

Memorandum

Date: May 4, 2007
 Telephone: (916) 654-4679

To: Commissioner Jeffrey Byron, Presiding Member
 Commissioner John Geesman, Associate Member

From: California Energy Commission – Bill Pfanner *Bill Pfanner*
 1516 Ninth Street Project Manager
 Sacramento, CA 95814-5512

DOCKET	
06-AFC-6	
DATE	MAY 04 2007
RECD.	MAY 04 2007

Subject: **EASTSHORE ENERGY CENTER (06-AFC-6) STATUS REPORT 3**

Pursuant to the Revised Committee Scheduling Order dated April 5, 2007, the following is staff's Status Report 3 for the proposed Eastshore Energy Center (Eastshore).

Recent Events and Milestones

- April 3, 2007, receipt of Eastshore Energy Center responses to Data Request Set #3 for the areas of: Alternatives, Land Use, Traffic and Transportation, and Waste Management.
- April 4, 2007, receipt of the Hayward City Council's March 13, 2007 Determination (in resolution form) that the Eastshore Energy Center is not consistent with the City of Hayward's Industrial Zoning District and General Plan
- April 19, 2007, receipt of City of Hayward response to California Energy Commission's letter of March 16, 2007 regarding land use issues pertinent to the Russell City Energy Center and Eastshore Energy Center
- April 27, 2007, receipt of Preliminary Determination of Compliance (PDOC) from Bay Area Air Quality Management District (BAAQMD).
- May 3, 2007, docketing of Workshop questions (#1 thru #15) from Data Response and Issues Resolution Workshop conducted on March 19, 2007 in Hayward (posted on Energy Commission's Eastshore web page on May 4, 2007 and attached for reference).

Current Issues and Activities for Resolution

Staff is continuing with the discovery and analysis portions of its review of the Eastshore Application for Certification (AFC). At this time the primary areas of outstanding information are Air Quality, Land Use, Traffic and Transportation (Hayward Executive Airport), Visual Resources, and Worker Safety and Fire Protection. Additionally, several concerns in the areas of Alternatives and Transmission System Engineering have emerged from the public, local agencies and the Committee's Revised Scheduling Order. These factors are contributing to the complexity of staff's completion of the Preliminary Staff Assessment (PSA) and will ultimately impact staff's ability to adhere to the Committee's Revised Schedule.

PROOF OF SERVICE (REVISED 3/12/07) FILED WITH
 ORIGINAL MAILED FROM SACRAMENTO ON 5/4/07

The following provides a summary of the status of the information needed to complete the PSA and anticipated dates of submittal.

Air Quality

The Bay Area Air Quality Management District (BAAQMD) released its Preliminary Determination of Compliance (PDOC) for the Eastshore project on April 25, 2007, which was received by the Energy Commission on April 27, 2007.

Staff's review of the PM10/PM2.5 emissions mitigation cannot be completed until the Eastshore applicant files a "mutually acceptable mitigation plan reflective of local air quality improvement goals" (as offered in the response to Data Response #7). Staff identified a need for such a plan at the January 29, 2007 workshop and again at the March 19, 2007 workshop. Similarly, staff's review of the cumulative air quality analysis cannot be completed until a full response to Data Request #17 is provided, as was noted in the January 29 workshop and again at the March 19 workshop (March 19 workshop questions #4 and #5).

- **The applicant has stated that a complete response for the Cumulative Air Impact Analysis and a PM10/PM2.5 mitigation package will be submitted on May 4, 2007.**

Land Use - Conformity with City of Hayward Laws, Ordinances, Regulations, and Standards (LORS)

On March 13, 2007, the Hayward City Council voted unanimously that the Eastshore Energy Center is not consistent with the General Plan or the Industrial Zoning District designation. The area is currently classified as an "Industrial Corridor" in the General Plan, and the site is zoned Industrial. The City Council's opinion is based in part on a revision to the general plan in 2002 that was intended to promote technology-based businesses in the area of the proposed plant. City staff reported to the Council their belief that the project would be more appropriately sited further west in the Industrial Corridor, nearer the proposed new site for the approved Russell City Energy Center (01-AFC-7C Amendment).

