

## DOCKETED

<b>Docket Number:</b>	93-AFC-02C
<b>Project Title:</b>	Compliance - Application for Certification SMUD's Proctor & Gamble Cogeneration Project
<b>TN #:</b>	203559
<b>Document Title:</b>	Sacramento Cogeneration Authority's Data Response, Set 1
<b>Description:</b>	Responses to CEC Data Requests 1 through 11
<b>Filer:</b>	John Carrier
<b>Organization:</b>	CH2M HILL
<b>Submitter Role:</b>	Applicant Consultant
<b>Submission Date:</b>	1/23/2015 12:17:05 PM
<b>Docketed Date:</b>	1/23/2015



**CH2M HILL**  
2485 Natomas Park Drive  
Suite 600  
Sacramento, CA 95833  
**Tel 916.286.0224**  
**Fax 916.614.3424**

January 23, 2015

Ms. Mary Dyas  
Compliance Project Manager  
California Energy Commission  
1516 Ninth Street, MS-15  
Sacramento, CA 95814

Subject: SCA's Petition to Amend, Procter and Gamble Cogeneration Project  
Data Response, Set 1  
93-AFC-2C

Dear Mary:

Please find attached Sacramento Cogeneration Authority's (SCA) response to CEC Cultural Data Requests numbers 1 through 11.

Please let me know if you need anything else.

Sincerely,

CH2M HILL

A handwritten signature in blue ink that reads "John L. Carrier".

John L. Carrier, J.D.  
Program Manager

Encl.

---

# **Addition of an Auxiliary Boiler and Associated Facilities, Procter & Gamble Project**

**(93-AFC-2C)**

**Data Response, Set 1  
(Response to Cultural Resources Data  
Requests 1 through 11)**

Submitted to the  
**California Energy Commission**

Submitted by  
**Sacramento Cogeneration Authority**

January 23, 2015

With Assistance from  
**CH2MHILL**  
2485 Natomas Park Drive  
Suite 600  
Sacramento, CA 95833

# Contents

---

<b>Section</b>	<b>Page</b>
<b>Introduction</b> .....	<b>1</b>
<b>Cultural Resources (1-11)</b> .....	<b>2</b>
 <b>Figures</b>	
Figure DR8-1 Proposed Plant Modifications (7.5-minute quad base)	
Figure DR10-1 Proposed Plant Modifications (aerial photo base)	
 <b>Attachments</b>	
DR11-1 Missing Cultural Studies and Information (Confidential)	

# Introduction

---

Attached are the Sacramento Cogeneration Authority's (SCA) responses to the California Energy Commission (CEC) Staff's Cultural Resources data requests numbers 1 through 11 for the SCA Procter & Gamble Petition to Amend (93-AFC-2C). The CEC Staff served these data requests on December 23, 2014. The background and data request text used in this response are extracted from the CEC's December data requests. The responses are presented in the same order as provided by CEC Staff and are keyed to the Data Request numbers (1 through 11).

Graphics are numbered in reference to the data request number. For example, the first figure used in response to Data Request 8 is Figure DR8-1, and so on. Similarly, attachments submitted in response to a data request are grouped together at the end of this document and are also numbered to match the data request number. The figures and attachments are located at the end of this data response and are in numerical order of the data request number.

# Cultural Resources (1-11)

---

## Background: Transportation Route

The proposed route(s) described in the petition to amend (PTA) to transport Boiler 1B from the Sacramento Co-Gen facility at Campbell Soup Supply Company (CSSC) to the Co-Gen facility at Proctor & Gamble (P&G) might encounter overhead or other obstructions (SCA 2014:3-15). The PTA goes on to describe the Central Route as the preferred route, noting that it has the fewest overhead obstructions and the ability to cross over to the opposite side of the street to maneuver around overhead traffic lights. However, the description provided is not firm on whether or not obstructions would be encountered and whether removal or adjustment of traffic and transportation facilities might be required. Removal or adjustment of infrastructure such as poles, curbs, transmission lines, or other facilities has the potential to create ground disturbance and subsequently, the potential to impact historical resources.

### Data Requests:

1. Please describe modifications to any roadway or intersection that may be required for transportation of Boiler 1B.

**Response:** There are no modifications required or anticipated at any intersection along any of the three identified transportation routes. Flagging may be required to allow lane swapping as necessary to avoid certain signal lights, but even these activities wouldn't necessitate any modifications to existing facilities.

2. If modifications are required, please describe the potential for ground disturbance, the degree of disturbance and/or the potential impacts on any resources of historic age<sup>1</sup> along the route(s).

