

DOCKETED

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CH2M HILL
2485 Natomas Park Drive
Suite 600
Sacramento, CA
95833-2937
Tel: 916.920.0300
Fax: 916.920.8463

March 17, 2014

Ms. Patricia Kelly
Project Manager
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

Subject: Redondo Beach Energy Project (12-AFC-03)
City of Redondo Beach Data Response Set 1– Responses to City of Redondo Beach Data
Requests 1.1 through 6.2

Dear Ms. Kelly:

Attached please find the Redondo Beach Energy Project's City of Redondo Beach Data Response Set 1, including responses to Data Requests 1.1 through 6.2 for the Redondo Beach Energy Project (12-AFC-03) dated February 24, 2014.

In addition, a notice of objection to Data Requests 3.1, 3.2, 5.2, 6.1, and 6.2 was filed on March 17, 2014; therefore, responses for those data requests are not included.

If you have any questions about this matter, please contact me at (916) 286-0249 or Mr. Jerry Salamy at (916) 286-0207.

Sincerely,

CH2M HILL

A handwritten signature in black ink, appearing to read "Sarah Madams".

Sarah Madams
AFC Project Manager

Attachment

cc: S. O'Kane, AES
G. Wheatland, ESH
J. Salamy, CH2M HILL

Redondo Beach Energy Project

(12-AFC-03)

Data Responses, Set DR 1 City of Redondo Beach

(Responses to Data Requests from
City of Redondo Beach Set 1
dated February 24, 2014)

Submitted to
California Energy Commission

Prepared by
AES Southland Development, LLC

With Assistance from

CH2MHILL®

2485 Natomas Park Drive

Suite 600

Sacramento, CA 95833

March 17, 2013

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Introduction

Attached are AES Southland Development, LLC's (AES or the Applicant) responses to the data requests propounded by the City of Redondo Beach, an intervenor in the Redondo Beach Energy Project (RBEP) (12-AFC-03) Application for Certification (AFC) proceeding. The City of Redondo Beach submitted its Data Request Set 1 on February 24, 2014.

The responses are grouped by individual discipline or topic area. Within each discipline area, the responses are presented in the same order as the City of Redondo Beach presented them and are keyed to the Data Request numbers and prefaced with "City" to reference the City of Redondo Beach, e.g. City DR 1.1.

New or revised graphics or tables are numbered in reference to the Data Request number. For example, the first table used in response to Data Request City 1.1 would be numbered Table DR City1.1-1. The first figure used in response to Data Request City 1.2 would be Figure DR City1.2-1, and so on. Figures or tables from the RBEP AFC 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.

Air Quality

BACKGROUND—ANNUAL CAPACITY FACTOR (AIR QUALITY / NOISE AND VIBRATION)

In Section 2.4 of the Application for Certification (AFC), AES states that “RBEP is expected to have an annual capacity factor between 15 and 25 percent.”¹ Stephen O’Kane of AES used this range to estimate a 20% capacity factor at the Information Hearing on October 1, 2013 (“Hearing”):

We expect the new plant to make somewhere between 15 and 25 percent annual, total energy in a year. So out of 20 percent annual capacity you can estimate the emissions and they’ll look like that. And that’s right in our application.

(Hearing Transcript at 41-42.)

AES has thus represented to the Commission and the public that the facility will likely operate no more than 25% of the time. However, in the AFC, AES later states that the facility could operate up to 70% of the time: “The permitted capacity factor for RBEP will be approximately 70 percent.” (AFC Section 5.1.9.2.) In addition, AES states that the facility will be able to operate nearly 100% of the time: “RBEP will be capable of being dispatched throughout the year and will have annual availability 98.4 percent. It will be possible for plant availability to exceed 99 percent for a given 12-month period.” (AFC Section 2.4.)

The capacity factor has a huge impact on the air and noise impacts produced by the facility. If the facility operates at 70% capacity, it will generate almost *three times* the emissions that it would at 25% capacity, and will generate almost five *times* the emissions that it would at 15% capacity.

Moreover, the current facility operates at a capacity factor of around 5%.² If the new facility operates at 70% capacity, it will increase the amount of time in which the facility is operating—and generating noise—by *14 times*.

We therefore ask the following:

DATA REQUEST

City 1.1 Please explain the basis for your statement that, “RBEP is expected to have an annual capacity factor between 15 and 25 percent.”

Response: The basis of the statement that RBEP is expected to have an annual capacity factor between 15 and 25 percent is a dispatch analysis performed by AES, based on forecast conditions in the year 2020.

