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March 5, 2007

346558

Docket Unit, MS-4
Docket No: 06-AFC-06
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

DOCKET	
06-AFC-6	
DATE	MAR 05 2007
RECD.	MAR 05 2007

Subject: Eastshore Energy Center (06-AFC-06)
Data Responses, Set 2

On behalf of Eastshore Energy LLC, enclosed are an original and 12 copies of the Eastshore Energy Center (06-AFC-06) Data Responses, Set 2 dated March 2, 2007. An electronic copy of the document has also been sent directly to Mr. Lorne Prescott, Project Manager and other parties on the attached Proof of Service List. Please direct any questions regarding this material to either me at 510.587.7787 or Jennifer Scholl at 805.568.0650.

Sincerely,

David A. Stein, PE
Vice President

Eastshore Energy Center (06-AFC-06)

Data Responses, Set 2

Submitted by:
Eastshore Energy, LLC

March 2, 2007



CH2MHILL

155 Grand Avenue, Suite 1000
Oakland, California 94612

**EASTSHORE ENERGY CENTER (06-AFC-6)
DATA RESPONSES, SET 2**

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**EASTSHORE ENERGY CENTER (06-AFC-6)
DATA RESPONSES, SET 2**

Section 1.0 Data Responses

The Applicant is providing data responses in reply to the data request received by CEC Staff on February 2, 2007. The data responses are in the same order as the data requests provided by the CEC.

**EASTSHORE ENERGY CENTER
(06-AFC-6)
DATA REQUESTS**

Technical Area: Alternatives
Author: Somer Goulet

BACKGROUND

AFC page 9-12, Table 9.4-1 states that there is an encumbrance on the PG&E site (site 2). Yet, the AFC does not explain why the encumbrance on the PG&E site will prevent Eastshore Energy, LLC from developing this site.

AFC page 9-13, indicates that the site on PG&E property located next to the Eastshore substation has advantages; however, PG&E will not enter into a contract with the Eastshore Energy, LLC to allow private development at this site. There is no explanation as to why PG&E will not enter into a contract with the Eastshore Energy, LLC to allow private development at this site.

DATA REQUEST

50. Please describe and provide any supporting documents that explain why the encumbrance on the PG&E site will prevent Eastshore Energy, LLC from developing this site.

Response:

As described in Section 9.0 of the Application for Certification (AFC), as part of the original response to the PG&E Request for Offer (RFO), the prior developers of the Eastshore Energy Center discussed with PG&E the possibility of using PG&E's property around its Eastshore substation for the site of the generating facility. In April 2005, PG&E notified the prior developer that it could not use the substation property for its proposed facility, as PG&E required the entire site for its future operations. The original 2005 letter could not be recovered, so Eastshore Energy, LLC has obtained confirmation from PG&E of its 2005 denial of the prior developer's request related to the site. (See attached letter.)

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Attachment ALT-50

**PG&E Letter Regarding the Eastshore Substation
Property Nonavailability**



March 1, 2007

EastShore Energy
c/o Ted Matula
7000 North Mopac, Suite 475
Austin Texas 78731

Re: PG&E Eastshore Substation Property

Eastshore Energy:

This letter confirms that your 2005 request to site a generation facility on a portion of PG&E's Eastshore Substation was denied by PG&E. In April of 2005 PG&E sent you a letter stating that it required its entire existing site for the continued operation of its facilities.

If you have any further questions please contact me at (925) 674-6593.

Sincerely,

A handwritten signature in cursive script that reads 'Perry Davis'.

Perry Davis
Land Agent

**EASTSHORE ENERGY CENTER
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DATA REQUESTS**

51. If PG&E will not enter into a contract with Eastshore Energy, LLC to allow private development at its site, please describe and provide a copy of documents stating PG&E's reasons.

Response:

See data response 50.

BACKGROUND

AFC page 9-27, map of the proposed project area and alternatives, provides the addresses for the proposed project site and four of the alternatives; however, there is no street addresses provided for three alternatives to the proposed project.

AFC page 9-5, Table 9-3.1 states that alternative site 2 is <15 acres, alternative site 3 is <5 acres, alternative sites 4 -6 are <5 acres, and alternative site 7 is <6 acres. The specific acreage of these sites is not included in Table 9-3.1.

DATA REQUEST

52. Please provide the street address for alternative sites three (3) and four (4) the Pallet Yard and the Industrial site 4.

Response:

The requested information is provided in the table below.

Alternative Site Information			
Alternative Site	Address/APN	Parcel Size (acres)	Comments
Site 1 - Eastshore Energy Center (proposed site)	25101 Clawiter Road	6.22	Proposed Project
Site 2 - PG&E land adjacent to Eastshore Substation		<15 acres	After initial discussions with the prior developers of the Eastshore Energy Center surrounding using such site for the generating facility, PG&E determined that it would need the property at the substation for its future operations and notified the developers that PG&E could not make the site available.
Site 3 - Pallet Yard	3862 Depot Road; APN 439-0070-009	8.72 acres	The prior developers looked at this site prior to entering into discussions with PG&E regarding Site 2. After PG&E notified Eastshore Energy, LLC that it could not use such site for the facility, the developers re-commenced discussions with the 3862 Depot Road property owner. In the period during which the developers were discussing Site 2 with PG&E, however, the owner of the Site 3 had entered into an an exclusive option for such site with a third party. Additionally, the then-current owner was prohibited by

**EASTSHORE ENERGY CENTER
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Alternative Site Information			
Alternative Site	Address/APN	Parcel Size (acres)	Comments
			confidentiality to disclose the identity of the optionee/purchaser, so the developers of the Eastshore Energy Center could not approach such party to negotiate a possible transaction.
Site 4 – Industrial Site	Behind 3664 Depot Road; APN: 439-0070-002-1	3.58 acres	This site had many limitations for the development of the Eastshore Energy Center. The size of this parcel, including the required transmission line setbacks, was not large enough to support a 14-engine Wärtsilä facility. In addition, the owner of this property would only agree to lease the property for a period of five to 10 years, which would not support the expected lifetime of the Eastshore Energy Center, nor a 20-year power purchase agreement.
Site 5 – Industrial Building	26599 Corporate Avenue	4.4 acres	Only 34,000 sf of the 100,000 sf building on this site was being offered, and it was only being offered for lease. Additionally, by the time PG&E notified the developers that Site 2 would not be available, this property had been re-leased and was no longer available. Additionally, even if the entire site was available, it would not have been large enough to support a 14-engine Wärtsilä facility. As a result, the developers did not engage in substantive negotiations with the lessor.
Site 6 – Industrial Campus	26460-26464 Corporate Avenue	12.4 acres	While this site would have had sufficient land for the Eastshore Energy Center, this site had many limitations. The site came on the market for sale after the prior developer had gone under contract and made a significant non-refundable deposit on the Clawiter site (Site 1). The developer determined that the cost to forfeit the Clawiter deposit, the higher aggregate and per-square-foot cost of acquiring Site 6 and the significantly larger demolition costs associated with this site would rendered the project non-economic. (The site had 342,000 sf in warehouse and office space over 4 buildings in a campus style.)
Site 7 - City of Hayward Water Pollution Control Facility	3700 Enterprise Avenue	+/-10 acres	Eastshore Energy was looking at the easterly +/-10 acres of the 39.86-acre site. Despite its size, this portion of the treatment plant site is bisected by the PG&E transmission line and would not have sufficient space to accommodate the Wartsila configuration.