**Response:** No modifications or ground disturbances are required.

## Background: Removal of Boiler 1B

At staff's request, the petitioner (SCA/SMUD) provided a figure (SCA 2014b, attached) showing the location of the building housing Boiler 1B and a photograph of the boiler itself to assist staff in understanding exactly where Boiler 1B is currently located.

According to the supplemental information provided by the petitioner on November 24, 2014, Boiler 1B is currently located at the CSSC plant at 6200 Franklin Boulevard in Sacramento County, in a facility designated as the Old Boiler House. Additionally, the petitioner provided information on December 9, 2014, revealing that the boiler house is part of the original CSSC factory whose construction began in 1947 (SCA 2014c). This indicates that the CSSC and facilities such as the boiler house are of historic age. The petitioner also provided a chronology of upgrades to the boiler(s) at the CSSC. The chronology indicates that Boiler 1B was one of several boiler replacements which took place on the CSSC plant site beginning in 1986, continuing into 1990. The CSSC CoGen plant was licensed in 1994 to provide additional steam capacity to the CSSC and is located adjacent to the CSSC plant.

---

<sup>1</sup> Defined as resources that are 45 years or older (OHP 1995.2).

What is not understood from the information provided to date are the potential impacts to the 1947 CSSC plant, how the removal of Boiler 1B would occur, and what type of modifications to the boiler house, excavation or ground disturbance might be required to accomplish this task. The petitioner can fill these information gaps for staff by providing the information requested below.

**Data Requests:**

3. Is any ground disturbance anticipated for the Boiler 1B removal at the CSSC plant? If so, please describe in detail the extent of ground disturbance anticipated.

**Response:** No ground disturbance is anticipated. The boiler will be removed from its foundation and underlying soil will not be disturbed.

4. What was the depth of previous excavation at the location of Boiler 1B?

**Response:** The maximum depth is estimated to be 3 feet.

5. What modifications, if any, to the “boiler house” structure will be required to remove Boiler 1B?

**Response:** See response to item 6.

6. If there will be ground disturbance and/or modifications to the boiler house, please conduct a cultural resources inventory of the proposed activities at the CSSC plant to the standards described in Title 20, California Code of Regulations, section 1704(b)(2), Appendix B(g)(2)(B)–(C). If all proposed removal activities would occur on paved or graveled surfaces, and do not require excavation, the petitioner need not conduct an archaeological survey as part of the cultural resources inventory. If modification would be made to the boiler house, please evaluate the Old Boiler House under the California Environmental Quality Act’s criteria for historical resources as part of the cultural resources inventory referred to previously in this paragraph.

**Response:** Planned temporary changes to the “boiler house” structure are limited to:

- Temporary removal and reinstallation of the roll-up door and associated side door, and the associated metal siding up to an elevation approximately 17 feet above ground level;
- Temporary removal and reinstallation of electrical conduits;
- Temporary removal and reinstallation of a portion of the roof required to allow a crane access to the boilers.

The subject doors, siding, and conduit were installed after the installation of the new boilers in 1990; therefore, their temporary removal and reinstallation upon completion of the project would not affect the historical integrity of the building in terms of materials, design, workmanship, association, location, feeling, or setting; nor would it constitute modification of the structure because all original materials will be reinstalled in their original locations and retain their original functions, as permitted under the *Secretary of the Interior’s Standards for the Treatment of Historic Properties*, 1995; see especially *Standards for Preservation*, numbers 1 -7:

1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces, and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.
2. The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate, and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color, and texture.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

(see: [http://www.nps.gov/history/local-law/arch\\_stnds\\_8\\_2.htm](http://www.nps.gov/history/local-law/arch_stnds_8_2.htm))

The proposed temporary removals of materials and their reinstallation also meets applicable portions of the standards for restoration, rehabilitation, and reconstruction.

In addition, temporary removal of siding and roof panels does not constitute a modification of the structure, because the original siding and roof panels will be replaced in their original positions. The boilers to be removed, as noted, were not original to the building, so their removal does not constitute a loss of integrity to the interior spaces.

There are no planned modifications to the building's existing concrete structure, nor any ground disturbance.

This information represents the planned path forward of the contractor who previously bid on the construction. A review of the contractor's plan confirms that the plan's content is sound and sensible.

## Background: Construction at P&G

Boiler 1B is proposed to be installed on the grounds of the P&G plant at 5000 83rd Street, within the city of Sacramento. Section 2.0 of the PTA provides general information but details have not been provided as to the method of installation or the potential for ground disturbing activities.