The decision to dispatch (run) a power plant in California does not rest with the owner of the plant. Instead, the decision to dispatch a plant is made by the load balancing authority (utility) and system operator. The decision by the load balancing authority and/or system operator, in turn, is influenced by many factors that are difficult to predict. At any given moment in time, the decision whether to dispatch a resource (a generating unit) will depend upon such factors as:

- The demand or load on the system at that moment;
- The weather/temperature conditions at that moment;
- The availability of other resources (generators and transmission lines) at that moment, and the relative cost, efficiency and responsiveness of those resources;

¹ The term “capacity factor” means the percentage of time that the facility is operating.

² “[I]f we assume that the existing plant running at a five percent annual capacity factor, which is about what it’s been doing over the last five, six years or so, about five percent of the total energy it could produce in a year we produce.” Stephen O’Kane, Hearing Transcript at 41.

- The duty cycles, vintage of the generator unit, and technology type of the resource to be dispatched;
- The responsiveness of the resource – how quickly it can start up or shut down;
- The heat rate of the resource relative to other available units on the system at a particular moment; and
- The location of the resource in relation to load.

Here is a description of how a load balancing authority or system operator typically decides how to dispatch generating units:

[Dispatchers] typically run their unit-commitment optimization computer programs the afternoon of the day before operations. These large, complicated computer programs accept as inputs detailed information on the characteristics of the individual generating units that are available to provide electricity on the following day. These characteristics include current unit status, minimum and maximum output levels, ramp rate limits, startup and shutdown costs and times, minimum runtimes, and unit fuel costs at various output levels. In addition, the operations planner inputs to the model the utility's day-ahead forecast of system loads, hour by hour, as well as any scheduled wholesale sales or purchases for the following day. Finally, the inputs include details on the characteristics of the transmission system expected for the operating day (in particular, any lines or transformers out of service for maintenance).

The optimization model is then run with all these inputs in an effort to identify the least cost way to meet the following day's electricity demands while maintaining reliability. The reliability requirements include the ability to withstand the loss of any single generation or transmission element while maintaining normal service to all loads. The optimization model performs two functions in its search for a least-cost solution. First, it tests different combinations of generating units that are available and, therefore, could be scheduled to operate the following day (i.e., the times each unit will start, operate, and then be turned off). Second, given the units that are online and operating during any hour, it selects the least-cost mix to meet that hour's loads.

Solving this optimization problem is complicated because of all the intertemporal constraints that generators have. For example, one unit may be relatively cheap to operate (in terms of its variable costs, expressed in \$/MWh) but may have relatively high startup and no load costs (expressed in \$/startup and \$/hour, respectively), while another unit has just the opposite characteristics. Which unit to commit depends on how many hours it is expected to operate the following day. In addition, the unit-commitment solution must respect system constraints, which include contingency-reserve requirements and the transmission constraints mentioned above. Finally, the optimization model must consider many different combinations of generating units that could meet the hour-by-hour loads during the day.

Because these problems are very difficult mathematically, the solutions are approximate. As a consequence, the final solution may not be exactly least cost. For a vertically integrated utility, this approximation is not a problem because its profitability depends on its entire portfolio of generating units, not on the performance (operation) of only one or two units. For the

customers of such a utility, the differences among solutions are also generally inconsequential, because the differences in total costs between near-optimal solutions is small.

The unit-commitment program may be run several times during the operating day, especially if conditions change materially from the time the day-ahead run was made. Such changes might include the loss of a major generating unit, the return to service of a large generator that was offline, the loss of a transmission line, or a change in system load caused by unexpected weather changes.³

As can be seen from the above description, the process of dispatching generating resources is complex and depends upon many variables at a particular point in time. However, it is not necessary for the Commission to determine the expected annual capacity factor in any given year in order to approve a license for a power plant. It is sufficient for the purpose of the license for the Commission to require that the Project not operate above permitted levels. All analyses potential environmental impacts assume operation at maximum permitted capacity. If the impacts of the project are not significant at the maximum permitted levels, the impacts will not be significant at lower estimated capacity factors.

DATA REQUEST

City 1.2 Please explain the basis for your statement that, “The permitted capacity factor for RBEP will be approximately 70 percent.”

Response: RBEP’s permitting capacity factor of 70 percent is based on a maximum electrical generating capacity of 496 megawatts and a maximum number of operating hours of 6,370 hours per year of permitted operation, which will be enforced through the facility’s CEC certification and Clean Air Act Title V permit. Using these values, the RBEP capacity factor is estimated to be 72.7 percent⁴ or approximately 70 percent.

