<b>Docket Number:</b>	07-AFC-06C					
<b>Project Title:</b>	Carlsbad Energy Center - Compliance					
TN #:	203211					
<b>Document Title:</b>	Project Owner's Data Request Responses and Request for Partial Extension					
<b>Description:</b>	N/A					
Filer:	Dee Hutchinson					
Organization:	Locke Lord LLP					
<b>Submitter Role:</b>	Applicant Representative					
<b>Submission Date:</b>	10/17/2014 3:55:55 PM					
<b>Docketed Date:</b>	10/17/2014					



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October 17, 2014

#### **VIA E-FILING**

Mike Monasmith, Project Manager California Energy Commission 1516 Ninth Street Sacramento, CA 95814-5512

Re: Carlsbad Energy Center Project (07-AFC-06C)

Data Request Responses and Request for Partial Extension

Dear Mr. Monasmith:

Enclosed please find Project Owner's responses to CEC Staff Data Requests Nos. 31-33, 38 and 39 in the Petition To Amend proceeding for the Carlsbad Energy Center Project (07-AFC-06C).

One data request response, number 58, is requiring longer to complete. This data request sought revised renderings from four additional Key Observation Points. Because of the added complexity of Project Owner's enhancement to move several transmission poles west and down into the basin, these renderings were not able to be completed by today. Project Owner therefore requests an additional week to complete its response to Data Request 58 and commits to completing this data request response by October 24.

Please contact me if you have questions.

Locke Lord LLP

John A. McKinsey

Attorneys for Carlsbad Energy Center LLC

JAM: dh

By:

**Enclosure** 

# Carlsbad Energy Center Project Petition to Amend

(07-AFC-06C)

# Data Response Set 2

(Responses to Data Requests 31-33, 38-39)

Submitted to

California Energy Commission

Prepared by

Carlsbad Energy Center LLC

With Assistance from

CH2MHILL®

6 Hutton Centre Drive Suite 700 Santa Ana, CA 92707

October 17, 2014

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#### Attachment

DR31-1 Literature Search Results – CONFIDENTIAL

IS120911143713SAC

### Introduction

Attached are Carlsbad Energy Center LLC's (Project Owner) responses to the California Energy Commission (CEC) Data Request Set 2 (numbers 31–33, 38–39) regarding the modified Carlsbad Energy Center Project (07-AFC-06C) (CECP) proposed in Project Owner's Petition to Amend (PTA). Any capitalized terms not defined in this Data Response Set 2 shall have the meanings given to them in the PTA.

The responses are grouped by individual discipline or topic area. Within each discipline area, the responses are presented in the same order as the CEC presented them and are keyed to the applicable Data Request numbers.

New or revised graphics or tables are numbered in reference to the associated Data Request number. For example, the first table used in response to Data Request 1 would be numbered Table DR1-1. The first figure used in response to Data Request 1 would be Figure DR1-1, and so on. Figures or tables from the CECP PTA that have been revised have "R1" following the original number, indicating revision 1.

Additional tables, figures, or documents submitted in response to a data request (for example, supporting data, stand-alone documents such as plans, folding graphics, etc.) are found at the end of each discipline-specific section and are not sequentially page-numbered consistently with the remainder of the document, though they may have their own internal page numbering system.

IS120911143713SAC 1 INTRODUCTION

### Cultural Resources (31-33, 38-39)

#### BACKGROUND: ARCHAEOLOGY

Archaeological staff has reviewed the PTA, as well as the original September 2007 Application for Certification (AFC), associated cultural resources documents, the September 2008 Project Enhancement and Refinement (PEAR) document, the November, 2009 Final Staff Assessment (FSA), the August, 2011 Supplemental Staff Testimony, and the May 31, 2012 Commission Final Decision for the original proceeding. Staff finds that the PTA does not provide sufficient information necessary to analyze the proposed amendment's potential impacts on archaeological resources for the following reasons:

- There is no cultural resources technical report associated with the February 5, 2014 survey mentioned in the PTA (CECP 2014a:5.3-2). Without the technical report, staff is unable to assess the adequacy of the survey and thus any potential impact to cultural resources that could be affected by the proposed project;
- It is unclear which specific areas were surveyed during the February 5, 2014 cultural resources survey because there is no map documenting this survey effort;
- There does not appear to be any attempt by the project owner to consult with Native American groups in the project vicinity, or with historic cultural attachment to the area (CECP 2014a:Section 5.3);
- Archaeological site CA-SDI-16885 was initially recorded in 2003, was last updated in 2005, and is located within one of the proposed construction laydown areas (Carlsbad Energy Center 2014a:5.3-2). Survey efforts by the project owner on February 5, 2014 did not relocate this approximately 14,400-meter<sup>2</sup> site, and thus the site was not evaluated for significance by applying the California Environmental Quality Act (CEQA) criteria for historical or unique archaeological resources. The depth and horizontal (subsurface) extents of the site have not been determined: and,
- Archaeological site CA-SDI-6751 was most recently recorded as being contained entirely within the
  Atchison, Topeka & Santa Fe railroad right-of-way. However, to date, CA-SDI-6751 has not been
  evaluated for significance by applying CEQA criteria for historical or unique archaeological resources.
  The depth and horizontal (subsurface) extents of the site have not been determined.

Staff requests the following information to complete its archaeological analysis of the PTA.

#### DATA REQUEST

31. To partially remedy the first two issues above, please provide the cultural resources technical report associated with the February 5, 2014 cultural resources survey. Please ensure this report includes record searches conducted at the South Coastal Information Center and San Diego Museum of Man, as well as a map detailing those areas that were subject to pedestrian survey. Please prepare the report so that it conforms to the standards described at Title 20, California Code of Regulations, section 1704(b)(2), Appendix B(g)(2)(C). The project owner may choose to combine the cultural resources inventory report with the test excavation report or documentation of artificial fill (as appropriate) requested in Data Request 37c and 37d below.

**Response:** A new literature search was requested of the South Coastal Information Center on October 3, 2014, to include data from 2007 to the present. Please note the following issues regarding the literature search: (1) The CHRIS did not separate post-2007 technical reports. There are numerous technical reports within the 1/4-mile radius, many of these are large documents, and many are not available digitally and will have to be copied by the CHRIS. Therefore, the attachment does not include only post-2007 technical reports; these will be provided in a separate transmittal once received by the CHRIS. (2) The

collections at the Museum of Man were not searched, as access to the Scientific Library at the museum is currently closed. From their website:

The San Diego Museum of Man will not be accepting applications to conduct research in collections, or to use library resources, from April 1, 2012 through April 1, 2015. This temporary moratorium on research-related activities is designed to allow our staff to better organize and house the collection. It will also allow us to develop a proper plan for the more effective use of our scientific library. We appreciate your patience as we work to preserve and protect these valuable resources so that they are available for future generations. - See more at: <a href="http://www.museumofman.org/access-collections-and-museum-library#sthash.2xMfo3ok.dpuf">http://www.museumofman.org/access-collections-and-museum-library#sthash.2xMfo3ok.dpuf</a>

A cultural resources technical report for the above additional literature search and the February 5, 2014, cultural resources survey was completed and is included with this submittal as Confidential Attachment DR31-1 (submitted separately under a request for confidentiality). The report conforms to the standards described at Title 20, California Code of Regulations, section 1704(b)(2), Appendix B(g)(2)(C).

#### DATA REQUEST

32. Please update the DPR 523 forms for archaeological sites CA-SDI-6751 and CA- SDI-16885. The project owner should compare and document the depth of fill that Magorien (2006: Figure 1) recorded in the licensed CECP project area with the proposed depths of construction and excavation in the vicinity of the previously known locations of these cultural resources.

Response: According to the geotechnical report (Magorien, 2006), the desalination project area consists of Eocene marine sediments, overlain by either a late Pleistocene age terrace or artificial fill, or a combination of the two. Artificial fill was described as either silty to slightly clayey fine to medium-grained yellowish brown to olive brown sand with trace amounts of gravel and organics or a sandy conglomerate containing subrounded gravel up to cobble-sized volcanic rock with shell fragments in a fine- to coarse-grained sand. Although the geotechnical report was prepared for the desalination plant, the entire terrace on which the plant footprint exists was examined. This terrace includes parts of the CECP project area, specifically, the area where site CA-SDI-16885 is located. Prior to construction of the Encina Power Station, the surface soils consisted of approximately 60 inches of Marina loamy coarse sand, with the top 10 inches exhibiting a dark yellowish brown to dark reddish brown color (Magorien, 2006).