The City Council in 2001, upon a recommendation from the Planning Commission, determined that the Russell City project at its original location was consistent with a "manufacturing" use, which is a permitted primary use listed in the Industrial Zoning District. Such determination was based largely on a determination that the Russell City power plant at that location was "similar to other existing uses in the Industrial District". On March 16, 2007, Energy Commission staff sent a letter to the City's Planning manager seeking clarification on the General Plan and Zoning consistency determination with respect to these issues. A response from the City was received on April 19, 2007, which details why the City finds the Eastshore project not consistent with Hayward's Industrial Zoning District and General Plan.

- **Staff now has the land use information needed to complete its analysis for publication of the PSA, with the exception of material related to the Hayward Executive Airport (see below).**

Land Use and Traffic and Transportation – Hayward Executive Airport

Staff has identified a potential issue associated with the proposed Eastshore project and its proximity to the Hayward Executive Airport (HEA). The HEA has a control tower with a staff overseeing approximately 400 airport operations (i.e., take-offs and landings) per day. The Eastshore site is approximately 1.2 miles from the HEA. This places the proposed project within the HEA Approach Zone, which extends out two miles in all directions. Pursuant to § 10-6.35 of the Hayward Municipal Code (HMC), "...no use may be made of land within any airport approach zone, airport turning zone, or airport transition zone in such a manner as to...endanger the landing, take off, or maneuvering of aircraft." Aircraft executing a missed approach, helicopters, and small general aviation aircraft would potentially fly over the facility and could be exposed to an aviation hazard from exhaust plumes generated from the power plant's 70-foot stacks and air cooled radiators.

On March 16, 2007, staff sent a letter to the City of Hayward's Planning manager seeking clarification on the City's use restrictions and zoning consistency with respect to land use compatibility and potential aviation safety issues. A response to this letter was received on April 19, 2007 stating that the Eastshore site is within the boundaries of the Hayward Airport Airspace Drawing shown in the Hayward Executive Airport Master Plan, is not in direct alignment of any major approach route and does not exceed the height limitations established by the FAA and referred to in Hayward's ordinance. However, the City identified the issue of exhaust plumes as a new area of concern and stated that the City understands that the issue of exhaust plumes will be addressed by the FAA as part of their Form 7460 review. Further, the City expects that any mitigation associated with exhaust plumes identified by the FAA will be met and funded by the Eastshore applicant.

The Federal Aviation Administration (FAA) [Bill, please identify the office] issued a letter dated March 9, 2007, recommending that the applicants for the power plants proposed for sites in Hayward (i.e., Eastshore Energy Center and the Russell City Energy Center) provide sufficient information through filing FAA Form 7460 for it to analyze the proposed facilities. FAA needs this information from the Eastshore applicant to make a determination on the effects of the exhaust stacks and exhaust plumes to the navigable airspace. The applicant filed Form 7460 with the Federal Aviation Administration [Bill, please identify the office] on March 28, 2007 and included the information regarding the exhaust plumes.

In the third round of Data Requests submitted on March 2, 2007, staff requested an exhaust plume analysis from the applicant. The applicant's thermal plume analysis results for the Eastshore project were provided in the Data Responses submitted on

April 3, 2007. In its review of the applicant's thermal plume analysis, staff concluded that the applicant's methodology was flawed in that it did not actually match the method from the reference source cited and did not provide reasonable results. Staff has been working with the applicant's consultant to address the methodology issues. Staff is preparing an independent thermal plume analysis and impact assessment of the effects of the plumes on the navigable airspace. Staff will be seeking comments on its PSA analysis from the FAA[Bill, please identify the office], Caltrans Aeronautics, the City of Hayward Public Works Department, Hayward Airport, and the Alameda County Airport Land Use Commission.