DATA REQUEST

City 1.3 Please provide your estimate of the likelihood that the capacity factor in any given year could be any of the following: 15% or greater; 20% or greater; 25% or greater; 50% or greater; 70% or greater. Please explain the basis for your estimates.

Response: The Applicant is not aware of any methodology that would allow a person to accurately calculate, five or more years in the future, the likelihood or probability of a specific capacity factor of a specific generating resource in any specific year. Therefore, the Applicant has not made any such estimate. However, because the maximum permitted annual capacity factor will be approximately 70% (please see the above response to DR City 1.2), the likelihood that the project will operate above the maximum permitted annual capacity factor of approximately 70% is nearly zero. Only one circumstance would allow AES to operate the facility at an annual capacity factor greater than 70%. That circumstance would be if the Governor of California were to declare a national or regional energy emergency and issue a temporary emergency suspension of permit conditions consistent with Section 110 of the Clean Air Act, for an extended period of time.

³ Hirst, Eric, *Real-Time Balancing Operations and Markets: Key to Competitive Wholesale Electricity Markets*, pp. 8-9 (April 2001), available at: <http://wp.ornl.gov/sci/ees/etsd/pes/pubs/RTMReport.pdf>.

⁴ Capacity factor = (496 megawatts * 6,370 hours) / (496 megawatts * 8,760 hours) * 100 = 72.7 percent

DATA REQUEST

City 1.4 Are there any circumstances in which AES believes that its capacity factor in any given year could exceed 70%? If so, please explain.

Response: AES will receive an air quality permit issued by the South Coast Air Quality Management District with oversight by the United States Environmental Protection Agency. The air permit will include monthly and annual emission limitations based on the exact same assumptions used to calculate the “approximately” 70 percent capacity factor reference in Data Request City 1.2 (above). As stated above, only one circumstance would allow AES operate the RBEP above an annual capacity factor of approximately 70%, and that circumstance would be if the Governor of California were to declare a national or regional energy emergency and issue a temporary emergency suspension of permit conditions consistent with Section 110 of the Clean Air Act.

DATA REQUEST

City 1.5 Would AES be willing to accept a permitted maximum annual capacity factor of 25%? If not, why not?

Response: No. The RBEP, if licensed by the Commission, will be capable of operating at up to a capacity factor of approximately 70% in conformance with all applicable laws, ordinances, regulations, and standards, and without causing any significant adverse environmental effects (please see the above response to DR City 1.2). As stated above, the Applicant will comply with the proposed maximum operating hours and total annual generating capacity, which will be enforced through the facility’s CEC certification and Clean Air Act Title V permit. Any lower limit could potentially jeopardize local electrical reliability, as the plant could be needed to operate for an extensive period of time in the event of electrical system need caused by the loss of transmission lines or other regional generating capacity. Since the primary purpose of the proposed RBEP is to provide generating capacity to serve local area reliability need, a limit on operating hours and total annual capacity lower than currently proposed would limit the ability of the RBEP serve its designed purpose. Therefore, there is no reason to arbitrarily limit the operation of the project to a lower maximum annual capacity factor. An arbitrary limit on the annual generating capacity of any generating unit would require the unnecessary construction of additional generation elsewhere to make up for the loss of the capacity that was arbitrarily capped. This would unreasonably increase both the economic and environmental costs of producing electricity in California.

Noise and Vibration

BACKGROUND – HISTORIC RESPONSE TO NOISE COMPLAINTS (NOISE AND VIBRATION)

In Section 5.7.5.2 of the AFC, AES states that “the Project Owner will document, investigate, evaluate, and attempt to resolve all legitimate project-related noise complaints.”

However, at the public workshops on December 5, 2013, and February 10, 2014, (collectively, “Public Workshops”) numerous residents testified regarding the current facility’s long history of frequent, severe, unaddressed noise complaints. This calls into question whether AES is willing or able to implement an effective system for mitigating noise impacts.

At the public workshop on December 5, 2013, a resident asked AES to describe its historic record of responding to and addressing noise complaints. AES declined. The City and Energy Commission Staff (“Commission Staff”) then made the same request. AES responded that if the public, the City, or the Commission are interested in obtaining this information, they should submit a written data request.

DATA REQUEST

City 2.1 Please provide the following with regard to all known or suspected exceedances of local noise ordinances by the existing facility since AES acquired the facility in 1998: (1) description of the underlying incident; (2) description of complaints submitted to AES or of which AES is aware; (3) description of any investigation conducted by AES; (4) description of corrective measures taken by AES to resolve the exceedance; (5) description of any preventive steps taken by AES to avoid such exceedances in the future.

