

## DOCKETED

<b>Docket Number:</b>	00-AFC-14C
<b>Project Title:</b>	El Segundo Power Redevelopment Project Compliance
<b>TN #:</b>	200197
<b>Document Title:</b>	August 13 2013 Informational Hearing Slides
<b>Description:</b>	PDF'd version of the Powerpoint slides shown at the August 13, 2013 Informational Hearng for the El Segundo Amendment
<b>Filer:</b>	Paul Kramer
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Committee
<b>Submission Date:</b>	8/14/2013 11:10:34 AM
<b>Docketed Date:</b>	8/14/2013

# CALIFORNIA ENERGY COMMISSION

SITE VISIT, ENVIRONMENTAL SCOPING MEETING AND INFORMATIONAL HEARING  
EL SEGUNDO ENERGY CENTER AMENDMENT



Energy Commission Headquarters, Sacramento

# Purpose of Today's Proceedings

- ❖ Inform members of the public about the proposed amendment and the Energy Commission's review process.
- El Segundo Energy Center – Petition to Amend
  - Proposed modifications include the demolition and replacement of two once-through-cooled natural gas-fired utility boiler units, Units 3 and 4, with one new combined cycle generator (Unit 9), one steam turbine generator (Unit 10) and two simple-cycle gas turbines (Units 11 and 12). This change will eliminate the use of ocean water for once-through cooling at the facility.
- ❖ You will be able to learn about the proposed amendment, ask questions and provide comments.
- ❖ You will also be informed of the various ways you can participate in the Energy Commission's power plant licensing process.



# Today's Agenda

**3:00 p.m. Site Visit—bus tour to site**

**5:00 p.m. Presentations and Discussion**

- ❖ **Commissioners' Opening Remarks**
- ❖ **Hearing Adviser—Energy Commission's role**
- ❖ **Applicant—project details**
- ❖ **Energy Commission Staff—environmental review process**
- ❖ **Staff's Issues Identification Report**
- ❖ **Staff's proposed schedule for the licensing process**
- ❖ **Public Adviser's Office—opportunities for public participation**
- ❖ **Public Questions and Comments**



# Energy Commission's Role

- ❖ Energy Commission has permitting authority over thermal power plants that are 50 megawatts or greater.
- ❖ The Commission is the lead state agency for California Environmental Quality Act (CEQA) review and ongoing compliance.
- ❖ Energy Commission staff is an independent party in the proceeding. Staff will prepare an independent evaluation of the environmental, engineering, and public health/safety aspects of the proposed amendment.



# Energy Commission's Role

- ❖ There are five members of the Energy Commission. The Commission has appointed Commissioners Douglas (Presiding Committee Member) and Scott (Associate Committee Member) to oversee the licensing process for this amendment.
- ❖ Following staff review, the Committee will issue a Presiding Member's Proposed Decision (PMPD) that makes a recommendation to the full Commission to approve, reject, or change the proposed amendment.



# EX PARTE RULE

- ❖ All decisions made in this case will be made solely on the basis of the public record.
- ❖ No off-the-record contacts concerning substantive matters are permitted to take place between interested parties and the Commissioners, their advisers, this Committee, or the Hearing Officer.



# EX PARTE RULE

- ❖ Contacts between interested parties and the members of the Committee regarding a substantive matter must occur in a public forum or in a writing distributed to all the parties and made available to the public.
- ❖ Purpose: to provide full disclosure to all participants of any information that may be used as a basis for the future Decision on this amendment.





# Applicant's Presentation



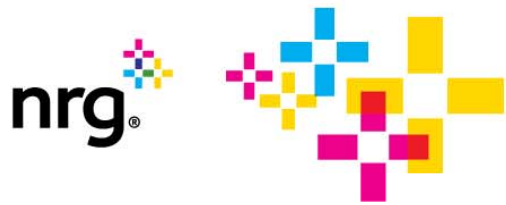


The power to change life.™

# CEC Site Informational Meeting – August 13, 2013

---

## El Segundo Energy Center Petition to Amend



# Our Strength in Numbers

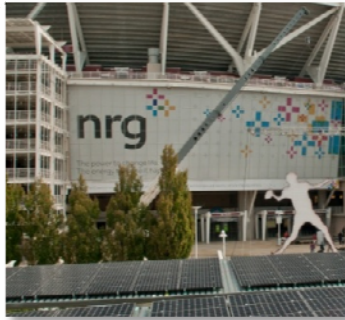


**284**

Fortune 300 and S&P 500 Index company.

