

4.6 CULTURAL RESOURCES

4.6.1 Environmental Setting

The following environmental setting has been summarized from three cultural and archaeological resource reports completed by Garcia and Associates on behalf of Aera (Appendix H). Specifically, these include the following:

- “Review of a Previously Completed Records Search and Phase I Cultural Resources Survey, and Impact Analysis for the Aera Energy LLC East Cat Canyon Oilfield Redevelopment Project” January, 2014 (Garcia and Associates, 2014a), (applies to the Project site);
- “Review of a Previously Completed Records Search and Phase I Cultural Resources Survey and Evaluation for the Gas Pipeline Route in Support of the East Cat Canyon Oil Field Redevelopment Project, Santa Barbara County, California,” July, 2014 (Garcia and Associates, 2014b) (applies to the natural gas import pipeline route); and
- “Review of a Previously Completed Records Search and Phase I Cultural Resources Survey for the Pacific Gas and Electric Company 115 kV Electric Supply Route in Support of the East Cat Canyon Oil Field Redevelopment Project” March 2014 (Garcia and Associates, 2014c) (applies to the proposed electrical line route).

The records searches and cultural resources pedestrian surveys were each completed for three separate Project-specific areas. The first, the “Review of a Previously Completed Records Search and Phase I Cultural Resources Survey, and Impact Analysis for the Aera Energy LLC East Cat Canyon Oilfield Redevelopment Project” (Garcia and Associates, 2014a), was completed on behalf of the entire Project site within the property boundaries shown in Figure 1.2-2 - Aerial Location Map. The second, the “Review of a Previously Completed Records Search and Phase I Cultural Resources Survey and Evaluation for the Gas Pipeline Route in Support of the East Cat Canyon Oil Field Redevelopment Project” (Garcia and Associates, 2014b) was completed for the proposed natural gas pipeline as shown in Figure 2.5-1 - Proposed Natural Gas Import Pipeline Route. The third, the “Review of a Previously Completed Records Search and Phase I Cultural Resources Survey for the Pacific Gas and Electric Company 115 kV Electric Supply Route in Support of the East Cat Canyon Oil Field Redevelopment Project” (Garcia and Associates, 2014c) was completed for the proposed electrical line route as shown in Figure 2.6-1 - Proposed Electrical Line Route.

4.6.1.1 Regional Background

Paleo-Environmental Context. The Project site is located within the Solomon Hills between the Santa Maria Valley to the north and east and the Los Alamos Valley to the south. Primary creeks within the Project site include Cat Canyon Creek, Long Canyon Creek, and Olivera Canyon Creek in addition to several other, smaller, drainages. The Sisquoc River is located approximately one mile north of the Project site and is a coastal drainage. The Pacific Ocean is 15 miles west and the San Rafael Mountain Range is 10 miles east in relation to the Project site.

In general, the archaeological/geologic time scale of California can be divided into four broad periods: Terminal Pleistocene (10,000 years before present), early Holocene (10,000 - 7,000 years before present), middle Holocene (7,000 - 3,350 years before present), and late Holocene (3,350 - 200 years before present). The period between 11,000 and 8,000 years ago is marked by the Pleistocene/Holocene transition. This was a time of dramatic change in vegetation and a warming period following the Late Glacial Maximum.

Initial development of the Holocene plant communities (oak woodland, chaparral, coastal sage scrub) began during the Pleistocene-Holocene transition (11,000 to 8,000 years ago). The rapid increase in oaks, herbs and chaparral taxa corresponded with a decrease in conifers. Overall, vegetation changes came in pulses, with a brief change event followed by a stabilization period with slower, more gradual changes, until the next change event or pulse. Vegetation changes were associated with similar climatic changes as conditions shifted from cool and wet to warm and dry.