Response: The Applicant disagrees with the background statement that the current facility has a “long history of frequent, severe, unaddressed noise complaints.” The request is vague because it does not define the term “known or suspected exceedance” nor identify the local ordinances which are alleged to be exceeded. However, if the term “known or suspected exceedance” refers to an instance in which any local governmental agency has investigated a noise complaint and has determined after notice and hearing that a local ordinance has been violated by the Redondo Beach Generating Station, there has been no “exceedance” since AES acquired the facility.

DATA REQUEST

City 2.2 Please provide the following with regard to all noise complaints regarding the current facility, which were submitted to AES or of which AES is aware, since AES acquired the facility in 1998: (1) description of the underlying incident; (2) description of complaints submitted to AES or of which AES is aware; (3) description of any investigation conducted by AES; (4) description of corrective measures taken by AES to resolve the complaint; (5) description of any preventive steps taken by AES to avoid such complaints in the future.

Response: AES has not retained records of noise complaints since 1998 regarding the Redondo Beach Generating Station. When there is an incident at the Redondo Beach Generating Station that causes a loud noise, AES takes a proactive approach to investigate the cause of the noise, to inform the community of the cause of the noise, and to provide a contact for any member of the public who has a question or concern. (Please see Attachment DR City 2.2-1, for copies of the Community notices that AES proactively issued in 2011, whether or not it has received a complaint.)

For example, on May 10, 2011, AES issued the following Community Notice:

Early this morning AES Redondo Beach Steam Generating Station experienced a steam release. To the best of our knowledge we did not receive any complaints regarding this release but as a proactive measure we wanted to inform you of the reason for the noise. At 1:30am on 5/10/2011 an auxiliary steam safety valve on Boiler #17 lifted due to a control valve malfunction causing a pressure swing. The system was returned back to a normal state shortly after the release. We will be investigating why the control valve malfunctioned. If you have any further questions please feel free to contact me. (See, Attachment DR City 2.2-1.)

Most of the incidences of loud noise at the Redondo Beach Generating Station are caused by steam releases. The plant heats steam to run its electric generators. A series of safety valves protect the boilers by rapidly venting excess steam when the steam system pressure reaches the design safety limit due to either a mechanical or operational issue. These steam releases are therefore unplanned events that are necessary in emergency circumstances to protect the plant, its personnel and the public. AES is aware that steam releases at the Redondo Beach Generating Station can be loud, and notes that the Redondo Beach Generating Station is an aging facility. Over the past 20 years, AES and the previous owner Southern California Edison have invested over \$ 1.7 million in the facility to reduce noise, including installing safety valve silencers on Units 7 and 8, silencers on the boiler feed booster pump motors, insulation on Units 7 and 8 main gas valve enclosures, and silencers on Units 5 and 6 auxiliary steam safety valves. To prevent future steam releases from an aging power plant, AES is proposing to build a new plant, with modern equipment and technology. In doing so, AES will be able to significantly reduce the need for and eliminate the need for future steam releases.

DATA REQUEST

City 2.3 At least 31 noise complaints have been filed with the City against the existing facility since 2007. The complaints are listed below, with brief excerpts of the text from each. (Redacted copies of the complaints are available from the City upon request.) For each complaint, please provide the following: (1) description of the underlying incident; (2) description of any investigation conducted by AES; (3) description of corrective measures taken by AES to resolve the complaint; and (5) description of any preventive steps taken by AES to avoid such complaints in the future.

Response: City of Redondo Beach Municipal Code Section 4-24.201 requires that “Upon the receipt of a complaint from a citizen, the Noise Control Officer or his delegated representative, equipped with sound level measurement equipment, shall investigate the complaint. The investigation, at the discretion of the NCO or his delegated representative, shall consist of a measurement and the gathering of data to adequately define the noise problem.” This request does not indicate whether the City actually investigated any of the “31 noise complaints” as required by the ordinance, or whether the City communicated the results of these investigations to AES. The request does not even indicate whether the City informed AES of any of these 31 communications. In the absence of specific information showing that the City conveyed these communications to AES, there is not enough information to address the specific communications.

Generally speaking, however, most of these communications referenced in the City’s Data Request 2.3 appear to refer to steam venting incidents described in response to City Request 2.2. With respect to these incidents (1) the incidents are caused by the emergency venting of steam when there is a malfunction of plant equipment, (2) each malfunction which causes venting is immediately investigated and repaired by AES, (3) whether or not there is a complaint, AES proactively issues a notice to the community explaining the cause of the incident and providing a person to contact with questions or concerns, and (4) in order to

prevent such incidents in the future, AES is proposing the construction of a new power plant that should reduce or eliminate these types of incidents.