**1**

Largest Independent Power Producer in the US



**2M**

Serving more than 2 million customers with NRG retail brands

**47K**

Generating more than 47,000 MW of global, diverse energy



**37M**

Providing enough generation capacity to power 37 million homes

**50%**

Reduced emissions by nearly ½\* for a cleaner NRG

\*Since 2000



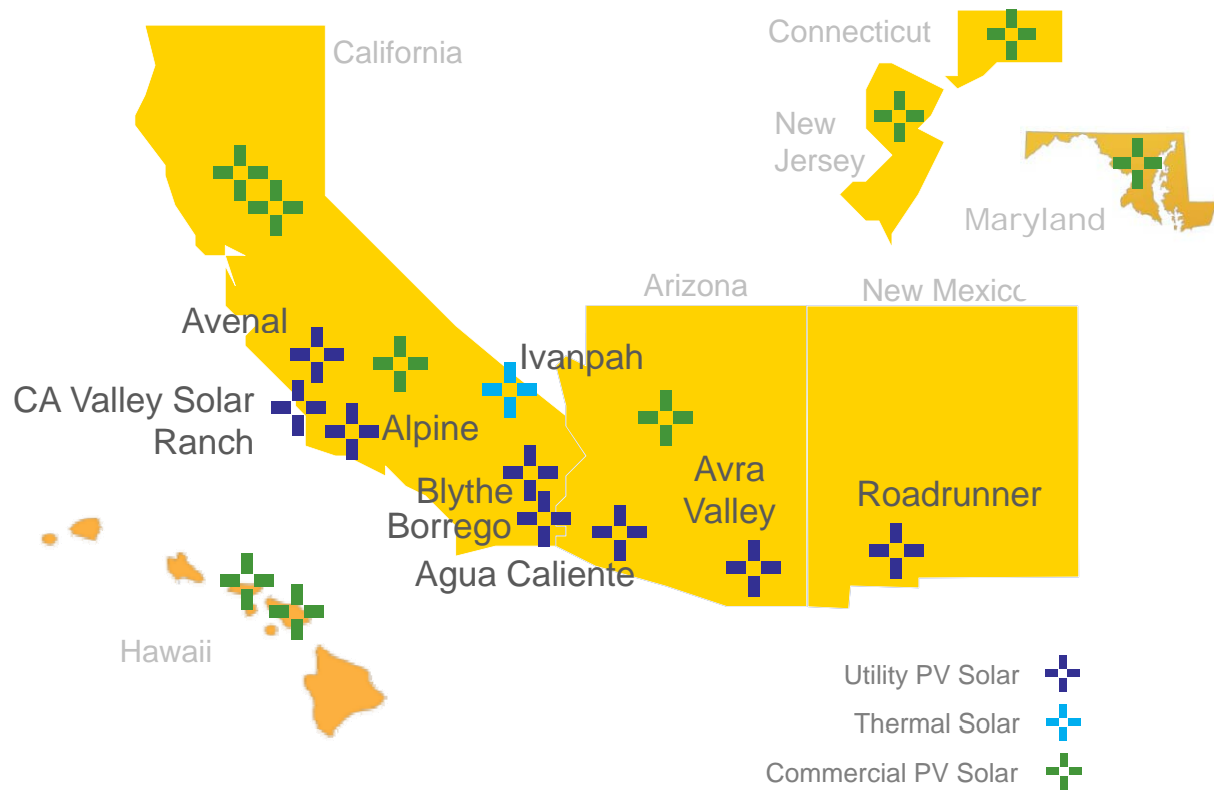
# Full Suite of Innovative and Efficient Energy Solutions