Fire may have begun to be a factor in shaping the landscape as early as the middle Holocene. The changing plant species compositions and lower rainfall, particularly when fuel/vegetation moisture was low during prolonged dry periods, would have created conditions for wildfire. Fire ecology studies in California have demonstrated regular intervals of large fires in 20 to 50 year cycles during the late Holocene, in addition to evidence of anthropogenic-caused fires. Geomorphic changes are commensurate with fires of this magnitude: slope failures, mudflows, and debris flows that changed water courses.

Archaeological Context. The history of human habitation in Santa Barbara County extends back at least 12,000 years on the Channel Islands and 6,500 years in the mountainous interior. Permanent villages or base camps would not be expected in the Project site because of the steep terrain and lack of permanent water sources; such villages and camps would be located in nearby, desirable low-elevation settings along creeks and river drainages (such as San Antonio Creek in the Los Alamos Valley, and along the Sisquoc River). Archaeological sites located at lower elevations in the Solomon Hills area exhibit chipped stone debitage and fire-fractured rock, which indicate specialized activities and short-term occupation akin to camping, while multi-component sites representing base or seasonal camps occur much closer to creeks and drainage bottoms. Given the long span of occupation in the area, it is likely that prehistoric populations would use the Solomon Hills for hunting and plant resource gathering; however, these activities result in only sporadic - if any - evidence of use.

Ethnographic Context. Prior to Euro-American contact, the central California coastal region, including the northern Channel Islands and inland areas, was occupied by Chumash-speaking people. The Chumash are known for having one of the most populous thriving, advanced societies of hunting-gathering California native groups. The Chumash occupied a territory that extended from San Luis Obispo to Malibu, and inland as far as the San Joaquin Valley. They spoke six dialects, with four of the six strongly related: Barbareño, Purisimeño, Ynezeño, and Ventureño.

Territorial boundaries for each of the six groups are unclear. Each group was generally associated with a geographical area (Santa Barbara, Santa Ynez, La Purísima, etc.) but little is known of where, for instance, the Ynezeño area ended and Purisimeño area began. Villages on the north side of the Santa Ynez Mountains are assumed to be Ynezeño. Mission register

records demonstrate, however, strong kinship affiliations between villages along the upper Santa Ynez River with Barbareño coastal villages. The village of Najalayegua was one of them; it contributed the first neophytes from an interior village to the Mission Santa Barbara. Records for other ethnohistoric villages along the upper Santa Ynez River exhibit similar kinship affiliations.

The Project site is at the convergence of areas attributed to the Ynezeño, Purisimeño and Cuyama Chumash groups. As such, it is likely all of these groups would have used the area for hunting and plant resource gathering.

Historic Period Context and Oil Development. The Historic Period covers an approximately 200 year period from the Mission Period (1760-1820) to modern oil field activities in the 1960s. Oil production in the Cat Canyon Oil Field began with the Palmer Union Oil Company's Palmer No. 1 well, which was drilled in 1908 and was located 1.5 miles northwest of the Project site within Palmer Canyon. Development of the West and East areas of the oil field expanded rapidly between 1909 and 1919, with most of the wells drilled by Brooks Oil Company and Palmer Union Oil Company. The Pacific Coast Railway, a narrow-gauge railroad, was extended from San Luis Obispo and Port Harford (now Port San Luis) to Santa Maria in 1882. In 1909, the Pacific Coast Railway built a spur line to the Palmer Canyon area, primarily for transporting crude oil to Port Harford and local refineries. The Pacific Coast Railway ceased operations in 1941. In 1909, Brooks Oil Company connected the east area to the Pacific Coast Railroad by a six-inch pipeline which extended across the R&G property. The Santa Maria Valley Railroad, a competing standard-gauge railroad, constructed a spur to Bradley Canyon (known as the Roadamite station) in 1911 which operated until 1927. Historical pipelines extended from the east area westward to Palmer Canyon and the rail facilities located there.

Historically, oil production activities at the Project site were operated by independent operators and later Husky Oil Company. In 1984, the Project site was transferred to Shell Oil Company. In 1997, Shell and Mobil combined their California exploration and production operations to form Aera. Intermittent production activities at the East Cat Canyon Field were conducted until 1989, when the oilfield was shut down due to economic reasons at that time. The field's wells were abandoned and nearly all of the facilities, except an office and adjacent warehouse, were removed by 2002.

