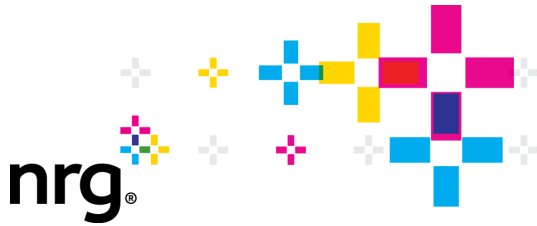


## DOCKETED

<b>Docket Number:</b>	07-AFC-06C
<b>Project Title:</b>	Carlsbad Energy Center - Compliance
<b>TN #:</b>	211679
<b>Document Title:</b>	Construction Traffic Control and Implementation Plan Amended Carlsbad Energy Center Project
<b>Description:</b>	The purpose of this CTCIP is to identify mitigation, monitoring, and compliance measures to ensure compliance with the COC TRANS-1. This CTCIP is for Phase II activities of the Amended CECP including site preparation, construction and commissioning of the Amended CECP as modified by the PTA.
<b>Filer:</b>	Jonathan Fong
<b>Organization:</b>	CH2M Hill
<b>Submitter Role:</b>	Applicant Consultant
<b>Submission Date:</b>	5/31/2016 1:33:07 PM
<b>Docketed Date:</b>	5/31/2016



**Carlsbad Energy Center LLC**  
5790 Fleet Street, Suite 200  
Carlsbad, CA 92008  
Phone: 760-710-2156  
Fax: 760-710-2158

November 18, 2015

Mr. Jonathan Fong  
Compliance Project Manager  
Docket No. 07-AFC-6C  
California Energy Commission  
1516 Ninth Street, MS-2000  
Sacramento, CA 95814

**RE: AMENDED CARLSBAD ENERGY CENTER PROJECT,  
DOCKET NO. 07-AFC-06C, CONDITION OF CERTIFICATION,  
TRANS-1, CONSTRUCTION TRAFFIC CONTROL AND  
IMPLEMENTATION PLAN**

Dear Mr. Fong:

Carlsbad Energy Center LLC ("Project Owner") submits the attached revised traffic control plan (Plan) in compliance with Condition of Certification (COC) TRANS-1 for the construction phase of work for the Amended Carlsbad Energy Center Project (Amended CECP) located at 4600 Carlsbad Boulevard, Carlsbad, California.

COC TRANS-1 requires the Project Owner consult with the City of Carlsbad (City), then prepare and submit a traffic control plan to the City for review and comment and to the California Energy Commission (CEC) Compliance Project Manager (CPM) for review and approval. The Project Owner consulted with the City of Carlsbad traffic engineer concerning the construction phase of work. This revised Plan incorporates their comments.

The Project Owner requests your review and approval of this Plan.

If you have any questions regarding this submittal, please contact George Piantka at (760) 710-2156.

Sincerely,

George Piantka,  
Sr. Director, Regulatory Environmental Services  
NRG Energy, West Region

Enclosure: TRANS-1, Construction Traffic Control and Implementation Plan  
Amended Carlsbad Energy Center Project, (07-AFC-06C), CH2M Hill,  
November 2015

Cc: John Kim, Traffic Division Manager, City of Carlsbad  
File

**Construction Traffic Control  
and Implementation Plan  
Amended Carlsbad Energy Center Project**

**(07-AFC-06C)**

**San Diego County, California**

Prepared for  
**Carlsbad Energy Center LLC**  
5790 Fleet Street, Suite 200  
Carlsbad, CA 92008

November 2015

**CH2MHILL®**  
6 Hutton Centre Drive, Suite 700  
Santa Ana, CA 92707

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# Acronyms and Abbreviations

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Amended CECP	Amended Carlsbad Energy Center Project
CEC	California Energy Commission
COC	Condition of Certification
CPM	Construction Compliance Manager
CTCIP	Construction Traffic Control and Implementation Plan
EPS	Encina Power Station
I-5	Interstate 5
NCTD	North County Transit District
Project Owner	Carlsbad Energy Center LLC
PTA	Petition to Amend
SDG&E	San Diego Gas and Electric

# Introduction

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Carlsbad Energy Center LLC (“Project Owner”) has prepared this Construction Traffic Control and Implementation Plan (CTCIP) for the Amended Carlsbad Energy Center Project (“Amended CECP” or “Project”) in San Diego County, California. This CTCIP is applicable to the activities associated with the Petition to Amend (PTA), as submitted by the Project Owner in April of 2014, and has been prepared in accordance with Condition of Certification (COC) TRANS-1 in the California Energy Commission’s (CEC’s) Amended CECP Final Decision (07 AFC-06C; July 2015).