The geotechnical report also provides mapping information for the desalination plant project area, including areas of the proposed CECP PTA project area. Specifically, the geotechnical report identifies the area where site CA-SDI-16885 is located as an area with the conglomerate type of artificial fill. Just north of the site area, the geotechnical report notes that there is quaternary marine terrace deposits, rather than fill. The site does not extend into this area on the surface. The marine terrace deposits date to the late Pleistocene, at approximately 80,000 to 125,000 years old. The geotechnical report further describes the terrace deposits as deposited on top of landform that is an ancient wave cut. The terrace deposits are considered unlikely to contain cultural deposits, based on their age (Magorien, 2006).

A review of historical aerial photographs was completed for this data request. Historical aerials for the following years were included in this review: 1938, 1947, 1953, 1964, 1980, 1990, 2003. The 1938 aerial shows the CECP project area as an undisturbed terrace with scattered trees or large bushes, adjacent to the natural Agua Hedionda Lagoon. A road is located east of the project area along the corridor of modern-day Interstate 5 and another road cuts through the project area. The 1947 aerial shows a new road that runs along the edge of the terrace, adjacent to the lagoon. The site area for CA-SDI-6751 is adjacent to water, and part of the site, as currently delineated, would be located in the water. By 1953, the area is under construction for the EPS and the majority of the project area is graded. The location of CA-SDI-16885 is entirely graded, the sparse trees are gone, and both roads within the project area are gone. The roads are

visible, terminating at the northern end of the project area. The majority of the site area for CA-SDI-6751 is also graded. Portions of this site that were not graded by 1953 are located in the railroad right of way.

The Smallwood report from 2005 states, "The historic photographs of the EPS revealed that, prior to its construction, the entire property had been graded, some areas were leveled and filled, a stream was channelized, the lagoon was dredged, and a large underground intake was constructed to bring water into the plant from the ocean. In short, the entire EPS property has received a high level of disturbance. The soils exposed during the geological boring procedures confirmed that fill soil over much of the property measures between approximately 2.5 and 10 feet in depth. Underlying the fill soil is a reddish-orange Pleistocene-age marine terrace material." (Smallwood, 2005).

Site forms for CA-SDI-6751 and CA-SDI-16885 were updated. No trace of Site CA-SDI-6751 was found during the survey completed by CH2M HILL in February 2014. Site CA-SDI-6751 was originally recorded in 1978, as a shell scatter, after the EPS was constructed, after the site was graded, and after artificial fill, specifically sand with shell fragments, was deposited. The site was included in two surveys in 2005, but only one of these surveys relocated part of CA-SDI-6751. This recordation (Smallwood, 2005) described the site as two shell scatters, consisting of various species of sparse shell which was highly fragmented. This recordation also noted that the site map filed with the SCIC is incorrect, showing the site as significantly larger than recorded by any consultant. The 2005 (Smallwood, 2005) update shrunk the site boundary, but this new boundary has not been updated by the SCIC, as of this filing. This boundary is shown in Confidential Figure DR32-1 (submitted separately under a request for confidentiality). This recorded site is situated within an area disturbed by the railroad and extensive grading related to the construction of the EPS. Additionally, the site, which is a sparse shell scatter with a single, possible, and not confirmed metavolcanic tool of an unknown tool type, is located in an area known to have artificial fill containing shell fragments. This fill ranges in depths from 2.5 to 10 feet throughout the EPS (Smallwood, 2005). In other areas of the EPS, the fill contains volcanic cobbles and gravels, and small pieces of these cobbles and gravels could easily migrate around the EPS. There are no diagnostic or definitively identified artifacts at CA-SDI-6751. There are no intact soils or ecofacts to indicate that the shell at this site is even cultural and, finally, part of the site as the site boundary is currently drawn indicates that part of the site would have been under the lagoon in 1938 and 1947. No additional work is recommended within the boundaries of this site.