**Attachment DR City 2.2-1
AES Outreach to Community After Noise/Facility
Malfunctions at the Redondo Beach Generating
Station**

From: Steven Winters
Sent: Monday, August 15, 2011 1:13 PM
To: 'Best Western Sunrise Hotel'; 'Bill Brand'; 'Brent Scheiwe'; 'Charlotte Ginsburg'; 'Cheesecake Factory'; 'City of Hermosa Beach'; 'Crown Plaza Hotel - Bill Ryburn'; 'Crown Plaza Hotel - Ernestina'; 'Crown Plaza Hotel - Glen'; 'Crown Plaza Hotel - Paul'; 'HBFD David Lantzer'; 'HBPD - Chief'; 'HBPD - Lieutenant'; 'King Harbor Marina Manager'; 'Mike Gin'; 'Neighbor - Carl Schneider'; 'Pat Aust'; 'Playa Pacifica Apartments'; 'Portofino Hotel & Yacht Club - Nina'; 'Portofino Hotel & Yacht Club - Carolyn'; 'Portofino Hotel & Yacht Club - Malia'; 'Portofino Hotel & Yacht Club - Randy'; 'Portofino Hotel & Yacht Club - Shannon'; 'Ruby's Diner'; 'Sean Guthrie'; 'Steve Aspel'; 'Ted Lieu'; 'Tracy Hopkins'
Cc: Tony Chavez; Eric Pendergraft
Subject: Community Notification

Dear Community Neighbors,

I apologize for sending this notification out late. On 8/11 at 4:55pm and again on 8/13 at 9:57am and 8:16pm, AES Redondo Beach Steam Generating Station encountered steam releases due to a malfunction of an auxiliary steam control valve. If you have any further questions please feel free to contact me.

Sincerely,
Steven Winters
Team Leader
AES Redondo Beach
1100 North Harbor Drive
Redondo Beach, CA 90277
P 310-318-7428 | F 310-318-7593
Steven.Winters@aes.com | www.aes.com

From: Steven Winters
Sent: Tuesday, April 17, 2012 3:10 PM
To: Best Western Sunrise Hotel; Bill Brand; Brent Scheiwe; Charlotte Ginsburg; Cheesecake Factory; City of Hermosa Beach; Crown Plaza Hotel - Bill Ryburn; Crown Plaza Hotel - Ernestina; Crown Plaza Hotel - Glen; Crown Plaza Hotel - Paul; Hbfd David Lantzer; HBPD - Chief; HBPD - Lieutenant; John Parsons; King Harbor Marina Manager; Mike Gin; Neighbor - Carl Schneider; Pat Aust; Portifino Hotel & Yahct Club - Nina; Portofino Hotel & Yahct Club - Malia; Ruby's Diner; Sean Guthrie; Steve Aspel; Ted Lieu; Tracy Hopkins
Cc: Eric Pendergraft; Tony Chavez; Brian White
Subject: Community Notification

Importance: High

Dear Community Neighbors,

On April 17th at approximately 12:00pm AES Redondo Beach Generating Station encountered a steam release due to main gas regulators coming open too quickly to meet high load demands. The problem has been identified and resolved. Please feel free to contact me if you have any further questions.

Sincerely,
Steven Winters
Team Leader
AES Redondo Beach
1100 North Harbor Drive
Redondo Beach, CA 90277
P 310-318-7428 | F 310-318-7593

Steven.Winters@aes.com | www.aes.com

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From: Steven Winters
Sent: Friday, September 14, 2012 2:15 PM
To: Best Western Sunrise Hotel; Bill Brand; Brent Scheiwe; Charlotte Ginsburg; Cheesecake Factory; City of Hermosa Beach; Crown Plaza Hotel - Bill Ryburn; Crown Plaza Hotel - Ernestina; Crown Plaza Hotel - Glen; Crown Plaza Hotel - Paul; HBFD David Lantzer; HBPD - Chief; HBPD - Lieutenant; John Parsons; King Harbor Marina Manager; Mike Gin; Neighbor - Carl Schneider; Pat Aust; Portifino Hotel & Yahct Club - Nina; Portofino Hotel & Yahct Club - Malia; Ruby's Diner; Sean Guthrie; Steve Aspel; Ted Lieu; Tracy Hopkins
Cc: Eric Pendergraft; Jennifer Didlo; Tony Chavez; Brian White; David Spencer; James Bresnahan; Guillermo Urena; Lou Bronsard; Kathryn Benner
Subject: Community Notification
Importance: High

Dear Community Neighbors,
AES Redondo Beach Generating Station experienced a steam release for approximately one minute at about 11:33 pm on 9/14/2012 due to combustion control issues while increasing output. We apologize for the disturbance; please contact me if you have any further questions.