The purpose of this CTCIP is to identify mitigation, monitoring, and compliance measures to ensure compliance with the COC TRANS-1. This CTCIP is for Phase II activities of the Amended CECP including site preparation, construction and commissioning of the Amended CECP as modified by the PTA.

The Project Owner consulted with the City of Carlsbad concerning traffic controls for the Phase I demolition/removals and soil remediation activities. After CEC Compliance Project Manager (CPM) approval, Phase I activities were approved in December 2014 (demolition of tanks 5, 6, and 7) and August 2015 (demolition of tanks 1, 2, and 4, and soil remediation). Phase I activities concluded in November 2015. The City of Carlsbad was again consulted with in November 2015 for this revised CTCIP. Comments received from the City of Carlsbad have been incorporated into this Plan.

## 1.1 Project Background

The Amended CECP is being constructed to meet the electrical resource needs for the San Diego County Region as identified by the California Independent System Operator, the CEC, the California Public Utilities Commission, and San Diego Gas and Electric (SDG&E). This includes contributing electricity to reserves that will ensure a reliable energy supply and local and regional electrical transmission grid support in San Diego County and the southern California region.

## 1.2 Project Location

The Amended CECP site is located in Carlsbad, San Diego County, California (Figure 1). The site address is 4600 Carlsbad Boulevard, Carlsbad, California 92008. The Amended CECP site is located on a portion of the approximately 95-acre Encina Power Station (EPS) property located in Township 12 South, Range 4 West, Section 7, in San Diego County. Elevation of the Amended CECP site varies between approximately 32 and 50 feet above mean sea level. The Amended CECP site is located within the northeastern portion of the existing EPS property, and is bordered to the east by Interstate 5 (I-5), to the south by the SDG&E maintenance yard and Cannon Substation, to the west by the Pacific Ocean, and to the north by the Agua Hedionda Lagoon. The Amended CECP site is bisected by the North County Transit District (NCTD) Railroad right-of-way that runs north and south through the EPS. Cabrillo Power I LLC operates a private rail crossing under a license agreement with the NCTD, enabling internal vehicle traffic to cross the rail line. Residential, commercial, agricultural, and open space land uses are also situated nearby.

## 1.3 Project Description

The Amended CECP has been divided into four phases as follows:

- **Phase I** - Above grade demolition/removal activities for Tanks 1, 2, 4, 5, 6, and 7 including soil remediation in the tank basins, as needed, and berm removal between Tanks 4 and 5, 5 and 6, and 6 and 7. This phase includes soil disturbance and excavations associated with soil remediation activities. Above grade demolition and removal of Tanks 5, 6 and 7 is being accomplished under the existing CEC License for CECP.

- **Phase II** – Site preparation, Construction, Commissioning and Operation of the Amended CECP as modified by the PTA.
- **Phase III** – Retirement and decommissioning of the EPS facility.
- **Phase IV** – Demolition of the EPS facility. Phase IV specifically excludes below grade demolition and site remediation, which will be accomplished under the authority of San Diego County Environmental Health Department (site remediation) and the City of Carlsbad (redevelopment of the site for future use) subsequent to the completion of Phase IV.

Construction equipment will be typical of construction work and will include excavation equipment (such as track hoes, front-end loaders and back-hoes), off-road forklifts, man-lifts, small diesel generators, delivery trucks, 10-wheel dump trucks, semi-tractor trailer trucks, cranes, cement trucks, and construction crew support trucks. Oversized loads will be delivered on multiple axel trucks with escort vehicles. If construction were to occur after dark, portable, diesel powered construction lights will be provided. The average construction workforce is expected to range in size from 150 to 250 workers at any one time with a peak of 279 workers. Construction activities are anticipated to occur over an approximately 24-month period.

