the existing substation with modern electrical equipment and provide standard three-phase electrical service to an existing customer in the Hobart Mills area. The installation of new electrical equipment would reconfigure the substation from two-phase to three-phase service and increase overall substation capacity from 666 kilovolt amperes (kVA) to 5,000 kVA. In addition, the existing 12.5 kilovolt (kV) distribution line would increase in voltage to 14.4 kV

The Proposed Project would also include the installation of a eight-foot chain link fence around the substation area, an earthen clay berm within the fenced area to contain any potential spills that may occur as a result of equipment failure, installation of concrete footings for the new electrical equipment, and the placement of gravel within the fenced area. Finally, the substation access road would be widened, regraded, and graveled to provide for improved safety and all-weather access.

Upon project completion, the rebuilt substation would function with improved reliability and continue to provide electrical service only to existing customers in the Hobart Mills area



2.2 PURPOSE AND NEED

An existing customer in the Hobart Mills area has requested approximately 500 to 1000 kVA of service, a portion of which must be three-phase load. The substation's existing transformers and regulators are inadequate to meet these requirements. The project does not propose to extend services from the substation to any new users, but instead will enable the substation to deliver the amount of load required by an existing customer for existing and future uses conditionally approved by Nevada County. The customer currently operates a rock crushing facility, but has received a Conditional Use Permit (CUP) that allows reestablishment of topsoil processing operations and construction and operation of a proposed concrete batch plant. Nevada County approved the CUP in 2001 with an expiration date of July 2004. No plans have been submitted to the County for approval, but the CUP was extended through July 2006. Nevada County approved a Mitigated Negative Declaration when it issued the CUP, which incorporated mitigation measures that would reduce the impact of the proposed construction and expanded operations to less than significant. A copy of the Nevada County CUP incorporating mitigations for the expansion and increased operations is available at Appendix B. Existing equipment at the substation consists of two single-phase 333 kVA 60/12.5 kV transformers, connected in an open wye configuration on the 12.5 kV side, resulting in a total capacity of 666 kVA. The existing voltage regulators are rated at 50 amperes and can regulate a maximum of 720 kVA. This type of distribution system is not capable of providing service to three-phase loads.

Sierra Pacific Power has proposed rebuilding the existing substation with a larger transformer and new voltage regulators. The estimated cost of the project is approximately \$200,000. A new substation capacity of 5,000 kVA, three-phase, would be obtained via the proposed substation improvements and would allow Sierra Pacific Power to:

- (1) Meet the new service requirements of its customers.
- (2) Accommodate future load growth within the area served from this substation; and
- (3) Make use of standard equipment, especially the transformer, which can be supplied and "backed up" by spare transformers within the system.

2.3 PROJECT LOCATION

The Proposed Project is located on private property in eastern Nevada County, approximately five miles north of the Town of Truckee and two miles east of the Hobart Mills area (see **Figures 1 and 2**). The project site is adjacent to the Tahoe National Forest approximately 0.75 miles north of Prosser Creek Reservoir, near the intersection of Old Reno Road (County Road 886E) and Dog Valley Road (County Road 889). The site is located at 15702 Dog Valley Road and is visible from both Old Reno Road and Dog Valley Road.

2.4 SITE CHARACTERISTICS

The area immediately surrounding the Proposed Project consists primarily of open space and undeveloped forest areas characterized by low growing shrubs, sagebrush, a number of stumps, and scattered second-growth trees. The project site is dominated by sparse second growth Jeffrey pine (Pinus jeffreyi) with groundcover consisting mainly of mountain sagebrush (Artemisia tridentata ssp. vaseyana) and associated species. The site has a moderate slope draining to the south where a shallow ephemeral drainage is present approximately 100 meters (328 feet) south of the project area. A manmade drainage on the opposite side of the access road also empties into the drainage area. No homes or structures are visible from the project site, although the landowner's residence is located on a nearby ridge to the northwest.



Insert Figure 1, Regional Location



Figure 1 page 2



Insert Figure 2, Project Location



Figure 2 page 2



Photo 1 page 1



Photo 1 page 2



Photo 2 page 1



Photo 2 page 2



Photo 3 page 1



Photo 3 page 2



Photo 4 page 1



Photo 4 page 2



At the time of application to the CPUC and preparation of the PEA, the Proposed Project site was zoned by Nevada County as Timberland Production Zone (TPZ)-160. However, on March 25, 2004, the Nevada County Planning Commission approved Sierra Pacific Power Company's Use Permit and recommended that the Board of Supervisors tentatively approve immediate rezoning of the property from TPZ-160 to Public and forward that recommendation to the California Board of Forestry for approval. If the Board of Forestry approves the rezoning from TPZ to Public, Nevada County staff will return to the Board of Supervisors to request approval of the rezone and amend Nevada County Zoning District Map (ZDM) 137.