Partner in tailoring energy solutions for our customers

# NRG's Diverse Solar Projects

Producing clean, renewable electricity for utility, municipal, and commercial customers



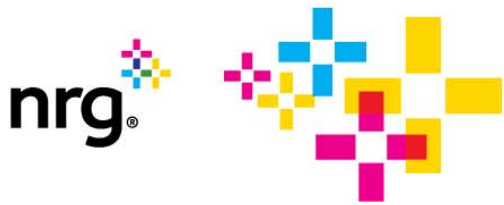
- Providing technical planning, development, construction, financing and operations of multi-technology solar generation assets
- Producing clean, renewable electricity for utility, municipal and commercial customers
- Constructing the world's largest solar thermal facility in California's Mojave Desert



**Agua Caliente**  
Renewable Energy World 2012 Winner  
Solar Power Generation USA  
2012 PV Project of the Year



**Ivanpah**  
Solar Power Generation USA  
2012 CSP Project of the Year

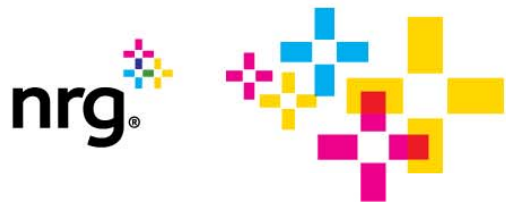


# El Segundo Generating Station: 60 Year History



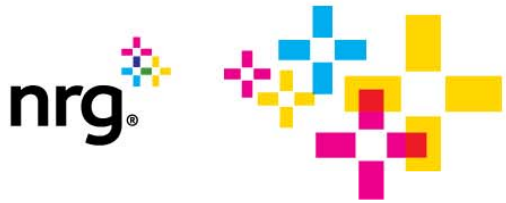
Original Units 1 and 2 (1950s) and Unit 3 and 4 (1960s) = 1020 MW  
net/~1052 gross





# El Segundo Energy Center: In Development Since 2000



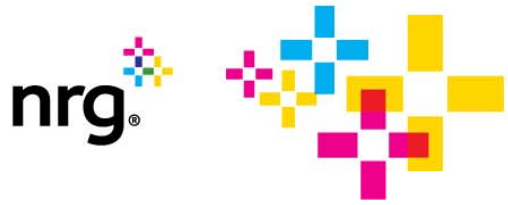


# El Segundo Energy Center: Future is Here



- Licensed in 2010, ESEC is first plant of its kind permitted in CA; 560 MW Plant that is fast-start (10 min) and air-cooled with combined-cycle efficiency
- Retires aging steam boilers, eliminating ~400 MGD of OTC
- Ideal for LA Basin Local Capacity Region (LCR) support and renewable integration
- On line August 1, 2013

