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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	DOCKET NO. 06-AFC-6 (AFC Accepted 11/8/06)

EASTSHORE ENERGY LLC'S COMMENTS ON THE PRESIDING MEMBER'S PROPOSED DECISION

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July 15, 2008

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Pursuant to Title 20 of the California Code of Regulations Section 1749(b) and the Notice of Availability of the Presiding Member's Proposed Decision and Notice of Evidentiary Hearing and Notice of Committee Conference, Eastshore Energy Center (Eastshore) hereby files comments on the Presiding Member's Proposed Decision (PMPD).

GENERAL COMMENTS:

The Applicant is astonished and baffled by the Committee's recommendation for denial of the Eastshore Energy Center. As demonstrated by the extensive exhibits, including written and verbal testimony presented by the Applicant for this proceeding, the Committee's recommendation reflects an incomplete, distorted and inappropriate distillation of the record. The Committee cannot logically rely upon flawed Staff calculations and overlook actual overflight measurements and technical complete modeling that demonstrates there is no aviation safety risk. We urge the Committee to reconsider its flat dismissal of the Applicant's Plume Overflight Study which offers the only scientific evidence upon which to render an informed decision in this matter. The Committee must also not defer its reasoned, independent judgment for the obviously biased decision making of the City of Hayward, who has reached inexplicable and opposite conformity determinations for two power plants in very close proximity.

We urge the Committee to reconsider and reverse its preliminary decision.

<u>There is NO Risk to Aviation Safety And NO Significant Unmitigated Environmental Impacts From The Project</u>

The Committee ignored the extensive technical information regarding aviation safety presented by the Applicant throughout the proceeding. The record clearly presented evidence, supported by thermal plume modeling and a detailed protocol involving the flyover of the Barrick facility that clearly demonstrated that thermal plumes from the Eastshore site will not cause an aviation safety risk. The Committee cannot justifiably adopt a flawed Staff evaluation simply because it

is labeled as conservative when the fact is - the Staff's analysis is without any technical merit whatsoever. We urge the Committee to wade through the hyperbole of ill-informed emotion reflected in the testimony that was fueled by misinformation provided in a flawed Staff analysis. There is no potential for thermal plumes to impact aviation safety and significant evidence was presented by the Applicant to support this conclusion. The following key points provided by the Applicant were ignored by the Committee.

- CEC staff plume calculations are inherently flawed – this was not rebutted; rather, staff cobbled together an incorrect and incomplete screening level procedure and then incorrectly applied it to screening level criterion from the Australian Government Civil Aviation Safety Authority's Advisory Circular (CASA AC). Thus, CEC staff's findings are based upon flawed and inappropriate use of data inputs and criterion to reach unsupportable results and unsubstantiated conclusions. Staff's erroneous calculations severely overestimated vertical velocity and plume height.

- The Committee completely ignores the fact that Applicant performed a detailed modeling in addition to performing actual overflight measurements. Applicant relied upon well documented and technically supported modeling performed consistent with the CASA AC for the Russell City Energy Center (RCEC). This modeling was accepted by the same Siting Committee as part of the RCEC proceedings. Applicant applied the accepted RCEC modeling procedures to the Eastshore Energy Center engines and demonstrated an even more remote possibility for generation of thermal plumes. The RCEC modeling concluded that thermal plume impacts from RCEC would be remote. We urge the Committee to review these analyses which do not support the Committee's proposed decision.

- Applicant also demonstrated that less than 0.01% of flights from the Hayward Executive Airport would flyover the Eastshore Energy Center site and of this small number of flights, the lowest observed flight (at an altitude that is below the acknowledged legal minimum) was above an altitude where Eastshore plumes would dissipate.

- Because there is an extremely remote possibility of flights over the site and all flights are above the level of plume dissipation, there is NO possibility of an aviation hazard possible to create.

The Project Will Comply With All Applicable Laws, Ordinances, Regulations and Standards (LORS)

Hayward's inconsistent treatment of the Eastshore project and Russell City Energy Center ("Russell City"), which constitute the same type of use in the same land use zone, strongly suggests that Hayward exercised its discretion in an arbitrary and capricious manner. (*See Endangered Habitats League v. Orange County (Rutter Development)* (2005) 131 Cal.App.4th 777, 782 (explaining that the arbitrary and capricious standard applies to a municipality's determination regarding a project's consistency with the municipality's general plan).) Hayward does not have unfettered discretion to apply – or not apply – policies in its general plan. Section 65862 of the California Government Code demonstrates the Legislature's intent that municipalities treat land uses within land use zones uniformly. Furthermore, Hayward's inconsistent General Plan interpretations are constitutionally questionable. An agency's inconsistent enforcement of land use laws, where equal conditions exist, is subject to review

under the due process and equal protection clauses of the United States Constitution. (*See, e.g., City of Banning v. Desert Outdoor Advertising, Inc.* (1962) 209 Cal.App.2d 152, 154; and *Kuzinich v. County of Santa Clara* (9th Cir. 1982) 689 F.2d 1345, 1349.)

Eastshore remains surprised that the Committee continues to defer to Hayward's interpretation of its General Plan when Hayward has so clearly applied its General Plan policies in an illogical and inconsistent manner. In interpreting its General Plan in favor of the similar Russell City project but not for the Eastshore project located in the same land use zone, Hayward has blatantly revealed a preference for Russell City. As a state agency that must maintain the interests of the State of California as its highest priority, the Energy Commission cannot defer to a city that has so obviously shown a preference for one project over another. Due to this bias, Hayward cannot render an objective interpretation of its General Plan and the Committee should therefore disregard Hayward's reading of the General Plan.

Furthermore, the Committee cannot show deference to the City of Hayward's position which fabricates the existence of a Business and Technology Corridor when none exists and then applies that fiction to find the Eastshore Energy Center is inconsistent with local agency LORS when the City reached the exact opposite conclusion for a power plant project nearly five times the size within a matter of weeks. We urge the Committee to embrace its authority to independently evaluate these facts and reach the only logical conclusion – the Eastshore Project will comply with all applicable LORS based on the following:

- Deference to a local jurisdiction is ill-advised and unjustifiable when there is a flagrant inconsistency in the jurisdictions actions that can only be considered arbitrary and capricious. Committee deferral in this case abdicates the fundamental role of the CEC, as a state agency responsible for managing California's energy generation resources, to make an objective decision.

- The presence of a Business/Technology Corridor in the City of Hayward's Industrial Corridor is a fantasy – No such designation was ever adopted or codified by the City. The City's opposition to the Eastshore Energy Center is therefore, illogical, and inconsistent with the appropriate application of City LORS, especially in light of the reverse decision made by the City to support the RCEC.

- Eastshore would not "erode the integrity of appearance of the Business and Technology Corridor". This conclusion was reached in the visual resources section of the PMPD. The project is located squarely in the center of an existing Industrial Corridor on property that is zoned for Industrial use. A full 0.5 mile buffer exists between the site and other properly zoned uses. The few residences and commercial concerns located closer are non-conforming uses that have been allowed within the Industrial Corridor.

Committee Has Unfairly Applied Its Authority In The Area of Worker Safety & Fire Protection

The Committee inappropriately applied an unfair standard to the Eastshore Energy Center by requiring that Eastshore Energy Center the pay the entire costs of upgrading the City's Opticom system rather than allocating the pro-rata costs of this upgrade to both Eastshore and RCEC. We are absolutely dumbfounded as to how this same Committee could approve the RCEC Project within a matter of weeks prior with no reference to this issue and then somehow conclude, unjustifiably that there is a significant cumulative impact that must be mitigated. This same Committee was obligated under CEQA to consider the cumulative impacts of both projects in the

RCEC deliberations and its failure to recognize a potential concern and remedy it in the RCEC proceeding as well is incredulous. Any upgrade of the City's Opticom system should be shared equitably by both projects and that is what Eastshore proposes in revised WORKER SAFETY-7 discussed in our specific comments below.