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53. Please provide the exact acreage of the six (6) alternative sites included in the AFC page 9-5, Table 9-3.1.

Response:

See data response 52.

**EASTSHORE ENERGY CENTER
(06-AFC-6)
DATA REQUESTS**

Technical Area: Traffic and Transportation
Author: Shaelyn Strattan

BACKGROUND

The primary access route to the project site, during both construction and operation, is Clawiter Road. This is a two-lane, north-south arterial road. In the project vicinity, Clawiter Rd., from Industrial Blvd. to the SR-92 westbound ramp, is rated LOS E (marginal) and projected in the AFC analysis (AFC Table 8.10-6) to deteriorate to an LOS F (at least during portions of the construction phase) as a result of project impacts. Traffic approaching from the south (SR-92) would be required to stop and turn left against traffic to enter the project site. Worker vehicles approaching from the north would be required to stop and turn left against traffic to enter the Berkeley Farms temporary parking area. Additionally, workers parking in the temporary lot would be required to cross Clawiter Road to reach the project site. There is no existing left turn lane, crosswalk, or light at this location.

DATA REQUEST

54. Please analyze the potential impacts to traffic flow associated with site and parking ingress/egress (both vehicle and pedestrian) during peak traffic hours. Identify potential mitigation measures.

Response:

To analyze the potential impacts to traffic flow associated with site and parking ingress/egress during peak hour traffic, the traffic model was updated to include the site and parking lot entrances. It was assumed that 90% of construction traffic will turn into the temporary parking lot, and 10% will turn into the site.

When conducting the analysis, the request from Data Request 56 (to use Industrial Boulevard as the primary route for construction traffic) was included. Also, HCM 2000 criteria were used (per Data Request 63) to determine the level of service at intersections.

The updated results are provided in the revised Tables 8.10-3 and 8.10-7 (below). Asterisks next to the LOS grade in Table 8.10-7 indicate cases where the construction conditions will result in a degradation in LOS.

The City of Hayward General Plan Circulation Element classifies intersection operating conditions as acceptable, if at LOS D or better, marginal if at LOS E, and unacceptable if at LOS F. While there are several intersections where the construction conditions will result in temporarily degraded LOS, Eastshore will not cause any intersection currently at acceptable City of Hayward LOS standards to be degraded to an unacceptable LOS. The most currently congested intersection, Clawiter Road/Eden Landing Road at SR 92 will remain at LOS E during peak PM traffic during Eastshore construction and diversion of Eastshore traffic away from this intersection and onto Industrial Boulevard will ensure that Eastshore is not a contributor to the marginal service at this location.

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TABLE 8.10-3 (REVISED)
Existing Conditions

Intersection	AM LOS	PM LOS
Clawiter Road and West Street	B	B
Clawiter Road and Industrial Boulevard	A	B
Clawiter Road and Depot Road	A	A
Industrial Boulevard and Depot Road	B	B
Clawiter Road/Breakwater Avenue at SR-92 Westbound ramps	B	B
Clawiter Road/Eden Landing Road at SR-92 Eastbound ramps	C	E
Industrial Boulevard/Cryer Street at SR-92 Westbound ramps	B	C
Clawiter Road/Project Site Entrance	A	A
Clawiter Road/Temporary Parking Lot Entrance	A	A

TABLE 8.10-7 (REVISED)
Construction Conditions – Construction Traffic Routed Via Industrial Blvd

Intersection	AM LOS	PM LOS
Clawiter Road and West Street	B	B
Clawiter Road and Industrial Boulevard	A	B
Clawiter Road and Depot Road	B*	B*
Industrial Boulevard and Depot Road	C*	B
Clawiter Road/Breakwater Avenue at SR-92 Westbound ramps	B	B
Clawiter Road/Eden Landing Road at SR-92 Eastbound ramps	C	E
Industrial Boulevard/Cryer Street at SR-92 Westbound ramps	D*	D*
Clawiter Road/Project Site Entrance	A	C*
Clawiter Road/Temporary Parking Lot Entrance	A	D*

*LOS is worse than existing conditions

55. Please discuss proposed accommodations or mitigation measures to protect worker safety when crossing Clawiter Road.

Response:

To protect workers from the traffic during construction phase, the following measures are proposed for the contractor, to protect worker safety for pedestrian traffic crossing Clawiter Avenue from the construction laydown area to the plant site:

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- During the peak crossing periods (beginning and end of shift), the general contractor will be required to make a flagperson available to allow workers to cross the street between the temporary parking lot and the construction site.
- At other times, the general contractor will be required to restrict mid-block crossings between the temporary parking lot and the construction site to times when materials movements are scheduled.
- Add temporary signs to direct pedestrians to yield to construction traffic.
- Movements of materials from the laydown area to the construction site or vice-versa will be scheduled to occur during off-peak hours. Workers will be permitted to cross Clawiter during periods when Clawiter traffic is already stopped temporarily to facilitate materials movements.

Eastshore recommends that these general measures be further developed in consultation with the project general construction contractor (not under contract at this time) in a required preconstruction Pedestrian Traffic Management Plan to be submitted and approved by the CEC Compliance Program Manager prior to commencement of construction.

BACKGROUND

AFC Section 3.10.4.3.2 states that VC §§31303 and 32105 require hazardous materials be transported along the shortest route possible. Actually neither code specifies "shortest route possible". VC §31303(b) states "transportation shall be on state or interstate highways which offer the least overall transit time whenever practicable" and VC §32105 makes no mention whatsoever of travel distance. However, both sections admonish against driving into or through heavily populated areas, congested thoroughfares, or places where crowds are assembled.