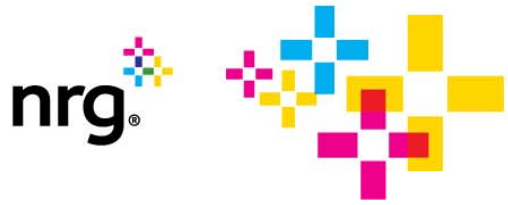




# El Segundo Energy Center: Today



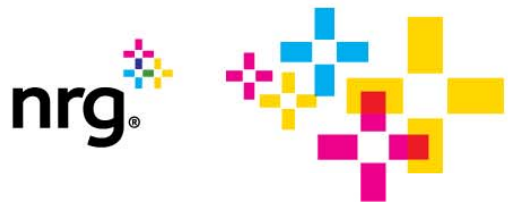




# El Segundo Energy Center: Today







# El Segundo Energy Center: Improvements for Tomorrow



Existing View

Future View



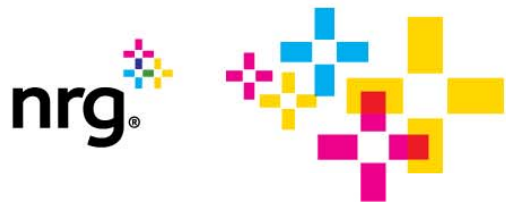


# El Segundo Energy Center: Improvements for Tomorrow



Proposed New Generation





# El Segundo Energy Center: Improvements for Tomorrow



Proposed Admin/O&M Building

# ESEC PTA Timeline

April 2013

Sept 2014

Dec 2015

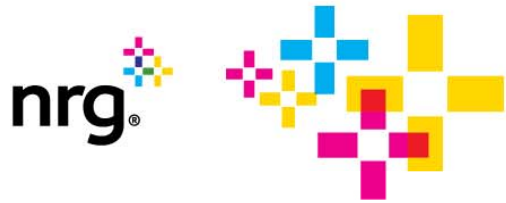
July 2016

June 2018

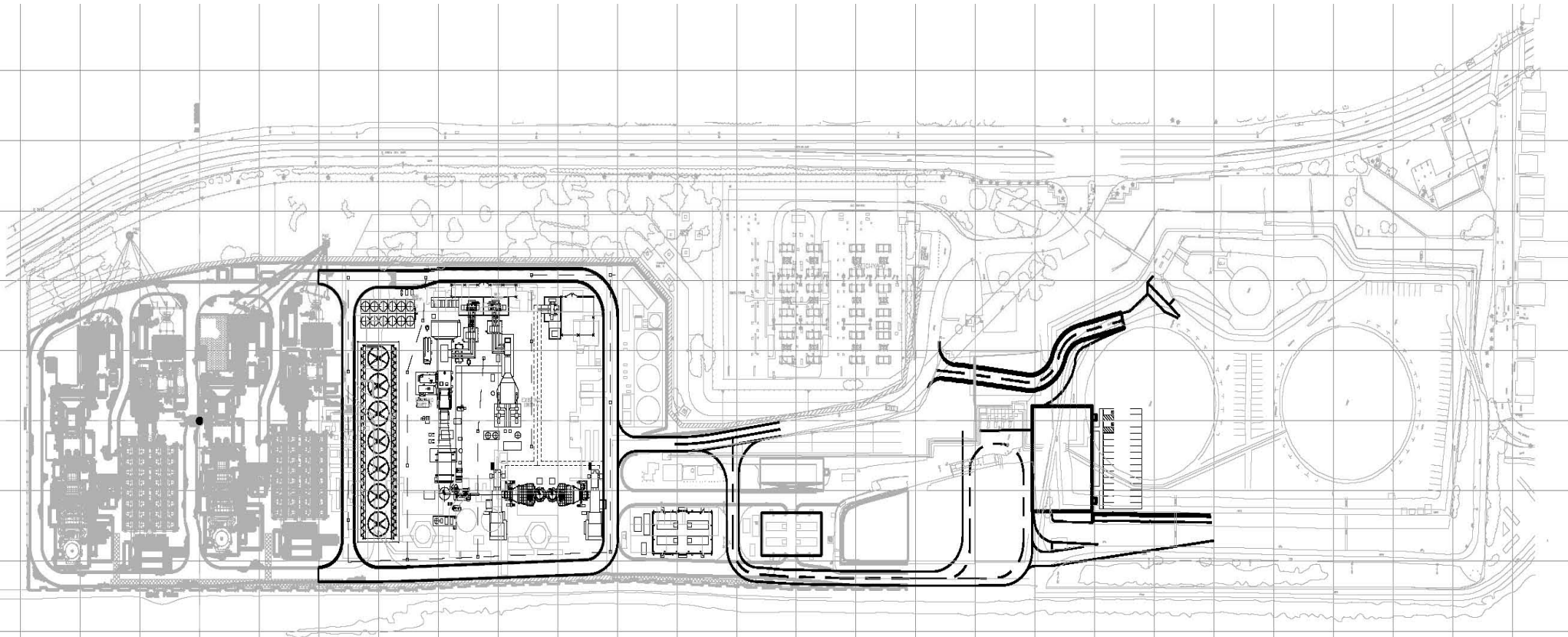
## PTA and Air Permit

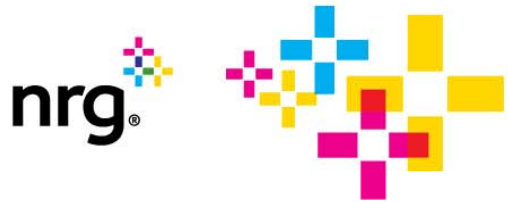
## Commercial Online

- April 2013 - Title V major modification and PTA filed
- Sept 2014 – Anticipated Decision on ESEC PTA
- Dec 2015 – Unit 4 OTC Policy compliance date
- May 2016 – Demolition complete/start of construction
- June 2018 – Commissioning complete/Commercial Online



# El Segundo Power Facility Modification: Layout





# El Segundo Power Facility Modification: 3D Model

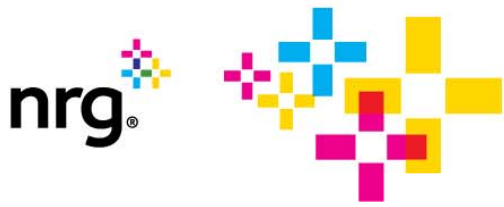






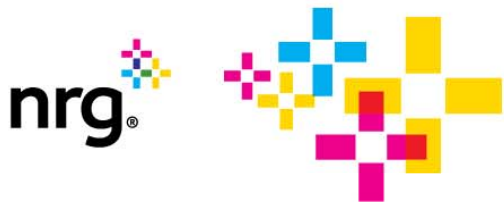
# El Segundo Power Facility Modification: Overview

- ~325 MW GE 7FA Fast-Start Combined Cycle Unit ("CC-Fast")
- (2) 55 MW Rolls Royce Trent 60s Advanced Simple Cycle Gas Turbines
- Fast Start (10 min, 75% load) & Air Cooled
- Responsive to CAISO Long Term Procurement Plan for 1200 MW in West LA Basin
- Integrates Renewables
- Meets Ambient Air Quality Standards



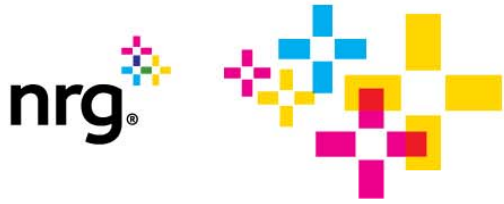