The Committee Should Compare the Benefits of Eastshore Consistent with the Commission's Decision in the Los Esteros Decision

In determining that the Eastshore project is not necessary for the "public convenience and necessity" and thereby declining to override, the PMPD completely ignores the clearly declared statewide need for electricity. The Eastshore project was proposed in response to the California Public Utilities Commission's ("CPUC") regional and statewide process of electric energy procurement. The Energy Commission and the CPUC issued the Energy Action Plan II ("EAP II") in 2005 which unequivocally declares the State's need for new generation. (EAP II, 2005 at 7.) In fact, the CPUC has specifically focused on the urgent need to supply *local* generation. (CPUC D. 06-07-029 at 36 (emphasis added).)

Eastshore would be further necessary for the public convenience and necessity by fulfilling the Energy Commission's own stated need for additional peaking capacity. Eastshore would more than simply contribute 115 MW of capacity, it would fulfill the Energy Commission's acknowledged need for resources to meet peak demand. (2007 Integrated Energy Policy Report ("IEPR") at 7.) The PMPD fails to recognize the fact that the Energy Commission's own 2007 IEPR specifically calls for increasing the efficiency and flexibility of conventional natural gas powered generation. The 2007 IEPR emphasizes that newer natural gas electricity generation facilities like Eastshore provide efficiency and environmental benefits by reducing greenhouse gas emissions as they reduce the amount of natural gas used. (*Id.* at 239.) The 2007 IEPR favors natural gas peaker plants such as Eastshore because of their efficiency and flexibility, as well as their complementary nature to renewable resources. (*Id.* at 146, 218.)

Finally, the Committee's override analysis only relied upon one previous override decision – the Metcalf Energy Center ("Metcalf") in laying out LORS override standards. By doing so, the Energy Commission has severely limited any future override decisions for peaker plants. The PMPD attempts to directly compare consumer benefits of Metcalf to Eastshore, but Metcalf is a 600 MW facility and thus cannot easily be compared to the 115 MW Eastshore project, nearly one sixth the size. By relying solely on the Metcalf Decision for LORS override guidance, the Committee has effectively declared that no small targeted peaker plants like Eastshore could ever obtain an override. Instead, the PMPD should have cited to the more recent 2006 Los Esteros Decision which presents a more analogous override situation to Eastshore. Los Esteros added 140 MW to the existing facility, comparable to Eastshore's 115 MW of electrical generation.

SPECIFIC COMMENTS

The specific comments have been prepared consistent with the direction provided by Hearing Officer Gefter requiring that the issue area and PMPD page number be referenced for each comment as well as a justification for any requested changes to the PMPD language. Further, these comments present the existing text of the PMPD and provide changes in strike-out and underline in a fashion that will be easy to accept the changes in order to efficiently prepare the Final Decision.

Specific Comments on PMPD

Committee Recommendation, pg 1-2 – modify text as follows:

The Committee recommends that the Energy Commission grant ~~deny~~ certification of the proposed Eastshore Energy Center at 25101 Clawiter Road in the City of Hayward. In summary, and based on the weight of the evidence, the Committee found the Application for Certification complies with all applicable Laws, Ordinances, Regulations and Standards (LORS) and environmental impacts can ~~deficient in four areas (all of which are discussed in detail in this proposed decision) that cannot~~ be mitigated at the proposed project site to a level of insignificance with the proposed Conditions of Certification.~~:~~

~~1)The facility would cause a significant cumulative public safety impact on the operations of the nearby Hayward Executive Airport by further reducing already constrained air space and increasing pilot cockpit workload.~~

~~2) The thermal plumes from the facility would present a significant public safety risk to low flying aircraft during landing and takeoff maneuvers due to the close proximity of the Hayward Executive Airport.~~

~~3) The facility would be inconsistent with the City of Hayward's Municipal Zoning Ordinance requirements for a Conditional Use Permit (CUP) since the project "would not operate at a minimum of detriment to surrounding properties," and the Committee was not persuaded that the benefits of the facility were sufficient to recommend the Commission exercise its override authority.~~

~~4) The facility would be inconsistent with the City of Hayward's Airport Approach Zoning Regulations and incompatible with the Alameda County Airport Land Use Policy Plan (ALUPP), and the Committee was not persuaded that the benefits of the facility were sufficient to recommend the Commission exercise its override authority.~~

~~If the Energy Commission should decide to override the Laws, Ordinances, Standards, and Regulations (LORS) inconsistencies and California Environmental Quality Act (CEQA) violations and certify the project, the Conditions of Certification identified in this Decision for each topic should be incorporated into the Commission decision and be effective upon certification.~~

Justification – There is substantial evidence in the record to support the determination that the Eastshore Energy Center will comply with applicable LORS and be mitigated to insignificant impact levels.

Land Use, pg 6 – modify text as follows:

Land Use. The site is ~~in~~consistent with the City's Airport Approach Zoning Regulations, which are designed to: (1) prevent the creation or establishment of airport hazards or obstructions; and (2) prevent the destruction or impairment of the utility of the airport and the public investment therein. The EEC's ~~high velocity~~ thermal plumes ~~could~~ would not cause turbulence and loss of control to aircraft flying at low altitude over the project site, and would not create ~~creating~~ a safety hazard within the airport zoning area since aircraft do not regularly fly over the EEC site at ~~low~~ an altitude where thermal plumes would have a significant effect on aircraft.

~~The aviation safety hazard created by the~~The EEC would not significantly restrict uses of the Hayward airspace for aircraft transit, maintenance flights, student pilot training, and normal departures/arrivals ~~that cannot be avoided~~ if the project is developed at the proposed location. Thus, the EEC is ~~in~~consistent with Conditional Use Permit (CUP) finding (c) since the project's invisible thermal plumes would not create an aviation safety hazard that is detrimental to public safety or general welfare.

The Applicant ~~failed to~~ provided substantial evidence ~~of feasible mitigation~~ that ~~would either~~ (1) ~~eliminate~~ thermal plumes would not jeopardize aviation safety of low flying aircraft or (2) ~~prevent the~~ constriction of navigable airspace in a way that would impair the utility of the airport. Thus, the EEC is ~~in~~consistent with CUP finding (d) since it would not creates an aviation safety hazard affecting the operation and utility of the Hayward Executive Airport, which is ~~not~~ in harmony with applicable City policies.

The EEC is ~~in~~consistent with zoning requirements for a CUP since the project "would ~~not~~ operate at a minimum of detriment to surrounding properties" and is therefore ~~in~~compatible with Sections 10-1.140, 10-1.1605, 10-1.1620, 10-3225, and 10-6.00 of the Hayward Municipal Code as well as the Alameda County Airport Land Use Policy Plan (ALUPP).

Justification – There is substantial evidence in the record to support the determination that the Eastshore Energy Center will comply with applicable LORS and be mitigated to insignificant impact levels.

Traffic and Transportation, pg 7 – modify text as follows:

(1) The project's invisible thermal plumes at the proposed site would not create a significant adverse impact under CEQA that would be cumulatively considerable to available Hayward Airport airspace. (2) Although the ~~The~~ EEC is adjacent the existing air traffic pattern, ~~requiring~~ pilots need not ~~to~~ be concerned about ~~other traffic as well as~~ potential turbulence from stack exhaust because turbulence effects are insignificant at all traffic pattern altitudes. (3) The cumulative effect of the EEC on Hayward Airport airspace would not cause~~increases the potential for serious~~ impairment to the utility of the airport by increasing the complexity of the airspace. (4) The "no fly zone" mitigation planned for RCEC is not necessary ~~cannot be implemented~~ at the EEC since there is no aviation safety risk. Therefore, the EEC ~~this~~ would not reduce available airspace for the takeoff and landing traffic pattern zone. (5) The project complies ~~does not comply~~ with applicable LORS regarding aviation traffic (City of Hayward Airport Approach Regulations) since it will not result in a significant aviation hazard ~~that cannot be mitigated~~ at the proposed site.

Justification – There is substantial evidence in the record to support the determination that the Eastshore Energy Center will comply with applicable LORS and be mitigated to insignificant impact levels.