- **Staff is working with the applicant's consultant on the methodology issues to assess impacts of the effects of the plumes on the navigable airspace. The applicant may choose to use alternative analytical techniques that could require additional time and resources of the Energy Commission to complete its PSA analysis.**
- **The applicant has stated the FAA's response to Form 7460 may be available on May 4, 2007 and submitted to the Commission soon thereafter.**
- **The Alameda County Airport Land Use Commission has committed to review the Staff Assessment for the Russell City project, scheduled for publication in late May. Comments received from the Airport Land Use Commission will be used in the Energy Commission staff's analysis of potential airport impacts associated with the Eastshore project. At this time it is not known if this will impact the publication schedule of the Eastshore PSA.**

Traffic and Transportation - Cumulative Impacts

Staff has identified a potential issue concerning the cumulative impacts associated with the interaction of Eastshore construction traffic and other projects. Two major projects are the Russell City Energy Center project at its proposed new site and the Caltrans I-880/SR-92 interchange reconstruction. The potential cumulative impacts of construction, heavy equipment, trucks and workers commuting to these projects could result in a considerable impact to local and regional transportation facilities that are already heavily congested. The traffic analysis provided by the Eastshore applicant in the AFC did not incorporate information on the proposed Russell City Amendment construction impacts or the impacts of the I-880/SR-92 Caltrans project. Staff received responses to its second round of data requests specific to these concerns on March 2, 2007, and they were discussed at the Data Response and Issues Resolution workshop conducted March 19, 2007, in Hayward. As a result of the workshop, staff requested additional information of the applicant in workshop questions #6 through #14.

- **The applicant has stated that their responses to outstanding workshop questions (#6 through #14) will be provided to the Energy Commission staff on May 4, 2007.**

Visual Resources - Additional Key Observation Point

At the Data Response workshop held on March 19, 2007, members of the community expressed a desire for a greater range of key observation points (KOP) assessing the visual impacts of the Eastshore project. Based on the public's concerns about visual impacts, on April 17, 2007, the applicant provided staff with photos from six new locations, selected two new KOPs, and prepared photo simulations of the project's publicly visible structures. One KOP location is at the west entrance (parking lot behind building) of the Life Chiropractic College West located on Clawiter Road West. The second KOP is from Clawiter Road in front of the Eastshore project site. The applicant will also be providing staff with a photo simulation of the facility showing onsite landscaping at the time of planting (when construction is expected to be completed in 2009).

- **The applicant will provide information on additional KOPs, photo simulations and a conceptual landscape plan by May 4, 2007.**

Worker Safety and Fire Protection

Energy Commission staff has been informed by the City of Hayward Fire Department (CHFD) that a number of questions listed in the October 20, 2006 letter from the CHFD concerning the fire protection details of the proposed power plant remain unanswered by the applicant. This topic was discussed at the March 19, 2007, workshop. The applicant indicated that they had met with the CHFD staff to address their 2006 questions and they would schedule additional meetings in the coming weeks to address any remaining questions from CHFD.

To date, The CHFD has not responded to Energy Commission staff's requests for information. Staff will therefore proceed with its assessment relying on information the applicant will provide in response to meeting with the CHFD.

- **The applicant has reported meeting with the CHFD on April 25, 2007, and that information regarding fire protection will be submitted on May 4, 2007.**

Community Input

To date, staff has received public comment from approximately 1,200 local Hayward residents expressing concerns about the proposed project. The primary areas of concern were as follows: degradation of air quality, erosion of property values, uncertainty as to the localized benefits of the power produced and the belief that the installation of a second power plant is an undue burden to the community.

Staff will address these community concerns within the scope of its Preliminary and Final Staff Assessments.

Emerging Project Issues

At the March 19 workshop during discussion of Alternatives and Transmission System Engineering (TSE), a number of issues and questions were raised by both the public participants and the City regarding:

- 1) the requirement for a transmission system connection to the Eastshore substation, as opposed to other PG&E substations in the Hayward region;
- 2) details regarding placement of poles along the approximately 1.25 miles of proposed transmission line from the proposed site at 25101 Clawiter Road to the Eastshore substation and the potential for biological impacts;
- 3) details regarding potential local benefits of power production or the lack thereof; and
- 4) public dismay at an apparent lack of involvement and availability on the part of PG&E which has a Power Purchase Agreement contract with the Eastshore applicant, in the City's hearings and the Energy Commission's workshops.

