

California Energy Commission DOCKETED 11-AFC-3 TN # 66158 JUL 09 2012

July 9, 2012

Mr. Eric Solorio California Energy Commission Docket No. 11-AFC-3 1516 9th St. Sacramento, CA 95814

Cogentrix Quail Brush Generation Project - Docket Number 11-AFC-3, Draft Wildfire Response Emergency Action Plan

Docket Clerk:

Pursuant to the provisions of Title 20, California Code of Regulation, and on behalf of Quail Brush Genco, LLC, a wholly owned subsidiary of Cogentrix Energy, LLC, Tetra Tech hereby submits the Draft Wildfire Response Emergency Action Plan. This information is pursuant to a technical conference call with the CEC on May 17, 2012. The Quail Brush generation Project is a 100 megawatt natural gas fired electric generation peaking facility to be located in the City of San Diego, California.

If you have any questions regarding this submittal, please contact Rick Neff at (704) 525-3800 or me at (303) 980.3653.

Sincerely,

Constance C. Frence

Constance E. Farmer Project Manager/Tetra Tech

cc: Lori Ziebart, Cogentrix John Collins, Cogentrix Rick Neff, Cogentrix Proof of Service List



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA 1516 NINTH STREET, SACRAMENTO, CA 95814 1-800-822-6228 – WWW.ENERGY.CA.GOV

APPLICATION FOR CERTIFICATION FOR THE QUAIL BRUSH GENERATION PROJECT

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DOCKET NO. 11-AFC-03 PROOF OF SERVICE (Revised 7/5/2012)

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DECLARATION OF SERVICE

I, <u>Constance Farmer</u>, declare that on <u>July 9, 2012</u>, I served and filed a copy of the Draft Wildfire Response Emergency Action Plan for the Quail Brush Power Project. This document is accompanied by the most recent Proof of Service list, located on the web page for this project at: [http://www.energy.ca.gov/sitingcases/quailbrush/index.html].

The document has been sent to the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit or Chief Counsel, as appropriate, in the following manner:

(Check all that Apply) For service to all other parties:

Served electronically to all e-mail addresses on the Proof of Service list;

Served by delivering on this date, either personally, or for mailing with the U.S. Postal Service with first- class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses **NOT** marked "e-mail preferred."

AND

For filing with the Docket Unit at the Energy Commission:

- by sending an electronic copy to the e-mail address below (preferred method); OR
- by depositing an original and 12 paper copies in the mail with the U.S. Postal Service with first class postage thereon fully prepaid, as follows:

CALIFORNIA ENERGY COMMISSION – DOCKET UNIT

Attn: Docket No. 11-AFC-3 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512 <u>docket@energy.state.ca.us</u>

OR, if filing a Petition for Reconsideration of Decision or Order pursuant to Title 20, § 1720:

Served by delivering on this date one electronic copy by e-mail, and an original paper copy to the Chief Counsel at the following address, either personally, or for mailing with the U.S. Postal Service with first class postage thereon fully prepaid:

California Energy Commission Michael J. Levy, Chief Counsel 1516 Ninth Street MS-14 Sacramento, CA 95814 <u>mlevy@energy.state.ca.us</u>

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

Constance C. Fainer

--DRAFT—

Quail Brush Generation Project

WILDFIRE RESPONSE EMERGENCY ACTION PLAN

1.0 INTRODUCTION

1.1 Purpose

The purpose of this Wildfire Response Emergency Action Plan (WREAP) is to facilitate and organize employer and employee actions during a wildfire emergency at or in the vicinity of the Quail Brush Generation Project (QBGP). This WREAP will be one component of a comprehensive health and safety program developed by Quail Brush Genco, LLC for the facility. The comprehensive program will include proper employee training (such that employees understand their roles and responsibilities within the program) specific to the QBGP. This WREAP will define the procedures that will serve to minimize employee injuries and structural damage to the facility during and in response to a wildfire emergency.

