CULTURAL RESOURCE TECHNICAL REPORT for the Round Mountain 500 kV Area Dynamic Reactive Support Project Shasta County, California

Lead Agency:

California Public Utilities Commission 300 Capitol Mall Sacramento, CA 95814

Prepared by:

Douglas W. Mengers, M.A., RPA, DPPH Senior Archaeologist/Historian

NY Wh

and

William T. Eckhardt, B.A. Senior Archaeologist

PanGIS, Inc. 8555 Aero Dr, #200 San Diego, CA 92123 (619) 218-9724

Project Proponent:

LS Power Grid California, LLC (LSPGC) 5000 Hopyard Road, Suite 480 Pleasanton, CA 94588

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National Archaeological Data Base Information

Author:	Douglas Mengers, M.A., RPA, DPPH William T. Eckhardt, B.A.
Firm:	PanGIS, Inc.
Client/Project Proponent:	LS Power Grid California, LLC (LSPGC)
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Management Summary

This Cultural Resources Technical Report documents the methods and results of background research and surface survey conducted to comply with California Environmental Quality Act (CEQA) Guidelines in association with the Round Mountain 500 kV Area Dynamic Reactive Support Project (Project) in Shasta County, California.

Background research included a record search review, historic map review, Sacred Lands File (SLF) search, and Native American tribal outreach. The record search was negative for resources within the Project Area of Potential Effect (APE). The SLF search was positive for resources within the Project APE. No responses were received to tribal outreach.

Two isolated historic-era resources were located during the surface survey, conducted on April 13-14, 2021. The resources include two steel cans. The entire survey area is currently used for cattle grazing, and consists of oak woodlands, a Pacific Gas and Electric (PG&E) right-of-way (ROW), an apiary, and dirt ranch roads. Ground visibility through most of the survey area was poor due to vegetation cover. The two isolates are not eligible for listing in the NRHP/CRHR and do not qualify as historic resources under CEQA and there are no other known cultural resources in the area surveyed. The PG&E distribution upgrades work area was not surveyed due to lack of access on private property. An archaeological survey of the PG&E distribution upgrades work area should be conducted as part of the CEQA process for the Project.

No cultural materials were collected during the surface survey. Photographs and field notes are held by PanGIS. This report and supporting documentation are on file with PanGIS and KP Environmental.

Introduction

LS Power Grid California, LLC (LSPGC), a wholly owned subsidiary of LS Power Associates, L.P., established to own transmission projects in California, is proposing the Round Mountain 500 kilovolt (kV) Area Dynamic Reactive Support Project (Proposed Project) in unincorporated Shasta County.

The main component of the Proposed Project is the development of a new Static Synchronous Compensator (STATCOM) Substation, the Fern Road Substation, which would include an approximately +/-529 MVAR (million volt-amperes, reactive) dynamic reactive support facility to include a minimum of two equally sized STATCOM units. The STATCOM units would be located within the new Fern Road Substation and would be independently connected (e.g., looped-in) to Pacific Gas and Electric Company's (PG&E) regional electric transmission system via the Round Mountain - Table Mountain #1 and #2 500 kV transmission lines that are located adjacent to the Proposed Project site. The extension of distribution level power to the Fern Road Substation would be provided through a new tap into an existing PG&E distribution line that is located on the west side of Fern Road. PG&E distribution upgrades include the conversion of approximately eight wood poles from a single phase 12 kV to three phase 12 kV. This would require PG&E to replace approximately 8 wood poles and reconductor approximately 1,600 feet of distribution line. The new wood or steel poles would be approximately 50 feet in height and would be installed as close to the original pole locations as feasible.

The Proposed Project was approved by the California Independent System Operator Corporation (CAISO) to ensure the reliability of the CAISO controlled grid by providing voltage support and grid stability at the PG&E Round Mountain Substation 500 kV bus. This would facilitate the reliable operation of the extra high voltage transmission system in the electrical proximity of the PG&E Round Mountain Substation. The Proposed Project has an in-service date of December 2023, including construction, commissioning, and testing.

The Project site is approximately 10 acres situated within a 40-acre parcel straddling the PG&E Round Mountain - Table Mountain #1 and #2 500 kV transmission lines in Shasta County, California as shown on *Figure 1: Project Vicinity Map* (Appendix E). The site is located east of Fern Road within the east half of Public Land Survey System (PLSS) Section 11 of Township 32 North and Range 1 West, Mt. Diablo Meridian, as shown on *Figure 2: USGS Topographical Map* (Appendix E) and *Figure 3: Aerial Location Map* (Appendix E). The site is located approximately 1.5 miles northwest of the unincorporated community of Whitmore, California. The site land-use is currently ranching and is surrounded by ranching and rural residential.

The California Public Utilities Commission (CPUC) General Order (GO) 131-D governs the construction of all electric facilities by investor-owned utilities. Substation and electric line projects greater than 50 kilovolts (kV) are subject to CPUC review and approval unless they qualify for exemptions. The development of the Fern Road Substation and loop-in of existing high-voltage transmission lines would require CPUC licensing and accompanying California Environmental Quality Act (CEQA) compliance.

No federal regulations related to cultural resources are applicable to the Project; Section 106 of the National Historic Preservation Act (NHPA) does not apply because no federal agency discretionary action is required for the project and no federal lands or monies are involved. Because the CPUC has exclusive jurisdiction over the siting, design, and construction of the project, the project is not subject to local

discretionary land use regulations. No local regulations related to cultural resources apply to the project or provide information to assist with CEQA review.

The Area of Potential Effect (APE) consists of the Project site of approximately 10 acres, as well as the remainder of the 40-acre parcel surrounding the Project site, and the PG&E distribution upgrades work area covering approximately 3.2 acres. The study area consists of the Project site and a buffer around it which totals approximately 86 acres, plus the PG&E distribution upgrades work area of 3.2 acres for a total of 89.2 acres.

The record search and sacred lands file search were conducted by PanGIS, Inc. (PanGIS) staff archaeologists. PanGIS Senior Archaeologist/Historian Douglas Mengers, M.A., RPA, DPPH, conducted tribal outreach and performed the archaeological survey. This report was prepared by Douglas Mengers with contributions by PanGIS Senior Archaeologist William Eckhart. Mr. Mengers' resume is included in Appendix A.

Setting

The following Natural Setting section is drawn primarily from McGuire (2020) and the US National Park Service (NPS 2020). The Prehistory section is summarized from McGuire (2010). The ethnography section is drawn from Johnson (1978), Sapir and Spier (1943), and Waterman (1918). The regional history was developed from Madley (2017), Nugent (1999), and Frémont's autobiography (1868), while the local history was drawn primarily from Petersen (1970) and Giessner (2012, 2015).

Natural Setting

The Project is located in northeastern California above the northeastern margin of the Upper Sacramento Valley, in the dissected low-lying elevations (circa 1,800-2,000 feet AMSL) of the Southern Cascade Range. Climate in the region is Mediterranean, with warm dry summers and mild, wet winters, though the Cascades in this region lack a well-defined high-elevation crest, resulting in more subtle gradation between climatic zones (McGuire 2010).

Mount Lassen, 25 miles southeast of the Project, is the southernmost active volcano of the Cascade Volcanic Arc and the largest lava dome in the world. An explosive eruption in 1915 sent lava blocks, pumice and ash, and lahar-induced floods out to 20-30 miles. Along with Mount Lassen's plug dome, the region includes shield and composite volcanoes, cinder cones, and platforms of lava flows (NPS 2020).

Closer to the Project area the landform consists of buttes separated by numerous creek drainages, along with scattered volcanic debris. The Project lies between the middle reaches of the Clover Creek and Cow Creek watersheds, which merge approximately 16 miles to the west before draining into the Sacramento River near Anderson.

Flora in the Project area, like most of the lower elevations of the western face of the Cascades, consists of chaparral and oak-gray pine woodland. Watercourses support many plants used as food by Native Americans, including seeds and roots such as camassia and yampah. Game including deer are still plentiful, as are resident and migratory waterfowl, and the Project is located within the up-stream limit of anadromous salmonid runs (McGuire 2010).

Cultural Setting

Prehistory

The following prehistoric context provides a temporally organized discussion of the archaeological record.