4.6.1.2 Site-Specific Setting

Project Site. In July 2013 Garcia and Associates conducted several activities in support of a historical, archaeological, and cultural resources assessment of the Project site. These activities included 1) a review of a previously completed records search; 2) a Phase I cultural resources pedestrian survey, 3) Extended Phase I testing, and 4) completion of an impact analysis for the Project.

Review of Previously Completed Records Search. In March 2012, Kristina Gill, a subconsultant of Padre Associates, Inc., requested a search of the California Historical Resources Information System at the Central Coast Information Center at the University of California, Santa Barbara for the area encompassing the Project site. The search included review of previously-recorded cultural resources and studies within a 0.5-mile radius; USGS 7.5-minute series topographic quadrangles and other historic maps; pertinent survey reports and archaeological site records, and historic-period, built-environment resources (such as buildings,

structures and objects) within or immediately adjacent to the Project areas; and the California Department of Parks and Recreation’s California Inventory of Historic Resources (1976) and the Office of Historic Preservation’s Historic Properties Directory (2007), which combines the cultural resources listed on the California Historical Landmarks, California Points of Historic Interest with those that are listed in or determined eligible for listing in the National Register of Historic Places or the California Register of Historic Resources.

The records search conducted by Gill in 2012 identified 19 previous studies within 0.5-miles of the Project site boundary. In 2013, Gill completed an additional two studies that encompassed the Project site. The records search results identified two previously-recorded historic cultural resources within the Project site and five previously-recorded cultural resources outside (within 0.5-miles) of the Project site (Table 4.6-1 – Previously Recorded Cultural Resources with 0.5-mile of the Project Site). The cultural resources within the Project site are identified as CA-SBA-4003H and P-42-040943 and are comprised of industrial scatter. Specifically, SBA-4003H consists of a historic boiler and debris associated with historic oil extraction in East Cat Canyon. At least some portions of the boiler foundations appear to be intact, and consist of bricks, metal pipes and wood beams. P-42-040943 consists of the remnants of a historic brick boiler associated with early oil production. According to Gill (2011) the boiler lacks integrity and has been significantly disturbed by modern oil production activities.

Table 4.6-1. Previously Recorded Cultural Resources within 0.5-mile of the Project Site

Site No.	Author, Year Identified	Description
CA-SBA-1214H	Spanne, 1972	Early 20 th century trash scatter
CA-SBA-3628	Gibson, 2001	Lithic and shellfish scatter
CA-SBA-4003H*	Gill, 2011	Industrial scatter
CA-SBA-4024	Conway, 2011	Lithic and shellfish scatter
CA-SBA-4026H	Conway, 2011	Historic and industrial trash scatter
CA-SBA-4027	Conway, 2011	Lithic scatter
P-42-040943*	Gill, 2011	Industrial scatter

Note: * Recorded cultural resources located within the Project site boundaries.

Source: Garcia and Associates 2014a

Phase I Cultural Resources Pedestrian Survey. In April 2013, Garcia and Associates archaeologists surveyed the approximate 2,100-acre Project site to identify prehistoric and historic archaeological sites, historic structures, and paleontological resources. During the survey, archaeologists identified and recorded 12 new cultural resources (eight sites and four isolates) and they confirmed the locations of two previously-recorded resources (P-42-040943 and CA-SBA-4003H) (Table 4.6-2 – Cultural Resources Inventoried during the 2013 Pedestrian Survey within the Aera Property Boundary). These resources included historic and industrial refuse scatters, historic isolates, and two fossils. No cultural resources were collected or removed during the survey and no excavations were undertaken at that time.