The February survey also included areas within the boundaries of site CA-SDI-16885. This site was originally recorded in 2003 as a small sparse scatter of artifacts and shell. Artifacts recorded include 18 pieces of volcanic and metavolcanic debitage, 28,839 grams of shell, and 2 grams of bone. The site form notes a considerable amount of disturbance, including the removal and redeposition of soil or fill, has occurred over much of the EPS. CA-SDI-16885 was revisited in 2005 and additional artifacts were observed, including a core, core fragments, chipped stone, a hammerstone, a graver or scraper, fire-affected rock, and burned shell. The update again discussed that due to the high level of disturbance within the EPS, the artifacts found at CA-SDI-16885 were redeposited during grading activities within the EPS which have occurred since the 1950s. The site was monitored during borehole testing and no subsurface deposits were identified (Smallwood, 2005). No artifacts associated with this site were relocated during the survey. Although the update for the site form notes that there may be artifacts or archaeological deposits in undisturbed soils near Fuel Oil Tanks #2 and #3, historical aerial photographss indicate that these soils are not undisturbed. Rather, they were graded by 1953 for the construction of the EPS. The trees or bushes visible in 1938 and 1947 were also removed by 1953, when the area was graded. The geotechnical report indicates the area is covered with two types of artificial fill and below the fill, which measures 2.5 to 10 feet over the EPS (Smallwood, 2005), is Quaternary marine terrace. This marine terrace sediment predates the accepted range of human occupation of southern California, as it is at least 80,000 years old (Magorien, 2006). The site lacks integrity of location, as the sediment within the EPS has been graded, moved, and artificial fill has been dumped within the EPS. The same actions have also impacted the integrity of design, as any potential spatial relationships between any features the site may have had or work areas within the site have been destroyed. The setting, feeling, and association of this site has been affected by the modifications to the

lagoon, the construction of the railroad, the freeway, Carlsbad Avenue, and the plant itself. In addition to grading, the dumping of fill and the construction of the plant modified the topography within the site boundary. Integrity of materials has likewise been lost and due to the dumping of artificial fill; it is not clear that all the shell noted within the site boundary is cultural. Finally, due to the presence of fill and the geotechnical report which indicates intact deposition below this fill predates accepted human occupation of southern California, cultural deposits are not anticipated in this sediment and no further work is recommended in this area.

#### **DATA REQUEST**

- 33. If the proposed excavations described in the PTA would not exceed the depth of fill, please:
  - a. Provide documentation of the depth of excavation entailed (if any) for each component of the PTA; and,
  - b. Also describe the depth of existing fill on the project site and substantiate this description by citing relevant plans or other sources. A graphical representation of the depth of fill in areas of proposed excavation would be highly valuable and expedite staff's review and resolution of this issue.

**Response:** All excavations will occur within fill, previously disturbed soils, or soils that do not have potential to yield cultural resources. Geotechnical data indicate that the plant site sediment consists of two kinds of artificial fill overlaying late Pleistocene marine terrace sediment. This sediment, which could potentially be intact under the fill, dates to 80,000 years and older, which predates accepted human occupation of southern California. Given these considerations, it is considered unlikely that intact cultural deposits will be identified during project implementation of the CECP.

#### BACKGROUND: BUILT ENVIRONMENT

Built environment staff also reviewed the PTA, as well as the original September 2007 Application for Certification (AFC), associated cultural resources documents, the September 2008 Project Enhancement and Refinement (PEAR) document, the November, 2009 Final Staff Assessment (FSA), the August 2011 Supplemental Staff Testimony, and the May 31, 2012 Commission Final Decision for the original proceeding. Given the expansion of the areas slated for demolition west of the railroad tracks, proposed expansion of the CECP footprint by 7 acres for new construction purposes, and the complexity of the proposed project changes outlined in the preceding section, staff finds that the PTA does not provide sufficient information to analyze the proposed amendment's potential impacts on built-environment resources. Summarized below are the areas where the project data is insufficient for staff to complete an analysis of the potential impacts to the environment:

• The licensed project included a very narrow built environment survey area confined to the immediate construction area. In September of 2007, JRP (JRP 2007) conducted an architectural field survey to assess the potential for historic architectural resources at the licensed project location. The architectural study area considered the location of above-ground fuel oil storage tanks (ASTs) 5, 6 & 7 (footprint where the 23-acre Licensed CECP project was permitted to be constructed after tank removal) the Cannon Substation, and a segment of the former Atchison, Topeka and Santa Fe Railway's (ATSF) tracks, now owned by North San Diego County Transit District (Carlsbad Energy Center et al. 2008:5.3-15; CEC 2009:4.3-13). AST's 5, 6 & 7 and the Cannon Substation were not evaluated for their significance as historical resources because they were not 50¹ years of age at the time of the survey in 2007. The segment of the ATSF railroad tracks within the EPS boundaries was the only built environment resource evaluated for its potential as a historical resource under CEQA. It was concluded that the ATSF railroad segment was not eligible for listing on either the National Register of Historic

<sup>&</sup>lt;sup>1</sup> JRP limited their investigation to resources 50 years or older. The Energy Commission uses 45 years or older in conformance with state standards for evaluating historic properties.

Places (NRHP) or the California Register of Historical Resources (CRHR). Fuel Tanks 5, 6 and 7 (1968–1976) (JRP 2007i) or 1972–1977 (JRP 2014; 15) and the Cannon Substation (1968–1976) (JRP 2007:i) are now, in 2014, 45 years or older.

- The proposed amendment would be implemented within the bounds of the EPS, which was constructed in the 1950s and is of historic age. The project owner indicates in the PTA that the EPS and affiliated structures have been evaluated for significance under CEQA (CECP 2014a:5.3-2). The project owner subsequently docketed the PTA-referenced historic architectural survey and evaluation on July 14, 2014. The proposed amendment would affect the EPS by demolishing most of its structures and associated facilities, including the fuel tanks proposed for removal in the April 29, 2014 Petition to Remove (CECP 2014b). Several known structures associated with the EPS were not included in the survey and evaluation. These are noted in Tables 1 and 2. Demolition of historic-age structures could cause significant and unavoidable direct, indirect and cumulative impacts on the environment.
- The proposed PTA would require installation of a new ocean water intake pipeline for the ocean water needed for the Amended CECP purified ocean water system (CECP 2014a:2-21). Construction of this pipeline could cause significant and unavoidable direct, indirect, and cumulative impacts on the environment.
- The proposed amendment would alter the use of the EPS ocean water intake facility in Agua Hedionda Lagoon, which was constructed in 1954 concurrent with the EPS, and thus of historic age. Isolation of part of the intake facility would occur by blocking it with concrete plugs and capping the pipes (CECP 2104a:2-38). The Carlsbad Seawater Desalination Project (CSDP or "Poseidon") will require 304 mgd of ocean water to produce 50 mgd potable water, and will utilize a modernized portion of the existing EPS intake facility on the southern end of the outer Agua Hedionda Lagoon. This would also result in the removal and demolition of associated piping, valves, filters and other above and below-ground structures. Demolition/alteration of historic-age structures could cause significant and unavoidable direct, indirect, and cumulative impacts on the environment.
- As proposed, the amended CECP would enlarge the footprint of the 230kV SDG&E Encina switchyard located west of the railroad track and adjacent to the large EPS Enclosure Building (CECP 2104a:2-4). This enlargement may require removal of existing facilities or other ground or structural disturbance, which have not been identified by the project owner in the PTA. Demolition of associated historic-age structures could cause significant and unavoidable direct, indirect, and cumulative impacts on the environment.
- The proposed amendment would construct a new 36-inch pipeline to convey reclaimed water from Carlsbad Recycle Water Facility located at Encina Wastewater Authority complex. The pipeline would connect at Cannon Road and proceed approximately 3,700 feet north along the Avenida Encinas right of way to the project site just north of the planned control facility (CECP 2104a:2-16). Construction of the pipeline could cause significant and unavoidable direct, indirect, and cumulative impacts on the environment during trenching activities.
- The proposed amendment does not evaluate adjacent properties for historic significance. Demolition of the EPS and new construction could both cause significant and unavoidable direct, indirect, and cumulative impacts on the environment.