2.5 PROJECT CONSTRUCTION

Project construction is anticipated to begin by September of 2004 and would be completed by October of 2004.

Construction Overview

Construction of the Proposed Project would begin with improvements to the access road and site grading. The existing access road would be re-graded, compacted, and overlain with gravel to control erosion and provide access for construction crews and equipment and permanent all-weather access for future substation maintenance. The substation footprint would then be graded at approximately the same slope as the surrounding terrain to provide a constant slope across the site in the direction of the natural drainage. Compacted clay berms would then be constructed to provide containment around oil filled equipment. After grading is complete, a new chain-link fence would be installed around the site, followed by the new concrete foundations, poles and framing. Finally, new electrical equipment would be installed.

The site plan for Proposed Project is shown in **Figure 3. Figures 4 and 5** present side and overhead details of the Proposed Project, and **Figure 6** presents a photo simulation (based on Sierra Pacific's Osgood Substation) of how the Proposed Project may appear upon completion of construction.

Access Road Improvements

The Proposed Project is adjacent to the Tahoe National Forest near the intersection of Old Reno Road and Dog Valley Road. The site is located at 15702 Dog Valley Road and is accessible via an unpaved access road that leads to the substation from a private driveway. The existing bladed access road is approximately 8 to 10 feet wide. The access road would be widened to 12 feet and covered with gravel to control erosion and provide access for construction crews and equipment and permanent all-weather access for future substation maintenance.

Substation Expansion

The existing substation encompasses a 30-foot by 30-foot area totaling approximately 900 square feet and is surrounded by an 8-foot high chain-link fence topped with barbed wire. Within the substation, existing electrical equipment currently rests above the ground on wooden risers similar to railroad ties. For the Proposed Project, the new facility would be similar to the existing facility with the exception of new concrete footings for electrical equipment and a new gravel base throughout the substation to provide improved access and accommodate installation of new electrical equipment.

Under the Proposed Project, the substation footprint would be enlarged to approximately 4,500 square feet and contained within a fenced area measuring 60 feet by 75 feet. A 30-foot



cleared area would surround the chain-link fence. Prior to the installation of fencing, the site would be graded at approximately the same slope as the surrounding terrain. Compacted clay berms would then be constructed to provide containment around oil-filled equipment. Once grading and earthwork is complete, a new chain-link fence would be installed around the site, and three new concrete foundations (totaling approximately 150 square feet) would be poured for new electrical equipment to rest on. In addition, a new wood pole would be installed to connect the rebuilt substation to the existing transmission line, and a new guy and anchor would be installed on an existing single-pole structure to support the transmission lines. Other than as described above, no other structures would be installed.

The entire area of the substation would be covered by gravel and surrounded by compacted earthen clay berms to provide spill-containment in the event of failure of any oil-bearing electrical equipment.

Electrical And Related Equipment

Existing substation electrical equipment consists of two single-phase 333 kVA 60/12.5 kV transformers and two 50-amp voltage regulators, resulting in a total substation capacity of 666 kVA. Electricity from the substation is distributed through an existing 12.5 kV transmission line to customers in the Hobart Mills area. The Proposed Project would upgrade the existing substation with modern electrical equipment and provide standard three-phase service while increasing substation capacity to 5,000 kVA. New electrical equipment to be installed at the substation would include a new transformer, three new voltage regulators, a recloser, and a station power transformer. The installation of new electrical equipment would also result in an increase of voltage of the existing transmission line, from 12.5 kV to 14.4 kV.

As noted above, the substation area would be surrounded by compacted earthen clay berms to provide spill-containment in the event of failure of any oil-bearing electrical equipment. It should be noted that the oil used for the electrical equipment would be a non-toxic mineral oil, and that approximately 3,000 gallons would be used at the substation in the following quantities: 2,350 gallons for the transformer, 600 total gallons for the three voltage regulators, 40 gallons for the recloser, and 10 gallons in the station power transformer.

Construction Equipment

Construction would include grubbing/clearing, digging, grading, lifting and hauling, using both heavy-duty and light-duty construction equipment. Specific equipment to be utilized may include, but is not limited to, pick-up trucks, dump trucks, boom trucks, bucket trucks, backhoes, bulldozers, graders, compactors, and concrete trucks.

Post Construction Clean Up

Once the substation has been energized and placed in service, the existing 30-foot by 30-foot substation would be dismantled and all electrical equipment would be removed from the site. All fencing material would also be removed and excavated fencepost areas would be backfilled with native soil. Finally, the surface area of the old site and areas that may have been impacted by construction activity would be scarified and contoured to match surrounding grades in order to promote natural vegetation.