As a hazardous materials route, Clawiter Road is not consistent with California Vehicle Code (VC) §31303(c), which requires the transporter to avoid, whenever practicable, congested thoroughfares. An alternate route from SR-92 is proposed (AFC Sect. 8.10.4.3.2) for delivery and removal of hazardous materials. This route would extend northwest along Industrial Blvd. to Depot Road; left on Depot Road to Clawiter Road; and left on Clawiter to the project site, with a right turn into the site. Industrial Road is rated as an LOS A from the SR-92 WB ramp to Clawiter. Although Industrial Blvd. skirts the edge of a high-density residential area, the section between SR-92 and Clawiter Road has an LOS rating of A, even during peak commute hours. This route would also significantly reduce the travel distance on Clawiter (LOS E/F). However, while this alternate route would avoid the left turn across traffic on Clawiter, there is some question whether there is a sufficient turning radius at the site's entrance to accommodate large tractor-trailer rigs entering from the north without encroaching into on-coming traffic.

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DATA REQUEST

56. Please discuss and justify the use of Clawiter Road, rather than Industrial Blvd., as the primary hazardous materials route, given Clawiter Rd.'s impacted status. Indicate if Industrial Blvd. would be acceptable as the primary access route, instead of Clawiter Road.

Response:

Eastshore will defer to the City of Hayward and the CEC regarding the preferred route for delivery of hazardous materials. The use of Industrial Boulevard as the primary access route, versus, Clawiter Avenue is acceptable to the Eastshore. Based on feedback received from the City of Hayward during the January 30 data response workshop, Eastshore assumes that it should adopt Industrial Boulevard as the primary route for all traffic to/from the site.

57. Please describe and evaluate the site entrance design as it relates to sufficient turning radius to accommodate large tractor-trailer rigs entering from the north. Identify potential design changes or mitigation measures, as appropriate.

Response:

The current site entrance design is suitable for construction traffic, although it will require a wider intersection opening to the site during the construction phase to accommodate two-way traffic. During the operational phase, the largest trucks expected are double trailers delivering aqueous ammonia. The deliveries are expected to occur approximately three times a month during off-peak hours. Since the site 2-lane entrance/exit can be used as a single entrance lane during off-peak hours (the double trailers can track into the opposite lane of traffic on the driveway entrance), no specific modification is expected to be required to accommodate the wider turning radius for these trucks making these deliveries. A final site development plan will undergo a detailed review by both the Chief Building Official (CBO) and any required modifications to the intended turning radius will be addressed at that time.

BACKGROUND

In AFC Section 2.1, and at multiple locations throughout the document, provisions for temporary worker parking during the construction phase of the project are only referred to as a 4.65 acre construction laydown and temporary parking area on a leased parcel of land immediately across Clawiter Road from the project site, on vacant land owned by Berkeley Farms. The AFC also indicates that some on-site construction parking would be provided. No other details are available.

DATA REQUEST

58. Please discuss the temporary parking lot design for both on-site and off-site locations. Identify the number of parking spaces, by type (auto, delivery truck, handicapped, etc.). Note entrance(s)/exit(s) off Clawiter Road and indicate if there is an existing city-approved encroachment permit for these locations.

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Indicate the lot preparation required on the Berkeley Farms site, including road work for encroachments, and plans for surfacing and striping. Identify any on-street parking that may be used by workers or visitors to the site, any impact that project use of these spaces may have on existing businesses, and propose appropriate mitigation measures.

Response:

The construction laydown area and plant site area are of sufficient size to accommodate construction parking and staging. Detailed information regarding the configuration of these areas for parking and staging will be determined by the general contractor and will be developed as part of final site design and will be reviewed and approved by the CBO prior to the start of construction. It is envisioned that excess cut from the project site will be used to achieve a level grade at the construction parking and laydown area. The parking and laydown area will be covered with approximately 2 inches of crushed rock. No paving or striping is planned. An appropriately wide and sloped entrance/exit to the construction parking and staging area will be created to accommodate entrance and exits. No on-street parking by either workers or visitors will be permitted. No encroachment permit is expected to be required to complete the preparation of the construction laydown area. However, these details will be resolved during the CBO review of the final site development plans.

BACKGROUND

Per AFC Table 2.2-3, demolition is scheduled to occur during the first two months of construction. As noted in the Project Description (AFC Section 2.1.1), this includes removal of the existing buildings, foundation, and parking lot asphalt. Projections, as noted in AFC Table 8.10-5, indicate 21 truck round trips per day. Data concerning the number of projected truck trips during construction, provided in the AFC Table 8.10-5 (Construction Worker and Truck Summary), is not consistent with data presented in Table 2.2-4. Average truck trips indicated (14) are lower than the actual average of 15.4 and Peak Daily Trips (month 11) are higher (24 vs 18). There is also no indication how many of these will be delivery trucks and how many would be dump trucks removing rubble and waste during the demolition process.

DATA REQUEST

59. Please correct or clarify truck data provided in the AFC Tables referenced above. Provide a breakdown by type of truck (light-weight delivery, dump trucks, semis, etc.). Identify destination and primary route to dump site for rubble, general hours of transport, and whether trucks would be single or double trailers. Identify number of trucks, if any, that would be hauling hazardous waste to or from the project during these months and probable route of travel.

Response:

As noted in the data request, there is a minor inconsistency between Table 2.2-4 and Table 8.10-5. The truck data provided in Section 8.10 indicates an average of 16 trucks per day during construction. This is derived from Table 8.10-5

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(calculated at 15.4 trucks) and is the correct average value. The average number of heavy trucks in Table 2.2-4 should therefore be increased by 2 (from 14 to 16).

We also note that the maximum number of truck trips in Table 8.10-5 is shown as 23 in month 3. Since Table 2.2-4 indicates a slightly higher maximum of 24 trucks/day, we recommend that Staff replace the value of 23 in month 3 with the value of 24 and assume a maximum of 24 truck trips per day will occur during month 3 of construction. However, we note that the maximum peak truck traffic volume occurs early in the construction schedule when overall traffic volume is relatively low. Since the peak truck traffic does not coincide with the peak activity months for construction workers (during months 10 and 11), the maximum truck trips per day was not a factor in the analysis. The traffic analysis was based on overall peak traffic conditions. The revised analysis is presented in data responses 54 and 63. These analyses are unaffected by the minor inconsistencies noted and corrected above.

The same truck route used during construction will be used for dump trucks and trucks carrying hazardous materials. Trucks traveling to the site will use the SR-92/Industrial Boulevard interchange to exit northbound on Industrial Boulevard, turn left onto Depot Road, turn left onto Clawiter Road, and then either right into the project site or left into the construction laydown area entrance. Trucks leaving the site or the laydown area would reverse these movements.

Information on the type of trucks (e.g., single trailers versus doubles) was not provided because the traffic analysis is not sensitive to truck type. The *Highway Capacity Manual* analysis uses a standard truck equivalency factor for all trucks on level grade.