Override, pg 8 – modify text as follows:

An override of applicable LORS is not necessary since the project will comply with all applicable LORS as set forth in the Override discussion. ~~Applicant requested the Energy Commission to override findings of LORS~~

~~inconsistencies and to certify the EEC in the interest of "public convenience and necessity" for reliable peaking energy in the Bay Area. We decline to override. As discussed in the Local System Effects and Override sections of this Decision, we find that the project's economic and reliability benefits for electricity consumers are modest at best. We also find that the project's asserted environmental benefits from replacing power generated by older, less efficient power plants do not outweigh the project's public health and safety impacts. On balance, the EEC does not provide public benefits that outweigh the consequences of LORS violations at the proposed site or warrant overriding considerations under the Warren-Alquist Act or CEQA.~~

Justification – There is substantial evidence in the record to support the determination that the Eastshore Energy Center will comply with applicable LORS and be mitigated to insignificant impact levels. As a result, there is no need for a Commission override, nonetheless, the Commission makes the following findings to support an override.

Power Plant Site and Facilities, pg 22-23 - modify text as follows:

The 14 generator exhaust stacks are each approximately 70 feet tall, four feet in diameter at the top and eight feet in diameter at the base. The stacks will be constructed in two clusters of seven stacks each, extending a total of approximately 425 feet in a linear array. Each stack will produce a ~~high velocity~~ thermal plume, with the potential for each seven-stack array to merge into a single plume. The project also includes two 20-foot tall radiator stack exhausts, which also produce individual ~~high velocity~~ thermal plumes. (Ex. 200, p. 3-4; Ex. 1, § 2.2.2 et seq.; Ex. 21.)

Justification – It is uncontroverted that the project will emit thermal plumes. However, there is substantial evidence in the record that these plumes do not have sufficient size or velocity to create turbulence that would endanger aviators.

Project Alternatives, pg 37– strike the following text:

~~In view of our determinations as discussed in the LAND USE and TRAFFIC AND TRANSPORTATION sections that the EEC will cause significant unmitigated impacts, we must now decide whether or not a feasible alternative site which would eliminate or acceptably reduce these impacts exists.~~ Both Applicant and Staff – the only parties presenting detailed, substantive evidence on this topic -- each concluded that no feasible alternative site exists which would meet most project objectives.11 (1/14/08 RT 73:13-15; see also Applicant's Opening Brief at 73-75; Staff's Opening Brief at 22, Staff's Reply Brief at 16.) The evidence compels us to agree.

Justification – There is substantial evidence in the record to support the determination that the Eastshore Energy Center will comply with applicable LORS and be mitigated to insignificant impact levels in both the areas of Land Use and Traffic and Transportation.

Project Alternatives, pg 38 – strike the following text:

~~Finally, as summarized above, the evidence uniformly establishes that renewable generation resources or demand reducing programs are either not practical or currently unable to satisfy most project objectives. What we are left with is, in our estimation, a proposed project which creates significant unmitigable impacts but for which a means of alleviating these impacts (in light of the project's objectives) does not exist. We discuss in the OVERRIDE section of this Decision, infra, our reasoning as to whether or not the positive attributes of the EEC project ultimately render it acceptable.~~

Justification – There is substantial evidence in the record to support the determination that the Eastshore Energy Center will comply with applicable LORS and be mitigated to insignificant impact levels. As a result, there is no need for a Commission override.

Project Alternatives, pg 39 – strike the following text:

6. The "no project" alternative would <u>not</u> avoid ~~the~~ significant adverse ~~unmitigable adverse~~ impacts ~~discussed in the Traffic and Transportation and Land Use portions of this Decision~~;

Justification – Since there is substantial evidence in the record to support the determination that the Eastshore Energy Center will comply with applicable LORS and be mitigated to insignificant impact levels, there are no significant adverse impacts to be avoided by the "No Project" alternative.

Local System Effects, pg 122 - modify text as follows:

These parties also cite as a "benefit" the fact that the EEC can reliably interconnect with the grid without creating the need for additional or new downstream facilities. ~~In our view, this factor essentially means that Applicant will not bear the cost of any mitigation which would otherwise be required. As such, it is undoubtedly an economic benefit to Applicant. We fail, however, to be persuaded that it constitutes a benefit to the overall system since, were mitigation necessary, we would require Applicant to take appropriate measures. Therefore, we consider this a neutral factor.~~ In conclusion, we are persuaded that the EEC will provide some degree of local system benefits as discussed above. ~~Whether these factors are "significant" as characterized by Applicant (see, e.g., Applicant's Reply Brief on Contested Subject Areas at 47-48) or "modest" as viewed by Staff (see, e.g., Staff's Reply Brief at 16), and how they are balanced in light of the project's impacts, is discussed in the OVERRIDE section of this Decision.~~

Justification – The statement is factually incorrect. Pursuant to California Independent System Operator (CAISO) Tariff for Large Generator Interconnection Procedures, costs for network upgrades are repaid to the project that advanced the funds over a five year payback period with interest. (CAISO Tariff, Appendix U, Section 3.4.3.) These costs could be on the order of million dollars such as the transformer replacements and seven miles of reconductoring required for RCEC. (See RCEC Final Staff Assessment at pp. 5.6-2, 5.6-3 & 5.5-11.) The avoidance of transmission system upgrades creates a clear economic benefit to ratepayers. Therefore, locating a project in an area that avoids these costs is a real benefit to the ratepayers.

Air Quality, Table 2, pg 126 - modify NO2 portion of the table and table footnote as follows:

Nitrogen Dioxide (NO2)	1 Hour	0.180.25 ppm (339470 µg/m3)	None
	Annual	0.030 ppm (57µg/m3)None	0.053 ppm (100 µg/m3)

Source: ARB, July 2008February 2007 (Note: New 1-hour NO2 CAAQS of 0.18 ppm [338 µg/m3] and annual NO2 CAAQS of 0.030 ppm [56 µg/m3] become effective on March 20, 2008 are expected to be approved by the Office of Administrative Law in late 2007.)

Air Quality, pg 136- modify paragraph preceding Table 16 as follows:

Applicant's analysis includes both maximum operating and start-up/shutdown scenarios to determine worst-case air quality impacts from routine operational emissions throughout the life of the project. (Ex. 1, § 8.1.8.3.) The predicted maximum concentrations of non-reactive pollutants are summarized in Staff's Air Quality Table 16, below. On July 15, 2008, the Applicant submitted a supplemental air quality analysis that updated the expected 1-hour NO2 impacts from the project. The impacts summarized in Table 16 reflect this update.

Justification – On February 23, 2007, the ARB approved a lowered 1-hour NO_2 standard of 0.18 ppm (339 µg/m3) and a new annual-average NO_2 standard of 0.030 (57 µg/m3). These changes become effective on March 20, 2008. Refined air quality modeling has been performed (as described in Supplemental Air Quality Testimony of Gregory Darvin, July 15, 2008) that demonstrates the Eastshore project will comply with the new standards. These modeling results are reflected in the proposed changes.

Air Quality, Table 16, pg 138 - modify NO2 portion of the table as follows:

Pollutant	Av. Time	Modeled Impact	Background	Total Impact	Limiting Standard	Percent of Standard
NO_2	1 hour	157.06314.3	131.67143	288.7457.3	339470	85.297
	Annual	3.223.2	2832	35.231.2	57100	61.831

Justification – On February 23, 2007, the ARB approved a lowered 1-hour NO_2 standard of 0.18 ppm (339 µg/m3) and a new annual-average NO_2 standard of 0.030 (57 µg/m3). These changes become effective on March 20, 2008. Refined air quality modeling has been performed (as described in Supplemental Air Quality Testimony of Gregory Darvin, July 15, 2008) that demonstrates the Eastshore project will comply with the new standards. These modeling results are reflected in the proposed changes.