Early Holocene Period (5,000+ BCE)

Evidence for human occupation of northeastern California arises in the Early Holocene, generally between 8,000 and 5,000 years before present. The earliest Paleo-Indian population is reflected by the rare occurrence of Clovis-like projectile points and suggestively large hydration readings on obsidian tools and flakes. These tools have not been directly dated but likely date to the range of Clovis points found elsewhere in North America (11,500 to 9,500 BCE). The earliest radiocarbon date in northeast California, 11,450 ±300 radiocarbon years before present (ca. 11,300 BCE), was recovered from a deeply buried fire pit located in a rock shelter on the shore of Tule Lake. Contents included fragments of burnt wood and the bones of freshwater fish, waterfowl, and mammals, inferring the shelter's use by Paleoindian foragers who were foraging the lakeshore/marsh resources (Beaton 1991b:64 cited in McGuire 2010:169).

For northeastern California, the evidence of various large lanceolate and stemmed projectile points occurring with a variety of heavy core tools, bifaces, flaked tools, and chipped stone crescents along the former shores of extinct pluvial lakes and other ancient landforms document the highly mobile and territorially expansive prehistoric populations toward the latter part of the Early Holocene (<9,500 BCE).

Post-Mazuma Period (5,000-3,000 BCE)

Human populations in northeastern California during the Post-Mazuma Period continued to manifest much the same lakeshore adaptation, but with an emergent tool kit of morphologically distinctive artifacts and features. The best-known occupation is reported in Surprise Valley, in the form of cultural deposits containing highly formalized, semisubterranean house structures, tool kits including large side-notched projectile points, mortars with V-shaped bowls and pointed pestles, and flaked stone pendants attributed by O'Connell (1971, 1975 cited in McGuire 2010:170) to his Menlo Phase, dating between 4,500-2,500 BCE.

Unambiguous evidence of Post-Mazuma occupation in archaeological assemblages across northeastern California is the presence of Northern side-notched projectile points that identify as the variant found in the Menlo Phase components in Surprise Valley. Evidence suggests that these points are distributed across the Columbia Plateau and northern reaches of the Great Basin. The Post-Mazuma cultural pattern appears to be the first substantial occupation of the upland zones in northeast California, suggesting that settlement systems dating to this time were not wholly confined to valley bottoms and lakeshore contexts.

The effects of Middle Holocene warming in the Southern Cascades are seen in land-use shifts dating to this cultural period, particularly to the south. Most Early Holocene sites occur closely tethered to lacustrine resources, while most Middle Holocene sites occur predominantly upslope, along major drainages or adjacent to springs. And, while the relative frequencies of various stone tools remain constant in the Early and Middle Holocene assemblages, the frequency of milling equipment

corresponding to the latter period mushroomed in some quarters, attributed to the rising importance of plant resource exploitation (Rosenthal 2000, Kowta 1988:193-194, cited in McGuire 2010:171).

Early Archaic Period (3,000-1,500 BCE)

The Early Archaic Period marks the beginning of major increases in archaeological visibility across northeast California. It is at this time that sustained occupations in the Lassen Volcanic National Park and Bucks Lake region are seen with components containing millingstones, mortars and pestles, and a variety of dart forms. Recognition of Early Archaic components depends in part on a reliable projectile point typology, confounded here by a high degree of regional and temporal variation in key Early Archaic time markers.

A primary example of increased archaeological visibility during this period is the Martis Complex, identified primarily in upland contexts along the eastern and western flanks of the Southern Cascade/Sierran divide north of Lake Tahoe. The Martis Complex is synonymous with the heavy use of basalt in manufacture of large bifacial tools, and the biface production from material derived from a series of upland quarries—considering reduction debris generated from on- and off-site reduction activities—accounts for the high visibility of Martis components in upland contexts. A variety of evidence, including both basalt and obsidian chemical sourcing studies suggest that much of the Sierran basalt was being exploited by population centers downslope to the west, located in the central valley and the valley foothill areas along the west (McGuire and Bloomer 1997, cited in McGuire 2010:172).

Early Archaic period cultural developments have been documented along the Middle Pit River drainage, with base camps on the higher terraces and benches above the river. This period is characterized by an increasing diversification of material culture, and growing settlement elaboration leading to pit house construction and semipermanent occupations.

Middle Archaic Period (1,500 BCE-AD 700)

Increases in archaeological visibility and settlement differentiation observed for northeast California during the preceding period accelerated during the Middle Archaic.

Evidence of occupation is widespread across the northern part of the Modoc Plateau. Middle Archaic period components and important sites are represented in nearly every valley system and section of the Modoc Plateau where serious investigations have been conducted (McGuire 2010:172). Dramatic examples of this increase are also evident to the south, with a proliferation of house structures, midden deposits, hearths, ovens and burials; some with the richest and most diverse assemblage of artifacts and subsistence remains identified in the region.

In many ways, the Middle Archaic may be viewed as a period of cultural florescence, with the most dramatic development being the occupation of large semisedentary villages, along with elaborations in material culture, house construction, obsidian tool stone production, big game hunting, and ceremonial activity (Hildebrandt and McGuire 2003 cited in McGuire 2010:173). Residential stability is seen to have increased during this timeframe, but logistical mobility appears to be greater than in earlier periods. Hunting parties extended their movements in pursuit of large game across the highlands. This might explain the omnipresence of hunting camps and features, as well as basalt and obsidian flake scatters in upland contexts throughout the region.

Obsidian quarry production for this period is expansive, perhaps tied to increase in long-range logistical mobility. Increases in obsidian biface production are seen to peak in some quarters, and much of this obsidian was making its way to distant regions. The rise and development of settlement activity associated with Middle Archaic occupations may have been accompanied by a significant trade and exchange network.

Late Archaic Period (700-1400 AD)

Transition from the Middle Archaic to Late Archaic in northeast California brought major changes in assemblage structure, subsistence, and settlement organization. This was a period of growing climatic instability; the Medieval Climatic Anomaly, a warm, dry interval from AD 900 to 1400 (Stine 1994, Jones et al. 1999, cited in McGuire 2010:173) being the most significant event in this regard. Any exact relationship between climatic change and specific cultural shifts in the archaeological record is not yet well understood. Whether induced by climatic change, increases in population density, or other factors, this period surrounding AD 1000 marks a time of instability and change in California and clearly divides the Late Archaic into two parts: that which preceded (circa AD 200-1000) and all that follows (circa AD 1000-1400).

From an assemblage standpoint the Late Archaic in northeast California is typically marked by the occurrence of Rose Spring and Gunther barbed arrow points, a reflection of the bow and arrow technology that was introduced into the region several hundred years earlier (circa AD 200 versus 650) than elsewhere in California and the Great Basin. Technological changes accompanying this introduction include a shift to smaller, flake-based implements. Beginning around AD 950, Brownware ceramics make their appearance in Late Archaic components located in the northern parts of the region.

The dichotomy in cultural patterning during the Late Archaic is evident in house and community structure. Those Late and Middle Archaic houses that predate AD 1000 are often clustered in small numbers rather than established as isolated features, and are structurally more formal and complete, with elaborations in superstructure, central hearths, storage, perimeter rock reflecting some form of prolonged occupation. Houses postdating AD 1000 generally lack this complexity. Residential appointments can occur as more ephemeral domestic features, rock rings, or compacted living surfaces.

The Late Archaic was also a time of expanding resource intensification, with a diminution in reliance on large game and dramatic increase in processing and use of tubers, roots, seeds and berries. While some of these crops may have been exploited to limited extents in earlier times, their intensive use and storage in the late period reflects a fundamental shift in land use patterns that may have developed in response to wide-spread population and resource imbalances (McGuire 2010:174).

Terminal Prehistoric Period (AD 1400-Contact)

The hallmark artifact types for the Terminal Prehistoric Period in northeast California are the Desert side-notched, Cottonwood and Gunther series projectile points. Gunther series points continue from the previous period, appearing in smaller numbers and geographically restricted to the northern and western portions of northeast California. Rose Spring and Desert side-notched points have been used in the Great Basin to distinguish between the Late Archaic and Terminal Prehistoric Periods; however, radiocarbon dates and obsidian hydration values from the Pit River uplands indicate that the use of Rose

Spring points in some areas may have extended throughout the Terminal Prehistoric Period, well past the normative AD 1400 for the type (Hildebrandt and King 2000:221-252 cited in McGuire 2010:175).

Wholesale shifts in populations mark the Terminal Prehistoric period throughout much of central and eastern parts of northeast California, centered on the arrival of desert-oriented Numic groups— Northern Paiute—from southeastern California. Beginning perhaps 500 years ago, Numic groups arrived along the eastern Sierran front in the Reno area, and made their arrival into the northern reaches near the Oregon border as late as 200 to 300 years ago. Large seasonal or semipermanent Late Archaic settlements were abandoned by this time and replaced by smaller independent sites of one or a few households.