Sincerely,
Steven Winters
P 310-318-7428 | F 310-318-7593
Steven.Winters@aes.com | www.aes.com

2011 Community Notifications

Dear Community Neighbors,

Early this morning AES Redondo Beach Steam Generating Station experienced a steam release. To the best of our knowledge we did not receive any complaints regarding this release but as a proactive measure we wanted to inform you of the reason for the noise. At 1:30am on 5/10/2011 an auxiliary steam safety valve on Boiler #17 lifted due to a control valve malfunction causing a pressure swing. The system was returned back to a normal state shortly after the release. We will be investigating why the control valve malfunctioned. If you have any further questions please feel free to contact me.

Dear Community Neighbors,

This morning May 29th at approximately 11:25am AES Redondo Beach Steam Generating Station experienced a steam release. Unit 7 auxiliary steam safety valve lifted due to a control module failure causing a pressure swing. The release lasted for about 10 minutes. The control module was replaced and we will be investigating why the module failed. If you have any further questions please feel free to contact me.

Dear Community Neighbors,

This afternoon June 5th at approximately 2:00pm AES Redondo Beach Steam Generating Station experienced a boiler drain line rupture on Unit 7. The unit was shut down and we are currently investigating the failure. If you have any further questions please feel free to contact me.

Dear Community Neighbors,

I apologize for sending this notification out late. On 8/11 at 4:55pm and again on 8/13 at 9:57am and 8:16pm, AES Redondo Beach Steam Generating Station encountered steam releases due to a malfunction of an auxiliary steam control valve. If you have any further questions please feel free to contact me.

Dear Community Neighbors,

Last night (8/15) around 10:55pm AES Redondo Beach Steam Generating Station had another steam release due to an excursion with our auxiliary steam. We have taken the system out of service to troubleshoot the issues with the control valve. If you have any further questions please feel free to contact me.

Dear Community Neighbors,

Just after midnight on August 30th at approximately 12:30 am AES Redondo Beach Steam Generating Station had a steam release while shutting down our running units. At this time we are still investigating what caused the release. If you have any further questions please feel free to contact me.

Dear Community Neighbors,

At approximately 3:25pm on September 5th AES Redondo Beach Steam Generating Station had a steam release due to a valve malfunction. A crew was brought in right away to make temporary repairs; a permanent repair will be scheduled when the unit is dispatched to be shut down. If you have any further questions please feel free to contact me.

Dear Community Neighbors,

Today (9/7) at approximately 2:45pm AES Redondo Beach Steam Generating Station had a steam release due to turbine control valve issues causing an upset. The incident is under investigation, if you have any further questions please feel free to contact me.

Selection of Monitoring Sites for Noise Study (Noise and Vibration)

BACKGROUND

At the Public Workshops, AES was asked the following questions by Commission Staff, the City, and members of the public: (1) Why are the monitoring sites for the noise study (“Sites”) not located closer the facility? (2) Why is there no Site located directly across the street to the north of the facility? and (3) Why was the noise study not completed when initially requested by the Commission Staff, and why will it not be completed until August (almost a year after the date initially requested by the Commission)?

AES responded, in part, that it had requested access to many potential sites that were closer to the facility and to the north and east of the facility, but that the property owners had refused to provide access.

DATA REQUEST

City 3.1 Please identify all sites that were considered by AES for use as monitoring sites for the noise study. For each site, please provide the following: (1) specify the location of the site; (2) specify whether and when AES requested access from the property owner; and (3) describe the response of the land owner.

Response: The Applicant objects to this request. Please see our Notice of Objection submitted under separate cover. Without waiving such objections, the Figure DR City 3.1-1 designates the areas that were considered by AES for use as noise monitoring sites.

DATA REQUEST

City 3.2 Specifically, did AES request access from a property owner at any of the following locations: (1) any property “across the street” to the north of the facility, located on Herondo Street between Valley Drive and Monterey Drive; or (2) any property located on N. Catalina Avenue, between N. Francisca Avenue and N. Pacific Coast Highway?