Staff is working with the applicant and PG&E to secure appropriate information for our analysis of Alternatives and TSE (workshop questions #1 and #2). Staff is also preparing a "Local System Effects" assessment as part of the TSE analysis. Staff plans to hold a Community workshop in Hayward in late May and has sought the participation of PG&E to discuss the original PG&E Request For Offer specific to the Eastshore project and alternative site considerations.

Revised Scheduling Order

The Revised Scheduling Order published on April 5, 2007 stipulated that the staff will consider input from the Russell City proponent regarding the feasibility of one site for both the Eastshore and Russell City projects, potential cumulative impacts of two sites, alternative interconnection locations, and any other relevant information. Staff is addressing this information in its PSA Alternatives analysis.

Staff's Status Report 2, published on March 27, 2007, projected a 4 to 6 week delay to the schedule issued by the Committee dated February 2, 2007. The Revised Scheduling Order of April 5, 2007 slightly modified that schedule, with an estimated PSA publication date of mid-June 2007.

The following table summarizes the Committee's Revised Scheduling Order in comparison to staff's current projected schedule. Staff's schedule modifications reflect a third Data Response workshop in late, not early May, for the technical areas of Air Quality, Hazardous Materials, Traffic and Transportation (aviation safety), Visual Resources, Local System Effects, and Alternatives. This workshop would facilitate discussion of the applicant's third set of data responses and issues discussed at the March 19, 2007 Data Response/Issues Resolution Workshop.

Staff, in coordination with the Air District, the City, PG&E and the applicant, will strive to complete its analysis expeditiously and look for opportunities to condense the schedule to the degree possible.

The following lists the outstanding data responses and their anticipated filing date:

AIR QUALITY

Cumulative Impacts Analysis	Information received from BAAQMD; file by May 4, 2007
PM ₁₀ Mitigation Package	File by May 4, 2007
Preliminary Determination of Compliance	Expected by April 27, 2007. (All issues Resolved)

HAZARDOUS MATERIALS

Conference with Fire Department	Meetings held on March 19 and April 25, 2007.
Workshop Question 15	File by May 4, 2007.

TRAFFIC AND TRANSPORTATION

Workshop Questions 6 – 14	File by May 4, 2007.
---------------------------	----------------------

CULTURAL RESOURCES

Workshop Question 16	File by May 4, 2007.
----------------------	----------------------

VISUAL RESOURCES

Additional KOPs, Simulations and Conceptual Landscape Plan	File by May 4, 2007.
--	----------------------

ALTERNATIVES

Workshop Questions 1 – 3	File by May 4, 2007.
--------------------------	----------------------

**Committee's Revised & Staff's Proposed Schedule
 Eastshore Energy Center Project**

Committee's Revised Schedule	Staff's Projected Schedule	Event
N/A	April 2, 2007	Applicant provided Data Response Set 3 on April 3, 2007
Late April, 2007	Mid April, 2007	Agency preliminary determinations and BAAQMD PDOC provided April 27, 2007
April 25, 2007	May 4, 2007	Status Report #3 due to Committee
Early May, 2007	May 23, 2007	Data Response #3 and Community Workshop
May 23, 2007	following May 23 workshop	Status Report #4 due to Committee
Mid June, 2007	Mid June, 2007	Staff files Preliminary Staff Assessment (PSA)
June 20, 2007	To be determined (TBD)	Status Report #5 due to Committee
Late June, 2007	Late June, 2007	Staff conducts PSA workshop
July 25, 2007	TBD	Status Report #6 due to Committee
Early August, 2007	Early August, 2007	Agency final determinations and BAAQMD FDOC
August 15, 2007	TBD	Status Report #7 due to Committee
Late August, 2007	Late August, 2007	Staff files FSA

cc: Docket (06-AFC-6)
 Proof of Service List

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov



May 4, 2007

Mr. Greg Trewitt
Vice President
Tierra Energy, Inc.
710 S. Pearl Street, Suite A
Denver, Colorado 80209

Subject: California Energy Commission Staff's Informal Questions to the Applicant for the proposed Eastshore Energy Center (06-AFC-6) – presented at Data Response and Issues Resolution Workshop conducted March 19, 2007 in Hayward, CA

Dear Mr. Trewitt:

I am sending you this letter as a to follow-up in writing to the questions that were asked at the March 19, 2007 Data Response and Issue Identification Workshop (#2) for the Eastshore Energy Center. Staff understands that you are preparing responses to these questions that will be submitted in writing in early May 2007, and that you will be available to discuss your answers at the Data Response and Issue Identification Workshop (#3) scheduled for May 23, 2006 in the City of Hayward.