Table 4.6-2. Cultural Resources Inventoried during the 2013 Pedestrian Survey within the Aera Property Boundary

Resource No.	Resource Type	Resource Description
AERA-1	Historic site	Moderate size brick and industrial scatter
AERA-2	Paleontological isolate	Fossilized bone fragment
AERA-3	Historic site	Large brick and industrial scatter
AERA-4	Historic site	Earthen channel lined with concrete slabs
AERA-5	Historic site	Small historic artifact scatter
AERA-6	Historic site	Moderate size brick and industrial scatter
AERA-7	Historic site	Historic tanks
AERA-8	Historic isolate	Concrete anchor
AERA-9	Paleontological isolate	Sandstone boulder with marine fossils
AERA-10	Historic isolate	Steel ring with diagnostic markings
AERA-11	Historic site	Historic man-made depression
AERA-12	Historic site	Historic tank with pump
P-42-040943	Historic site	Historic brick scatter
CA-SBA-4003H	Historic site	Historic boiler and debris

Source: Garcia and Associates, 2014a

Natural Gas Import Pipeline Route. In 2013, Garcia and Associates completed a review of a previously completed records search conducted in support of the natural gas import pipeline route in support of the Project. The records search revealed that no previously recorded cultural resources are present within the pipeline route area; however, seven previously recorded cultural resources occur within a 0.25-mile radius.

On June 5 and 6, 2013, and January 30, 2014, Garcia and Associates archaeologists conducted a Phase I cultural resources pedestrian survey along the approximate 14-mile route in order to identify cultural resources. The area surveyed covered approximately 68.2 acres of public right-of-way within the natural gas import pipeline route portion of the Project site. The public right-of-way measured 40 feet across (20 feet from the centerline of the road) and consisted of the road and shoulder. During the survey, Garcia and Associates archaeologists identified and recorded two cultural resources (one archaeological site and one historic structure) within the pipeline route area (SCGP-1 and SCGP-2) (Table 4.6-3 – Cultural Resources Identified during Phase I Cultural Resources Survey for the Natural Gas Import Pipeline Route).

Table 4.6-3. Cultural Resources Identified during Phase I Cultural Resources Survey for the Natural Gas Import Pipeline Route

Site No.	Resource Type	Description
SCGP-1	Historic archaeological site	Brick and industrial scatter
SCGP-2	Historic structure	c. 1950 culvert

Electrical Line Route. In February 2014, Garcia and Associates conducted a records search and archaeological survey of the Pacific Gas and Electric Company electrical line route in support of the Project. A Phase I cultural resources pedestrian survey was conducted along the approximate 1,200-foot route in order to identify cultural resources. The archaeologists examined a 500-foot buffer around the proposed alignment; thus, the survey covered approximately 27.5 acres.

The records search for the electrical line route Project site revealed no previously recorded cultural resources present within the Project site or within the 0.25-mile radius. During the archaeological ground survey the archaeologist identified and recorded two new cultural resources (one site and one isolate) within the survey area (PGE-1 and PGE-ISO-1) (Table 4.6-4 – Cultural Resources Identified during Phase I Cultural Resources Survey for the Electrical Line Route).

Table 4.6-4. Cultural Resources Identified during Phase I Cultural Resources Survey for the Electrical Line Route

Site No.	Resource Type	Description
PGE-1	Historic site	Historic artifact scatter
PGE-ISO-1	Historic isolate	Historic ceramic insulator

4.6.2 Regulatory Setting

4.6.2.1 Federal Regulations

National Historic Preservation Act and Section 106. The National Historic Preservation Act of 1966, along with its amendments, aims to preserve the historic heritage of the nation by protecting significant properties and resources. Section 106 of the National Historic Preservation Act requires Federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The goal of consultation is to identify historic properties potentially affected by the undertaking, assess its effects and seek ways to avoid, minimize, or mitigate any adverse effects on historic properties.