# El Segundo Power Facility Modification: Overview

- Meets CEC Objectives for Brownfield Development
- Utilizes existing Infrastructure: Transmission, Natural Gas, Water
- Replaces Existing Steam Boiler Units 3 & 4, meeting State's OTC Policy
- Further Plant's Conversion to Reclaim Water Use for Industrial Purposes
- Further Plant's Zero Liquid Discharge Goals



# El Segundo Power Facility Modification: Further Benefits

- Improve Beach/Bike Path Access from 45<sup>th</sup> Street
- Continue Improvement of Visual Enhancements along Vista Del Mar and 45<sup>th</sup> Street
- Modern Admin Building located North End of Tank Farm



# SCAQMD/EPA Permitting

- Title V Modification
- Emission Offsets Analysis
- Air Quality Impact Analysis
- Health Risk Assessment
- PSD Applicability/Analysis
- Acid Rain permit application

# Overview of Amendment Process

- 1. Committee must determine whether impacts will change as a result of the amendment**
- 2. Staff Discovery and Analyses**
  - Issues Identification
  - Data Requests
  - Public Workshops
  - Preliminary Staff Assessment (PSA)
  - Final Staff Assessment (FSA)
- 3. Committee Evidentiary Hearing and Decision**
  - Evidentiary Hearings on FSA
  - Presiding Member's Proposed Decision (PMPD) and public comments
  - PMPD hearing and Commission decision



# Energy Commission Staff's Role

- ❖ Determine if the project, as modified, will remain in compliance with applicable laws, ordinances, regulations, and standards.
- ❖ Staff will perform an independent review the project for environmental impacts and propose mitigation as necessary.