Insert Figure 3, Site Plan



Figure 3 page 2



Insert Figure 4, Site Detail



Insert Figure 5, Site Detail



Insert Figure 6, Photo Simulation



Figure 6 page 2



2.6 FACILITY OPERATION AND MAINTENANCE

Once construction activities are complete, the Proposed Project would operate automatically without day-to-day assistance from Sierra Pacific Power Company personnel. Maintenance personnel would require access to the substation for routine maintenance and inspection activities or during emergency situations. Maintenance of the substation would include equipment testing, equipment monitoring and repair, patrol of the substation site, clearing of vegetation in a 30-foot area around the substation, and maintenance of the access road as needed.

2.7 REGULATORY REQUIREMENTS, PERMITS, AND APPROVALS

Nevada County, the California Board of Forestry, and the Lahontan Regional Quality Control Board are responsible agencies with jurisdiction over the Proposed Project. To proceed with construction of the Hobart Substation Rebuild Project in Nevada County, the following permits or approvals would be required:

- <u>Nevada County Use Permit</u>: A Conditional Use Permit is required for electrical substations by County Code Section I-11 3.14.
- <u>Nevada County Rezone:</u> Electrical substations are not an allowed use within areas zoned for TPZ. The substation parcel would require immediate rezoning from TPZ to Public, with approval by the California Board of Forestry to remove areas from a TPZ area.
- <u>Nevada County Building and Grading Permits:</u> SPPCo. will submit project construction and grading plans to the Nevada County Department of Planning and Nevada County Building Department for review and approval.
- <u>California Board of Forestry:</u> The Board of Forestry has established procedures for the removal of property from TPZ areas. The Board of Forestry would be required to approve the zoning conversion from TPZ to Public.
- <u>Lahontan Regional Water Quality Control Board:</u> The RWQCB must approve an NPDES Waste Discharge Permit Waiver to ensure no pollutants enter water sources during construction activities. A waiver may be granted because the Proposed Project involves less than one acre of disturbance.

2.8 MITIGATION MEASURES INCLUDED IN THE PROJECT

The PEA suggested that impacts resulting from the Proposed Project would occur only during construction activities and that no significant impacts would occur as a result of continued operation of the Hobart Substation. SPPCo. identified several mitigation measures as part of the project in the application for a Permit to Construct to reduce impacts to a less than significant level. These measures included mitigation for Hazards (Fire Prevention), Land Use, and Cultural Resources.

As Nevada County has tentatively approved a rezone application for the project area, subject to approval by the California Board of Forestry, those mitigation measures identified in the PEA related to Land Use have not been retained. In addition, the proposed mitigation identified in the PEA for compliance with the Zoning Regulations for Visual Resources have not been retained, as Nevada County indicated that:



"...the design of this project ... is compatible with its surroundings and therefore meets the intent of the electrical substation design standards; because of the natural screening and landscaping provided by area vegetation, the low profile design, slatted fencing and additional landscaping are not required."

For more information, see the environmental discussion in *Section 4.9, Land Use* and the Nevada County documents contained in Appendix B.

Therefore, the following mitigation measures identified as part of the project in the PEA and application for a Permit to Construct to reduce impacts to a less than significant level shall be incorporated into the project:

Hazards and Hazardous Materials

Fire Prevention Measures: As part of best management practices, the areas in which construction occurs shall be cleared of vegetation prior to construction activity. All construction areas shall be equipped with adequate fire suppression devices such as extinguishers and shovels, and all equipment shall be maintained to prevent accidental sparks. Construction safety precautions shall be listed and included in contract specifications. Trees and vegetation within the 9,375 square foot project area shall not be replaced and the area shall be kept clear during regular operation of the facility so that no trees may fall onto the substation and no vegetation may dry and create high fuel situations on the site. A 30-foot area around the substation shall also be kept clear in accordance with substation safety regulations.

Cultural Resources

Discovery of Buried Cultural Resources: In the unlikely event that buried cultural resources are discovered during the course of project activities, construction operations shall immediately stop within 200 feet of the find and the client shall consult with the appropriate local, state, or federal entities and a qualified archaeologist to determine whether the resource requires further study. Cultural resources could consist of, but not be limited to, artifacts of stone, bone, wood, shell, or other materials, or features, including hearths, structural remains, or dumps.

Discovery of Human Burials: If human burials are encountered, all work in the area will stop immediately and the Nevada County Coroner's office shall be notified within 48 hours. If the remains are determined to be Native American in origin, both the Native American Heritage Commission and any identified descendants must be notified by the coroner and recommendations for treatment solicited (CEQA Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and 5097.98).