1.2 Scope

The scope of the WREAP is specific to the QBGP and includes the requirements of federal agencies (i.e. Occupational Safety and Health Act [OSHA]), San Diego Gas & Electric (SDG&E), industry standards, and the San Diego Fire/Emergency Response Department. This WREAP describes how employees will respond, taking into account the QBGP facility specific worksite layout, structural features, and onsite emergency systems. The WREAP will be reviewed and updated periodically during the life of the plant. The updated WREAP will be based upon the input of a diverse group of representatives (management and employees) regarding the planning and implementation process. These representatives will be comprehensively trained and will work to refine this WREAP before the plant becomes operational. The commitment and support of the employer and all employees is critical to the WREAP success in the event of a wildfire emergency. The elements of the comprehensive WREAP training program are listed in Section 1.4 below.

1.3 Background

The proposed QBGP site falls within Engine District 34, City of San Diego Fire-Rescue Department. The City of San Diego Fire-Rescue Department fire station #39 serves the proposed QBGP (San Diego Fire-Rescue Department website 2011). Fire Station #39 was placed in service in June 1976 and serves the Tierrasanta neighborhood and surrounding area. The station is located at 4949 La Cuenta Drive and has a fire fighter/medic staff of 39.

The proposed QBGP site is located in a Very High Fire Hazard Severity Zone by the City of San Diego Fire-Rescue Department (Official Very High Fire Hazard Severity Zone Map, Grid Tile 30, 2009), which is based on the physical conditions that create a likelihood that an area will burn over a 30- to 50-year period without considering modifications such as fuel reduction efforts.

The QBGP will adhere to structural requirements for new buildings located in the Very High Fire Hazard Severity Zone specified under Chapter 7A of the 2007 California Building Code for structures.

Measures will also be implemented to ensure compliance with the City of San Diego Municipal Code that regulates brush management and requires creation of two Brush Management Zones with specific requirements. The Code was amended in October 2005 to make these Zones total 100 feet of defensible space from structures within the Very High Fire Hazard Severity Zone. These two Brush Management Zones include areas either natural or man-made, where material capable of allowing a fire to spread unchecked has been thinned, removed, and/or modified to slow the rate and intensity of an advancing wildfire and to create an area for fire suppression operations to occur. If the full brush management zone(s) cannot be provided, a project is required to develop alternative means of equivalent fire protection as required by the Fire-Rescue Department. Criteria for brush management purposes are determined by the Fire-Rescue Department based upon a structure's proximity to native or naturalized vegetation and extent of the fuel load.

The WREAP has been prepared in coordination with SDG&E Wildfire Operating Guidelines (113.1). Notification to de-energize the facility will be delivered to QBGP via SDG&E System Dispatch personnel.

1.4 Training Program

To ensure that all employees recognize and understand their roles and responsibilities within the WREAP, a comprehensive training program will be developed and implemented. Each of the procedures within the WREAP will require some form of training. Training will be developed and implemented in various ways, depending on the requirements of federal agencies (i.e. OSHA), SDG&E, industry standards, and the San Diego Fire/Rescue Department.

Training Program Elements:

- General requirements
- Fire hazard inventory, including ignition sources and mitigation
- Housekeeping and proper materials storage
- Employee alarm\communication system
- Portable fire extinguishers
- Fixed firefighting equipment
- Fire control and containment
- Flammable and combustible liquid storage
- Use of flammable and combustible liquids
- Dispensing and disposal of flammable liquids
- Training requirements
- Reporting and notification procedures for emergency; contacts, including offsite and local authorities

- Alarm and communication systems
- Emergency response equipment
- Emergency personnel (response team) responsibilities and notification roster
- Site assembly and emergency evacuation route procedures
- First Aid/Medical Treatment
- Additional requirements

2.0 KEY CONTACTS AND RESPONSIBILITIES

- 2.1 Quail Brush Facility/Operations Manager TBD – WREAP Incident Commander
- 2.2 Quail Brush Engineering Manager TBD – Alternate WREAP Incident Commander
- 2.3 Quail Brush Facility Supervisor TBD – Alternate Incident Commander
- 2.4 Quail Brush EHS Manager/Specialist TBD – Alternate Incident Commander
- 2.5 SDG&E Service Dispatch TBD
- 2.6 San Diego Fire-Rescue Department
 1010 Second Ave, Suite 400, MS 604
 San Diego, CA 92101-4409
 (619) 533-4311
 EMERGENCY NUMBER: 9-1-1
- 2.7 Sycamore Landfill Operations Manger 8514 Mast Blvd Santee, CA 92071 (619) 449-4053