As to rubble, the production of large quantities of hazardous waste is not anticipated (see Table 8.13-2 from the AFC). We anticipate infrequent hazardous waste shipments from the site during construction (less than 1 truck per month). The Bay Area dump sites are located to the east of the project site, so traffic will most likely travel south on Industrial Boulevard to SR92 eastbound, and then travel on I-880 northbound to a dump site destination. No specific location is available at this time. Dump sites tend to be somewhat transient as they are oftentimes located near areas where there are large amounts of construction debris. Since much of the waste will be concrete debris, concrete crushing facilities are also transient as they tend to be located in areas where the crushed concrete aggregate can be used for construction projects, such as for fill or road base.

BACKGROUND

Section 8.10.4.2.5 of the AFC states that the traffic control plan for the project would be prepared in accordance with the Caltrans Manual on Uniform Traffic Control Devices and the WATCH Manual. Primary access for the project site is along city-maintained

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roads. There is no discussion of City of Hayward Public Works requirements for traffic control or incorporation of those requirements in the proposed traffic plan.

DATA REQUEST

60. Please identify City of Hayward Public Works requirements that would be applicable to road and right-of-way work for the proposed project and discuss how these requirements would be met.

Response:

According to the City of Hayward's Traffic Engineer (conversation with the City's Traffic Engineer on February 15, 2007), the City of Hayward uses the Caltrans standards for traffic control. These standards can be found in the Manual of Uniform Traffic Control Devices (MUTCD), and the temporary traffic controls element (<http://www.dot.ca.gov/hq/traffops/signtech/mutcdsupp/pdf/camutcd/CAMUTCD-TTC.pdf>). These are supplemented by the Work Area Traffic Control Handbook (commonly called the WATCH manual). Additionally the City of Hayward may apply more stringent requirements for signage based upon a case-by-case basis in order to ensure that traffic control measures provide adequate notice to roadway users. The Eastshore Energy Center Traffic Management/Control Plan will be subject to the review and approval of the CBO prior to the implementation of any measures.

BACKGROUND

AFC Sections 8.10.4.2.5 and 8.10.4.2.4 indicate that construction impacts to intersections and roadway segments, related to installation of natural gas, water, wastewater, sewer, and transmission lines, would be site-specific. However, no detailed discussion of these site-specific impacts is provided.

DATA REQUEST

61. Please discuss the site-specific impacts to intersections and roadway segments that would result during project construction. Identify potential mitigation measures or alternatives to reduce the significance of any potential impacts. Please include a Table indicating impact by intersection or road segment, estimated timeline, and any permit(s) or consultation required.

Response:

The construction of the transmission line will be PG&E's responsibility, and short-term construction impacts may occur to intersections and roadway segments. These impacts are discussed in detail in Section 8.10.4 of the AFC. The expected future Traffic Management Plan measures for the Eastshore Energy Center, such as those noted in Data Responses 60 and 62, are expected to mitigate any temporary impacts.

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Based upon communication with PG&E's representative for electric transmission (Michael Lightstone) generally, it is expected that PG&E will temporarily close one lane of the road at each pole location during construction (approximately one day per pole location). Closures will be intermittent until construction is complete. There may be locations, such as the north end of the project site, where work can be completed without a lane closure. PG&E will follow the City of Hayward's standards for road closures as specified on the encroachment permit for work within City roadways. PG&E will also follow Caltrans requirements for any work within the Caltrans right-of-way for the SR-92 crossing and these requirements will be specified on the Caltrans encroachment permit. However, until completion of final design of the transmission line, the exact construction schedule and subsequent roadway and intersection closures cannot be provided.

BACKGROUND

The City of Hayward General Plan Circulation Element specifies LOS D as the minimum acceptable LOS for roadway segments in the City of Hayward. Clawiter Road, the primary access road for the Eastshore project, already operates at LOS E and is projected to drop to LOS F during peak construction periods. Two segments of I-880 that are predicted to carry the majority of worker traffic for this project are already over capacity. Addition of the Eastshore construction traffic to both Clawiter Road and the I-880 segments would result in a potentially significant impact. (AFC 8.10.4.2.3 and Table 8.10-6) Traffic related to the construction of the Russell City Energy Center, scheduled to coincide with portions of the Eastshore construction, would increase the cumulative impact on these roadways.

The City of Hayward General Plan Circulation Element requires mitigation when it is shown that there may be an adverse impact on the transportation system. Although the AFC indicates that a Traffic Management Plan (TMP) would be prepared for this project and would reduce potential impacts to a less than significant level, the general discussion of issues the TMP would address are not specific enough to evaluate the feasibility or effectiveness of the proposed mitigations.

DATA REQUEST

62. Please discuss specific mitigation measures that would be included in the Traffic Management Plan to address increased traffic congestion, meet City of Hayward General Plan requirements, and reduce potential impacts to a less than significant level and to what extent the implementation of the plan will reduce potential impacts.

Response:

In order to minimize short-term construction impacts, typical Traffic Management Plan measures for roadway segments include:

- *Require the contractor to use Industrial Boulevard as the primary access route to project site for construction-related traffic. This would avoid further*

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congestion and delays on Clawiter Road without significant impacts along Industrial Boulevard.

- *Schedule construction shift hours to avoid peak commute hours.* Since Clawiter Road is used more extensively by nearby businesses during peak commute hours, there should not be any congestion on this segment outside this time frame.
- *Schedule heavy equipment and building material deliveries during off-peak periods.* This will avoid having construction-related traffic added to the high volumes throughout the street network during peak periods.
- *Schedule lane closure according to the transmission line construction.* Optimal timing will prevent having long stretches of roadway closed without any construction in progress.
- *Place traffic control device, signing, lighting to mitigate the impacts associated to street or lane closures during the construction of the transmission line.*
- *Conduct construction along affected roadways at night where permitted.*
- *Prohibit worker and visitor parking on Clawiter Road.* All parking will be located either on the temporary construction parking and laydown area or the project site.

Each of the above measures will be discussed in greater detail in the Traffic Management Plan that will be developed and submitted to the CBO prior to the start of construction.

BACKGROUND

The traffic analysis of construction impacts contained within the Eastshore AFC uses the 2001 Russell City Energy Center (RCEC) project info, rather than the 2006 RCEC Amendment 1 data (AFC Sect. 8.10.5). The location of the RCEC facility, primary access routes, number of construction workers, and construction timeline have all changed, invalidating much of the submitted analysis. Additionally, the City of Hayward has expressed concern that the traffic study prepared for this project, including the analyses of unsignalized intersections, uses ICU methodology rather than the Highway Capacity Manual methodology used by the City.