This CTCIP has been prepared to address Amended CECP activities and contractors will be required to acknowledge the CTCIP requirements as part of their procurement process.

## SECTION 2

# Condition of Certification

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The CEC issued COC TRANS-1, which requires preparation and implementation of a traffic control plan to mitigate potential traffic impacts during construction/demolition of the Amended CECP. TRANS-1 requires preparation of a CTCIP as follows.

**TRANS-1:** The project owner shall consult with the City of Carlsbad and prepare and submit to the City of Carlsbad for review and comment and the Compliance Project Manager (CPM) for approval a construction/demolition traffic control plan. The plan shall be implemented during all phases of construction/demolition and shall address the following issues:

- Timing of truck trips, including heavy equipment and building materials deliveries, especially those that would cross the railroad tracks
- Directing construction and demolition traffic with a flag person at a minimum for trucks traveling eastbound on Cannon Road from the SDG&E Service Gate to cross the railroad tracks
- Signing, lighting, and traffic control device placement if required
- Need for construction work hours and arrival/departure times outside and during peak traffic periods
- Ensure access for emergency vehicles to the project site
- Temporary closure of travel lanes
- Access to adjacent residential and commercial property during construction of all pipelines
- Specify construction truck -related haul routes
- Identify safety procedures for exiting and entering the site access gate

**Verification:** At least 30 days prior to tank demolition, the project owner shall provide the traffic control plan to the City of Carlsbad for review and comment and to the CPM for review and approval.

Mitigation, monitoring, and compliance measures to ensure the Amended CECP complies with COC TRANS-1 are detailed in Sections 3 and 4 of this CTCIP.

In addition, the Crossing Safety Plan prepared for Amended CECP, applicable to TRANS-4, is incorporated by reference. The Crossing Safety Plan addresses pedestrian and vehicular traffic, including the transport of heavy/oversize loads, across the internal rail crossing.



# Transportation Routes and Access

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Phase II activities of the Amended CECP including site preparation, construction and commissioning is anticipated to occur over an approximately 24-month period, and will typically occur Monday through Friday from 7:00 a.m. to 6:00 p.m. and 8:00 a.m. to 6:00 p.m. on Saturdays.

The number of construction workers will fluctuate throughout the 24-month construction period, with the peak construction effort onsite occurring during month 13, when 279 workers are projected. Based on this assumption, activities would generate a total of 558 daily one-way auto trips (279 inbound trips and 279 outbound trips, assuming no carpooling occurs). The workforce will arrive before the morning peak hour; however, workforce-related trips could occur during the afternoon peak hour.

The truck trips will peak during month 6 when up to 29 truck deliveries (58 one-way trips) per day are expected. Truck trips will be spread throughout the day, beginning at approximately 8:00 a.m. and ending at approximately 3:00 p.m. to avoid high traffic hours (high traffic at Cannon Road and I-5 occurs between 3:00 p.m. and 7:00 p.m.).

## 3.1 Workforce Site Access

Workforce access to the Amended CECP site has been established as exiting from I-5 (north or southbound) at Cannon Road, and heading west, then turning right at Avenida Encinas and proceeding north into the gate at the Cannon Substation (Figure 2).

## 3.2 Truck Routes/Access

Transportation of materials generated during Amended CECP activities will occur on arterial streets and freeways approved for truck traffic to minimize any potential impact on the local neighborhoods. Primary truck access to the Amended CECP site will be via I-5 to Cannon Road to the driveway located at the north end of Avenida Encinas. A second site access point will be located off of Cannon Road at the gate to the SDG&E service yard located immediately west of the rail line. Site access and truck routes are shown in Figure 2 and are described below.

### 3.2.1 Primary Truck Route

The primary haul route for Amended CECP activities has been established as exiting from I-5 (north or southbound) at Cannon Road and traveling west, then turning right at Avenida Encinas and proceeding north into the gate at the Cannon Substation. Trucks would use the same route in reverse to leave the site. Heavy haul and oversized load deliveries will only be made via the primary truck route.