3.0 **RESPONSE AND NOTIFICATION – CONTACTS**

3.1 Incident Command and Coordination

Upon activation of the WREAP by one of the Key Contacts listed in Section 2.0 above, Command Post operations involving emergency communications, message control and routing of essential information will take place from the QBGP Control Room. Other Command Post activities will include coordination of actions and requests by the San Diego Fire/Emergency Response Department, as well as, determination of requirements for additional resources and situation updates to appropriate authorities and/or services. Incident command will be headed bv the Facility/Operations Manager, Environmental Health and Safety (EHS) Manager/Specialist, or one of their assigns.

3.2 Emergency Notification List

It is imperative that emergency situations be immediately reported. Fires and other emergency situations can reach dangerous levels in seconds and any delay in getting emergency responders to the scene can result in unnecessary loss of life and property. An Emergency Notification List shall be posted on, or near, each facility phone.

Once notification of a wildfire has been received, the following notifications shall be made:

- Call "911"
- Notify Quail Brush Control Room
- Activate Facility Alarm System
- Call each of the Key Contacts listed in Section 2.0 above.

4.0 RESPONSE PROCEDURES – NOTIFICATION FROM EXTERNAL SOURCE (Addresses notification of fire conditions by external organization/agency)

4.1 Emergency Procedures

4.1.1 Internal Notification and Alarms

Upon notification of wildfire by an external organization/agency, the procedure listed in Section 3.2 Emergency Notification List shall be followed.

4.1.2 Fire Watch

Upon notification of wildfire by an external organization/agency, employees designated as Fire Watch shall perform their responsibilities under the direction of the Command Post located in the QBGP Control Room.

4.1.3 External Notification and Coordination

4.1.3.1 SDG&E (CAL ISO)

Upon receipt of wildfire conditions notification, SDG&E shall be notified. Contact information is located in Section 2.5 above.

4.1.3.2 S San Diego Fire-Rescue Department

Upon receipt of wildfire conditions notification, the San Diego Fire-Rescue Department shall be notified. Contact information is located in Section 2.6 above.

4.1.3.3 Sycamore Landfill

Upon receipt of wildfire conditions notification, the Sycamore Landfill shall be notified. Contact information is located in Section 2.7 above.

4.1.4 Equipment Isolation and Shutdown

4.1.4.1 Venting and De-energizing

Fuel gas venting and de-energizing of facility equipment shall be as directed by the QBGP Control Room upon receipt of notification from SDG&E System Dispatch personnel who have the authority to order the plant to de-energize. Details of this process will be developed once detailed design is complete.

4.1.5 Evacuate Non-Facility Staff from Facility

Visitors will be accounted for during an evacuation and will be assisted in exiting the facility. QBGP will employ a sign-in system for all visitors and contractors entering the workplace and use this list when accounting for all persons in the assembly area. The area wardens will be responsible for helping these individuals safely evacuate.

4.1.6 <u>Secure Facility Equipment/Engine Hall (including Vents/Doors/Windows)</u>

Upon detection and confirmation of the existence of a wildfire, the control system will automatically shut down the reciprocating engines, turn off ventilation fans, and close ventilation openings. The automatic fire suppression system and portable fire extinguishers of appropriate sizes and types will be available in the event fire suppression within the plant is required. This procedure will assure that hazardous and combustible materials have been properly secured. A detailed description of these systems will be provided and incorporated into this WREAP upon final design of the plant.