DATA REQUEST

63. Please update the AFC traffic analysis by incorporating the 2006 RCEC Amendment 1 project information in place of the outdated 2001 RCEC information, using Highway Capacity Manual methodology. Identify the extent of any resulting impacts and discuss any specific project changes or mitigation measures proposed to address these concerns.

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Response:

Based on the recently submitted License Amendment 1, the Russell City Energy Center (RCEC) proposed site is now located at the southwest corner of the intersection of Enterprise Avenue and Whitesell Street. To analyze the cumulative impacts of Eastshore and RCEC, updated data were used from the 2006 RCEC CEC License Amendment 1, dated November 2006. It should be noted that under RCEC's existing conditions of certification, RCEC is required to formulate and submit a Traffic Management Plan (TRANS-1). Eastshore anticipates and has also committed to preparation of a similar TMP for Eastshore. The foregoing analysis has been prepared without the benefit of the future RCEC and Eastshore TMPs. Eastshore is committed to working with the City of Hayward and RCEC to develop a coordinated traffic management approach.

An updated cumulative traffic impact analysis has been performed and the results are presented in Tables 8.10-7A and 8.10-7B below, reflecting two approach options for the Eastshore Energy Center construction traffic – Table 8.10-7A addresses site access via Clawiter/SR-92 and Table 8.10-7B addresses site access via the proposed Industrial Boulevard/SR-92 alternative. For site access via Clawiter/SR-92, Table 8.10-7A, the results indicate that combined Eastshore and RCEC project traffic would degrade the the stop-controlled intersection at Clawiter Road/Eden Landing Road at SR-92 Eastbound ramps to LOS F in both peak AM and PM periods, resulting in a potentially significant impact under the City of Hayward's General Plan Circulation Element. All other intersections would remain at the same LOS, or the changes in LOS would not be significant.

TABLE 8.10-7A
Cumulative Impacts –Eastshore and RCEC Construction Conditions – Eastshore Construction Traffic Routed Via Clawiter Road

Intersection	AM LOS	PM LOS
Clawiter Road and West Street	B	B
Clawiter Road and Industrial Boulevard	A	B
Clawiter Road and Depot Road	A	A
Industrial Boulevard and Depot Road	B	B
Clawiter Road/Breakwater Avenue at SR-92 Westbound ramps	C*	B
Clawiter Road/Eden Landing Road at SR-92 Eastbound ramps	F*	F*
Industrial Boulevard/Cryer Street at SR-92 Westbound ramps	B	C
Clawiter Road/To Project Site	A	A
Clawiter Road/ To Temporary Parking Lot	A	D*

*LOS is worse than existing conditions

**EASTSHORE ENERGY CENTER
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In order to avoid potentially significant impacts, access via Industrial Boulevard/SR-92 was evaluated as an alternative. Under this alternative, all Eastshore traffic would be routed through the Industrial Boulevard corridor. The results of this evaluation are summarized in Table 8.10-7B and compared to Table 8.10-3 (existing conditions). Routing Eastshore construction traffic through the Industrial Boulevard corridor would avoid potentially significant impacts at the Clawiter/SR-92 interchange and would cause slightly lower, but acceptable LOS, at both Industrial Boulevard/Depot Road and Clawiter Road/Depot Road intersections in the AM and Clawiter Road/Depot Road in the PM. Since the intersections at Clawiter Road/Eden Landing Road and Clawiter/Breakwater at SR-92 would not be impacted by Eastshore traffic with the Industrial Boulevard approach, these intersections are not included in the cumulative impact analysis for this alternative. Other evaluated intersections will remain at the same LOS, or the changes in LOS will not be significant. Based on this analysis it is clear that Eastshore Energy Center cumulative construction traffic impacts will be reduced to insignificant impact levels by rerouting Eastshore traffic through the Industrial Boulevard corridor. Eastshore is therefore committing to use Industrial Boulevard as the primary and sole access route for construction traffic. Use of the Clawiter Road/Eden Landing and SR-92 intersection by Eastshore construction contractors will be specifically prohibited.

TABLE 8.10-7B
Cumulative Impacts – RCEC and Eastshore Construction Conditions – Eastshore Construction Traffic Routed Via Industrial Boulevard

Intersection	AM LOS	PM LOS
Clawiter Road and West Street	B	B
Clawiter Road and Industrial Boulevard	A	B
Clawiter Road and Depot Road	B*	C*
Industrial Boulevard and Depot Road	C*	B
Industrial Boulevard/Cryer Street at SR-92 Westbound ramps	D*	D*
Clawiter Road/To Project Site	A	C*
Clawiter Road/ To Temporary Parking Lot	A	C*

*LOS is worse than existing conditions

BACKGROUND

As noted in AFC §8.10.4.2.2, approximately 85 percent of the traffic to and from the site during the construction phase of the Eastshore project would use SR-92 at the Clawiter Road or Industrial Blvd. access ramps, with approximately 60 percent of that traffic connecting to or from I-880. The California Department of Transportation (Caltrans) is planning to initiate a project to reconstruct the I-880/SR-92 Interchange, beginning in

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Spring or Summer 2007 and continuing for up to four years. This project would seriously impact traffic flow and access routes to the proposed site, especially during the construction phase of the project.

DATA REQUEST

64. Please update the AFC traffic analysis to address potential impacts from the I-880/Route 92 Interchange Reconstruction Project on traffic flow, site access, and transport and delivery of hazardous materials.

Response:

Information regarding the status of the Caltrans I-880/Route 92 Interchange Reconstruction Project is provided below. The evaluation of traffic patterns will be included in the Caltrans Transportation Management Plan (TMP) for the Interchange Reconstruction Project that is currently in progress. It is expected that the Caltrans TMP will include an evaluation of the traffic pattern changes as well as measures to mitigate traffic and circulation impacts to area roadways resulting from the interchange reconstruction.

The following information was found on the *Caltrans' website*:

http://www.dot.ca.gov/dist4/documents/88092/1_need.pdf.

"[...] The limits for the I-880/SR-92 interchange reconstruction project are the I-880/West Winton Avenue Interchange to the north, the I-880/West Tennyson Road interchange to the south, the Mt. Eden Overhead (a railroad overpass) west of the Route 92/Industrial Boulevard interchange to the west, and the terminus of Route 92 as a freeway at the intersection of Jackson and Santa Clara Streets to the east.