The western and northern portions of northeast California are an exception to the dispersal pattern described for the east. For these regions, the final phase of prehistoric occupation may have seen a strengthening of village settlement patterns. In the Middle Pit River area, Cleland reports more intensified use of habitation sites centered on major river margins (1995:5-11 cited in McGuire 2010:175), and the pattern appears to have continued up to about AD 1700-1750.

Ethnography

Native peoples of northeast California at the onset of the historic period include nine ethnic groups representing three major language stocks within or surrounding our current study area (Moratto 1984:435, Figures 9.2 and 11.1). The western slope of the southern Cascade Range was populated by speakers of Hokan languages, and among them the Yana are identified as occupants of the landscape surrounding the current Project site.

The Yana inhabited the upper Sacramento River valley and foothills east of the river itself (Johnson 1978:361). Boundaries for their homeland and territory vary, but one worthwhile description offered by Edward Sapir and Leslie Spier reads:

"... lying between the Sacramento River on the west and a line of peaks of the northern Sierra Nevada (Lassen Butte, Crater Peak, Magee Peak, Burney Butte) on the east, while the northern and southern boundaries were respectively Pit River and Mill Creek, both of them eastern tributaries of the Sacramento (1943:240)."

Neighboring Wintun peoples occupied all the east bank of the river and held their eastern boundary along the edge of the foothills. Eastern neighbors along the Sierran ridgeline included the Achumawi on the north and east, the Atsugewi north of Lassen Peak, and Northeastern Maidu below at the headwaters of Mill Creek. Northern Maidu abutted Yana territory on the south. The Yana were never on good terms with others for any length of time, and yet they maintained external relations and participated in trade and interchange with neighbors in all quarters.

Yana political organization was comprised of many triblets, each of these consisting of a major village situating the principal chief and assembly house, with a number of smaller allied villages, most with their own chiefs. Political units owned particular territories; in the north, there was some private ownership of land, seed tracts, and fishing places (Gifford and Klimek 1939:84 cited in Johnson 1978:364).

The landscape of the southern Cascade foothills rises from the valley floor to elevations over 10,000 feet, and provided an array of floral and faunal resources. Across the low-lying foothills was a cover of several types of oaks and grasses, while the canyon bottoms supported dense growths of broken forest

with thickets and scrub. Large game available to the Yana in this landscape included deer, bear, antelope and elk, and salmon entered most of the streams.

Population estimates for the Yana are presented in Johnson (1978:362), identifying their estimated numbers precontact (1,100-1,800), in 1848 (1,900), and through the course of various subsequent years through 1973. Separating the Yana into Northern, Central, Southern, and Yahi divisions is primarily based on linguistic differences. The many cultural similarities and traits shared between the Northern and Central divisions and their differences from the Southern and Yahi were of secondary importance.

The earliest probable contact by "white" culture with any of the Yana occurred in 1821 when an expedition of Spanish soldiers and Indian neophytes left from San Francisco and traveled on the east side of the Sacramento River from Red Bluff to the vicinity of Redding. From 1828 to 1846 Hudson's Bay Company ran trapping parties in California and some of these ventures probably had contact with Yana along the Pit River and northeastern Sacramento Valley (Johnson 1978:362).

In 1911, one member of the Yahi division was discovered near Oroville, California. This was an adult Yahi-Yana man who, with a dwindling number of extended family, had managed to survive in the southern Cascade Mountains from about 1860 until taken into protective custody. His discovery having attracted the interests of anthropologists in Berkeley and San Francisco, his custody was transferred to the University of California and he was given the name Ishi, meaning 'man' in his native language.

History

Spanish Period (1772–1822)

The earliest recorded European intrusion into the Sacramento Valley was in 1808 by Spanish explorer Gabriel Moraga and soldiers from Mission San Jose, scouting for additional mission locations. Luis Arguello led similar expeditions in 1817 and 1821, likely reaching the location of present-day Sacramento. No missions or other permanent settlements were established in the region (Fontana 1956).

Mexican Period (1822–1848)

During the 1820s and 1830s, European incursions in the Sacramento Valley region were primarily related to fur trapping. This included Jedediah Smith in 1828 and Michael La Framboise and John Work in 1832-33 (Fontana 1956). The first permanent European settlement in the region came in 1839 when John Sutter established New Helvetia, also known as Sutter's Fort, in what would later become the city of Sacramento. European settlement increased through the 1840s, with emigrants arriving via the California Trail, a collection of routes originally established by trappers and mountain men and expanded to support wagons (Nugent 1999).

In the mid-1840s, several ranchos were granted in the Upper Sacramento Valley by Governor Manuel Micheltorena. The northernmost of these was Rancho Buena Ventura, granted in 1844 to Pierson Reading, a clerk and trapper employed by John Sutter, Governor Micheltorena's *alcalde*. The grant covered nearly 27,000 acres, extending for 19 miles along the west side of the Sacramento River, encompassing the area of present-day Redding and Anderson. Reading began ranching on the property and built an adobe house there in 1847 (Rensch et al. 2002). Most development during this period consisted of similar ranching endeavors, using paid and forced servitude of the local indigenous

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population, primarily Wintu west of the Sacramento River and Yana to the east (LaPena 1978, Johnson 1978).

Captain John Frémont's expedition passed through the area in April 1846. Based on claims from local white settlers of imminent Indian raids, Fremont conducted an attack on a large Wintu camp on the Reading rancho, known as the Sacramento River Massacre (Madley 2017). Estimates of native deaths range as high as 800-900. Participant Thomas Breckenridge called it "a scene of slaughter which is unequalled in the West," and expedition guide Kit Carson described it as "a perfect butchery."

After the massacre, the Frémont party continued east, crossing the foothills very close to the Project area on the way to Klamath Lake in Oregon (Frémont 1886). They returned via the same route in May 1846 with the outbreak of the Mexican-American War, conducting several smaller massacres en route including the Klamath Lake Massacre and the Sutter Buttes Massacre.

Gold was discovered at Sutter's Fort in January 1848, just before the signing of the Treaty of Guadalupe Hidalgo ending the Mexican-American War. Over 100,000 miners and other emigrants poured into California by the time of statehood in 1850.

American Period (1848–Present)

Gold mining boomed in the area through 1850s, with miners representing half of the white population. Emigration continued, especially with the development of the Nobles Emigrant Trail in 1851, a shorter, less arduous alternate to the Lassen Trail, which terminated at Shasta City. By 1860, individual placer gold mining had shifted to corporate quartz mining. Boom towns disappeared and a more stable population was established. Small towns developed around grazing, agriculture, and mining, adding schools, post offices, and sawmills (Petersen 1970).

In 1872, the Union Pacific Railroad pushed north through Cottonwood, Anderson, and Redding, bypassing Shasta City, which began to decline. The railroad replaced the wagon roads and the Sacramento River for emigration and freight. It also allowed the development of larger-scale industrial activity including copper mining north of Redding, lumber from the eastern part of the Shasta County, and fruit production around Anderson (Orsi 2005, Petersen 1970).

Shasta County led California in copper, silver, and iron mining after the turn of the 20th century, resulting in significant environmental damage to crops and fish. By 1920, virtually all mining had ceased, and the next two decades saw population contraction and economic hardships. A boom began with the construction of Shasta Dam (1938-1944) which continued after World War 2. Major industries included recreation, forestry, electrical power, and agricultural. Post-War population increases led to the development of colleges and housing tracts on former grazing land (Petersen 1970).

Project Environs

The Project is in the foothills east of Millville, off the Whitmore Road, between the Dry Clover Creek and Old Cow Creek drainages. Millville, originally known as Harrill's Mill, was established in 1855 as one of Shasta County's earliest grist mills. By the early 1880s, it had a population of 600 and was the principal agricultural town east of the Sacramento River (Giessner 2012). Whitmore, a small farming community originally known as Tamarack, was established in 1863. It was a freight stop on the Redding-Burney wagon road, and was the site of Eudora, a German Lutheran colony from 1885-1937 (Petersen 1970).

The farming community of Fern was established north of Whitmore by the late 1880s, but its post office was discontinued in 1945 (Giessner 2015).

Methods

Background Research

A record search was conducted to determine if any historic properties or archaeological resources listed or potentially eligible for listing on the NRHP or CRHR were present within or immediately adjacent to the APE. The record search request was submitted by PanGIS to the Northeast Information Center (NEIC) at California State University Chico on March 12, 2021 and was fulfilled on March 16, 2021.