Native American Heritage Commission. The Native American Heritage Commission was established in 1976 to assist Federal and State agencies in protecting Native American traditional cultural properties, as well as providing recommendations on Native American heritage in accordance with environmental law and policy. Senate Bill 297 became law in 1982 and addressed the disposition of Native American human burial and skeletal remains and amended sections of the state's Government Code, Health and Safety Code, and Public Resources Code. These revised regulations protect Native American burials from disturbance, vandalism, and inadvertent destruction, as well as stipulate the implementation of specific procedures if a Native American burial is unearthed during project construction.

4.6.2.2 State Regulations

California Health and Safety Code- Section 7050.5. California Health and Safety Code Section 7050.5 states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, no further excavation shall be conducted until the County coroner has determined whether or not the remains are subject to the coroner's

authority. If the human remains are of Native American origin, the County coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify an individual with the designation of Native American Most Likely Descendant to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

Public Resources Code - Section 5097.5. Public Resources Code Section 5097.5 provides for the protection of cultural resources by prohibiting the removal, destruction, injury, or defacement of archaeological features on any lands under the jurisdiction of State or local authorities.

4.6.2.3 Local Regulations

County of Santa Barbara. In addition to the California Environmental Quality Act Guidelines, the County of Santa Barbara Environmental Thresholds and Guidelines Manual Section No. 8 (2008) provides the procedures for cultural resources consultants to follow to identify, evaluate, and mitigate impacts to cultural resources. Specifically, Phase I reports consist of a field survey and a literature search. If a cultural resource is identified during the Phase I study, a Phase II study is required to evaluate the significance of the resource. Phase II reports include the methods and results of the research and field surveys, an integrity rating and significance evaluation based on criteria provided in the Guidelines, and recommendations for avoidance and minimization measures to reduce project impacts to any significant resources that cannot be avoided. If significant resources cannot be avoided, then Phase III mitigation is required after a Phase III proposal is prepared and approved. This proposal would outline the required mitigation, the timeframe for conducting and completing the mitigation, and any costs associated with performing the mitigation. If the mitigation would not reduce impacts to significant cultural resources to less than significant then an Environmental Impact Report may be required. Additional guidelines are provided for curation of collections, ethnic impacts, and steps for a shortened clearinghouse review.

4.6.3 Impact Assessment Standards

Consistent with the California Environmental Quality Act guidelines and the County of Santa Barbara Environmental Thresholds Guidelines, the following criteria were used to determine the significance of potential impacts associated with the Project.

A significant impact on cultural resources will occur if a project would:

- Cause a substantial change in the significance of the resource;
- Cause a substantial adverse change in the significance of an archaeological resource;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; and/or
- Disturb any human remains, including those interred outside formal cemeteries.

4.6.4 Impact Analysis

Appropriate extended Phase I Cultural and Archaeological Surveys were conducted by Garcia and Associates in accordance with County of Santa Barbara Environmental Thresholds

and Guidelines Manual I Section 8 (2008) in support of the East Cat Canyon Oil Field Redevelopment Project, including the Project components located within the Project site, the natural gas import pipeline route, and the electrical transmission service route. Based on the results of those surveys, Aera worked closely with Garcia and Associates during the Project design phase to avoid potential impacts to sensitive cultural resources. In addition, Aera has incorporated all of the recommended avoidance and minimization measures suggested by Garcia and Associates (Garcia and Associates 2014a, 2014b, and 2014c [Appendix H]) into the Project.

4.6.4.1 Potential Impacts to Cultural, Historical or Archaeological Resources within the Project Property Boundaries

Site Aera 5 - Extended Phase I Testing. Based on the results of the Cultural Resources Pedestrian Survey, and in accordance with County of Santa Barbara Environmental Thresholds and Guidelines Manual, Section Eight, in December 2013, Garcia and Associates archaeologists completed an Extended Phase I testing of site Aera-5. The Extended Phase I was completed using a backhoe with a straight-edged bucket, which measured approximately 36 feet (11 meters) long and two feet (0.60 meters) wide, to excavate the trench. To increase ground visibility, the archaeologists directed vegetation removal under the guidance of a Padre Associates, Inc. biologist prior to the start of backhoe trenching. After examining the cleared area, Garcia and Associates archaeologists directed the placement of one backhoe trench (Cut One) within the site area. Approximately two-to-three inch lifts of soil were removed at a time to reduce impacts to archaeological features or deposits. Upon completion of trenching, trench sidewall profiles were both drawn and photographed and the archaeologists used Munsell soil color charts to describe the soil color and texture for each profile.