With the information provided in the PTA and the data gaps outlined in the list above, staff concludes there is insufficient data to complete an analysis of the potential for environmental impacts in the area of built-environment cultural resources, that would not be mitigated by the conditions of certification in the current license described in the Final Decision (CEC 2012a:7.3-7–18). Staff requests the following information to complete its built-environment analysis of the PTA.

**Response:** The Applicant respectfully disagrees with Staff's assertion that the additional elements in the PTA require an expanded study area beyond the methodology applied and required for the licensed facility,

and outside the footprint of the existing EPS property and the project elements described in the PTA. The entire area where any effect to historical resources could occur has been examined by the Applicant and data for these studies has been provided, indicating the documented absence of historical resources. The methodology used to assess potential impacts to cultural resources is the same as was required for the initial licensing and a new requirement should not be imposed for the PTA, which comprises very little new impact. Demolition west of the railroad tracks will not affect historical resources and has no potential to affect historical resources outside of the plant property. In additional, physical boundaries surrounding the EPS include significant physical features including bodies of water, a major interstate highway, and other roadways. Therefore, expansion of the study area is considered unwarranted and would be unnecessarily burdensome.

#### **DATA REQUEST**

39. Prepare a cultural resources inventory report that conforms to the standards described in Title 20, California Code of Regulations sections 1704 and 2012, Appendix B(g)(2)(C). The report for the built-environment resources does not need to be submitted under confidential cover and non-confidential filing is preferred for best public participation.

Cultural Resources Table 1
Built Environment Resources Surveyed for 07-AFC-06 and Petition to Amend

Built Environment Resources Surveyed for 07-AFC-06 and Petition to Amend					
Resource	Associated Structures	Year Built	Surveyed	Evaluated*	Citation
ATSF tracks	Railroad tracks	1882/1906	Yes	Yes; not eligible	JRP 2007:19
Encina Power Station (EPS)			Yes	Yes; not eligible	JRP 2007, 2014
	Units 1, 2, & 3 (D)	1954,1956, 1958	Yes	Yes; not eligible	JRP 2007, 2014
	Units 4 & 5 (D)	1974, 1978	Yes	Yes; not eligible	JRP 2007, 2014
	Fuel Tanks 1-2 (D)	1954,1956	Yes	Yes; not eligible	JRP 2007, 2014
	Fuel Tank 4 (D)	1972	Yes	Yes; not eligible	JRP 2007, 2014
	Fuel Tanks 5-6-7 (D)	1972, 1975, 1977	Yes	Yes; not eligible	JRP 2104
	Paint Storage Building	ca. 1985	Yes	Yes; not eligible	
	Administration Building (D)	1985	Yes	Yes; not eligible	JRP 2014
	Equipment Bay Building (D)	1954-1978	Yes	Yes; not eligible	JRP 2014
	Wastewater Storage Tanks (D)	ca.1985	Yes	Yes; not eligible	JRP 2014
	Compressor Building (D)	ca. 1970	Yes	Yes; not eligible	JRP 2014
	Machine Shop Building (D)	ca. 1970	Yes	Yes; not eligible	JRP 2014
	Storage Building	ca. 1970	Yes	Yes; not eligible	JRP 2014
	Exhaust Stack	1978	Yes	Yes; not eligible	JRP 2014