Materials consulted by the NEIC included prehistoric and historic archaeological resource and report databases, California Office of Historic Preservation (OHP) Historic Properties Directory, National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Historical Landmark, California Historical Points of Interest, California Inventory of Historic Resources, and Archaeological Determinations of Eligibility. The record search area included a 1.0-mile buffer of the APE.

PanGIS consulted historical maps and documents of the record search area including land patents from 1880 and 1894 associated with Central Pacific Railroad ownership (originally Oregon & California Railroad, 1866)(BLM 2021); the 1859 and 1883 survey plats (BLM 2021); and historical topographic maps (USGS 1:250,000 Lassen Peak 1886, 1892, and 1894, Westwood 1955, and Susanville 1962; USGS 1:125,000 Burney 1935 and 1939; USGS 1:62,500 Whitmore 1956; USGS 1:24,000 Whitmore 1958, 1963, and 1971)(USGS 2021). No aerial photographs are available for the project area prior to 1981 (NETROnline 2021).

A Sacred Lands File (SLF) Search request of the survey area was submitted to the Native American Heritage Commission (NAHC) on March 12, 2021.

Surface Survey

The survey area includes all of the 10-acre Project site, plus the remainder of the surrounding parcel (40 acres), plus a buffer for a total of approximately 86 acres, as shown on *Figure 3: Aerial Location Map* (Appendix E). The PG&E distribution upgrades work area is located on private property and was not surveyed. The survey plan entails 5-10 meter transects depending on ground visibility and accessibility. For areas not accessible due to steep or unsafe terrain or dense vegetation, directed survey will attempt to survey any accessible portions.

Previously unrecorded resources encountered are to be recorded on digital DPR 523 site forms, and their locations will be recorded using a handheld device running ESRI Arc Collector software. Pen and paper field logs serve as a backup. Photographs are taken with a 12-megapixel digital camera. No cultural materials are to be collected during the surface survey. Photographs and field notes are to be held by PanGIS.

Resource types

Based on the prehistoric, ethnohistoric, and historic context of the Project area, certain types of resources are more likely to be encountered in the Project area.

Prehistoric resources are the surface manifestations of human activity generally associated with early Native American activity into the ethnohistoric period. These resource types include lithic scatters (flaked stone artifacts such as cores, bifaces, and debitage created from lithic reduction), diversified artifacts scatters (containing a mix of lithic artifacts, pottery, bone, and/or shell), and habitation sites (a variety of artifact types, features such as hearths, and midden). Ethnohistoric period sites are defined as Native American settlements occupied after the arrival of European settlers in California and may contain a mix of prehistoric and historic-era artifacts.

Historic-era resources are those with structures or other remains of historic activities greater than 50 years old. Historically, land use in the area has focused on agriculture and ranching; therefore, the resources most likely to be encountered will include irrigation and water conveyance features (pipe, pumping equipment), structural foundations, remains of abandoned roads, historical electrical infrastructure, historic-era refuse deposits (glass bottles and cans), and stock-related features such as fence lines and water troughs.

Isolated artifacts refer to one or two distinct artifacts or a few fragments of the same artifact that are too far away (typically more than 30 meters) from other artifacts or features to be considered part of a site. These may be prehistoric or historic and are frequently displaced from their original context and disassociated from their provenance.

Findings

Background Research

The NEIC record search indicated that no portion of the APE has been subjected to an intensive pedestrian survey within the past five years. Earlier surveys of the APE were conducted in 1982 (NEIC-001232, <5% coverage) and 2008 (NEIC-009960, ~35% coverage). An additional ten reports were identified outside of the APE but within the one-mile search buffer (*Figure 5: Record Search Report Locations Map* (Confidential Appendix F)).

The record search identified no previously recorded resources within the APE. Five resources are located outside of the APE but within the one-mile search buffer (*Figure 4: Record Search Resource Locations Map* (Confidential Appendix F)). All five of these are prehistoric resources: three lithic scatters; one bedrock milling with lithics; and one habitation site with milling and lithics. The last of these, P-45-001567/CA-SHA-1567 is the nearest to the Project area, approximately 400 meters east of the APE adjacent to Coal Gulch.

The review of historic maps agrees with the development history of this portion of Shasta County. The 1859 survey map shows scattered houses and small agricultural fields, all to the south of the Project area. A mill and road junction are nearest significant development, located 2.75 miles southwest of the Project area at the confluence of Mill Creek and Cow Creek. Maps from the late 1880s show very little change. By the 1930s, many small named communities are shown in the area, including Whitmore and Fern, as well as an increase in rural structures. Roads extend across the area, though most are unpaved. Municipal development includes a power plant and reservoir near Miller Mountain, 4.5 miles east of the Project area. No structures are shown within the APE on any historic maps. The closest is a structure along the west bank of Coal Gulch, 0.25 miles northeast of the APE, shown on 1930s maps but gone by the 1950s. The east-west dirt ranch road through the northern portion of the APE is shown on 1930s

maps, terminating shortly after Coal Gulch. By the 1950s, the dirt road extends northeast, eventually reconnecting with Fern Road near the community of Twin Valley.

The SLF Search was returned by the NAHC with positive results on April 2, 2021 (Appendix C1). The NAHC provided PanGIS with a single Native American Contact who may be able to supply information pertinent to the project area (Appendix C2). The individual, Chairperson Jack Potter affiliated with the Pit River, Wintu, and Yana, was contacted by email sent April 2, 2021. The contact letter is attached (Appendix C3). To date, there has been no response to outreach efforts (Appendix C4).

Surface Survey

The surface survey was conducted on April 13-14, 2021 by PanGIS Senior Archaeologist/Historian Douglas Mengers. The PG&E distribution upgrades work area is located on private property and was not surveyed; the following discussion pertains to the main 86-acre Project area. The area surveyed is shown on *Figure 3: Aerial Location Map* (Appendix E). There were no problems with access to the fenced survey area, which is currently used for cattle grazing. Images referred to below are in *Appendix D – Survey Area Photographs*.

The west side of the survey area is mostly flat, supporting oak woodland (*Image 3*). Two 500 kV circuits run north-south through the entire survey area; trees have been removed from the approximately 320-foot-wide Right-of-Way (*Image 1*). The terrain slopes to the south, with a large ravine at the south leading into Coal Gulch outside the survey area. The east side is also oak woodland, with hills in the northeast and east and a basin in the southeast (*Image 2, 4, and 6-9*).

Several dirt access roads cross the survey area, and there is a small apiary just east of the transmission lines (*Image 5*). The northwest corner of the survey area is enclosed in a horse paddock behind the house at 12377 Fern Road and was only surveyed from the fence line (*Image 1*). Contact was made in the field with a neighboring landowner, who stated that obsidian projectile points have been found to the northwest, near lower-elevation ponds.

Two archaeological resources were located during the surface survey (Figure 6: Survey Results Map (Confidential Appendix F)). RM-ISO-01 is an isolated rusted steel half-gallon rectangular fuel can, possibly of historic age found in an open area above a ravine near the eastern boundary of the survey area (Confidential Appendix G – Resource Records). RM-ISO-01 may be modern; there are no associated features or other artifacts to place it in historic context. The isolate is not likely to contain information bearing on important archaeological research questions; its information potential has been exhausted through recording. Therefore, RM-ISO-01 is not eligible for listing on the NRHP/CRHR and is therefore not considered a historical resource per CEQA. RM-ISO-02 is the rusted, flattened, steel casing to a 6-volt lantern battery, possibly of historic age. It was found in the dirt road approximately 30 meters east of the property entrance gate from Fern Road (Confidential Appendix G – Resource Records). RM-ISO-02 appears to have been moved from its originally deposited location due to road traffic and there are no associated features or other artifacts. The isolate is not likely to contain information bearing on important archaeological research questions; its information potential has been exhausted through recording. Therefore, RM-ISO-02 is not eligible for listing on the NRHP/CRHR and is therefore not considered a historical resource per CEQA. No cultural materials were collected during the surface survey. Survey notes and photographs are maintained by PanGIS, Inc., in their San Diego, California office.

Management Considerations

The survey area has been disturbed by cattle grazing and the construction of roads and electrical infrastructure. While the survey was positive for cultural resources, the two isolated finds are not eligible for listing in the NRHP/CRHR and therefore do not qualify as historical resources under CEQA (14 CCR § 4850, PRC § 21083.2 and 21084.1). As such, the Project will have no effect on historical resources within the area surveyed. However, the PG&E distribution upgrades work area was not surveyed due to lack of access on private property. An archaeological survey of the PG&E distribution upgrades work area should be conducted as part of the CEQA process for the Project. No additional cultural resource studies are recommended at this time. However, unanticipated resources may be discovered during ground-disturbing activities, which will then need to be evaluated in order to assess project impacts.