In order to collect a representative sample of artifacts, one 5-gallon bucket (0.019 cubic meters) of soil was screened through 1/4-inch wire mesh for every one-meter length of trench excavated. All artifacts were retained, bagged, and labeled according to provenience. The archaeologists only collected a sample of bulky or redundant materials (e.g., brick fragments, concrete chunks); quantities, weight and material types were recorded in the field prior to depositing those items at the bottom of the trench. The backhoe trench was refilled upon completion of analysis. During testing, all artifacts were observed within the top 15 centimeters of the trench. Based on stratigraphy indicators observed during the Extended Phase I, Garcia and Associates determined that site Aera-5 is a secondary deposit, and therefore not a significant resource. No further testing of Aera-5 is required.

Sites Aera-1, Aera-2, Aera-3, Aera-4, Aera-6, Aera-7, Aera-8, Aera-9, Aera-10, Aera-11, and Aera-12. Based on the Review of Previously Completed Records Search, Phase I Cultural Resources Survey, and in conformance with California Environmental Quality Act guidelines, Garcia and Associates evaluated each potential cultural site within the proposed impact area for eligibility as a historical resource in the California Register of Historical Resources. Based on the results of the fieldwork, historic research, and evaluation; sites Aera-1, Aera-3, Aera-4, Aera-6, Aera-7, Aera-11, and Aera-12 were determined to not be historical resources and therefore ineligible for inclusion in the California Register of Historical Resources. In addition, the four isolated artifacts (Aera-2; -8; -9; and -10) do not meet the definition of unique archaeological or historical resources under California Environmental Quality Act. No

further consideration is warranted for these resources and no changes are recommended to the Project design.

Project activities within the Project property boundaries will involve the re-establishment of oil production in an existing oil field by drilling and operating various types of oil/gas production wells, steam generators, a central processing plant, gathering and distribution pipelines, and related ancillary equipment. These facilities will be serviced by a new natural gas import pipeline, as well as an electrical power transmission line, substation, and telecommunications. In support of these activities, existing roadways will be graded and enhanced to provide transportation routes to and from the well locations. However, in order to reduce the ground disturbance required for the Project, wells and facilities will be located within the existing well pads, roadways and other previously disturbed areas to the extent feasible. Although no significant resources were identified, Project-incorporated avoidance and minimization measures identified within Garcia and Associates' Review of a Previously Completed Records Search, Phase I Cultural Resources Survey, and Impact Analysis for the Aera Energy LLC East Cat Canyon – Oil Field Redevelopment Project (2014a), have been included to further avoid potential impacts to nearby cultural resources. These include Project incorporated measures CUL-1 (Paleontological Resources Monitoring Plan), CUL-2 (Unanticipated or Undocumented Cultural Resources) and CUL-3 (Presence of Human Remains). By following the Project-incorporated measures, cultural, historical and archaeological resources will be avoided. Impacts associated with Project activities within the Project property boundary are not anticipated.

4.6.4.2 Potential Impacts to Cultural, Historical, or Archaeological Resources Resulting from the Natural Gas Import Pipeline

The Project will require a new natural gas import pipeline, approximately 14 miles in length that will be sourced by Southern California Gas Company. Upgraded fiber optic communications lines will be installed concurrently with the natural gas import pipeline along portions of the same proposed pipeline corridor. Nearly all of the pipeline and telecommunication lines will be installed within the public right-of-way, under existing road pavement.