4.1.7 Coordinate Facility Staff Evacuation

QBGP will utilize an evacuation warden system to help move employees from danger to safe areas during a wildfire emergency. Generally, one warden per shift will be adequate, and the warden will be available at all times during shift hours. Wardens, or other designee, will be responsible for checking offices, bathrooms, and other spaces to account for all people (employees, contractors, and guests) who are present onsite, before being the last person to exit an area. They will also be tasked with ensuring fire doors are closed when exiting. All employees designated as wardens, or otherwise required to assist in an emergency, will be trained in the complete workplace layout and various alternative escape routes if the primary evacuation route becomes blocked. Wardens will be made aware of employees with special needs (who may require extra assistance during an evacuation), and any hazardous areas to avoid during an emergency evacuation.

4.1.8 <u>Secure/Lock-up Facility</u>

The facility shall be secured and locked-up as directed from the WREAP Command Post located in the QBGP Control Room. The Authority Having Jurisdiction (AHJ) and SDG&E shall be notified prior to abandoning the facility, and coordinating actions described above shall be implemented.

5.0 RESPONSE PROCEDURES – INTERNAL OBSERVATION OF WILDFIRE (Addresses identification of fire conditions by Facility staff)

5.1 Emergency Procedures

5.1.1 Internal Notification and Alarms

Upon notification of wildfire by Facility Staff, the procedure listed in Section 3.2 Emergency Notification List shall be followed.

5.1.2 Fire Watch

Upon notification of wildfire by Facility Staff, employees designated as Fire Watch shall perform their responsibilities under the direction of the Command Post.

5.1.3 <u>External Coordination</u>

5.1.3.1 SDG&E (CAL ISO)

Upon receipt of wildfire conditions notification, SDG&E shall be notified. Contact information is located in Section 2.5 above.

5.1.3.2 San Diego Fire-Rescue Department

Upon receipt of wildfire conditions notification, the San Diego Fire-Rescue Department shall be notified. Contact information is located in Section 2.6 above.

5.1.3.3 Sycamore Landfill

Upon receipt of wildfire conditions notification, the Sycamore Landfill shall be notified. Contact information is located in Section 2.7 above.

5.1.4 Equipment Isolation and Shutdown

5.1.4.1 Venting and De-energizing

Fuel gas venting and de-energizing of facility equipment shall be as directed by the QBGP Control Room upon receipt of notification from SDG&E System Dispatch personnel. Details of this process will be developed once detailed design is complete.

5.1.5 Evacuate Non-Facility Staff from Facility

Visitors will be accounted for during an evacuation and will be assisted in exiting the facility. QBGP will employ a sign-in system for all visitors and contractors entering the workplace and use this list when accounting for all persons in the assembly area. The area wardens will be responsible for helping these individuals safely evacuate.

5.1.6 <u>Secure Facility Equipment/Engine Hall (including Vents/Doors/Windows)</u>

Upon detection and confirmation of the existence of a wildfire, the control system will automatically shut down the reciprocating engines, turn off ventilation fans, and close ventilation

openings. The automatic fire suppression system and portable fire extinguishers of appropriate sizes and types will be available in the event fire suppression within the plant is required. This procedure will assure that hazardous and combustible materials have been properly secured. A detailed description of these systems will be provided and incorporated into this WREAP upon final design of the plant.

5.1.7 Coordinate Facility Staff Evacuation

QBGP will utilize an evacuation warden system to help move employees from danger to safe areas during an emergency. Generally, one warden per shift will be adequate, and the number of warden will be available at all times during working hours. Wardens may be responsible for checking offices, bathrooms, and other spaces to account for all people (employees, contractors, and guests) who are present onsite, before being the last person to exit an area. They may also be tasked with ensuring fire doors are closed when exiting. All employees designated as wardens, or otherwise required to assist in an emergency, will be trained in the complete workplace layout and various alternative escape routes if the primary evacuation route becomes blocked. Wardens will be made aware of employees with special needs (who may require extra assistance during an evacuation), and any hazardous areas to avoid during an emergency evacuation.

5.1.8 <u>Secure/Lock-up Facility</u>

The facility shall be secured and locked-up as directed from the WREAP Command Post located in the QBGP Control Room. The AHJ shall be notified prior to abandoning the facility, and coordinating actions shall be implemented.