References

Beaton, John M.

1991 Paleoindian Occupation Greater than 11,000 years BP at Tule Lake, California. *Current Research in the Pleistocene* 8:5-7. Center for the Study of the First Americans, College Station Texas.

Bureau of Land Management (BLM)

2021 General Land Office Records. Accessed at: <u>https://glorecords.blm.gov/default.aspx</u>.

Chartkoff, J.L., and K.K. Chartkoff

1984 *The Archaeology of California*. Stanford University Press, Stanford.

Cleland, J. H.

1995 Prehistory of the Middle Pit River, Northeastern, California: Archaeological Investigations at Lake Britton, Pit 3, 4, and 5 Project. Vol. 1. KEA Environmental Report on file, North Central Information Center, California State University, Sacramento.

Fontana, Bernard L.

1956 "Three Ethnohistoric References to the Maidu." *Ethnohistory* v3n1:34-45.

Frémont, John Charles

1886 *Memoirs of my Life, Including in the Narrative Five Journeys of Western Exploration, During the Years 1842, 1843-4, 1845-6-7, 1848-9, 1853-4.* Belford, Clarke & Company: Chicago, IL.

Gifford, Edward W. and S. Klimek

1936 Culture Element Distributions II: Yana. *University of California Publications in American Archaeology and Ethnology* Vol II pp.71-100. University of California Press: Berkeley.

Giessner, Jo

- 2012 *Millville*. History & Happenings. Accessed at: <u>http://historyandhappenings.squarespace.com/shasta-county/2012/7/15/millville.html</u>.
- 2015 *Whitmore*. History & Happenings. Accessed at: <u>http://historyandhappenings.squarespace.com/shasta-county/2015/8/10/fern.html</u>.

Heizer, Robert F.

1966 *Languages, Territories and Names of California Indian Tribes*. University of California Press: Berkeley and Los Angeles.

Hildebrandt, William R., and K. R. McGuire

2002 The Ascendance of Hunting During the California Middle Archaic: An Evolutionary Perspective. *American Antiquity* 67:231-256.

Hildebrandt, William R. and J. H. King

2000 Projectile Point Variability Along the Northern California-Great Basin Interface: Results from the Tuscarora-Alturas Projects. In, Archaeological Investigations Along the Northern California-Great Basin Interface: The Alturas Transmission Line Project, edited by K. R. McGuire, pp. 221-252. Translated by Sierra Pacific Power Company. Far Western Anthropological Research Group, Davis, California.

Johnson, Jerald Jay

1978 Yana. In *California*, edited by Robert F. Heizer, pp. 361-369. Handbook of North American Indians, Vol 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, DC.

Jones, T.L., G. M. Brown, L. M. Raab, J. L. McVickar, W. G. Spaulding, D. J. Kennett, A. York, and P. L. Walker

1999 Environmental Imperatives Reconsidered: Demographic Crises in Western North America During the Medieval Climatic Anomaly. *Current Anthropology* 40:137-170.

Kowta, Mark

1988 *The Archaeology and Prehistory of Plumas and Butte Counties, California: An Introduction and Interpretive Model.* Report on file, North Central Information Center, Department of Anthropology, California State University, Sacramento.

LaPena, Frank R.

1978 Wintu. In *California*, edited by Robert F. Heizer, pp. 324-340. Handbook of North American Indians, Vol 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, DC.

Madley, Benjamin

2017 *An American Genocide: The United States and the California Indian Catastrophe, 1846-1873.* Yale University Press: New Haven, CT.

McGuire, Kelly R.

2010 Models Made of Glass: A Prehistory of Northeast California. In *California Prehistory: Colonization, Culture, and Complexity,* edited by Terry L. Jones and Kathryn A. Klar, pp. 165-176. AltaMira, Lanham, Maryland.

McGuire, K. R., and W. Bloomer

1997 Middle Period Land-Use Patterns and Toolstone Preferences: A Model for the Martis Complex and Other North-central Sierran and Eastern Front Assemblages. In, *Cultural Change Along the Eastern Sierra/Cascade Front,* edited by K. McGuire, *pp.115-122*. Far Western Anthropological Research Group, Davis, California. Report prepared for Tuscarora Gas Transmission Company.

Moratto, Michael J.

1984 *California Archaeology*. Academic Press, New York.

NETROnline

2021 Historic Aerials. Accessed at: <u>https://www.historicaerials.com/viewer</u>.

Nugent, Walter

1999 Into the West: The Story of its People. Alfred A. Knopf: New York, NY.

O'Connell, James F.

- 1971 The Archaeology and Cultural Ecology of Surprise Valley, Northeast California. Ph.D. dissertation, University of California, Berkeley.
- 1975 *The Prehistory of Surprise Valley,* edited by L. J. Bean, Anthropological Papers 4. Ballena Press, Ramona California.

Orsi, Richard

2005 *Sunset Limited: The Southern Pacific Railroad and the Development of the American West, 1850-1930.* University of California Press: Berkeley, CA.

Petersen, Edward

1970 *In the Shadow of the Mountain: A Short History of Shasta County, California, 2nd Edition.* Selfpublished: Cottonwood, CA.

Rensch, Ethel Grace, Douglas E. Kyle, Mildred Brooke Hoover, and Hero Eugene Rensch

2002 *Historic Spots in California: Fifth Edition*. Stanford University Press: Palo Alto, CA.

Rosenthal, Jeffrey S.

2000 Madeline Plains. In, Archaeological Investigations Along the California-Great Basin Interface: The Alturas Transmission Line Project. Vol 1, Prehistoric Archaeological Studies: The Pit River Uplands, Madeline Plains, honey Lake and Secret Valley, and Sierran Front Project Segments, edited by K. R. McGuire. Report submitted to Sierra Pacific Power Company, Reno, Nevada.

Sapir, Edward, and Leslie Spier

1943 Notes on the Culture of the Yana. *Anthropological Records*. Editors: A.L. Kroeber, E. W. Gifford,
 R. H. Lowie, R. L. Olson. Vol. 3, No. 3. Pp. 239-298. University of California Press, Berkeley.

Stine, S.

1994 Extreme and Persistent Drought in California and Patagonia During Mediaeval Time. *Nature* 369:546-549.

United States Department of the Interior

2014 Shasta Lake Water Resources Investigation, California Final Environmental Impact Statement. Accessed at: <u>https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=1915</u>.

United States Geological Survey (USGS)

- 2021 USGS Historical Topographic Map Explorer. Accessed at: <u>https://livingatlas.arcgis.com/topoexplorer/index.html</u>.
- United States National Park Service (NPS)
- 2018 The Cascade-Sierra Mountains. Series: Physiographic Provinces; Accessed at: https://www.nps.gov/articles/cascadesierra.htm.
- 2020 Lassen Volcanic National Park: Volcanoes. Accessed at: https://www.nps.gov/lavo/learn/nature/volcanoes.htm

Waterman, Thomas Talbot

1918 The Yana Indians. *University of California Publications in American Archaeology and Ethnology* Vol.13(2):35-102. Berkeley.

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 - 2) Reports Table
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 - 2) NAHC Native American Contact List
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- D. Survey Area Photographs
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Confidential Appendices

- F. Maps (Confidential)
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- G. Resource Records (DPR 523)
 - 1) RM-ISO-01
 - 2) RM-ISO-02

Appendix A – Resume: Douglas Mengers, PanGIS



Education

M.A., Applied Anthropology, San Diego State University

B.A, History, University of California at San Diego

B.A, Anthropology, University of California at San Diego

Professional Certifications & Registrations

Secretary of Interior Standards (36 CRP Part 61) for History Secretary of Interior Standards (36 CRP Part 61) for Archaeology (historic and prehistoric) Advanced CEQA Essentials Bureau of Land Management (BLM) Principal Investigator NCTC Rail Safety Training MCTC Rail Safety Training SANDAG Architectural Historian II Hazwoper 40 Hour

Areas of Expertise

Section 106 Compliance **NEPA Compliance CEQA** Compliance **Archaeological Field Studies** Historic–Era Structure **Evaluations Historic Artifact Analysis Historic Publications** Environmental **Contract/Project Management** SB 18/ AB 52 Native American Outreach State, Regional, Local Policy Knowledge **GIS Asset Management** ESRI ArcGIS **GIS Mobile Solutions Resource Agency Coordination** Permitting

Doug Mengers M.A., RPA #39693945, DPPH Principal Investigator Cultural Resources

Mr. Mengers is a Registered Professional Archaeologist and Historian with 13 years of experience, meeting Secretary of Interior standards for archaeology, history, and architectural history. He is a BLM approved Principal Investigator and CPUC qualified archaeologist. He has worked on large-scale, multi-



year utility projects for the past 10 years, progressing from field monitor, GIS Lead, Field Director, to Principal Investigator, and is very knowledgeable of the process and required procedures. He has expertise in project implementation with experience in agency coordination and has a deep understanding of relevant federal and state codes and regulations, including NHPA Section 106/110 compliance, NEPA, ARPA, and CEQA as they pertain to cultural resources and the built environment.