Alternatives

- WSQ -1. Please explain the use of the name Black Hills for the project and provide an explanation for why PG&E did not identify the project as a Tierra Energy project in its public documents.
- WSQ -2. Please make another attempt with PG&E to obtain additional information or background to expand upon the position outlined in PG&E's letter provided in response to data responses 50 and 51. Please document the results of your contact with PG&E, including the names and phone numbers of PG&E individuals contacted and any further explanation obtained.
- WSQ -3. Besides the Request for Offers information found on PG&E's website at PGE_LT_RFO_PP_3-18-05.pdf, please provide copies of and additional PG&E RFO documents and explain whether the RFO mentions the Eastshore substation as a preferred point of interconnection.

Air Quality

- WSQ -4. The Energy Commission staff does not wish to review the applicant's partial cumulative analysis including only Eastshore and Russell City Energy Center projects. Please provide the complete cumulative air quality impact analysis

requested under data request 17 after a complete inventory of cumulative sources has been obtained from the Bay Area Air Quality Management District to allow the full analysis.

WSQ -5. Please provide a written air quality mitigation plan including the specific details of the emissions to be mitigated, an identification of the specific ERCs to be surrendered by Eastshore, a complete description of any additional emission reduction programs to be implemented, and any supporting materials establishing the basis and efficacy of the program.

Traffic and Transportation

WSQ -6. Provide analysis of vehicle safety issues at Clawiter/I-92E exit and Industrial Blvd/I-92E exit, in conjunction with evaluation of traffic conditions and suitability of routes for hazardous materials transport for both Clawiter Road and Industrial Blvd, as requested in DR #56. Provide similar analysis for any other proposed alternative routes.

WSQ -7. Provide turning radius/encroachment design diagram for the plant entrance (encroachment onto Clawiter Road). This a follow-up request for clarification of DR #57.

WSQ -8. Provide data and method(s) of analysis for revised traffic impact analyses and consistency with City of Hayward methods of evaluation, per DRs #60 and #63.

WSQ -9. Provide a draft of Transportation Management Plan, Pedestrian Traffic Management Plan, and Heavy Haul Plan or, as an alternative, provide detailed project-specific measures that would be incorporated into the plans to mitigate potential impacts. This is a follow-up request for clarification of responses to DRs #55, #61, and #62.

WSQ -10. Provide a breakout of truck and passenger vehicle traffic from total peak traffic counts and projected construction traffic counts. Include construction truck traffic counts from Russell City project in cumulative analysis. This is a follow-up request for clarification of response to DR #59.

WSQ -11. Specify actual window time for off-peak construction operations, including worker arrival/departure times. This is a follow-up request for clarification of response to DR #62 and public requests.

WSQ -12. Specify conditions that would support 24-hour project construction activity. Identify frequency and portions of the construction timeline when these conditions would be reasonably expected to occur. Address compatibility with City of Hayward construction restrictions. Response to public request.

WSQ -13. Address impact of Caltrans I-880/SR-92 Interchange Reconstruction Project road closures and construction delays on off-peak worker arrivals and departures. This is a follow-up clarification of response to DR #64.

WSQ -14. Provide proposed mitigation measures to address project-related traffic impacts on already impacted roads. This is a revisit of DR #65. No mitigation was proposed.