# Discovery and Analysis Process

- ❖ Determine if the proposed amendment complies with Laws, Ordinances, Regulations, Standards (LORS)
- ❖ Conduct engineering and environmental analysis
  - ✓ identify issues;
  - ✓ identify environmental impacts and mitigation measures;
  - ✓ recommend conditions of certification.
- ❖ Facilitate public and agency participation
- ❖ Staff products: Preliminary Staff Assessment (PSA) and Final Staff Assessment (FSA)
- ❖ Make recommendations to the Committee



# Agency Coordination

- ❖ Energy Commission staff work closely with other governmental agencies, for example:
  - City of El Segundo
  - City of Manhattan Beach
  - County of Los Angeles
  - California Coastal Commission
  - State Lands Commission
  - South Coast Air Quality Management District (SCAQMD)
  - Local Native American Tribes





# Evidentiary Hearing & Decision Process

- ❖ Committee conducts hearings to create evidentiary record
- ❖ Issues Presiding Member's Proposed Decision (PMPD). The PMPD contains findings relating to:
  - Environmental impacts, public health, engineering
  - Project's compliance with LORS
  - Recommends conditions of certification
  - Recommends whether or not to approve the amendment
- ❖ Full Commission issues a Final Decision
- ❖ Appeals: Reconsideration by Commission; California Supreme Court
- ❖ Energy Commission monitors compliance with all conditions of certification, for the life of the project and closure



# Staff's Issues Identification Report

## Purpose

- ❖ Inform participants of potential issues
- ❖ Early focus on important topics



# Staff's Potential Issue Areas

- ❖ Environmental Justice Population
- ❖ Coordination with SCAQMD / Project Schedule



# POTENTIAL ISSUE:

## Environmental Justice Population

- ❖ Based upon the 2010 Census data, 63.4 percent of the total population living within the six-mile buffer of the project site constitutes an environmental justice population.
- ❖ Staff will review the impacts resulting from the construction and operation of the proposed project, to determine impacts and necessary mitigation.
- ❖ Staff will work with the Hearing Officer and Public Advisor on public outreach regarding the project and its impacts.



# Potential Issue

## Air Quality Schedule Timing

- ❖ Preliminary Determination of Compliance (PDOC) expected in November 2013 and a Final Determination of Compliance (FDOC) expected in April 2014.
- ❖ Energy Commission staff utilizes the PDOC and FDOC in their air quality analysis, the timing of the availability of these documents will impact the proposed schedule for producing an Energy Commission final decision.



# Staff's Proposed Schedule

ACTIVITY	DAY	DATE
Applicant files ESEC Petition to Amend	--	4/23/13
Staff files Notice of Receipt	--	5/14/13
Committee assigned		6/12/13
Staff files Issues Identification Report	--	8/5/13
Staff files data requests	--	8/9-12/13
Data Request Workshop (if needed)	--	8/13
Informational Hearing / Status Conference	--	8/13/13
Applicant provides data responses (last response)		9/13
Data Response and Issue Resolution Workshop		9/13
California Coastal Commission expected to file comments		11/13
SCAQMD files PDOC	1	11/13



# Staff's Proposed Schedule

ACTIVITY	DAY	DATE
Preliminary Staff Assessment published	30	
Preliminary Staff Assessment Workshop	45	
Preliminary Staff Assessment – 30 day comment period ends	75	
<b>SCAQMD files FDOC</b>	<b>1</b>	<b>4/14</b>
Final Staff Assessment published	30	5/14
Prehearing Conference*	TBD	
Evidentiary hearings*	TBD	
Presiding Members Proposed Decision (PMPD)*	TBD	
Committee Hearing on PMPD*	TBD	
Addendum/Revised PMPD	TBD	
Energy Commission Decision*	TBD	





**El Segundo Energy Center Amendment**  
**Docket No. 00-AFC-14C**

# **Informational Hearing and Site Visit**

**Alana Mathews**

Public Adviser

August 13, 2013



CALIFORNIA  
ENERGY COMMISSION





# What's a Public Adviser?

## At the Commission

**The Public Adviser is a Governor appointed attorney who independently:**

- *Helps the public understand the process*
- *Recommends the best way to be involved*
- *Assists in successful participation in proceedings*