Mr. Mengers has earned a CEQA Practice certificate and has a strong understanding of CEQA, as well as the ability to critically assess information during the environmental review process. He can oversee the preparation of technically compliant, legally defensible, and high-quality environmental documents including Environmental Impact Reports (EIRs), Environmental Assessments (EAs), Initial Studies, Mitigated Negative Declarations (MNDs), and required CEQA findings, as well as drafting of cultural resources specialists reports. He oversees projects from start to finish and can apply tools to minimize time and expense related to the environmental review process. He is qualified to manage CEQA projects and multi-disciplinary teams, and develop plans and scopes of work, budgets, and schedules for complex environmental projects. Mr. Mengers has conducted Native American Consultation for many projects and maintains positive relationships with local tribal groups. He has served as Principal Investigator on many projects with Federal components and has a strong knowledge of NEPA and Section 106.

Select Project Experience:

SDG&E Data Recovery and Treatment Plan for Substation Extension Project (2020) Mr. Mengers was the lead historian on this project to expand a substation. During trenching for geotechnical investigations, a subsurface cistern was discovered during archaeological monitoring. Trenching in the vicinity was halted and the client requested a data recovery and treatment plan for the historic-era cistern. Mr. Mengers conducted background research on the area using Sanborn maps and information from the local history center. He then wrote a treatment and data recovery plan, including a discussion of capping. The plan will be implemented after the geotechnical studies are complete.

Caltrans/City of Porterville, Tule River Bike Path Phase III (2017 – 2018) Principal Investigator, Mr. Mengers provided environmental compliance for



archaeological and historical resources. He conducted an archival record search and historic research at local historical societies, conducted Tribal consultation, directed pedestrian surveys of the APE, prepared the ASR/HPSR reports, and coordinated with agency personnel. The purpose of the archaeological survey was to determine if any historic properties or archaeological resources were potentially eligible for listing on the National Register of Historic Places are located within or near the construction area, and documents compliance with Section 106 of the NHPA. Historic railroad bridges, buildings, and trash deposits were recorded and evaluated.

Cultural Resources Management Plan (CRMP) for SCE's Devers-Colorado River (DCR) No.1 Transmission Line Rating Remediation Project (2018) Senior Investigator Mr. Mengers conducted the Class III survey to assist federal permitting agencies in complying with Section 106 of the NHPA and NEPA and to assist the Public Utilities Commission, the lead state agency for the inventory portion of the project. The lead federal agency was the BLM. He prepared the Cultural Resources Management Plan (CRMP) which describes the measures that SCE will take to ensure no adverse effects to Historic Properties/historical resources during the project in accordance with Mitigated Negative Declaration (MND). Mr. Mengers conducted a site tour for the Lead Agency's thirdparty monitoring firm and directed staff for GIS maps and project files.

Mojave National Preserve- Determination of Eligibility (DoEs) for 7 Mine Sites (2019 - 2020) Principal Investigator, Mr. Mengers evaluated 7 abandoned mines to determine their eligibility for listing on the National Register of Historic Places (NRHP). The DoEs will assist the NPS with compliance required by 36 CFR 800 for Section 106 of the NHPA before proceeding with the safety mitigations. The study includes historic research, condition assessments, photo-documentation, and architectural descriptions along with descriptions and photographs of the cultural landscape. As project lead, he led fieldwork, wrote site inventory forms and managed GIS staff in mapping and recording historic mining features.

Caltrans FNAE and Historic Properties Action Plan for Cottonwood Creek Bridge Widening Project (2020) PSQ-Equivalent Principal Architectural Historian, Mr. Mengers wrote the Finding of No Adverse Effect with Standard Conditions and Secretary of the Interior's Standards for the Treatment of Historic Properties Action Plan for the Cottonwood Creek Bridge Widening Project in the County of San Diego. The road over the bridge was found eligible for the NRHP and a historical resource for the purposes of CEQA, so the bridge was evaluated as a component of the road. The purpose of the project is to widen and rehabilitate Cottonwood Creek Bridge, constructed in 1950, to meet federal bridge safety requirements.

SCE Devers to Palo Verde Transmission Project, Riverside County, CA (2009- 2017) Mr. Mengers served as an Archaeologist/Historian and GIS team leader for this multi-year project. He was a co-author for the Historic Properties Management Plan and was responsible for recording a number of historic districts, canal siphons, other water conveyance systems, historic ranches, and conducting testing for historic and prehistoric sites. Responsibilities also included the identification, cataloging, and curation for all historic artifacts recovered from the project, researching and writing portions of the historic context. He also kept the GIS databases up-to-date based on ever-changing engineering GIS data for the construction of the transmission lines. He was also responsible for integration of GPS field data collected in the field, keeping GPS units updated with proper background files for monitoring and survey, creating environmental avoidance areas, and GIS graphics production for reports.

SDG&E Salt Creek Substation Construction Monitoring, San Diego County, CA (2016 - 2018) PanGIS provided archaeological monitoring during construction of the Salt Creek Substation. Mr. Mengers, Senior Archaeologist, documented compliance with CEQA and the measures in the Cultural Resources Mitigation and Monitoring Plan.



He insured that all mitigation measures were implemented during and the project, scheduled cultural monitors during the two-year project, and wrote the final technical report.

Cultural Resource Assessment and Section 106 Evaluation for Sycamore Creek Mobile Home Park (2017) Project Historian Mr. Mengers conducted the site survey, performed a record search, historic research at historic societies, and prepared a site inventory form for the remains of a historic-era trailer park and adjacent historic rancho. The project site came under review by the ACOE, Section 106 of the NHPA. Based on background historic research he also prepared a site evaluation to assess NRHP eligibility to be submitted to the State SHPO. Mr. Mengers authored a cultural report, summarizing the background research and survey results.

Design of Los Penasquitos Lagoon Restoration (2019-2020) Principal Investigator for Cultural Resources, he is providing CEQA and NEPA services for cultural and historical resources and GIS mapping support to satisfy the Historical Resources Guidelines and Section 106 of the NHPA. Tasks include record search, NAHC Sacred Lands File Search, Native American outreach letters, intensive linear ground surveys, historic research, paleontology study, updated site forms, technical reports with recommendations, and writing cultural sections for the EIR. The goal of this project is to restore the historic coastal salt marsh habitat in the Los Peñasquitos Lagoon.

Lawson Valley West Bridge Replacement Project, San Diego County, CA (2020) PQS-Equivalent Principal Investigator Historic Archaeology, Mr. Mengers managed PanGIS staff conducting archival research, a pedestrian archaeological field survey, and creating the GIS deliverables. For the cultural resource reporting, Mr. Mengers authored the Caltrans Archaeological Site Report (ASR) in support of the proposed project's environmental compliance with NEPA and Section 106 of the National Historic Preservation Act. The documents were prepared according to Caltrans guidelines, including the First Amended Section 106 Programmatic Agreement (106 PA) among Federal Highways Administration (FHWA), the State Office of Historic Preservation (SHPO), the Advisory Council of Historic Preservation (ACHP), and Caltrans.

CA Dept. of Water Resources and CDFW South Coast Region Land Management Plans (LMP) (2020) PanGIS staff are preparing LMPs on three properties, Boden Canyon ER, Batiquitos Lagoon ER, and Ballona Wetlands ER. Project archaeologist, Mr. Mengers is managing staff conducting cultural field studies for use in the development of the LMPs. These studies will enable CDFW to prepare an LMP for each of the properties that can then be processed through CEQA and implemented by CDFW. Studies include Archaeological Background Research, Native American Outreach and Consultation, Site surveys, Archaeological Technical Cultural Report, Cultural Resources Treatment and Protection Plan Cultural Resources Research Design and Context Statement, Cultural Resource Survey and On-Call GIS Support.