In addition, the following mitigation measures identified in this MND to reduce impacts to a less than significant level shall be incorporated into the project:

General

Prior to substation site development, SPPCo. will submit project construction and grading plans to the Nevada County Department of Planning and Nevada County Building Department for review and approval. SPPCo. will apply for and receive all required local permits for the Proposed Project.



Air Quality

SPPCo. will comply with the *Northern Sierra Air Quality Management District* (NSAQMD) rules and regulations to reduce fugitive dust emissions, including the following:

- MM AQ-1 Place dust control mitigation requirements in all construction contracts. All construction contracts will require the following:
 - All construction activities shall be subject to the requirements of the Northern Sierra AQMD's Regulation 2, Rule 226 regarding dust control. The purpose of Regulation 2, Rule 226, is to reduce and control fugitive dust emissions to the atmosphere. For more information, see the following website:

http://www.arb.ca.gov/DRDB/NSI/CURHTML/R226.HTM

- Alternatives to open burning of vegetative material on the project site shall be used unless deemed infeasible by the Northern Sierra Air Quality Management District. Suitable alternatives are chipping, mulching, or conversion to biomass fuel.
- Contractors shall be responsible for ensuring that adequate dust control measures are implemented in a timely manner during all phases of project development and construction.
- All material excavated, stockpiled, or graded shall be sufficiently watered, treated, or covered to prevent fugitive dust from leaving the property boundaries and causing a public nuisance or violation of an ambient air standard. Watering should occur at least twice daily, with complete site coverage.
- All areas (including unpaved roads) with vehicle traffic shall be watered or have a dust palliative applied as necessary for stabilization of dust emissions.
- All on-site vehicle traffic shall be limited to a speed of 15 mph on unpaved roads.
- All land clearing, grading, earth moving or excavation activities shall be suspended as necessary to prevent excessive windblown dust when winds are expected to exceed 20 mph.
- All material transported off-site shall be either sufficiently watered or securely covered to prevent public nuisance.
- Re-establish ground cover on the site through seeding and watering in accordance with the local grading ordinance.
- Contractor shall be responsible for proper maintenance of all mobile and stationary equipment in order to minimize exhaust emissions.



Cultural Resources

MM CR-1:

If any prehistoric or historic artifacts, or other indications of archaeological resources are found once project construction is underway, all work in the immediate vicinity must stop and the County shall be immediately notified. An archaeologist meeting the Secretary of Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, shall be retained to evaluate the finds and recommend appropriate mitigation measures for the inadvertently discovered cultural resources.

MM CR-2:

If any paleontological resources (i.e., fossils) are found once project construction is underway, all work in the immediate vicinity must stop and the County shall be immediately notified. A qualified paleontologist shall be retained to evaluate the finds and recommend appropriate mitigation measures for the inadvertently discovered paleontological resources.

MM CR-3:

If human remains are discovered, all work must stop in the immediate vicinity of the find, and the County Coroner must be notified, according to Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in Section15064.5(d) and (e) shall be followed.

Hydrology and Water Quality

MM WQ-1.

SPPCo. shall implement the Spill Prevention and Recovery Program as approved by the Lahontan Regional Water Quality Control Board (Permit 6T-003-004-30, see Appendix C) Elements of the plan limit the storage of hazardous materials, fuels and oils and fueling station for construction materials to no closer than 200 feet of any water feature. On site vehicles will be monitored for leaks and all leaks will be cleaned up in accordance to existing laws. Other elements of the plan include secondary containment for bulk storage units in excess of 55 gallons, and placement of 2 Spill Kits on site at all times for immediate containment and cleanup.

2.9 MITIGATION MONITORING

As the lead agency under CEQA, the CPUC is required to monitor this project to ensure that the required mitigation measures are implemented. The CPUC will be responsible for ensuring full compliance with the provisions of the Mitigation Monitoring Plan (MMP) included in Appendix A.

The CPUC will also ensure that any variance process or deviation from the MMP complies with CEQA requirements; no project variance will be approved by the CPUC if it creates new significant impacts. A variance should be strictly limited to minor project changes that will not trigger other permit requirements, will not increase the severity of an impact or create a new impact, and that will clearly and strictly comply with the intent of the mitigation measure. A Proposed Project change that has the potential to create significant environmental effects will be evaluated to determine whether supplemental CEQA review is required. Any proposed deviation from the approved project or adopted mitigation measure, and correction of such deviation, shall be reported immediately to the CPUC for review and approval. In some cases, a variance may also require approval by a CEQA Responsible Agency.