[...] The interchange currently has a four quadrant, cloverleaf configuration, which exacerbates peak period traffic congestion on I-880 and Route 92. The proposed project will replace two of the loop connectors—Route 92 eastbound to I-880 northbound, and Route 92 eastbound to I-880 southbound—with direct, flyover connectors, which will have HOV lanes. On I-880 between the Winton Avenue and Tennyson Road interchanges, auxiliary lanes will be added to provide additional room for vehicles to exit from or merge with mainline traffic. Another auxiliary lane on Route 92 westbound between I-880 and the Hesperian Boulevard interchange will provide additional room for vehicles to exit from or merge with mainline traffic on Route 92. With the improvement in traffic operations at the I-880/Route 92 interchange, drivers should have less cause to use local arterials and streets as alternate routes to the I-880/Route 92 interchange."

Construction is expected to begin in early 2007 and be completed in mid-2011. The construction schedule is shown below.

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Project	2006				2007				2008				2009				2010				2011				2012				2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
I-880/92 Interchange																																
Advertise																																
Construction																																

Source: <http://www.ci.hayward.ca.us/citygov/meetings/ccarp/2006/rp092606-04%20Exhibit%20B.pdf>

It is expected that Caltrans will not close any lanes during the day, given the high volumes at this busy interchange. Therefore, the same level of congestion as existing conditions can be expected during the peak periods. Additionally, because the interchange operates at capacity during the peak periods (without construction), significant changes in traffic patterns will not occur with the interchange reconstruction. As a result, no Eastshore-specific mitigation is necessary.

- 65. Identify the extent of any resulting impacts and discuss specific project changes or mitigation measures proposed to address these concerns.

Response:

See data response 64.

**EASTSHORE ENERGY CENTER
(06-AFC-6)
DATA REQUESTS**

Technical Area: Transmission System Engineering
Authors: Laiping Ng
Technical Senior: Mark Hesters

BACKGROUND

Data Response Set 1A provided by the applicant shows additional detail that indicated two transformers will be used for the Eastshore Energy Center project. The rating of the transformers will be 60/72/90 MVA. Staff needs an updated System Impact Study (SIS) from PG&E that reflects these changes.

DATA REQUEST

66. Please provide the following information:

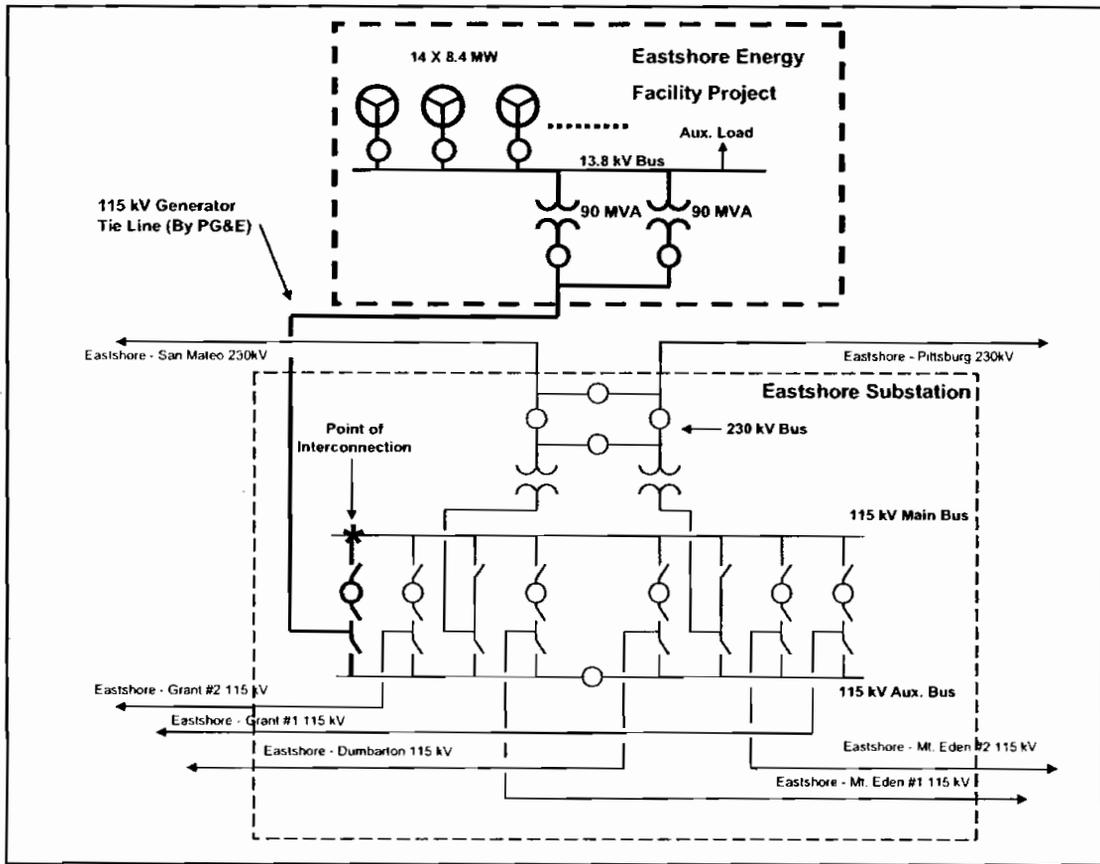
- An updated Appendix D of the SIS (Power Flow Diagrams) from PG&E for the changes made to the generator step-up transformer.
- A one line diagram of the modifications to the existing Eastshore Substation for the interconnection of the EEC.
- Updated electronic copies of *.sav PSLF files used for the SIS (including N-0, N-1, and N-2).

Response:

It is PG&E's opinion that a revision to Appendix D is not necessary. The changes in power flow resulting from the slightly higher impedances of the two transformers are expected to be negligible. Results from the original system impact study are conservative and can therefore be used by Staff to assess worst-case impacts from Eastshore. Please see the attached February 2, 2007 PG&E letter (Attachment TSE-66).

The electrical one-line diagram showing the interconnection to the Eastshore substation is included as Figure 2-1 of the revised facility study dated January 11, 2007 and is provided below. In addition, attached are a general arrangement drawing and preliminary one-line diagram of the Eastshore Substation showing the location of the intended interconnection.

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**EASTSHORE ENERGY CENTER
(06-AFC-6)
DATA REQUESTS**

Attachment TSE-66

**PG&E Letter Regarding the Eastshore Energy, LLC
System Impact Study**



**Pacific Gas and
Electric Company**

WE DELIVER ENERGY.

John Vardanian
Senior Project Manager
Mail Code N 7 L
Pacific Gas & Electric Co.
PO Box 770000
San Francisco, CA 94177

February 8, 2007

Mr. Greg Trewitt
VP Development and Engineering
Tierra Energy, LLC
710 S. Pearl Street, Suite A
Denver, Colorado 80209

Mr. Trewitt:

Re: Eastshore Energy, LLC System Impact Study

Pacific Gas and Electric Company revised and reissued this SIS on January 11, 2007, due to Eastshore's proposed change in transformer configuration to two step-up transformers. The California ISO approved the revised SIS on January 23, 2007.