Shasta Valley Resource Conservation District's (SVRCD) Watershed Protection Projects (2019) Senior archaeologist and historian Mr. Mengers managed 3 projects for the SVRCD. Shasta Valley has a rich ranching, mining, and Native American history. The purpose of the projects was to provide constraints information to assist the SVRCD in several Federally funded watershed protection projects. Mr. Mengers provided oversite for the GIS mapping, record search and Sacred Lands Search from the NAHC, intensive linear ground surveys, and historic research. Projects were located on long-established ranch lands; therefore, research was conducted on the history of the Newton, Lemos, Hull, and Sandahl ranch properties through the County Historical Society. Research sources included the publication Siskiyou Pioneer and conversations with current property owners, descendants of the original ranch families. This research was intended to assist with the evaluation of undocumented historical resources encountered during the field survey. Mr. Mengers authored a series of reports with resource recommendations.



SDG&E Environmental Compliance MSA, Agreement # 6360040006 (2014-2020) Senior archaeologist and historian, Mr. Mengers provides cultural resource management services including site surveys, data recovery, Plans, and Analysis, GIS/Geospatial Services, Cultural Construction Monitoring, Monitoring reports, agency coordination (BLM, State Parks, USFWS), historic era structure evaluation, and technical report preparation; addressing Inventory Results, Potential NHPA/CRHR Resource Eligibility, and further measures for CEQA and Section 106 Compliance.

Historic Resources Evaluation for Cottonwood Sand Mine Development (2019 – 2020) Project lead, Mr. Mengers directed archival and background research, conducted an intensive pedestrian survey, carried out an eligibility evaluation and integrity assessment of the historic resources observed in the project area, and authored the site forms and technical report. The project site consisted of 277 acres over 24 parcels. Section 106 compliance and eligibility evaluations. As mining extraction activities are completed by phase, the land and river channel will be restored and replanted with native vegetation.

BBMWD Big Bear Lake Routine Lake Maintenance Project (2017) PanGIS acted on behalf of the lead agency providing the CEQA and NEPA compliance for archaeological and paleontological resources. Mr. Mengers supervised all cultural compliance services for this project. He conducted archival record searches, wrote historic context statements, managed AB52 Tribal consultation, prepared resource recommendations, attended agency meetings and created GIS maps and models for archaeological sensitivity in proposed project area.

Cultural Resource Studies and Evaluations for Del Mar Bluffs Stabilization Project 5 (DMB5) (2020)

Architectural Historian and Senior Archaeologist Mr. Mengers reviewed cultural documentation from Del Mar Bluffs 4 (also a PanGIS project) and other previous studies. He and archaeological staff with rail certification training conducted a pedestrian reconnaissance survey of the Area of Potential Effect. New archaeological and historical resources including water conveyance features were recorded. Mr. Mengers prepared a report documenting the sites and potential for impacts, including SHPO evaluation concurrence documentation. The memorandum includes sixteen site inventory form updates, ESRI GIS based maps, and recommendations for which sites may need further evaluation. This project was subject to National Environmental Policy Act (NEPA) review. Per the requirements of NEPA, the Federal Railroad Administration (FRA) is committed to the examination and avoidance of potential impacts to the social and natural environment when considering approval of proposed transportation projects.

Southern California Edison (SCE) CWA15 Environmental Impact Management for the Colorado River-Palo Verde 500kV Transmission Line, Riverside County, CA (2016) SCE was required to manage and document environmental impacts including biological and cultural resources during the construction of the Colorado River-Palo Verde TL. Field director/Primary Report Author, Mr. Mengers provided daily archaeological resources construction monitoring at multiple construction sites, 14 hours per day/7 days per week. His duties included: obtaining Field Work Authorization from BLM, archaeological survey ahead of construction crews, daily monitoring logs, WEAP training, monthly summary reports, safety tailboard meetings, and ESA staking. Cultural resources encountered during monitoring and survey were recorded with high precision GPS units. All cultural resources within the project area were added to the SCE GIS Schema for cultural resources. He wrote the final report and created maps. The report was submitted to both SCE and BLM.

Testing, Monitoring, and Data Recovery Plans, Artifact Analysis and Curation for 2100 Kettner Redevelopment Project (2019 – 2020) Mr. Mengers served as the Principal Investigator for Historic Archaeology. He developed testing, monitoring and data recovery plans for the projects and supervised archaeological monitoring and data recovery. After the fieldwork was complete, Mr. Mengers developed a curation plan for agency approval. 3500+ artifacts were analyzed and cataloged, and a portion were curated per agency guidance.



Grandview Pointe Project – 1902 Grandview Street Historic Resource Assessment, Oceanside, CA (2018) PanGIS Senior Historian Mr. Mengers performed archival and background research, conducted the intensive survey of the property to document the historic-era structures at 1902 Grandview Street, carried out CRHR and City of Oceanside Historic Preservation Ordinance (HPO) eligibility evaluation and integrity assessment of the historic resources observed in the project area, and authored the final report. The historical resources assessment described in this report was conducted to fulfill mitigation measures in accordance with CEQA Guidelines and using CRHR eligibility criteria. The exterior of each structure was examined and photographed; an interior examination was not conducted. Field note included information on architectural style and features, construction methods, modifications, and property condition. A DPR 523 update form was created for the property. Mr. Mengers attended Oceanside City council meetings.

Caltrans Historic District SR-163 Bridge Rail Upgrade Project (2019) Four bridges over SR-163 are part of a Historic District and must be upgraded to meet current safety standards. Senior Historical Archaeologist, Mr. Mengers worked with a team of architectural historians to conduct research and make recommendations. He surveyed the bridges, took photos, produced a photo appendix, completed site inventory forms, and was responsible for creating APE maps for direct and indirect effects. He was also responsible for completing two Historic Property Survey Reports (HPSR) and the Finding of Effect or Finding on No Effect (FOE/FONE), along with GIS deliverables and exhibits.

Southern California Edison West of Devers Transmission Project, Riverside County, CA (2015-2018) Mr. Mengers was the Principal Investigator and authored the final project reports. He performed and directed survey, conducted background research, evaluated prehistoric and historic sites and districts, provided site assessments and recommendations (NTRP), and produced DPR forms. This project included water conveyance systems, testing, and Section 106.

San Diego High School Constraints Analysis, Phase 1, San Diego, CA (2019) PanGIS provided due diligence and constraints analysis services for cultural resources sensitivity analysis for historical (built) resources (historic-era structures and landscape features) for Whole Site Modernization Improvements and Long-Range Facilities Master Plan at San Diego High School. Initial research indicated that many of the existing structures were constructed prior to 1970, therefore requiring an assessment due to age and potential status as historic resources. Project Architectural Historian Mr. Mengers authored the historic constraints analysis. The goal of the historic-era structures and landscape features analysis is to determine if any built environment resources within the project area are likely to be considered historic resources under State guidelines and, if so, to determine if any built environment resources are likely to be or are potentially eligible for listing on the NRHP or Local Registers. Mr. Mengers performed a reconnaissance survey to identify resources likely to require a full evaluation. The results of the analysis will assist the San Diego Unified School District in determining direct construction impacts to historic resources and guide future historic resource evaluations.

San Diego Unified San Diego High School Historic-Era Structures and Landscape Features Evaluations (2020) In the 2nd Phase of this project, Mr. Mengers evaluated Ten historic built-environment resources and landscape features found in Phase 1 of the study to be potentially eligible for NRHP, State, and Local Registers based on the architects who designed them. The evaluation included archival research, an intensive historic built-environment survey including photo documentation, completion of site inventory forms with evaluations, GIS maps, and a technical report.