# Cultural Resources Table 1 Built Environment Resources Surveyed for 07-AFC-06 and Petition to Amend

Resource	Associated Structures	Year Built	Surveyed	Evaluated*	Citation
	Encina Substation 1 & 2	1954, 1975		Yes; not eligible	JRP 2014
	Cannon Substation	1968– 1976/1976– 1984 <sup>2</sup>	Yes; see Table 2	No; less than 50 years old in 2007, not evaluated in 2014	JRP 2007:i,17
	Control Houses (D)	1954, 1958	Yes	Yes; not eligible	JRP 2014
	EPS Power Plant Seawater Intake Structure Partial (D-partial)	1954	Yes	Yes; not eligible	JRP 2014
	EPS Outflow Pond	1954	Yes	Yes; not eligible	JRP 2014
	Security Building	1954	Yes	Yes; not eligible	JRP 2014
	Dredge Dock	ca. 1954	Yes	Yes; not eligible	JRP 2014
	Gas Turbine Generator	ca. 1970	Yes	Yes; not eligible	JRP 2014
	Hazardous Waste Building	ca. 1985	Yes	Yes-not eligible	JRP 2014
	Substation Expansion Area (D)	Unknown	No; see Table 2	No	Carlsbad Energy Center 2014a:2-4
	Railroad Spur	Unknown	No; see Table 2	No	Carlsbad Energy Center 2014a:2-4
	Carlsbad Aquafarm in Agua Hedionda Lagoon	Unknown	No; see Table 2	No	Fishchoice.com 2013; Thai 2013

<sup>\*</sup> Significance evaluations made by JRP and Carlsbad Energy Center provide recommended eligibility; only the lead agency (Energy Commission, in the present case) can make significance determinations under CEQA.

 $<sup>^2\,\</sup>mbox{JRP}$  2007 states different dates on pp. i and 17.

## Cultural Resources Table 2 Built Environment Resources in the PAA<sup>3</sup>

Resource	Associated Structures	Year Built	Surveyed	Evaluated	Citation
Encina Power Station (EPS)					
	Railroad Spur	Unknown	No	No	Carlsbad Energy Center 2014a:2-4
	EPS Discharge Tunnel and Channel	Unknown	No	No	Carlsbad Energy Center 2014a:2-37, 38
	Substation Expansion Area (D)	Unknown	No	No	Carlsbad Energy Center 2014a:2-4
	Carlsbad Aquafarm in Agua Hedionda Lagoon	Unknown	No	No	Fishchoice.com 2013; Thai 2013
ATSF Railroad	Bridge over Agua Hedionda	1950	No	No	JRP 2007:16
	Tracks	1882–1906	Yes	Yes; not eligible	JRP 2007:19
SDG&E Cannon Maintenance Yard (Parcel 5)	May be relocated	Unknown	No	No	Carlsbad Energy Center 2014a:2-37
	Domestic Potable Water Tanks-2 (D)	Unknown	No	No	Carlsbad Energy Center 2014a:2-37
PCH-Carlsbad Boulevard	TBD	Unknown	No	No	
Cannon Road	TBD	Unknown	No	No	
State Beach(es)	TBD	Unknown	No	No	
Carlsbad Strawberry Company/Parcel	TBD	Unknown	No	No	
Pipeline Crossing Agua Hedionda	TBD	Unknown	No	No	
Transmission Lines & Structures North- South	TBD	Unknown	No	No	
Transmission Lines East- West	TBD	Unknown	No	No	

#### **REFERENCES CITED**

**CECP 2014a**—**Carlsbad Energy Center, with CH2M HILL.** *Petition to Amend Carlsbad Energy Center (07-AFC006C).* May. Submitted to Dockets Unit, California Energy Commission, Sacramento. TN 202287-2

**CECP 2014b—Carlsbad Energy Center, with CH2M HILL.** Petition to Remove Obsolete Facilities to Support Construction of the Carlsbad Energy Center Project CEC License for the Carlsbad Energy Center Project,

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<sup>&</sup>lt;sup>3</sup> (D): to be demolished as part of project

- Carlsbad, California (07-AFC- 06C). April. Submitted to Dockets Unit, California Energy Commission, Sacramento. TN 202267.
- Carlsbad Energy Center et al. 2008—Carlsbad Energy Center, Shaw Stone & Webster, and CH2M Hill.