Response: The Applicant objects to this request. Please see our Notice of Objection submitted under separate cover. Without waiving such objections, Figure City 3.1-1 identifies the areas that were considered by AES for use as noise monitoring sites. Siting a noise monitoring system requires a secure location where the equipment can be locked to an immovable object to prevent removal and will be free from tampering or activity that could skew noise monitoring results. As such, AES primarily focused its search for noise monitoring locations within commercial properties surrounding the project site, including commercial properties located on Herondo Street and N. Catalina Avenue. The two noise monitoring locations presented in the Application for Certification and the additional two noise monitoring locations presented in Data Response Set 1R, #26R, represent those properties that granted permission to site the equipment.

DATA REQUEST

City 3.3 At the public workshop on February 10, 2014, Hermosa Beach Council Member Hany Fangary told AES that he would be happy to work with them to identify appropriate monitoring sites located on property owned by the City of Hermosa Beach. Has AES contacted Council Member Fangary regarding his offer? Please describe any such discussions.

Response: AES has not communicated with Mr. Fangary since the workshop, nor has he contacted AES.



Source: Department of Public Works Water Resources Division (2004).
 Esri, i-cubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Legend

- AES Redondo Beach Energy Project
- Areas Considered for Noise Monitoring
- City Boundary

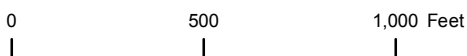


Figure City DR 3.1-1
Areas Considered for
Noise Monitoring Sites
 AES Redondo Beach Energy Project
 Redondo Beach, California

Violation of Local Construction Ordinance (LORS Violation)

BACKGROUND

At the public workshop on February 10, 2014, Stephen O’Kane of AES stated that the construction of RBEP would require at least one incident of continuous construction activity overnight, and possibly more. This appears to be a direct violation of Section 9-1.12 of the Redondo Beach Municipal Code (“Construction Noise Ordinance”), which provides, in relevant part

- (a) All construction activity shall be prohibited, except between hours of 7:00 a.m. and 6:00 p.m. on Monday, Tuesday, Wednesday, Thursday, and Friday and between the hours of 9:00 a.m. and 5:00 p.m. on Saturday. No construction activity shall be permitted on Sundays, or the days on which the holidays designated as Memorial Day, the Fourth of July, Labor Day, Thanksgiving Day, Christmas Day, and New Year’s Day are observed.

DATA REQUEST

City 4.1 Please describe the extent to which the demolition and construction activities for the RBEP project—including transportation activity—will extend beyond the hours permitted by the Redondo Beach Construction Noise Ordinance. Please specify the number of expected incidents, and the amount of time by which each incident will exceed the limits specified in the ordinance.

Response: The Applicant does not agree with the premise of the request that night time construction or demolition activities will necessarily violate Section 9-1.12. We will address this ordinance in detail at the appropriate time in this proceeding. However, for the purposes of responding to this data request, Table City 4.1-1 identifies the anticipated demolition and construction activities for the RBEP that might extend beyond the hours of 7:00am and 6:00pm Monday, Tuesday, Wednesday, Thursday, and Friday, or beyond the hours of 9:00 a.m. and 5:00 p.m. on Saturday. It should be noted however that RBEP will make efforts to minimize nighttime work, and does not plan to perform normal work activities outside of the permitted hours.

The Redondo Beach Noise Ordinance does not include transportation activities in the definition of construction activity and as such transportation activities are not subject to the Subsection 4-24.503(a) of the City’s noise ordinance. Equipment deliveries to the project site will occur between the hours of 7 am to 6 pm with the maximum number of truck trips per month being 28. A traffic management plan would restrict deliveries to the site to these hours. Any delivery trucks that might arrive at the site prior to allowable construction start time (7 am on weekdays and 9 am on Saturday) will be parked on the RBEP site until the allowable construction start time and the driver/contractor would be reprimanded for not complying with the traffic management plan. Consistent with state laws governing idling diesel engines, no delivery truck will remain idling more than 5 minutes. All delivery trucks are required to comply with the California Vehicle Code Sections 23130 and 23130.5.

Subsection 4-24.503(c) of the Redondo Beach noise ordinance provides the Building Officer with the ability to permit construction activities that are prohibited by Subsection 4-24.503(a) based on the location or nature of the construction activity. Therefore, the City’s noise ordinance includes provisions to allow construction to occur outside of the allowable construction days and hours.