Air Quality, Table 20, pg 145 - modify NO2 portion of the table as follows:

Pollutant	Av. Time	Modeled Impact	Backgro und	Total Impact	Limiting Standard	Percent of Standard
NO_2	1 hour	157.06316	131.6714	288.73459	339470	85.298

Pollutant	Av. Time	Modeled Impact	Backgro und	Total Impact	Limiting Standard	Percent of Standard
	Annual	3.363.2	3228	35.3631.2	57100	62.031

Justification – On February 23, 2007, the ARB approved a lowered 1-hour NO_2 standard of 0.18 ppm (339 µg/m3) and a new annual-average NO_2 standard of 0.030 (57 µg/m3). These changes become effective on March 20, 2008. Refined air quality modeling has been performed (as described in Supplemental Air Quality Testimony of Gregory Darvin, July 15, 2008) that demonstrates the Eastshore project will comply with the new standards. These modeling results are reflected in the proposed changes.

Air Quality, pg 148 - modify paragraph continuing at the top of the page to reflect supplemental testimony on air quality:

designed to address serious health impacts to asthmatics and children, sensitive receptors identified in the project vicinity. (Ex. 800, p. 5; Ex. 801; Sarvey's Reply Brief at 1-3.) Staff's witness testified that the new NO2 standard had not been adopted when Staff conducted its analysis but Staff was aware of the regulatory change and the project's modeled impact for NO2 does not exceed the new standard. The witness also noted that Staff would work with CARB to develop the proper modeling protocol for the new NO2 standard. (12/17/07 RT 102:15-25, 103-104.) Staff asserted that the ERCs identified in Condition AQ-SC6 would ensure compliance with the new standard. We took ~~take~~ administrative notice that the state's new NO2 standard was adopted in March 2008, subsequent to the Evidentiary Hearings in this matter and ~~we believe it is necessary to~~ reopened the record for further evidence to confirm the project's compliance with the new standard. The analysis summarized in the preceding sections reflect this additional evidence which confirms that Eastshore will comply with the new standard.

Justification – On February 23, 2007, CARB approved a lowered 1-hour NO_2 standard of 0.18 ppm (339 µg/m3) and a new annual-average NO_2 standard of 0.030 (57 µg/m3). These changes become effective on March 20, 2008. Refined air quality modeling has been performed (as described in Supplemental Air Quality Testimony of Gregory Darvin, July 15, 2008) that demonstrates the Eastshore project will comply with the new standards. These modeling results are reflected in the proposed changes.

Air Quality, pg 153 - modify finding 24 to reflect supplemental testimony on air quality:

24. Applicant has demonstrated that ~~and Staff shall consult with the California Air Resources Board(CARB) to implement the appropriate modeling protocol to ensure~~ the project will comply with CARB's new NO2 emissions standard.

Justification – On February 23, 2007, the ARB approved a lowered 1-hour NO_2 standard of 0.18 ppm (339 µg/m3) and a new annual-average NO_2 standard of 0.030 (57 µg/m3). These changes become effective on March 20, 2008. Refined air quality modeling has been performed (as described in Supplemental Air Quality Testimony of Gregory Darvin, July 15, 2008) that

demonstrates the Eastshore project will comply with the new standards. These modeling results are reflected in the proposed changes.

Public Health , pg 194 – modify footnote 66 as follows:

[66] We take administrative notice of CARB's March 19 2008, preliminary report on the disproportionate burden of cancer and respiratory disease in the East Bay and in particular, the City of Oakland due to diesel pollution from trucks traversing freeways and roadways in the Oakland area and marine vessel emissions in the Port of Oakland. ("Diesel Particulate Matter Health Risk Assessment for Oakland Community," Mar 19, 2008.) The evidentiary record was supplemented on July 21 to establish that ~~does not indicate whether~~ data compiled by CARB for the Oakland area HRA would not impact ~~was included in~~ Staff's cumulative public health analysis.

Justification – Supplemental public health testimony submitted by Applicant on July 21, 2008 indicates the CARB March 19 report would not impact the required compliance demonstration under PUBLIC HEALTH-1.

Public Health , pg 198 – strike finding 21 in its entirety:

21. There is no evidence of cumulative public health impacts from project emissions; ~~however, CARB's March 19, 2008, Health Risk Assessment on diesel particulate matter in the Oakland area raises a question about the assumptions used by Applicant and Staff regarding ambient airborne TAC concentrations in Hayward.~~and the data compiled by CARB for the Oakland area HRA does not impact Staff's cumulative public health analysis.

Justification – Supplemental public health testimony submitted by Applicant on July 21, 2008 indicates the ARB March 19 report would not impact the required compliance demonstration under PUBLIC HEALTH-1.

Worker Safety and Fire Protection, Committee Directive pg 206 - modify text as follows:

We are concerned that no mitigation is proposed to address Staff's preliminary finding that the project's incremental effect on fire and emergency response would be cumulatively considerable. Although the HFD did not provide information on the costs of upgrading Opticom, the HFD's failure to respond does not obviate the project's potential cumulative impact on HFD services. We believe this impact must be mitigated unless otherwise infeasible. The Committee therefore directed~~s~~ the Applicant, Staff, and City of Hayward to draft a Condition of Certification to resolve this issue. Based on testimony filed by the City of Hayward regarding the Opticom system upgrade, Applicant has proposed WORKER SAFETY – 7 requiring Eastshore to fund half the required $150,000 upgrade recognizing its contribution along with RCEC to the need for this system.

Justification – Applicant is proposing WORKER SAFETY-7 to address the Committee's concern. The funding proposed is consistent with the City of Hayward's estimate of the Opticom system upgrade and Eastshore's contribution to the need for the system.

Worker Safety and Fire Protection, pg 208 - modify Finding 9. as follows:

9. ~~Unless mitigated, the~~ The EEC project's incremental effect on fire and emergency response ~~would be cumulatively considerable. Finding No. 10 and the Conclusions, below, are contingent on the Applicant, Staff, and City of Hayward drafting a Condition to mitigate cumulative impacts.~~will be mitigated to an insignificant level by providing this project's contribution to the overall costs for funding an upgrade to the City's Opticom system as set forth in condition WORKER SAFETY-7.

Justification – Applicant is proposing WORKER SAFETY-7 to address the Committee's concern. The funding proposed is consistent with the City of Hayward's estimate of the Opticom system upgrade.

Worker Safety and Fire Protection, pg 211 – add new WORKER SAFETY-7 as follows:

WORKER SAFETY-7 The project owner shall provide half of the cost up to $75,000 to the Hayward Fire Department (HFD) for mitigation of project specific and cumulative impacts associated with providing fire, EMS, and hazardous materials release response for the Eastshore Energy Center. The total payment shall not exceed half the cost of the requisite improvement to the "Opticom" system used by the Hayward Fire Department for emergency response.

Verification: At least 30 days prior to commencement of operation, the project owner shall provide the CPM with evidence of payment of the mitigation fee to the Hayward Fire Department.

Justification – Applicant is proposing WORKER SAFETY-7 to address the Committee's concern. The funding proposed is consistent with the City of Hayward's estimate of the Opticom system upgrade.

Land Use, pg. 314 – modify the text as follows:

The EEC's location in the center of the eastern Industrial Corridor area provides a buffer of approximately ~~is approximately~~ 0.5 mile from most areas zoned for residential, public, and retail commercial use. There are five schools (Life Chiropractic College West (LCCW), ITT Technical Institute, Eden Gardens Elementary School, Anthony W. Ochoa Middle School, and Lea's Montessori Christian School) within a one-mile radius of the project site. The closest, LCCW, is located less than 1,000 feet east of the site, but does not serve young, school-age children. LCCW and ITT are vocational/trade schools, which were approved by the City as compatible uses within the Industrial Corridor. Ochoa Middle School, the nearest public school, is located approximately 0.5 mile east of the site. Other potential sensitive receptors within one mile of the site include Eden West Convalescent Hospital and Senior Group Home (approximately 1.0 mile northeast) and the Waterford Apartments (approximately 1,850 feet east). (Ex. 200, p. 4.5-26; Ex. 1, Appendix 8.1D: Table 8.1D-4 and Figure 8.1D-1.)

Justification – The PMPD text is an incomplete version of the cited text that misstates the Staff testimony. These changes are necessary to reflect an accurate version of the Staff's testimony.