Hazardous Materials

WSQ -15. Questions were asked by the public at the Data Response Workshop concerning the safety of the transfer of ammonia from the storage tank to the ammonia skid and then to the individual engine exhaust stacks. Please provide a narrative description and preliminary design drawings of the piping system that will be used to transfer aqueous ammonia from the ammonia tank to the ammonia skid and then ammonia vapor from the skid to the individual engine exhaust stacks. The narrative and design drawings shall describe and show the following:

- locations of these three components to one another;
- distances between them;
- length of pipe between these components;
- total length of piping at the power plant that will carry ammonia;
- locations of secondary containment structures;
- pipe materials;
- proposed use of double-walled pipes (if any);
- locations of ammonia sensors (if any);
- operating pressures and temperatures of each segment of the piping; and
- height clearances of pipes above passage ways (if any).

If you have any questions or comments, please do not hesitate to call me at 916-654-4206.

Sincerely,

Bill Pfanner
Project Manager

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION
OF THE STATE OF CALIFORNIA

APPLICATION FOR CERTIFICATION
FOR THE EASTSHORE ENERGY CENTER
IN HAYWARD
BY TIERRA ENERGY OF TEXAS

Docket No. 06-AFC-6

PROOF OF SERVICE
(Revised 3/12/07)

INSTRUCTIONS: All parties shall either (1) send an original signed document plus 12 copies or (2) mail one original signed copy AND e-mail the document to the address for the Docket as shown below, AND (3) all parties shall also send a printed or electronic copy of the document, which includes a proof of service declaration to each of the individuals on the proof of service list shown below:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 06-AFC-6
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

APPLICANT

Greg Trewitt, Vice President
Tierra Energy
710 S. Pearl Street, Suite A
Denver, CO 80209
greg.trewitt@tierraenergy.com

Harry Rubin, Executive Vice President
RAMCO Generating Two
1769 Orvieto Drive
Roseville, CA 95661
hmrenergy@msn.com

APPLICANT'S CONSULTANTS

David A. Stein, PE
Vice President
CH2M HILL
155 Grand Avenue, Suite 1000
Oakland, CA 94612
dstein@ch2m.com

Jennifer Scholl
Senior Program Manager
CH2M HILL
610 Anacapa Street, Suite B5
Santa Barbara, CA 93101
jscholl@ch2m.com

COUNSEL FOR APPLICANT

Theodore Matula, Esq.
Vice President and General Counsel
Tierra Energy
7000 North Mopac, Suite 475
Austin, Texas 78731
theodore.matula@tierraenergy.com

Jane Luckhardt, Esq.
Downey Brand Law Firm
555 Capitol Mall, 10th Floor
Sacramento, California 95814
jluckhardt@downeybrand.com

INTERESTED AGENCIES

Larry Tobias
CA Independent System Operator
151 Blue Ravine Road
Folsom, CA 95630
ltobias@caiso.com

Electricity Oversight Board
770 L Street, Suite 1250
Sacramento, CA 95814
esaltmarsh@eob.ca.gov

Jesus Armas, City Manager
City of Hayward
777 B Street
Hayward, California 94541
jesus.armas@hayward-ca.gov
michael.sweeney@hayward-ca.gov

INTERVENORS

*Paul N. Haavik
25087 Eden Avenue
Hayward, CA 94545
lindampaulh@msn.com

ENERGY COMMISSION

Jeffrey D. Byron
Presiding Member
ibyron@energy.state.ca.us

John L. Geesman
Associate Member
jgeesman@energy.state.ca.us

Susan Geffer
Hearing Officer
sgeffer@energy.state.ca.us

Lorne Prescott
Project Manager
lprescot@energy.state.ca.us

Caryn Holmes
Staff Counsel
cholmes@energy.state.ca.us

Public Adviser
pao@energy.state.ca.us

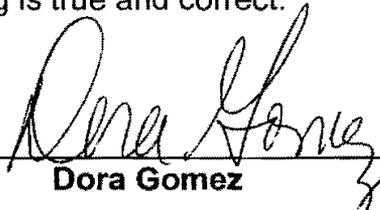
DECLARATION OF SERVICE

I, Dora Gomez, declare that on May 4, 2007, I deposited copies of the attached Eastshore Energy Center (06-AFC-6) Status Report 3 in the United States mail at Sacramento, California with first-class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above.

OR

Transmission via electronic mail was consistent with the requirements of the California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service list above.

I declare under penalty of perjury that the foregoing is true and correct.



Dora Gomez