During the Phase I Cultural Resources Pedestrian Survey for the Natural Gas Import Pipeline, two cultural resources (SCGP-1 and SCGP-2) were identified: SCGP-1 (brick and industrial artifact scatter) and SCGP-2 (a historic culvert). Upon further investigation, Garcia and Associates determined that SCGP-2 does not meet the definition of a unique archaeological or historical resource under CEQA, and does not require further consideration for Project avoidance or mitigation.

Historic research was also completed by Garcia and Associates (2014b) to determine the origin of historic industrial scatter SCGP-1 and to evaluate its significance. This additional investigation revealed that SCGP-1, located on the east side of Dominion Road, was likely historic remnants of the town site of Roadamite. An archaeological pedestrian survey did not identify any surface evidence of archaeological resources on the west side of Dominion Road. An examination of numerous historic maps by Garcia and Associates also indicated that historic buildings or structures were not present on the west side of Dominion Road in this location.

Historic-era structural features are present at SCGP-1 and archaeological deposits that have the potential to be eligible for listing in the California Register of Historic Resources may be present. Pursuant to California Environmental Quality Act guidelines, due to its association with the historic town of Roadamite and subsequent research potential, Garcia and Associates recommended several project-incorporated avoidance and minimization measures to reduce the potential for impacts to historic resources associated with SCGP-1. Specifically, that SCGP-1, be avoided during planning for the gas pipeline route in support of the East Cat Canyon Oil Field Redevelopment Project (CUL-4a). Aerial photographs of the area, dating to 1989 and 2002, indicate extensive ground disturbances on the west side of Dominion Road from plowing or grading. Based on this information, Aera has located the natural gas import pipeline on the west side of Dominion Road to avoid impacts to known cultural resources.

Additionally, to further ensure that no impacts to previously unidentified resources would occur during installation of the natural gas import pipeline, Garcia and Associates has recommended archaeological monitoring within 0.25 mile (1,320 feet) of SCGP-1 and the Roadamite area of the Project site (CUL-4b). If avoidance of SCGP-1 is not feasible or in the event of the discovery of unanticipated cultural resources that are eligible or potentially eligible for the California Register of Historic Resources are found during construction within the western side of Dominion Road, then Phase II testing (excavation) of the area will be required to evaluate archaeological sites for significance (CUL-4c). Implementation of Project-Incorporated Minimization Measure CUL-4 (a, b, and c) will reduce the potential impacts to cultural resources during natural gas import pipeline installation activities to less than significant.

4.6.4.3 Impacts to Cultural, Historical or Archaeological Resources Resulting From the Electrical Power Transmission Service

Electrical power to the Project site is to be provided by new overhead transmission lines which will tap into an existing electrical line route as well as an electrical substation. Accordingly, a cultural resources pedestrian survey of the approximately 1,200 linear feet (plus a 500 foot buffer of the proposed alignment) found that two historical resources (PGE-1 and PGE-ISO-1) have been identified within the installation corridor. PGE-1 measures approximately 131.2 feet long by 36 feet wide and includes sparse, scattered historical remnants. PGE-1 is not located within the immediate electrical power transmission line service route.

PGE-ISO-1 is located adjacent to the electrical power transmission service line corridor and includes a single piece of historic ceramic cable. However, based on the location of electrical power transmission service line corridor, the potential resource will be avoided. According to Garcia and Associates (2014c), a California Register of Historic Resources evaluation is not warranted and no further cultural resources studies are required.

However, to further ensure the unevaluated historic artifact scatter is avoided, a 50-foot buffer will be staked around the resource boundary prior to construction. In addition, Garcia and Associates recommends that a qualified archaeologist provides cultural resources awareness training for all construction personnel prior to the start of work. Construction personnel will be briefed on laws that protect cultural resources and procedures to be followed in the event that a unique archaeological resource, historical resource, or human remains are encountered during construction. Please refer to CUL-5 – Avoidance of Cultural or Historic Resources During

Electrical Line Route Installation for further details. Implementation of this Project-incorporated avoidance and minimization measure will reduce the potential impacts to cultural resources during electrical power transmission line installation activities to less than significant.