Land Use, pg. 320 – modify the text as follows:

From the City's perspective, the EEC does not represent "smart growth" principles promoted by the General Plan to address problems endemic to urban sprawl, including traffic congestion, poor quality housing, and air pollution. (Ex. 401, p. 4, citing Ex. 406, p. 2-6.) The City seeks to attract high-tech, information based businesses to a "new economy" in Hayward to transition from traditional industrial development. (Ex. 406, p. 2-19, et seq.) In this context, the City believes the EEC is contrary to the General Plan objective because it does not fit the definition of "information based economy." (Ex. 401, p. 5.) The City asserts that it is in the process of implementing this objective by supporting heavy industrial uses in the western portion of the Industrial Corridor, i.e., RCEC, the wastewater treatment plant, and the Rohm and Haas chemical plant, while approving high-tech development (computer chip manufacturing) in the eastern portion of the industrial zone along Clawiter Road. ~~Thus, the City believes the EEC would disrupt the City's future land use planning goals~~[102] (Ibid.) However we do not find these arguments persuasive as the project site is adjacent to the existing Berkeley Farms milk processing facility, which stores and uses anhydrous ammonia, a more potent and hazardous product than the aqueous ammonia proposed for the EEC and to date, identification or development of these locations or districts in the vicinity of the Eastshore project has not been proposed or adopted by the City. (Ex 200, p. 4.5-11)

Justification – While Mr. Rizk indicates that the City is in the process of implementing this objective, however there is no evidence of any discrete City actions to designate a Business and Technology Corridor in this portion of the Industrial Corridor or elsewhere in the City. The City's reference to the Fremont Bank letter provides no support for its declared objective. The Fremont Bank contains no reference to an "information-based" economy or a disruption of the City's future planning goals. The bank's reference to hazardous materials concerns are specious given its chosen location directly adjacent to the Berkeley Farms milk processing facility where more potent and hazardous anhydrous ammonia is in use. All of the perceived concerns identified in the bank's letter have been addressed in the PMPD and impacts have been mitigated to insignificant levels.

Land Use, pg. 321 – modify the text as follows:

In addition, the City asserts the EEC will erode the integrity of appearance of the Business and Technology Corridor since its fourteen 70-foot tall stacks and new 80 to 90 foot-tall transmission line poles interspersed with existing poles would not be compatible with nearby uses. (Ex. 401, p. 6.) We do not find these arguments persuasive as the project will be located in the Industrial Corridor (not the Business and Technology Corridor), the property is zoned for industrial use and will have no significant visual resources impacts (See the Visual Resources Section of this decision).

Justification – There is no Business and Technology Corridor (Ex. 200, p 4.5-11). The Eastshore facility is located in the Industrial Corridor on property that is zoned for industrial use. The basis for the City's assertion of an erosion of the integrity of the appearance of the Industrial Corridor is not supported by the evidence taken under Visual Resources or the Committee's decision in this area.

Land Use, pg. 321- 322 – modify the text and footnote as follows:

a. The proposed use is desirable for the public convenience or welfare.

Staff asserts the project will support sustainability of the area's power grid even though the power generation would not be solely dedicated to the Hayward area. (Ex. 200, p. 4.5-16.) The City believes the potential environmental effects and aviation hazards associated with the EEC outweigh power grid benefits and are not desirable for public convenience or welfare of the Hayward community. (Ex. 401, p. 8.) We disagree.[104] The Eastshore project will not cause significant aviation hazards and will provide local system benefits. The Eastshore project will also enhance operating flexibility for PG&E and the CAISO. (See Traffic and Transportation and Local Systems Benefits sections of this decision). ~~In the Override section of this Decision we conclude that the EEC is not "required" for "public convenience and necessity." The "desirable for the public convenience or welfare" criterion appears easier for a project to meet, but in assessing it we believe it is appropriate to consider all of a project's attributes, both positive and negative. The City of Hayward shares this view (Exh. 401, p. 8), and we give substantial weight to the City's interpretation of its own laws. Considering the modest benefits of the project (see the Override section) and its adverse impact on aviation safety (see the Traffic and Transportation section), we concur with the City that~~ We therefore find that the EEC is ~~not~~ desirable for the public convenience or welfare.

[104] See discussion of aviation hazards below and in the Traffic and Transportation section of this Decision. ~~See also the Override section on the issue of public convenience and necessity.~~

Justification – The Eastshore facility will not cause significant aviation hazards and will provide local system benefits. It therefore provides desirable public convenience or welfare benefits. There is substantial evidence in the record to support the determination that the Eastshore Energy Center will comply with applicable LORS and be mitigated to insignificant impact levels. As a result, there is no need for a Commission override.

Land Use, pg. 322 – modify the text as follows:

b. The proposed use will not impair the character and integrity of the zoning district and surrounding area.

The City asserts that introduction of highly visible 70-foot tall exhaust stacks, which will be seen from residential areas to the east, is incompatible with the heights of existing facilities in the area. According to the City, the visual and aesthetic impacts of the stacks cannot be mitigated and the addition of the project's stacks in conjunction with other negative aspects including noise, aviation hazards, visual, and hazardous materials, will impair the character and integrity of the zoning district and surrounding area, i.e., residential and public areas along the eastern edge of the Industrial Corridor. (Ex. 401, p. 8.) Staff disagreed with the City, arguing that the project's stacks were consistent with existing uses in the Industrial Zone. ~~Although we~~ We agree. The height of the Eastshore stacks is comparable to other industrial/manufacturing structures within 0.5 mile of the proposed project site, including Gillig Inc. and Berkeley Farms, and the proposed

stacks are not as tall as the existing Rohm & Haas stack (120 feet) or the twin stacks of the Russell City Energy Center (145 feet), which the city supports. Furthermore, the project will be located in the Industrial Corridor on property that is zoned for industrial use. Based on these comparisons and our finding in the Visual Resources section of this decision , we have concluded that placement of the facility at the proposed location would not impair the character and integrity of the zoning district and surrounding area and is consistent with section b. (Ex. 200, p. 4.5-17).
~~We find that the project's visual impacts can be mitigated to insignificant levels (See Visual Resources section.), and we believe the City's attempt to implement its General Plan by asserting the site is located in a Business and Technology Corridor that should restricting future heavy manufacturing uses to the western area of the Industrial Corridor Zone is inconsistent with the City's failure to designate a Business and Technology Corridor that would support this restriction. The project is located in an Industrial Corridor and the site is zoned for industrial use. Surrounding land uses are generally consistent with this designation and the proposed use would not impair the character and integrity of the zoning district and surrounding area. carries great weight. (See Visual Resources section.) In addition, we find the project's adverse impacts on aviation safety will impair the integrity of the zoning district. (See the Traffic and Transportation section~~

Justification – There is ample and uncontroverted evidence in the visual resources testimony to conclude that the project will not be visually intrusive and will not erode character and integrity of the District. The findings in the PMPD in this area are in stark contrast to the Findings and Conclusions on visual resources at Pages 421-422:

> 1. The EEC site is situated in an area designated by the City of Hayward as the "Industrial Corridor", characterized by existing industrial and commercial facilities, tall tower structures, and utility lines.
>
> 7. The project's publicly visible structures and red aviation lights on the 14 exhaust stacks will blend into the general industrial background surrounding the site.
>
> 12. Potential cumulative visual impacts will be mitigated to insignificant levels.

Land Use, pg. 322- 323 – modify the text as follows:

> c. The proposed use will not be detrimental to the public health, safety, or general welfare.

The City asserts that mitigation measures approved by BAAQMD, which accepts emission reduction credits on a regional basis, will not reduce local impacts from EEC's emissions and the City is also skeptical about Staff's proposed CEQA mitigation for air quality impacts.[105] Thus, the City believes the project would be detrimental to public health, aviation safety, and general welfare in conjunction with the other detrimental aspects identified by the City. (Ex. 401, p. 8.) Staff relies on the proposed air quality and hazmat mitigation measures to argue that the EEC will not result in significant environmental impacts and that the EEC is consistent with other uses in the area such as the Berkeley Farms facility, which processes anhydrous ammonia. (Ex. 200,

p. 4.5-17.) ~~However, as~~ As discussed in the Traffic and Transportation section, we have concluded that EEC's adverse impacts on aviation safety are not detrimental to public safety.