## Data Requests:

7. What is the depth of excavation required to build the Boiler 1B foundation at the project site?

**Response:** The depth of excavation shall not exceed 48 inches. Once final design is completed, the depth of disturbance may be less.

8. Please describe the nature of the utility tie-in and display the location on a 7.5-minute topographic map of the project site. How deep would excavation need to be? How deep was previous excavation at this location?

**Response:** A new overhead pipe rack will be installed between the new facilities and the existing pipe rack (see Figure DR8-1, at end of data responses). The excavation required for the new segment of the pipe rack will just be footings for the support structure. Excavations will not exceed 24 inches in depth. Once final design is completed, the depth of disturbance may be less. There were no previous foundations at this location.

9. What “associated facilities” would need to be constructed and installed? Please map their locations on a 7.5-minute topographic quadrangle and describe them, with reference to prior depth of excavation and proposed excavation for new associated facilities.

**Response:** New facilities include the boiler/economizer/fans assembly, the selective catalytic reduction (SCR), the ammonia injection grid, the emissions stack, the boiler feedwater pumps, the deaerator, the blowdown tank, and tie-ins to existing plant systems (steam, feedwater, ammonia, gas, air and water services). The existing ammonia injection system will be used. The SCR and ammonia injection grid are integral with the boiler/economizer/fans assembly and share a foundation. The emissions stack, the deaerator, and the boiler feed pumps are located nearby but the exact location will not be determined until final design. One of the two locations (shown as locations 1 and 2 on Figure CR8-1) will be used. No new equipment shall require a foundation with a depth of excavation in excess of 48 inches.

10. Please describe and map on a 7.5-minute topographic quadrangle and aerial photograph the proposed tie-in to the substation. Include depths of proposed and previous excavations, if applicable.

**Response:** Figure DR8-1 shows the proposed facilities on a 7.5-minute quad map. Figure DR10-1 provides the same information on a recent aerial photograph. Disturbance information is provided in the responses to Data Requests 8 and 9. No foundations will be required greater than 48 inches deep.

## Background: Records Search Results

11. Certain studies and information are missing from the records search documented in Helton (2014:Confidential Attachment A). These are primarily architectural surveys and evaluations within a one-mile radius of the proposed project amendment. In addition, certain maps or plats were not included.

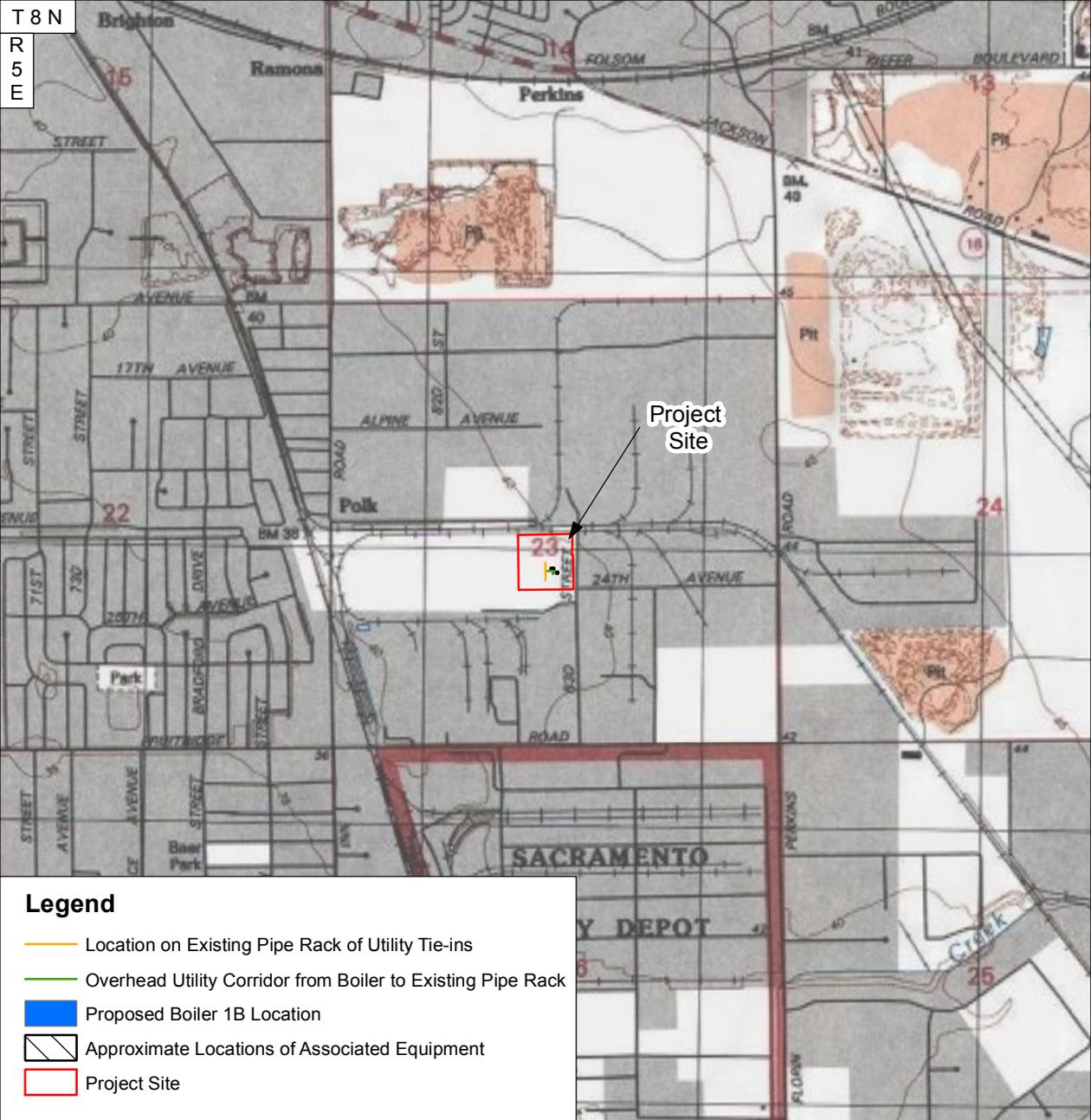
- a. SA-7130 (Hatoff and Egheman 2002) records several cultural resources. If this report covers a historic architectural survey or archaeological excavations, staff will require a copy of this report.
- b. SA-3405 (Maniery 1995) is an architectural survey; staff requires a copy.
- c. SA-310B (Bakarich and Rondeau 1980) is an architectural survey; staff requires a copy.
- d. SA-3397 (USACE 1998) is an architectural survey and evaluation; staff requires a copy.
- e. SA-3373 (Green 1998) is an architectural survey and evaluation; staff requires a copy.