6.0 EMERGENCY EQUIPMENT AND MEDICAL/FIRST AID RESPONSE

6.1 Incident Command and Coordination

Upon activation of the WREAP by one of the Key Contacts listed in Section 2.0 above, Command Post operations involving emergency communications, message control and routing of essential information will take place from the QBGP Control Room. Command Post activities will include coordination of actions and requests by the San Diego Fire/Emergency Response Department, as well as, determination of requirements for additional resources and situation updates to appropriate authorities and/or services. Incident command will be headed by the Facility/Operations Manager, EHS Manager/Specialist, or one of their assigns.

6.2 Onsite Fire Protection Systems

6.2.1 <u>Description</u>

In the event that a wildfire breaches the plant perimeter, project fire protection systems including a water sprinkler fire suppression system for the natural gas-fired reciprocating engines and engine hall, main transformers and administrative areas will be activated. Portable fire extinguishers will be located at strategic locations within and around the plant site. The QBGP Control Room and Electrical Room are protected by a combination of Clean Agent Chemical systems and portable fire extinguishers. The plant's fire protection water system will be supplied from a dedicated 600,000 gallon fire water tank located on the plant site. An electric motordriven pump, back up by a diesel-driven fire pump, each with a capacity of 1,500 gallons per minute can deliver water to the fire protection water-piping network.

The water-piping network will be configured in a loop so that a piping failure can be isolated with shutoff valves without interrupting the supply of water to a majority of the loop. The piping network will supply fire hydrants located at various locations around the plant site and also will supply a sprinkler system in the engine hall, administrative areas, and at each of the generating unit transformers. The engine hall protection includes gas sensors and heating sensing sprinklers. Upon detection and automated confirmation of the existence of a fire, the control system will automatically shut down the reciprocating engines, turn off ventilation fans, and isolate the gas supply to the building. Provisions will be provided to purge the natural gas line from the building to the Natural Gas Metering Station in the event such action is necessary.

6.2.2 Locations

The location of the fire protection system elements will be determined during the facility's detail design phase. Locations will be determined in coordination with the local AHJ.

6.2.3 <u>Training</u>

As part of the WREAP comprehensive training program, all employees will be trained in the elements listed in Section 1.4 Training Program above.

6.2.4 <u>Use</u>

As part of the WREAP comprehensive training program, all employees will be trained in the use of fire protection equipment consistent with their responsibilities under the WREAP.

6.3 First Aid/Medical Treatment

As part of the WREAP comprehensive training program, all employees will be trained in basic first-aid and medical treatment. First-aid and medical treatment of serious injuries and/or conditions will be coordinated with the AHJ.

7.0 EVACUATION PLAN

Employees will be trained for power plant evacuation. It is not anticipated that the plant staff will join in any area suppression efforts. However, they may conduct localized suppression efforts within the power plant area under certain conditions and consistent with the emergency response procedures, such as during system shutdown and lockout, prior to evacuation. An employee shelter-in-place response procedure may be developed in conjunction with the San Diego Fire-Rescue Department. A shelter–in-place Class 3 safe room (or as otherwise required by the AHJ) may be designed in accordance with OSHA and San Diego Fire-Rescue Departments.

7.1 Coordination with SDG&E

The evacuation plan will be coordinated with SDG&E. Coordination with the SDG&E Fire Coordinator will be conducted from the QBGP Control Room during an emergency.

7.2 Coordination with Sycamore Landfill

The evacuation plan will be coordinated with Sycamore Landfill. Coordination with the Sycamore Landfill Operations Manager will be conducted from the QBGP Control Room during an emergency.

7.3 Coordination with San Diego Police/Fire-Rescue Personnel

The evacuation plan will be coordinated with the San Diego Police/Fire-Rescue Department. Coordination will be conducted from the QBGP Control Room.

7.4 Evacuation Route

Evacuation routes will be posted throughout the facility. All employees will be trained in site emergency evacuation route procedures as part of the comprehensive training program.

7.5 Safe Assembly Area for Evacuees

Safe assembly areas will be clearly shown on evacuation route placards posted throughout the facility. All employees will be trained in site safe assembly area procedures as part of the comprehensive training program.