## Outreach--Public Adviser

### Notice of Informational Hearing and Site Visit :

- City and County officials from the area
- Native American officials and members
- Broad categories:
  - Public members who have contacted our office; city and county civic leaders; local non-profit groups (community, environmental, ethnic organizations); public and private schools; hospitals, law enforcement; emergency personnel and community organizations.*
- Paid local newspaper advertisement
- Local Libraries
- Local TV and radio contacted

# Two Levels of Public Participation

## Informal Participation

### First level -- Public Comments are Easiest

- *Verbal Comments at Public Meetings: via Blue Cards*
- *Written Comments or Statements to the Commission Dockets Unit*  
[dockets@energy.ca.gov](mailto:dockets@energy.ca.gov)

**And**

- *Considered by the Commissioners*
- *Part of the record*

**But**

- *Not considered evidence and cannot be the sole basis of a decision*

# Two Levels of Public Participation

## Formal Participation (Intervenor)

### **Second level -- Intervening is more involved**

- *Anyone may file a Petition to Intervene in a Commission proceeding*
- *The Petition is considered by the assigned committee*
- *If approved, you become a party to this proceeding*
- **Intervenors can present evidence at the hearings and question the staff and applicant's witnesses**

**and**

- *You do not have to be or have an attorney to intervene*

**and**

- *The Public Adviser's Office is here to help you file a Petition to Intervene and navigate the entire process.*

*NOTE: It is important to intervene early in a case to be most effective.*

# How<sub>to</sub> Participate

## Things to Do

➤ **Sign-Up on the List Server to receive notice of upcoming events:** [www.energy.ca.gov/listservers](http://www.energy.ca.gov/listservers)

➤ **Submit written comments**

➤ **Provide oral comments**

➤ **Attend public project events**

*In person or by WebEx or conference call*

*Non-English Speaking Welcome*

*Special Accommodations for Persons With Disabilities*

Lourdes Quiroz (916) 654-5146, [lquiroz@energy.state.ca.us](mailto:lquiroz@energy.state.ca.us)

# How to Participate

The Public Adviser's Office

[www.energy.ca.gov](http://www.energy.ca.gov)



CA.GOV CALIFORNIA ENERGY COMMISSION

HOME ABOUT US EFFICIENCY FUNDING POWER PLANTS SEARCH TRANSPORTATION

Search [This Site] [California]

- Power Plant Cases Under Review
- Alphabetical List of Power Plant Projects  
Licensing and Compliance Information
- Siting, Transmission, and Environmental Protection Division  
Description of mission and offices
- Public Adviser's Office  
Assistance for public participation in power plant cases
- Energy Commission Dockets Unit  
Currently open dockets with listing to documents filed under each
- Status of all power plant projects
- DRECP  
About the Desert Renewable Energy Conservation Plan
- California On-Line Energy Maps
- More Power Plant Information...

### Latest Energy News and Activities

- » About Our Website Redesign Project (and Tips for Using our New Navigation)
- » **NEW** 2013 Building Energy Efficiency Standards (Facts, Frequently Asked Questions, Infographics, What Others Are Saying, and More)

**Edmund G. Brown Jr.**  
Office of Governor

**John Laird**  
Natural Resources Agency

**Robert B. Weisenmiller**  
Chair, California Energy Commission

# How to Participate

Home » newnav » power plant links

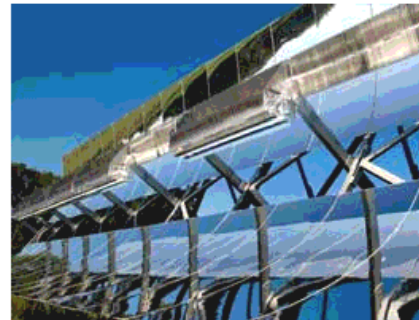
## Power Plant Licensing Cases Under Review