Examination of prior records search materials shows record of survey SA-379 along Florin-Perkins Road, within the 1-mile buffer (Cleland et al. 1987). This document includes management provisions for historic architecture, and therefore, should be provided to staff.

**Response:** Copies of these documents, provided by the California Historical Resources Information System (CHRIS), are being submitted as Confidential Attachment DR11-1 under a repeated request for confidentiality.

**Figures**

---



**Legend**

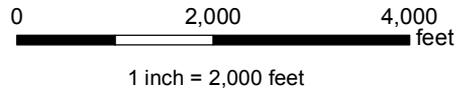
-  Location on Existing Pipe Rack of Utility Tie-ins
-  Overhead Utility Corridor from Boiler to Existing Pipe Rack
-  Proposed Boiler 1B Location
-  Approximate Locations of Associated Equipment
-  Project Site

**AUXILIARY BOILER LICENSE AMENDMENT - SACRAMENTO COGENERATION AUTHORITY**

The project site is approximately 9.564 acres located in the central area of the County of Sacramento in the city of Sacramento.

The project site is located on the Sacramento East USGS 7.5-minute quadrangle map; The project occurs within Township 8 North and Range 5 East, Section 23.

Center coordinates for the project site are:  
 WGS84 Latitude 38.531035, Longitude -121.400367  
 UTM Zone 10 South NAD83 Northing 4265949m, Easting 639428m



Data Source:  
 - Area West Environmental, Inc. 2015  
 - ESRI ArcGIS Online, USGS and  
 ©2013 National Geographic Society

Date: 1-23-15

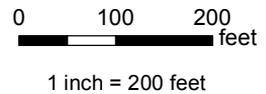


Figure DR8-1 Proposed Plant Modifications



AUXILIARY BOILER LICENSE AMENDMENT - SACRAMENTO COGENERATION AUTHORITY

-  Overhead Utility Corridor from Boiler to Existing Pipe Rack
-  Location on Existing Pipe Rack of Utility Tie-ins
-  Approximate Locations of Associated Equipment
-  Project Site (9.564 acres)
-  Proposed Boiler 1B Location



Data Source:  
 - Area West Environmental, Inc. 2015  
 - ESRI ArcGIS Online; Aerial  
 Background, Accessed January, 2015

Date: 1-23-15



## **Attachments**

---

**Confidential Attachment DR11-1**  
**Missing Cultural Studies and Information**

---

Attachment DR11-1 has been submitted under a repeated request for confidential designation.