In response to Eastshore's request to also revise the power flow diagrams in Appendix D of this report, PG&E is of the opinion that this revision is unnecessary. The two transformers have higher impedance and therefore the results in the current Appendix D are conservative compared with the results of a re-run of the model. Furthermore, the differences in results are negligible. Thus, in the interest of saving time and expense, PG&E proposes to leave the Appendix D of the report as it is.

Please feel free to contact me with any questions.

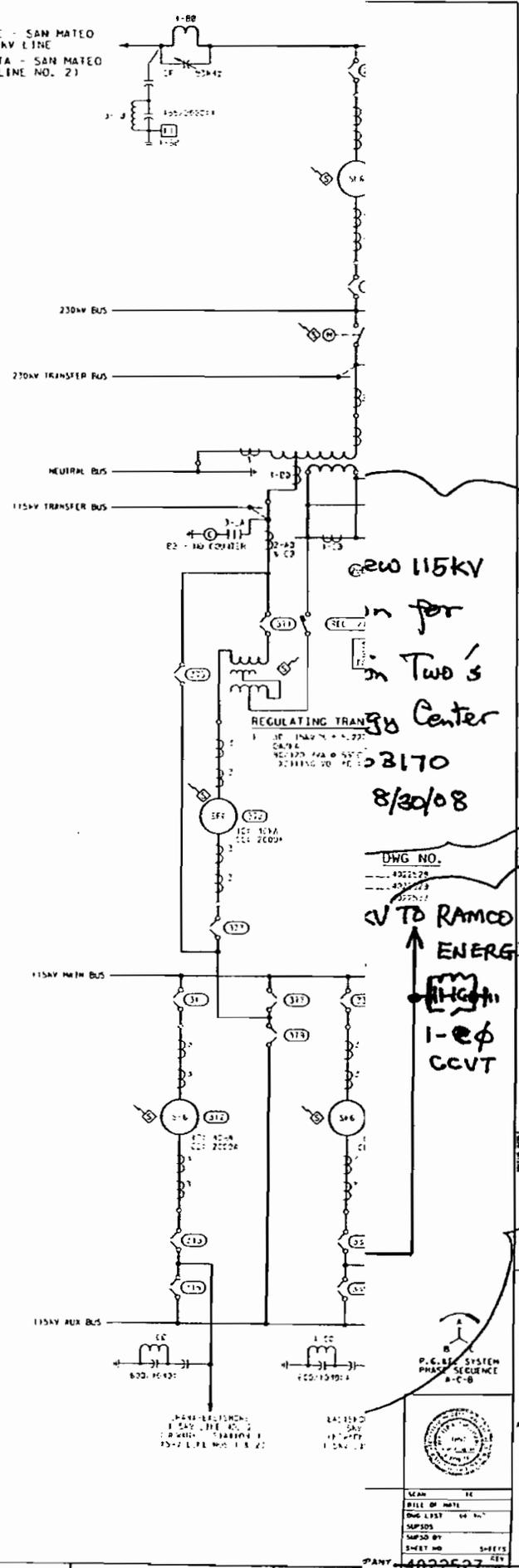
Sincerely,

John Vardanian

John Vardanian
Generation Interconnection Services

EASTSHORE - SAN MATEO
230KV LINE
(CONTRA COSTA - SAN MATEO
230KV LINE NO. 2)

E
D
C
B
A



new 115KV
in for
in Two's
Center
03170
8/30/08

DWG NO.
4022527
4022527
4022527

↑ TO RAMCO EASTSHORE
ENERGY CENTER

1-φ CCVT

SK# RamcoEastSL

DATE: 08/30/08
DRAWN BY: [unclear]
CHECKED BY: [unclear]

**EASTSHORE ENERGY CENTER
(06-AFC-6)
DATA REQUESTS**

Technical Area: Waste Management
Author: Suzanne Phinney

BACKGROUND

The Eastshore Energy Center proposed site is located in a heavy industrial area. Soil and groundwater contamination are common in such areas. The AFC Page 8-13-8 references that a Phase I environmental site assessment (ESA) indicated the presence of groundwater monitoring wells at the gas station immediately to the north of the site. No discussion of groundwater conditions in the surrounding area is provided, however. At the Data Response and Issues Resolution workshop conducted January 29, 2006, there was discussion of an underground contamination plume within proximity to the proposed Eastshore site. There is no mention of this within the ESA provided with the AFC.

DATA REQUEST

67. Please provide any information regarding groundwater conditions in the vicinity of the site obtained subsequent to the Phase I and II ESAs, including records of conversations with California regulatory agencies.

Response:

To determine the extent of groundwater plumes in the area, a database search was performed on both the San Francisco Regional Water Quality Control Board (RWQCB) Geotracker database, and the Department of Toxic Substance Control (DTSC) Envirostor database. The Geotracker database identified several facilities in the immediate area with Leaking Underground Storage Tanks (LUST) that may be impacting groundwater in the area of the Eastshore Energy Center site. In particular, to the north of the Eastshore Energy Center site is the Olympian Cardlock Service Station located at 3152 Depot Road. The service station had a LUST onsite, however the tank and piping have been removed, and there are monitoring wells on the property. Groundwater in this area moves to the southwest, and crosses the northwestern corner of the Eastshore Energy Center site. The Olympian Cardlock Service Station has just filed a closure report with the RWQCB, showing that the plume is shrinking, and moving back to the point of origination, likely as a result of the removal of the original equipment. In addition, Marcia Liao (caseworker for San Francisco RWQCB) was contacted. Per Ms. Liao, there are potentially three groundwater plumes in the area that may impact our site. Although the plumes did not originate from the Eastshore Energy Center site, she was unsure where the plumes had originated. A subsequent file review was not performed to collect any additional information.

In addition, according to the Envirostor database there are two larger facilities, the CA Air National Guard facility located at 1525 West Winton Avenue, and LaVista LLC located at 22958 Saklan Road which both have soil and groundwater contamination issues. Both of these sites are located approximately one mile north of the project site. It is unknown if these sites have impacted the groundwater under the Eastshore Energy Center site.

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Review of the Report of Findings – Limited Subsurface Investigation, dated May 2006, and included as part of Appendix 8.13 of the AFC, this report noted that groundwater sampling has not been performed at the Eastshore Energy Center site, as onsite contamination appears to be located only within the top 3 feet of the soil. Due to the potential for impacting groundwater during construction activities, both a soil management plan and a groundwater management plan will need to be prepared prior to ground disturbance. The groundwater management plan will address the appropriate protocols needed during construction activities including, placing groundwater from dewatering activities into an onsite Baker tank. The Baker tank water would then be sampled prior to disposal to determine the appropriate disposal facility.