  Carlsbad Energy Center Project (07-AFC-6) Project Enhancement and Refinement Document. July. CH2M Hill, Sacramento, CA. On file, Dockets Unit, California Energy Commission, Sacramento. TN 47257.
- **CEC 2009—California Energy Commission.** Final Staff Assessment, Carlsbad Energy Center Project Application for Certification (07-AFC-6), San Diego County. November. Sacramento, CA. CEC-700-2008-014-FSA. On file, Dockets Unit, California Energy Commission, Sacramento. TN 54068.
- **CEC 2012a—California Energy Commission.** *Carlsbad Energy Center Project: Commission Decision.* June. Sacramento, CA. CEC-800-2011-004-CMF. 07-AFC-6. On file, Dockets Unit, California Energy Commission, Sacramento. TN 66185.
- **CH2M Hill 2007—CH2M Hill.** Application for Certification, Carlsbad Energy Center Project. 2 vols. September. Prepared for Carlsbad Energy Center, Carlsbad, CA. On file, Dockets Unit, California Energy Commission, Sacramento. 07-AFC-6. TN 42299.
- **Fishchoice.com 2013—Fishchoice.com**. Carlsbad Aquafarm, Inc-Carlsbad Aquafarm Cultivates a California Flavor. February 28.
- Helton 2007—Clint Helton. Technical Memorandum: Confidential Carlsbad Energy Center Project (CECP); Cultural Resources Assessment. July 17. CH2M Hill. Prepared for Carlsbad Energy Center, Carlsbad, CA. Appendix 5.3F in Application for Certification, Carlsbad Energy Center Project, by CH2M Hill, Vol. 2. September. Prepared for Carlsbad Energy Center, Carlsbad, CA. On file, Dockets Unit, California Energy Commission, Sacramento. 07-AFC-6. TN 42299.
- JRP 2007—JRP Historical Consulting. Historic Resources Inventory and Evaluation Report, Carlsbad Energy Center Project. July. Davis, CA. Prepared for CH2M Hill, Santa Ana, CA. Appendix 5.3B in Application for Certification, Carlsbad Energy Center Project, by CH2M Hill, Vol. 2. September. Prepared for Carlsbad Energy Center, Carlsbad, CA. On file, Dockets Unit, California Energy Commission, Sacramento. 07-AFC-6. TN 42299. Also included in JRP 2014.
- JRP 2014—JRP Historical Consulting. Historic Resources Inventory and Evaluation Update Report, Carlsbad Energy Center Project, Encina Power Plant. March. Prepared for CH2MHILL. On file, Dockets Unit, California Energy Commission, Sacramento. 07-AFC-6. TN 202699.
- Magorien 2006—D. Scott Magorien. Geology, Soils, Seismicity, and Environmental Assessment EIR, Encina Seawater Desalination Project. March 10. D. Scott Magorien Engineering Geologist, Newport Beach, CA. Prepared for RBF Consulting, Ontario, CA. Appendix 5.4A in Application for Certification, Carlsbad Energy Center Project, by CH2M Hill, Vol. 2. September. Prepared for Carlsbad Energy Center, Carlsbad, CA. On file, Dockets Unit, California Energy Commission, Sacramento. 07-AFC-6. TN 42299.
- OHP 1990— Office of Historic Preservation (California). Archaeological Resource Management Reports (ARMR): Recommended Contents and Format. February. Sacramento, CA. Electronic document, http://ohp.parks.ca.gov/pages/1054/files/armr.pdf, accessed May 5, 2014.
- OHP 1991—Office of Historic Preservation. *Guidelines for Archaeological Research Designs*. February. Preservation Planning Bulletin 5. Sacramento, CA. Electronic document, http://ohp.parks.ca.gov/pages/1069/files/arch%20research%20design.pdf, accessed May 5, 2014.
- OHP 1995—Office of Historic Preservation. *Instructions for Recording Historical Resources*. March. Sacramento, CA. Electronic document, http://ohp.parks.ca.gov/pages/1054/files/manual95.pdf, accessed May 5, 2014.
- **Smallwood 2005—Josh Smallwood.** Letter Regarding Archaeological/Paleontological Monitoring of Boring Activities, San Diego County Water Authority's Seawater Desalination Project, Encina Power Station, city

of Carlsbad, San Diego County, California, CRM TECH Contract #1724. December 20. CRM TECH, Riverside, CA. Prepared for RBF Consulting, Irvine, CA. On file, South Coastal Information Center, California Historical Resources Information System, San Diego. Study Smallwood 05-01.

**Thai 2013—Minerva Thai.** Much Ado About Fooding Online Blog by Minerva Thai *Meet Carlsbad Aquafarm:* A Deep Dive into Oyster Farming (Part IV) Monday, September 30.

Response: Please see response to DR 38.