Justification– There is substantial evidence in the record to support the conclusion that Eastshore will not adversely impact aviation safety. See comments on Traffic and Transportation section.

Land Use, pg. 323 – modify the text as follows:

> d. The proposed use is in harmony with applicable city policies and the intent and purpose of the zoning district involved.

According to the City, the EEC represents an intensity of use that is outside the scale and character of uses in the area and would not be in harmony with city policies. (Ex. 401, pp. 8-9, citing Ex. 408, § 10-1.110: Purpose of the Zoning Ordinance.) Although Staff asserts the project is consistent with the General Plan designation of Industrial Corridor, similar in appearance to surrounding industrial uses, and corresponds with other permitted uses, Staff ~~concedes~~ asserts that the project cannot operate at a minimum of detriment to surrounding properties (Hayward Executive Airport), discussed below. (Ex. 200, p. 4.5-18.) Based on our findings in the Local Impact Assessment and Traffic and Transportation sections, we have concluded that EEC is ~~not~~ in harmony with city policies (indeed, laws) concerning aviation safety and, therefore, the EEC is ~~not~~ in compliance with Hayward Municipal Code sections 10-1.1620 and 10- 1.3225. As a result, the EEC is ~~in~~consistent (~~not~~ in harmony) with various City regulations and policies, including Hayward Municipal Code §§ 10-1.140, 10-1.1620, and 10- 6.00 (airport zoning). Since all four CUP findings can~~not~~ be made, we find the project ~~in~~consistent with Hayward Municipal Code Sections 10-1.1620(b)(1)(a) and 10-1.3225. (Ex. 200, p. 4.5-18.)

Justification - There is substantial evidence in the record to support the conclusion that Eastshore will not adversely impact aviation safety. See comments on Traffic and Transportation section.

Land Use, pg. 325 - 326 – modify the text as follows:

The EEC site is within the airport's AAZP, AIA, and airspace boundaries and therefore subject to the City's Airport Approach Zoning Regulations. 107 (Ex. 200, p. 4.5-21.)

The City's Airport Approach Zoning Regulations were enacted to:

- Prevent the creation or establishment of airport hazards or obstructions.
- Prevent the destruction or impairment of the utility of the airport and the public investment therein. (Ex. 409: HMC, § 10-6.00, Appendix F in this Decision.)

As described in the Traffic and Transportation section of this Decision, the EEC will produce ~~high velocity,~~ thermal plumes. Applicant has demonstrated through modeling and overflight tests that the project would ~~could cause turbulence and would~~ not cause a loss of control to aircraft flying at low altitude over the project in the traffic pattern zone.~~;~~ Therefore, the project would not create ~~creating~~ a safety hazard within the airport zoning area. Staff asserts that pilots ~~Pilots~~ would have to divert their attention from flying their aircraft, look for other aircraft in the pattern, and follow instructions from the tower controllers, thus adding to pilot workload during

takeoff and landing at low altitude. (Ex. 200, p. 4.5-22.) However, there is no need for such diversion as the project would not cause a noticeable impact when passing over the project at elevations of 300 feet or above. (Ex. ____, p. _____.) Land uses that impair the utility of the airport are incompatible with the Airport Approach Zoning Regulations. The utility of an airport depends, in part, on the safe and efficient movement of air traffic and use of the surrounding airspace. The presence of the EEC would not further complicate an already complex airspace~~,~~ or impair~~ing~~ the utility of the airport. (Ex. 20 Testimony of Graves, 17~~200, p. 4.5-22.~~) Operations at the Hayward Executive Airport are expected to increase over the next 20 years. ~~If~~ Since there is no need to restrict the airspace ~~is restricted~~ over the EEC, congestion would not increase in other areas. Thus, ~~in addition to~~ EEC would not interfere ~~interfering~~ with or restrict ~~and restricting~~ existing or future operations at the airport~~, the project would also restrict future airport operations~~. According to Staff, the EEC is ~~therefore~~ inconsistent with the City's Airport Approach Zoning Regulations since it conflicts with the airport land use compatibility plan at the proposed project location. (Ex. 200, p. 4.5-22.) However we are not persuaded by the Staff's arguments. The applicant has demonstrated through modeling and actual overflight measurements that there is no significant aviation safety risk associated with the EEC. (Ex. 20, Testimony of Graves, 2-8, 17; Testimony of Corbin and Darvin, 6-18; Testimony of Blumenthal, 1-17; and Testimony of Belollo, 3) We therefore find that the project is consistent with the City's Airport Approach Zoning Regulations.

Justification – Applicant has demonstrated through modeling and actual overflight measurements that there is no adverse impact to aviation safety.

Land Use, pg. 326– modify the text and footnote as follows:

Alameda County. The ALUC's 1986 Airport Plan (Ex. 535), which is still in effect, does not require a formal land use consistency determination for the EEC since the Airport Plan does not restrict facilities that emit thermal plumes.[108] (County Reply Brief at 9.) However, reflecting its obligation to ensure public and pilot safety and to coordinate the safe and orderly expansion of airports, the ALUC passed a resolution on October 17, 2007, finding that the EEC poses an aviation hazard and should be sited outside the Airport Influence Area. (Ex. 513.) According to the County, the ALUC's resolution is consistent with the other aviation expert agencies weighing against the EEC location. (County Opening Brief at 14-15.) We note, however, that the ALUC was incorrectly informed by expert agencies and consultants who relied primarily on the Staff technical analysis to reach their conclusions. (12/18/07 RT 266, 269, 274, 275). Applicant has demonstrated that Staff's analysis is technically flawed and is therefore, unreliable. Applicant has also demonstrated through modeling and actual measurements that the EEC would not cause an adverse impact to aviation safety. We believe that Applicant has met its burden of proof in this area.

[108] For several years, the ALUC has been in the process of updating its 1986 Airport Plan and published a draft in December 2007, which added a new restriction on locating power plants or other facilities that emit thermal plumes in the Airport Influence Area. (Ex. 534.) This new restriction was based on information provided during the RCEC proceeding regarding the effect of industrial thermal plumes on low-altitude flight. (Ex. 515 at 3.) The County argues that if the ALUC adopts the revised Airport Plan, the Energy Commission must find the EEC is

incompatible with the ALUC's land use policy. (County Reply Brief at 10.) We decline to make this finding since it was not litigated during the evidentiary hearings. ~~However, we are persuaded that the EEC is incompatible with the City's Airport Approach Zoning Regulations for the reasons set forth herein.~~

Justification - There is substantial evidence in the record to support the conclusion that Eastshore will not adversely impact aviation safety. This evidence includes empirical measurements confirming modeling results that demonstrate plume vertical velocities are not hazardous at the traffic pattern altitude and actual overflight measurements of a very similar facility that demonstrate there is little or no turbulence that would impact aviation. See comments on Traffic and Transportation section.

Land Use, pg. 327 - 328, Cumulative Impacts – modify the text as follows:

Both the EEC and RCEC sites are located within the southwest quadrant of the Hayward Executive Airport's airspace. RCEC mitigation includes notification to Traffic Control at both Hayward Executive and Oakland International Airports to preclude the vectoring of aircraft over the RCEC and to avoid overflight of the RCEC at less than 1,000 feet AGL.109 Adding the EEC to the airspace would not introduce additional thermal plumes that are potentially hazardous to aircraft flying below 1,000 feet AGL. Alternative mitigation such as pilots seeing and avoiding both power plants is impractical and unattainable especially since aircraft regularly fly at low altitudes are therefore not necessary over the EEC site. See Traffic and Transportation section of this Decision. The weight of the evidence establishes that the addition of the EEC in conjunction with the RCEC will not increase the potential for serious impairment to the utility of the airport by increasing the complexity of the airspace. ~~Indeed, if~~ Since the airspace ~~is~~ will not be restricted over the EEC, congestion would not increase in other areas. We therefore find the EEC will not result in a cumulatively considerable impact to Hayward Airport airspace that cannot be avoided at the proposed EEC site.