### Directory and Status of Projects

- » ALPHABETICAL LISTING OF ALL PROJECTS
- » STATUS OF ALL PROJECTS

### Projects

- » Abengoa Mojave Solar Project
- » Almond 2 Power Project
- » Avenal Energy Project
- » Beacon Solar Energy Project
- » Black Rock Geothermal Major Amendment
- » Blythe Solar Power Project
- » Calico Solar Project
- » Canyon Power Plant
- » Carlsbad Energy Center
- » El Centro - Unit 3 Repower
- » El Segundo Dry Cooling Amendment
- » Genesis Solar Energy Project
- » Hanford Combined-Cycle Power Plant Amendment
- » Henrietta Combined-Cycle Power Plant Amendment
- » Hidden Hills Solar Electric Generating System
- » Huntington Beach Energy Project
- » Hydrogen Energy California
- » Ivanpah Solar
- » Lodi Energy Center
- » Mariposa Power Project
- » Marsh Landing Generating Station
- » Oakley Generating Station (Formerly Contra Costa)
- » Palen Solar Power Project
- » Palmdale Solar-Gas Hybrid
- » Pio Pico Energy Center
- » Quail Brush Generating Project
- » Rice Solar Energy Project
- » Ridgecrest Solar Power Project
- » Rio Mesa
- » Russell City Amendment # 2
- » San Gabriel Generating Station
- » Santa Clara SC-1 Data Center, Phase 2
- » Sentinel Energy Project
- » Sun Valley Energy Project
- » Tracy Combined Cycle Power Plant
- » Vaca Station - CPV Vaca-Station
- » Victorville 2 Hybrid
- » Walnut Creek Energy Park
- » Watson Cogeneration Project
- » Willow Pass Generating Station







# Contact

Alana Mathews, Public Adviser

(916) 654-4489

(800) 822-6228 Toll Free

(916) 654-4493 FAX

1516 Ninth St, MS-12

Sacramento CA 95814-2950

[publicadviser@energy.ca.gov](mailto:publicadviser@energy.ca.gov)

[www.energy.ca.gov/public\\_adviser](http://www.energy.ca.gov/public_adviser)



# Sources of Information

- ❖ The Amendment is available for public review at the following libraries:

**El Segundo Public Library; Manhattan Beach Library; Redondo Beach Public Library; Lawndale Public Library; Wiseburn Library; Masao W. Satow Library; View Park Library; Culver City Julian Dixon Library; Hawthorne Library; Lloyd Taber-Marina del Rey Library; Lennox Library; Inglewood Public Library, Main and Crenshaw-Imperial Branches**

**Copies are also available at the Energy Commission's Library in Sacramento, the California State Library in Sacramento, and at public libraries in Eureka, San Francisco, Fresno, Los Angeles, and San Diego.**



# Sources of Information

❖ All project documents are available for public review at:

✓ Energy Commission Web site:  
[http://www.energy.ca.gov/sitingcases/elsegundo\\_amendment/2013\\_amendment](http://www.energy.ca.gov/sitingcases/elsegundo_amendment/2013_amendment)

✓ Dockets Unit at the Energy Commission  
1516 9th Street, MS - 4  
Sacramento, CA 95814-5512



# Energy Commission Contacts

## ❖ Committee

- Commissioner, Karen Douglas, *Presiding Member*
- Commissioner, Janea Scott, *Associate Member*

## ❖ Hearing Officer

- Paul Kramer, Commission's Hearing Officer  
(916) 654-5103, e-mail: [Paul.Kramer@energy.ca.gov](mailto:Paul.Kramer@energy.ca.gov)

## ❖ Commission Staff

- Craig Hoffman, Compliance Project Manager  
(916) 654-4781, e-mail: [Craig.Hoffman@energy.ca.gov](mailto:Craig.Hoffman@energy.ca.gov)

## ❖ Public Adviser's Office

- Alana Mathews  
(916) 654-4489 or (800) 822-6228  
e-mail: [PublicAdviser@energy.ca.gov](mailto:PublicAdviser@energy.ca.gov)