### 3.2.2 Secondary Truck Route

The second haul route will be available by exiting I-5 (north or southbound) at Cannon Road and traveling west, then after crossing the rail line, taking an immediate right into the SDG&E service yard gate. Trucks would use the same route in reverse to leave the site.

Workers will use local roads in the area as well as the roads described above to access the secondary site entrance on Avenida Encinas.

Based on Section 5.8, *Traffic and Transportation*, of the CECP Application for Certification (Carlsbad Energy Center LLC, 2007) and Section 5.12 *Traffic and Transportation*, of the PTA (Carlsbad Energy Center LLC, 2014), the surrounding roadways and intersections currently operate within acceptable standards and are expected to continue to do so with the estimated Amended CECP traffic. There would be no impact to the surrounding intersections or roadways on a daily or peak-hour basis and the transportation route will not require any new construction or modifications to support traffic for the Amended CECP.

### 3.3 Emergency Vehicle Access

Emergency vehicles (Figure 3) will have access to the site through the SDG&E service yard gate off of Cannon Road, as well as the from the existing driveway on Carlsbad Boulevard.

## SECTION 4

# Traffic Control Procedures

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No temporary lane closures are expected for the Amended CECP; however, if temporary lane closures are determined to be necessary, the contractor will coordinate with the City of Carlsbad to develop lane closure plans at that time.

The following traffic control measures will be implemented:

- Only authorized access through the site is allowed. Safety signs will be posted in conformance with applicable state and federal regulations, and, when necessary, around all equipment, transformers, and other high-voltage facilities.
- Construction delivery trucks will be staggered throughout the day to avoid queuing onto public roadways.
- Truck traffic will be managed in compliance with the City of Carlsbad permit requirements.
- Flagmen will be used at all entrances and exits when trucks must make left turns across streets with no traffic signals.
- In compliance with TRANS-4: Crossing Safety Plan, vehicles, equipment, and pedestrian foot traffic must cross railway tracks only at the established Railroad crossing and only under the direct supervision of a safety crossing monitor/flag man. Large trucks (e.g., lowboys) will not be allowed to use the private rail crossing. Lowboys will be required to access the Amended CECP site via the Avenida Encinas entrance only, and not use the private rail crossing on the EPS property. For oversize vehicles or trucks that may take extra time to cross the tracks, the rail crossing safety monitor/flag man will hold the traffic until there is adequate time to complete the cross safely and before any scheduled trains may arrive. A flag man will also be used for trucks traveling eastbound on Cannon Road from the SDG&E service gate to cross the railroad tracks.
- Truck trips will be scheduled to occur outside of the morning and afternoon peak hour. The field construction manager will coordinate with the City of Carlsbad Transportation Department to determine the appropriate peak hour restrictions.
- Traffic patterns and safety of operations will be monitored by the field construction manager and modifications will be made to travel routes, traffic control measures, and transport scheduling as necessary to address changes in conditions in real time.
- While at the site, vehicles will be required to maintain slow speeds for safety purposes and for dust control measures.
- Trucks transporting waste will be restricted to the primary heavy haul route at all times for travel. Offsite truck routes are shown in Figure 2.
- Safety at the main entrance will be addressed by prohibiting stopping/parking and not allowing construction material storage near the entrance.
- A security guard will be stationed at all construction entrances and exits during Amended CECP activities.
- No changes to or near the existing main entrance are proposed and emergency access will not be affected. Emergency access will continue to be maintained at the site at all times (Figure 3).
- Truck drivers will be required to minimize unnecessary stops on public roadways, to maintain speeds no greater than posted speed limits, and to operate their vehicles in ways that minimize excessive noise and emissions.

- Truck facilities (e.g., waiting areas, inspection areas, etc.) will be located on the property and away from public roads.
- No signs, lighting, and/or traffic control devices will be needed during Amended CECP activities.
- No road/lane closures or detour routes during Amended CECP activities are anticipated. The contractor would be required to notify local emergency service providers (City of Carlsbad Police and Fire departments) and the local transit provider (NCTD) of any road closures and suggest alternate detour routes. Access to commercial or residential properties is not expected to be affected. However, if access to these properties is affected, the contractor will notify affected parties as necessary to minimize any impacts on access to their properties.
- All trucks entering and leaving the property will be covered as necessary.
- All applicable local, state, and federal traffic control measures will be followed to ensure the safety of the local and construction traffic. Trucks will follow all applicable traffic laws and obey posted signs.
- The Project Owner will obtain all necessary transportation permits.