**Table DR City 4.1-1
Activities with Potential to Occur Outside of Noise Ordinance Hours**

Activity	# of Occurrences	Time per Occurrence	Equipment Needed	Description	Potential for Noise
Concrete Pours	5-10	6-10 hours	Concrete mixer truck, concrete pump, concrete vibration equipment, concrete finishing hand tools, task lighting for worker safety	This would only occur when there was a large volume concrete pour that could not be finished within normal working hours. RBEP does not plan to pour concrete outside of normal working hours.	The concrete mixer and pump truck will have backup warning alarms for worker safety, and the concrete pump will emit some noise. Concrete finishing is very quiet and is mostly done with hand tools.
Cable Pulls	10-20	6-10 hours	Motorized cable puller	Cable pulls may need to be performed at night to coordinate with other critical construction activities	This generates little to no noise.
Electrical terminations	10-20	6-10 hours	Hand tools	Electrical terminations may need to be performed at night to coordinate with other critical construction activities	This generates little to no noise.
Post Weld Heat Treating	10-20	24 hour operation	Resistive electric heaters	The nature of post weld heat treating necessitates that it run continuously. It will not create a disturbance.	This generates little to no noise, and only requires that a worker monitor the equipment and take hourly readings.
Aligning mechanical equipment	5-20	6-10 hours	Laser alignment tooling	Alignments for major mechanical equipment can take days or weeks to complete, and sometimes require that work continue into the night to get to a stopping point	This generates little to no noise.
Flushing piping systems	0-10	24 hour operation	Flushing and filtering skid	The nature of flushing a piping system necessitates that it run continuously until impurities have been removed from the system	This generates little to no noise, and only requires that a worker monitor the equipment and take hourly readings.
Performing quality checks	0-10	6-10 hours	Hand tools	A worker may need to perform various checks around the site outside of normal construction hours. This would involve taking measurements and readings throughout the site	This generates little to no noise.

Construction of Battery Facilities

BACKGROUND

At the meeting of the City's Planning Commission on January 16, 2014, Eric Pendergraft spoke on behalf of AES regarding the possible construction of battery storage facilities at the RBEP facility. Later, at the public workshop on February 10, 2014, Stephen O'Kane of AES was asked whether battery storage "is going to be a part of this plant?" He responded, "It's not part of this project, but it's part of AES' portfolio; but not part of this project, right."

This raises the question of whether AES might be planning to construct battery storage facilities as part of the RBEP power plant or at the RBEP site, but is not communicating this information to the Energy Commission in order to avoid complicating or delaying the AFC process. If AES is planning to construct a battery storage facility at the RBEP facility, it must disclose this information to the Energy Commission, and the Energy Commission must review the proposed battery storage facility as a critical component of the proposed power plant.

DATA REQUEST

City 5.1 Is AES considering or discussing (internally or externally) the possibility of constructing an electricity storage facility or capability at the RBEP site? If so, please provide a description of the possibilities that are being considered or discussed.

Response: The possibility of constructing an electricity storage facility as part of the RBEP was considered and rejected by the Applicant. Please see section 6.7.5 of the AFC for a discussion of this alternative, and the Applicant's reasons for rejecting this alternative. However, as explained in our letter of January 16, 2014 to the Redondo Beach Planning Commission:

With respect to the future of the existing AES-RB power plant site... if a viable alternative use for the property could be identified that would be more broadly supported by the community and provide AES- RB with enough financial benefit to voluntarily move away from its efforts to develop a conventional gas - fired power plant. An ESF on the AES - RB site has the potential to be one of these alternatives and it should not be eliminated as an option by implementing zoning restrictions.

In other words, a battery storage facility is not being considered as a component of the proposed power plant; but if AES were to voluntarily move away from the power plant proposal, a battery storage facility might be a component of an alternative use of the site.

DATA REQUEST

City 5.2 Please provide all written materials in AES' possession—including electronic communication—regarding the possibility of its constructing an electricity storage facility or capability at the RBEP site.

Response: The Applicant objects to this Data Request. Please see our Notice of Objection filed under separate cover.

Alternatives Analysis

BACKGROUND

As a result of AES' refusal to provide an analysis of reasonable alternatives as required by the California Environmental Quality Act ("CEQA") and the Warren-Alquist Act, Energy Commission staff are conducting their own independent alternatives analysis. (See Staffs Response to Applicant's Notice of Objection to Set 1B and Notice of Additional Time Needed to Respond, Dec. 17, 2013.)

DATA REQUEST

City 6.1 Please provide a detailed description of any project alternative or alternative site configuration considered or discussed by AES that is not contained in the AFC or other materials submitted by AES to the Energy Commission. This includes but is not limited to any facilities or equipment involving batteries or electrical storage.

Response: The Applicant objects to this Data Request. Please see our Notice of Objection filed under separate cover.

DATA REQUEST

City 6.2 Please provide all written materials in AES' possession—including electronic communication—regarding any project alternative or alternative site configuration responsive to Data Request 6.1.

Response: The Applicant objects to this Data Request. Please see our Notice of Objection filed under separate cover.