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 1/3/07)

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

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michael.sweeney@hayward-ca.gov

INTERVENORS

None at this time

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John L. Geesman
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Public Adviser
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DECLARATION OF SERVICE

I, Jeannette Harris, declare that on March 2, 2007, I deposited copies of the attached Eastshore Energy Center (06-AFC-06) data Responses, Set 2 dated March 2, 2007 in the United States mail at Sacramento, CA 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.

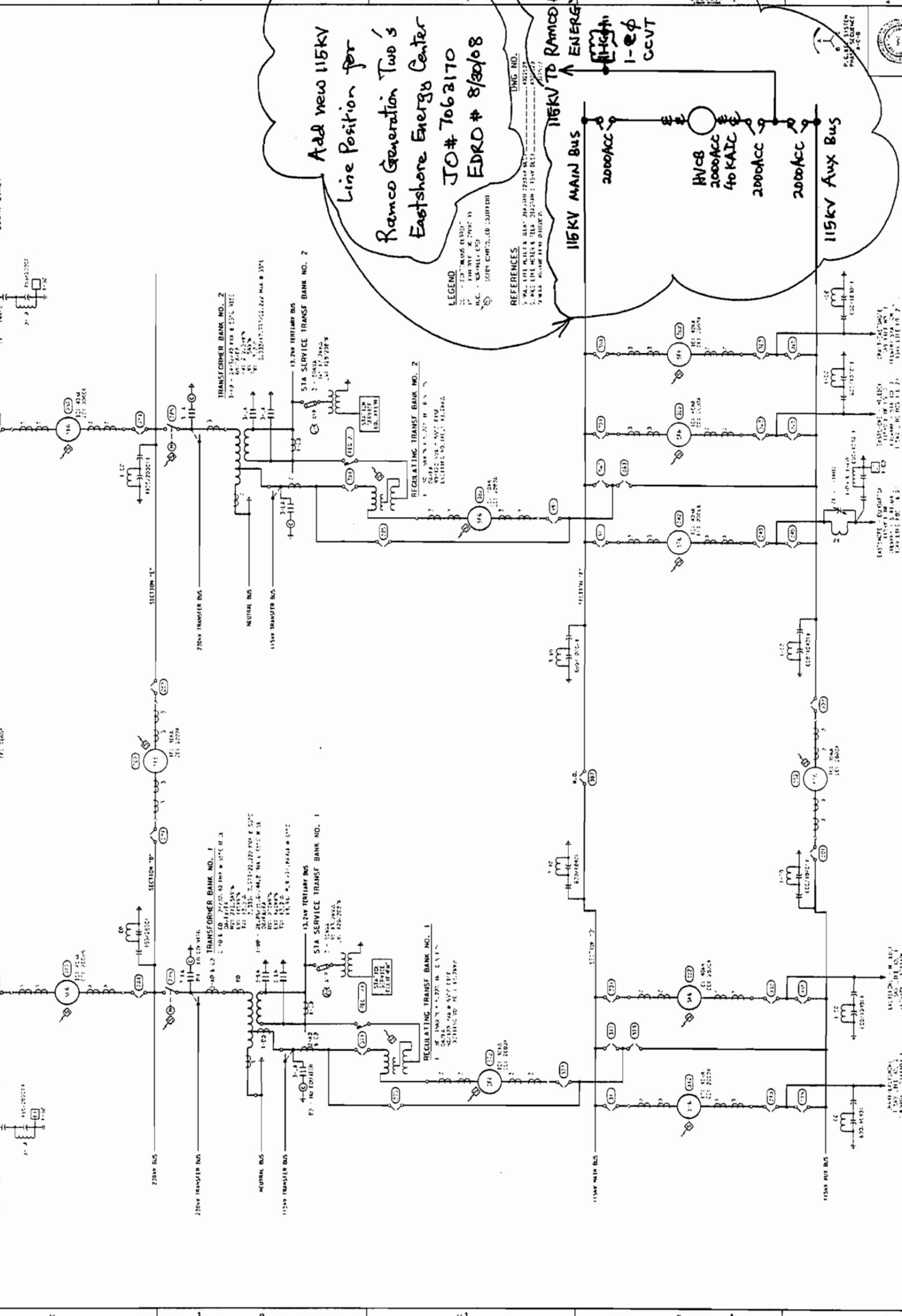


[signature]



EASTSHORE - SAN MATEO
230KV LINE
(CONTRA COSTA - SAN MATEO
230KV LINE NO. 2)

PITTSBURG - EASTSHORE
230KV LINE
(CONTRA COSTA - EASTSHORE
230KV LINE)



Add new 115KV
Line Position for
Ramco Generation Two's
Eastshore Energy Center
JO# 7062170
EDRD # 8/30/08

115KV MAIN BUS
2000ACC
115KV TO RAMCO EASTSHORE ENERGY CENTER
115KV Aux Bus
2000ACC
40 KATC
2000ACC
2000ACC
1-Øφ
CCVT

LEGEND
1. 230KV BUS
2. 115KV BUS
3. 115KV TO RAMCO EASTSHORE ENERGY CENTER
4. 115KV TO RAMCO EASTSHORE ENERGY CENTER
5. 115KV TO RAMCO EASTSHORE ENERGY CENTER
6. 115KV TO RAMCO EASTSHORE ENERGY CENTER

REFERENCES
1. 230KV BUS
2. 115KV BUS
3. 115KV TO RAMCO EASTSHORE ENERGY CENTER
4. 115KV TO RAMCO EASTSHORE ENERGY CENTER
5. 115KV TO RAMCO EASTSHORE ENERGY CENTER
6. 115KV TO RAMCO EASTSHORE ENERGY CENTER

NO.	DESCRIPTION	DATE	BY	CHKD	APPD
1	DESIGN	11/11/07	J. J. ...		
2	REVISION	11/11/07	J. J. ...		
3	REVISION	11/11/07	J. J. ...		
4	REVISION	11/11/07	J. J. ...		
5	REVISION	11/11/07	J. J. ...		
6	REVISION	11/11/07	J. J. ...		
7	REVISION	11/11/07	J. J. ...		
8	REVISION	11/11/07	J. J. ...		
9	REVISION	11/11/07	J. J. ...		
10	REVISION	11/11/07	J. J. ...		

ELECTRIC TRANSMISSION
ENGINEERING & CONSTRUCTION
1200 ...
SAN FRANCISCO, CALIFORNIA

DATE: 11/11/07
DRAWN BY: J. J. ...
CHECKED BY: J. J. ...
APPROVED BY: J. J. ...

SK # Ramco East SL