4.6.4.4 Potential Impacts to Cultural Resources Resulting from Project Operations

Following installation of the proposed well-pads, natural gas pipeline, electrical transmission line, facilities and ancillary equipment, the Project will not require further ground disturbance at or near any known cultural or historical sites. As such, no impacts are associated with Project operations.

4.6.5 Project-Incorporated Avoidance and Minimization Measures

Based on the recommendations by Garcia and Associates within the Phase I Cultural and Archaeological Reports completed for the Project, the following measures have been incorporated into the Project design to reduce the potential for impacts to cultural resources. With the implementation of the recommended avoidance and minimization measures, impacts to cultural resources will be avoided.

- **CUL-1. Cultural and Paleontological Resource Monitoring Plan.** Prior to Project ground-disturbing activities, a Cultural and Paleontological Monitoring Plan will be completed. The Plan will require monitoring by a qualified archaeologist during ground disturbing activities. In addition, the archaeological monitor will give workers associated with Project activities an orientation regarding the probability of exposing paleontological or cultural resources, tips on recognizing such resources and directions as to what steps are to be taken if a find is encountered.
- **CUL-2. Unanticipated or Undocumented Cultural Resources.** If undocumented cultural resources are encountered during construction within the Project site, then work will be stopped within 50 feet of the area of the find pending consultation between the qualified archaeologist and Aera. The Project archaeologist shall determine the potential significance of the find and, in consultation with Aera, develop measures designed to eliminate adverse impacts. Such measures can include avoidance through Project redesigns, or Phase II testing (excavation) to evaluate the significance of the find.

If Phase II testing is required, then considerable delays may be warranted prior to completion of construction. The duration of work stoppages will vary depending on the extent, integrity, and potential significance of the encountered resource. CEQA provides a measure of protection for human remains (Guidelines section 15064.5[d]), and for the accidental discovery of cultural resources (Guidelines section 15064.5[e]). These guidelines are particularly important as they take into account the possibility that significant resources not noted as a result of previous research efforts may be present within a Project area and need to be treated in a way commensurate with CEQA standards.

- **CUL-3. Presence of Human Remains.** If human remains are encountered during construction activities, any work in the vicinity will stop and a qualified archaeologist will be required to evaluate the situation. At the same time, the County coroner shall be contacted immediately. If the human remains are Native American in origin, then

- the coroner must notify the Native American Heritage Commission within 24 hours of this identification.
- **CUL-4. Avoidance of Cultural or Historic Resources During Natural Gas Import Pipeline Installation.**
 - a) The natural gas import pipeline will be located within the west side of Dominion Road in the area within 0.25 mile (1,320 feet) of SCGP-1 and the Roadamite area, in accordance with the Garcia and Associates' Review of a Previously Completed Records Search and Phase I Cultural Resources Survey and Evaluation for the Gas Pipeline Route in Support of the East Cat Canyon Oil Field Redevelopment Project, Santa Barbara County, California (2014b). No ground disturbing activities will occur on the east side of Dominion Road within 0.25 mile (1,320 feet) of SCGP-1 and the Roadamite area.
 - b) Archaeological monitoring will occur within 0.25 mile (1,320 feet) of SCGP-1 and the Roadamite area of the Project Site to ensure no previously unidentified resources are discovered during construction.
 - c) If avoidance of SCGP-1 is not feasible or in the event of the discovery of unanticipated cultural resources that are eligible or potentially eligible for the California Register of Historic Resources are found during construction, then Phase II testing (excavation) of the area will be required to evaluate archaeological sites for significance in accordance with the California Register of Historic Resources.
 - **CUL-5. Avoidance of Cultural or Historic Resources During Electrical Line Route Installation.** A 50-foot buffer will be staked around the resource boundary (PGE-1 and PGE-ISO-1). A qualified archaeologist will provide cultural resources awareness training for construction personnel prior to the start of work. Construction personnel will be briefed on laws that protect cultural resources and procedures to be followed in the event that a unique archaeological resource, historical resource, or human remains are encountered during construction.