Justification - There is substantial evidence in the record to support the conclusion that Eastshore will not adversely impact aviation safety. This evidence includes empirical measurements confirming modeling results that demonstrate plume vertical velocities are not hazardous at the traffic pattern altitude and actual overflight measurements of a very similar facility that demonstrate there is little or no turbulence that would impact aviation at altitudes less than allowed over EEC. See comments on Traffic and Transportation section.

Land Use, pg. 328 - 330, Commission Discussion– modify the text and footnotes as follows:

Under the Energy Commission's regulations, Staff shall give due deference to a local agency's comments and recommendations regarding a project's conformance with LORS under that agency's jurisdiction. (Cal. Code Regs., tit. 20, §§ 1714.5(b) and 1744(e).) Staff must conduct such analyses needed to resolve any significant concerns of the agency, or to satisfy any remaining substantive requirements for the issuance of a final permit by the agency, which would have jurisdiction but for the commission's exclusive authority. (Id. at § 1714.5(a)(2).) ~~We believe~~ While deference to local agency determinations includes the City of Hayward's interpretation of its own zoning regulations ~~and thus, we give great weight to the City's~~

~~perspective~~ the Committee must ensure that such deference does not result in unusual or incorrect interpretations of the City's own regulations and planning documents that would potentially result in obvious disparate and inequitable treatment of two power plant facilities located in close proximity to one another within the City as is the case here.

The City's Exclusionary Zoning Ordinance (HMC, § 10-1.140) allows for discretionary review of a project that is not specifically listed under permitted uses. Although the RCEC was allowed as a manufacturing facility in the Industrial Zone, power plants are not listed as a permitted use.110 Since RCEC uses hazardous materials, a CUP was required for that project as it is for the EEC. The City evaluates CUPs on a case-by-case basis. ~~The City's conclusion that RCEC could meet the CUP requirements is not precedential for this case and neither is our concurrence with the City in the RCEC Decision.~~[111] In this case, the 2002 General Plan represents the City's predominant land use policy. Under the City's interpretation of its General Plan, the City asserts that the area is classified as a Business and Technology Corridor and that the EEC does not fit the type of facility sought by the City in such a corridor. However the evidence is clear that the area is classified as an Industrial Corridor and the property is zoned for industrial use. These facts are no different from the RCEC consistency determination in which no reference to a Business and Technology Corridor was made. ~~to~~ If the City desires a transition of the Industrial Corridor to a high tech, information based development it has done nothing in the more than 5 years since the General Plan was adopted to formally rezone any portions of the Industrial Corridor (or any other part of the City for that matter) as a Business and Technology Corridor. We cannot overlook this obvious error in the City's analysis and must conclude that the City has misinterpreted its own regulations and plan. ~~It is not surprising that the City refused to embrace a second power plant proposal within one mile of the RCEC, especially given the mandate to improve City's economy and land use objectives with "smart growth" strategies.~~[112] We find the EEC is ~~in~~consistent with Policy 7 of the Land Use Element of the General Plan since it would not disrupt the City's future land use planning goals. ~~Indeed, Applicant concedes that the trend for conversion of warehouse space to office or research space in the Industrial Corridor is continuing throughout the Industrial Corridor.~~ More critically, however, we find the location of the EEC does not conflicts with the City's Airport Approach Zoning Regulations (HMC, § 10-6.00) and the ALUPP, which limit development in the vicinity of the airport that endangers the landing, takeoff, or maneuvering of aircraft. The Airport Zoning Regulations define airport hazard as "any structure of tree or use of land which obstructs the airspace required for the flight of aircraft in landing or taking off at the airport or is otherwise hazardous to such landing or taking off of aircraft." (Id. at § 10-6.12.) Evidence is uncontroverted that aircraft may fly over the site at ~~low~~ traffic pattern altitude where the project's invisible thermal plumes will not have the potential to cause excessive flight turbulence that would constitute an aviation hazard. ~~This aviation hazard~~ The EEC will not ~~significantly~~ restrict uses of the Hayward airspace for aircraft transit, maintenance flights, training procedures, and normal departures/arrivals ~~that cannot be avoided~~ if the project is developed at the proposed location. The Applicant ~~did not~~ provided substantial evidence of an actual overflight demonstratingthat aviation impacts would be negligible. The Applicant also demonstrated that Staff's calculations of plume velocities were highly exaggerated and without physical evidence. The City, County and other expert agencies relied on the Staff's exaggerated analysis as a basis for their aviation safety concerns. ~~of feasible mitigation that would either (1) eliminate thermal plumes or (2) prevent the constriction of navigable airspace that would impair the utility of the airport.~~ Accordingly, we find the EEC

~~does not comply~~ complies with finding (d) for a CUP and: the project would ~~not~~ be in harmony with applicable city policies and the intent and purpose of the zoning district. (Ex. 408: HMC, § 10-1.1605.) Therefore, the EEC represents an intensity of use that is ~~outside~~ within the scale and character of uses in the area and would ~~not~~ be in harmony with city policies since it does not creates a detriment to the operation and utility of the Hayward Executive Airport.

[110] ~~Although~~ Applicant argues the Zoning Ordinance does not allow for site-specific review, the City performed such review for both RCEC and EEC. (See, Ex. 408: HMC § 1-1.1600.) ~~Indeed, the RCEC amendment was based on the RCEC's relocation to a more appropriate industrial site.~~ The City adopted Resolution #01-104 (Ex. 50) in 2001 for the initial RCEC site. When relocation of the RCEC was proposed, the City Council adopted Resolution #05-125 (Ex. 49) in 2005 supporting an exchange of property between RCEC and the City to relocate the project adjacent to the City's wastewater facility. Resolution #06-068 was adopted in 2006 amending the property exchange option. The City Council did not address the consistency of the new RCEC site the 2002 General Plan and did not amend the 2001 Resolution but merely expressed support for RCEC at the relocated site. (Ex. 29, p. 4.5-13.) Since the RCEC was initially approved prior to adoption of the 2002 General Plan, it appears that the City allowed RCEC to relocate without the scrutiny required to meet the General Plan's transition goals for the Industrial Corridor. That is, it appears the RCEC was indiscriminately "grandfathered" ~~in as a previously approved project~~. In 2007, the City distinguished the RCEC from EEC under the 2002 General Plan, by asserting it must implement~~ing~~ the transition goals for the eastern area of the Industrial Corridor. (1/14/08 RT 227-232, 236.) However, the City has never designated a Business and Technology Corridor that would serve as a basis for implementing a transition and cannot arbitrarily apply one now.

[111] Russell City Energy Center Decision, CEC-800-2007-003 (Docket No. 01-AFC-7C) at 187.

[112] We agree with the Applicant ~~argues~~ that the City's treatment of the EEC compared to the RCEC was arbitrary and capricious and/or intentionally discriminatory. (Applicant's Reply Brief at 18-19.) ~~We are not persuaded.~~ The EEC site is located in the area of the Industrial Corridor that is zoned for industrial use. ~~slated for transition and it is also within~~ Although the EEC is within the AIA boundaries the record demonstrates there is no significant ~~raising a concern about~~ aviation safety concern, unlike the higher velocity RCEC plumes that were mitigated ~~was mitigable~~ in the RCEC proceeding. There is no EEC's ~~s~~ conflict with airport zoning regulations ~~cannot be resolved~~ in this case due to its much more insignificant plumes and its location outside of ~~in~~ the airport Traffic Pattern Zone (TPZ).

Justification – There is substantial evidence in the record to demonstrate that the City conducted no discretionary review of the amended RCEC site and its interpretation of its regulations is inconsistent and arbitrary. The City made its determination without the benefit of any environmental analysis. The City based its determination on zoning consisting of an insufficient amount of information upon which to base a decision of zoning consistency. The City did not have even the benefit of an environmental impact report as most likely would have been prepared but for the Commission's exclusive siting authority. Nonetheless, the City made conclusions on impacts such as visual resources without a complete analysis. Therefore, the City was unable to make a fully informed decision. In addition, a city by having elected officials

make land use decisions must be attentive to the wishes of the local populace the public officials represent. Therefore, decisions on projects presented to a local government body should take both environmental and local citizens concerns into account. On the other hand the Commission must also consider state interests in making decisions on a power plant.