Appendix B – Record Search Results

1) Resource Table

2) Reports Table

Resource List

(IUII) /0-1.70							
Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-45-001371	CA-SHA-001371			Prehistoric	AP02; AP04	1982 (RITTER / FOSTER)	NEIC-001470, NEIC- 003716
P-45-001567	CA-SHA-001567			Prehistoric	AP02; AP04; AP15	1985 (FOSTER)	NEIC-001470, NEIC- 003716
P-45-002619		Other - CARR SITE "D"		Prehistoric	AP02	1995 (DAVID DERBY, CASTER FORESTRY DAVID DERBY RPF)	NEIC-001232, NEIC- 001470
P-45-002620		Other - CARR SITE "E"		Prehistoric	AP02	1995 (DAVID DERBY, CASTER FORESTRY DAVID DERBY RPF)	NEIC-001232, NEIC- 001470
P-45-002623		Other - CARR SITE "I"		Prehistoric	AP02	1995 (DAVID DERBY, CASTER FORESTRY DAVID DERBY RPF)	NEIC-001232, NEIC- 001470

Report L	ist					
D21-67 (1mi)						
Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
NEIC-001470	CAL FIRE - K96-90	1996	Caster, Paul B. and David Derby	Archaeological and Historical Resources Survey and Impact Assessment: A Supplemental Report for Carr-Gazzigli Timber Harvest Plan	California Department Forestry and Fire Protection	45-001371, 45-001372, 45-001373, 45-001567, 45-002619, 45-002620, 45-002621, 45-002622, 45-002623
NEIC-001470		1996	Jenkins, Richard	Archaeological and Historical Resources Survey and Impact Assessment Preharvest Inspection: THP 2-96-182	California Department of Forestry and Fire Protection	
NEIC-003716	Voided -	1996	Jenkins, Richard	Archaeological and Historical Resources Survey and Impact Assessment Preharvest Inspection: THP 2-96-182		45-001371, 45-001372, 45-001373, 45-001567
NEIC-006992	CAL FIRE - Rx 2- 030-SHU; Voided - SH-L-668	1991	Jenkins, Richard	5200 Vegetation Management, VMP RX 2- 030-SHU/ Mazzatta VMP, Archaeological Review	California Department of Forestry and Fire Protection	45-002385, 45-002544, 45-002545, 45-002547
NEIC-010052	CAL FIRE - Rx: 2- 052-SHU; Voided - SH-L-668	1995	Charlton, Verne	CDF Project Review Report for Archaeological and Historical Resources: Mazzotta VMP		
NEIC-011292	IC Record Search Nbr - W10-11; NRCS - 10FY45- 0015	2010	Truman, Elizabeth	Field Office Report of Cultural Resources Ground Survey Findings		45-004631
NEIC-011466	IC Record Search Nbr - W11-31; NRCS - 11FY45- 0018	2011	McCann, Robert	Project 11FV45-0018 Field Office Report of Cultural Resources Ground Survey, Shasta County, California	Natural Resources Conservation Services	
NEIC-012893	NRCS - 13FY45- 0042	2013	Graves, Melinda	Field Office Report of Cultural Resources Ground Survey Findings of Project #13FY45- 0042	Natural Resources Conservation Service	
NEIC-014437	IC Record Search Nbr - D06-45	2008	Peak, Melinda	Cultural Resource Assessment for the Mackenze Dam Project, SWRCB Application Number 31576. Shasta County, California	Peak & Associates, Inc.	
NEIC-014736	Voided - SH-L-341	1987		Addendum #2: Report on Historic and Archaeological Resources for the Olsen Hydroelectric Project near Whitmore, Shasta Count, California	Jensen & Associates	

NEIC 3/16/2021 3:38:22 PM

Page 1 of 1

Appendix C – Sacred Lands File Search Results

- 1) NAHC Sacred Land File Search Results
- 2) NAHC Native American Contact List
- 3) Tribal Outreach Letter
- 4) Tribal Contact Log

THE RICAN

Chairperson Laura Miranda Luiseño

VICE CHAIRPERSON Reginald Pagaling Chumash

Secretary Merri Lopez-Keifer Luiseño

Parliamentarian Russell Attebery Karuk

COMMISSIONER William Mungary Paiute/White Mountain Apache

COMMISSIONER Julie Tumamait-Stenslie Chumash

Commissioner [**Vacant**]

COMMISSIONER [Vacant]

Commissioner [Vacant]

Executive Secretary Christina Snider Pomo

NAHC HEADQUARTERS

1550 Harbor Boulevard Suite 100 West Sacramento, California 95691 (916) 373-3710 nahc@nahc.ca.gov NAHC.ca.gov STATE OF CALIFORNIA

NATIVE AMERICAN HERITAGE COMMISSION

April 2, 2021

Annemarie Cox PanGIS, Inc.

Via Email to: acox@pangis.com

Re: Roundmountain STATCOM Facility Project, Shasta County

Dear Ms. Cox:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were <u>positive</u>. Please contact the tribes on the attached list for more information. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: <u>Nancy.Gonzalez-Lopez@nahc.ca.gov</u>.

Sincerely,

Nancy Gonzalez-Lopez Cultural Resources Analyst Attachment

Native American Heritage Commission Native American Contact List Shasta County 4/2/2021

Redding Rancheria

Jack Potter, Chairperson 2000 Redding Rancheria Road Pit River Redding, CA, 96001 Wintu Phone: (530) 225 - 8979 Yana Fax: (530) 241-1879 melodieh@redding-rancheria.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Roundmountain STATCOM Facility Project, Shasta County.



April 2, 2021

Jack Potter, Chairperson 2000 Redding Rancheria Road Redding, CA, 96001

Re: Round Mountain STATCOM Facility Project

Dear Chairperson Potter,

The proposed project is for the construction of a Static Synchronous Compensator (STATCOM) Substation, also referred to as the Fern Road Substation. The project site is directly adjacent to the Round Mountain - Table Mountain #1 and #2 500 kV transmission line corridor. The Proposed Project site is located approximately 2,000 feet east of Fern Road, and approximately 1.6 miles northwest of the unincorporated community of Whitmore and approximately 9.3 miles north of State Highway 44 in an unincorporated area of southern Shasta County. The proposed substation will occupy approximately 6 acres and the construction limits encompass 86 acres. The land is currently used for grazing cattle.

PanGIS, Inc., is providing cultural resources services for the project's planning process, including: a records search at the Northeast Information Center (NEIC), Sacred Lands File Search with the Native American Heritage Commission (NAHC), a Class III archaeological survey, and a cultural resources technical report. The records search at NEIC was negative for the project limits of construction, but resources were present within a 1-mile radius.

A records search of the NAHC Sacred Lands File was ordered on March 12, 2021, for the project area; the results, received April 2, 2021 were <u>positive</u>. The NAHC suggested you may be able to supply information pertinent to the project area or might recommend others with specific knowledge. Any sensitive cultural information you provide will be protected and will not be disclosed in public documentation. **This is an information request only and is not associated with any official consultation**.

Thank you for your consideration of this matter and please do not hesitate to contact me at (619)218-9724 or dmengers@pangis.com should you have any questions or need additional information.

Sincerely,

14 hhr

Douglas Mengers, M.A. RPA, DPPH Senior Archaeologist/Historian PanGIS, Inc.

Attachment 1: Round Mountain STATCOM Facility Project Location Map 8555 Aero Drive, Suite 200 San Diego, California 92123 Phone: 760.683.8335 Fax: 760.884.3763



Method/s* and Date/s of replies Comments	Vone SLF Positive 4/2/2021	
mernou/s and Date/s of additional contact	Phone, DWM, left msg, 4/22/2021	
Method/s* and Date/s of replies	None	
Method/s* and Date/s of initial contact	melodieh@redding- rancheria.com, 4/2/2021	
Affilation	Pit River, Wintu, Yana	
Name	Jack Potter, Chairperson	

Appendix D – Survey Area Photographs

Image 1) Overview from northwest corner of survey area, facing south (4/13/2021)
Image 2) Overview from east side, just north of road, facing west (4/13/2021)
Image 3) Overview from southwest corner of survey area, facing east (4/14/2021)
Image 4) Overview from southeast corner of survey area, facing northwest (4/14/2021)
Image 5) View of apiary from under transmission line, facing east (4/14/2021)
Image 6) Overview from center of proposed substation location, facing north (4/14/2021)
Image 7) Overview from center of proposed substation location, facing east (4/14/2021)
Image 8) Overview from center of proposed substation location, facing south (4/14/2021)
Image 9) Overview from center of proposed substation location, facing west (4/14/2021)



Image 1. Overview from northwest corner of survey area, facing south (4/13/21)



Image 2. Overview from east side of survey area, just north of road, facing west (4/13/2021)



Image 3. Overview from southwest corner of survey area, facing east (4/14/2021)



Image 4. Overview from southeast corner of survey area, facing northwest (4/14/2021)



Image 5. View of apiary from under transmission line, facing east (4/14/2021)



Image 6. Overview from center of proposed substation location, facing north (4/14/2021)



Image 7. Overview from center of proposed substation location, facing east (4/14/2021)



Image 8. Overview from center of proposed substation location, facing south (4/14/2021)



Image 9. Overview from center of proposed substation location, facing west (4/14/2021)

Appendix E – Maps (Non-Confidential) Figure 1) Project Vicinity Map Figure 2) USGS Topographical Map Figure 3) Aerial Location Map

Cultural Resource Technical Report – Round Mountain 500 kV Area Dynamic Reactive Support Project



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Figure 1. Project Vicinity Map



Figure 2. USGS Topographical Map



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Figure 3. Aerial Location Map