## SECTION 5

# Contacts

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The following is a list of contacts that, if needed, could be utilized for implementation of this CTCIP:

- California Highway Patrol, Border Division, Oceanside (650). 1888 Oceanside Blvd., Oceanside, CA 92054, (760) 757-1675
- Caltrans, District 11, 4050 Taylor Street, San Diego, CA 92110, (619) 688-6699
- City of Carlsbad Fire Department, 2560 Orion Way, Carlsbad, CA 92010, (760) 931-2141
- City of Carlsbad Police Department, 2560 Orion Way, Carlsbad, CA 92010, (760) 931-2197
- San Diego County Sheriff (non-Emergency) 858-565-5200
- City of Carlsbad, Transportation Department, Traffic Operations Division, 1635 Faraday Avenue, Carlsbad, CA 92008, (760) 602-2730
- North County Transit District (NCTD), 205 South Tremont Street, Oceanside, CA, 92054, (760) 966-6700  
Website: <http://www.gonctd.com/system-map>
- United States Environmental Protection Agency (EPA). Regional Emergency Response Office, Region 9, 24-hour Environmental Emergencies, (800) 300-2193 and San Diego Border Office, (619) 235-4765

SECTION 6

# References

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Carlsbad Energy Center LLC. 2007. Application for Certification for Carlsbad Energy Center Project. Submitted to the California Energy Commission on September 11, 2007.

Carlsbad Energy Center LLC. 2014. Petition to Amend for Carlsbad Energy Center Project. Submitted to the California Energy Commission on May 1, 2014.

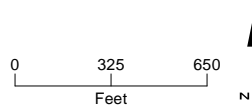
Carlsbad Energy Center LLC. 2015. TRANS-4 Crossing Safety Plan for the Amended Carlsbad Energy Center Project. November 2015.

California Energy Commission, Carlsbad Energy Center Project Amendment Final Decision, Docket Number 07-AFC-06C, July 2015.



- LEGEND**
- Amended CECP Site Boundary
  - Encina Power Station Site
  - Construction Staging/Laydown/Parking Areas
  - Railroad Crossing Arms/Automatic Gates

Aerial Imagery Source: Google Earth Pro, 2015

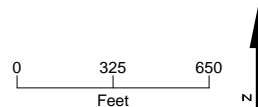


**Figure 1**  
**Traffic Control Implementation Plan**  
 Amended Carlsbad Energy Center Project



- LEGEND**
- Amended CECP Site Boundary
  - Encina Power Station Site
  - Construction Staging/Laydown/Parking Areas
  - Railroad Crossing Arms/Automatic Gates

- Construction Worker Access
- Primary Truck Access
- Secondary Truck Access
- Hazardous Material Route



**Figure 2**  
**Site Plan**  
 Amended Carlsbad Energy Center Project

Aerial Imagery Source: Google Earth Pro, 2015

DEN \COBRA\PROJ\CECP\_496957\MAPFILES\TCIP\FIG2\_CECP\_SITEPLAN\_101.MXD AESPEJO 11/11/2015 12:52:26 PM

**CH2MHILL.**



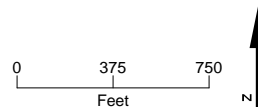


- LEGEND**
- Amended CECP Site Boundary
  - Encina Power Station Site
  - Construction Staging/Laydown/Parking Areas
  - Railroad Crossing Arms/Automatic Gates

Fire and Emergency Access Route

Note: Fire and emergency vehicles would use the most direct route to respond to onsite emergencies.

Once emergency vehicles enter the site emergency responders will use any available onsite route.



Aerial Imagery Source: Google Earth Pro, 2015

DEN \COBRA\PROJ\CECP\_496957\MAPFILES\TCIP\FIG3\_CECP\_FIREACCESSRT.MXD AESPEJO 11/11/2015 1:04:19 PM

**Figure 3**  
**Fire and Emergency Access Routes**  
 Amended Carlsbad Energy Center Project