Land Use, pg. 331 -333, Findings and Conclusions– modify the text as follows:

8. Land Use Policy 7 of the Land Use Element describes the City's goal to transition the Industrial Corridor ~~(also called the Business and Technology Corridor)~~ from a manufacturing-based economy to an information-based economy in industrial areas but the City has never designated specific areas for this transition to occur.

15. The EEC is ~~in~~consistent with CUP finding (a) since there are no significant ~~potential~~ aviation hazards associated with the project and ~~outweigh~~ power grid benefits ~~and~~ that are ~~not~~ desirable for public convenience or welfare of the Hayward community.
(HMC, § 10-1.3225.)

16. The EEC is ~~in~~consistent with CUP finding (b) ~~although~~ since the visual impacts of its 14 stacks are similar to existing stacks in the area, and do not create a significant adverse visual impact, the placement of the power plant at the proposed site is not "more objectionable" than existing uses and does not impair~~s~~ the character and integrity of the zoning district and surrounding area~~, which are slated for conversion to information technology facilities~~. (HMC, §§ 10-1.3225, 10-1.140.)

17. The site is subject to the City's Airport Approach Zoning Regulations, which are designed to: (1) prevent the creation or establishment of airport hazards or obstructions; and (2) prevent the destruction or impairment of the utility of the airport and the public investment therein. (HMC, § 10-6.00.)

18. The EEC's ~~high-velocity~~, thermal plumes ~~could~~ would not cause turbulence and loss of control to aircraft flying at low altitude over the project site, and would not create ~~creating~~ a safety hazard within the airport zoning area.

19. Aircraft ~~regularly~~ rarely fly over the EEC site. ~~at low altitude.~~ The incidence of overflights in the area is less than 0.01 percent.

20. The EEC would not create an aviation safety hazard created ~~by the EEC~~ and would not significantly restrict uses of the Hayward airspace for aircraft transit, maintenance flights, training procedures, and normal departures/arrivals ~~that cannot be avoided~~ if the project is developed at the proposed location. (HMC, § 10-6.00.)

21. The EEC is ~~in~~consistent with CUP finding (c) since the project's invisible thermal plumes do not create an aviation safety hazard that is detrimental to public safety or general welfare. (HMC, § 10-1.3225.)

22. The Applicant ~~failed to~~ provided substantial evidence that aviation impacts would be negligible based on in its vertical plume velocity modeling and actual plume overflight measurements. The Applicant also demonstrated that Staff's calculations of plume velocities were technically flawed and over exaggerated the impacts. The City, County and other expert agencies relied on the Staff's flawed analysis as a basis for their aviation safety concerns. ~~of feasible mitigation that would either (1) eliminate thermal plumes or (2) prevent the constriction of navigable airspace that would impair the utility of the airport~~.

23. The EEC is ~~in~~consistent with CUP finding (d) since it would not creates an aviation safety hazard affecting the operation and utility of the Hayward Executive Airport, and ~~which~~ is ~~not~~ in harmony with applicable City policies. (HMC, §§ 10- 1.3225, 10-6.00.)

24. The EEC is ~~in~~consistent with zoning requirements for a CUP since the project "would ~~not~~ operate at a minimum of detriment to surrounding properties" and is therefore ~~in~~compatible with Sections 10-1.140, 10-

25. The EEC in conjunction with the RCEC will not result in a cumulatively considerable impact to Hayward Airport airspace.

We conclude, therefore, that construction and operation of the EEC will not result in direct, indirect, and cumulative land use impacts and that certification should be granted ~~denied. If the inconsistent uses can be cured at the proposed site so the project can be certified, adoption~~ Adoption of Condition of Certification LAND-1 will ensure the project is constructed and operated in accordance with the City's Industrial Zoning District standards.

Justification – There is substantial evidence in the record to demonstrate that the City conducted no discretionary review of the amended RCEC site and its interpretation of its regulations is inconsistent and arbitrary. There is also substantial evidence in the record to support the conclusion that Eastshore will not adversely impact aviation safety. This evidence includes modeling that demonstrates plume vertical velocities are not hazardous at the traffic pattern altitude and actual overflight measurements of a very similar facility that demonstrate there is little or no turbulence that would impact aviation. See comments on Traffic and Transportation section.

Traffic and Transportation, pg . 350, Potential Aviation Impacts ,– modify the text as follows:

3. Potential Aviation Impacts

The most contested issue in the EEC proceeding is whether the plumes from the project's stacks and radiators will create a hazard for aviation safety. We conclude that EEC is not likely to create a hazard in either of the two ways asserted by project opponents -- (1) turbulence from the plumes rising to an altitude where airplanes fly, ~~and~~ or 2) pilots needing to take additional measures while in the cockpit in order to avoid potential invisible plumes – and therefore that the project will not cause significant, adverse environmental impacts. ~~We also conclude that the impacts cannot be mitigated~~

Justification - There is also substantial evidence in the record to support the conclusion that Eastshore will not adversely impact aviation safety. This evidence includes modeling that demonstrates plume vertical velocities are not hazardous at the traffic pattern altitude and actual overflight measurements of a very similar facility that demonstrate there is little or no turbulence that would impact aviation.

Traffic and Transportation, pg . 350, a. The Hayward Airport and the EEC Site,– modify the text of the last paragraph as follows:

The proximity of the EEC site to the Hayward Airport, particularly its location within the airspace, is potentially problematic in an already congested area. The airspace is subject to several operational restrictions to accommodate the high level of aircraft activity at numerous airports in the Bay Area. The relevant Hayward Airport airspace extends approximately four nautical miles to the northeast and southwest, but only one nautical mile to the northwest due to potential conflicts with flights in and out of Oakland International Airport. (Similarly, although the Oakland International Airport is 7.9 miles away, its airspace extends to within 1.8 miles of the EEC.) Ex. 200, p. 4.10-19.) The movement of aircraft within the Hayward airspace is further constrained by noise abatement procedures designed to protect residential developments in the north, northeast, and southeast areas surrounding the airport. As a result, the southwest quadrant of the Hayward Airport airspace is the only relatively unobstructed area for aircraft transit, maintenance flights, student pilot training procedures, and normal departures/arrivals. (Ex. 200, p. 4.10-19.)

Justification - There is also substantial evidence in the record to support the conclusion that Eastshore will not adversely impact aviation safety.

Traffic and Transportation, pg . 352, b. Flights Over the EEC Site,– modify the text as follows:

~~Aircraft are likely to fly over the EEC site in the range of 300 to 400 feet AGL.~~ April 2007 data show flights between 505 to 919 feet, and in June 2007 flights were as low as 330 feet AGL. (Ex. 200, p. 4.10-20; Ex. 208.) However, these represent about 0.01 percent of the approximately 10,000 flights. Therefore the occurrence of overflights of the Eastshore plume are essentially nonexistent. (12/18/07 RT 225-226) In addition, for fixed wing aircraft the lowest level an aircraft should fly over EEC in a circling pattern around the airport is 493 feet above ground level. (12/18/07 RT 268.) The Caltrans witness testified that although the Hayward traffic pattern altitude is 650 MSL (600 AGL), on a pilot check ride, pilots are given tolerance to 100 feet deviation from the assigned altitude and in some cases a pilot could fly as low as 393 feet AGL in landing mode (the FAA-approved circling altitude is 493 feet) and still be within legal operating regulations. (12/18/07 RT 120-122). However, the manager of the Hayward control tower, Sandra Garupto, indicated that arriving aircraft should be at least 1,000 feet above the ground and preferred to be 1,200 feet above the ground. (12/18/07 RT 223).

Justification – These changes are necessary to provide an accurate and balanced citing of the evidentiary record. Furthermore, Jay White admitted the lowest level an aircraft should be flying

over EEC in a circling pattern on approach to landing is 540 feet above sea level or 493 feet above ground level. (See 12/18/07 RT 268.)

Traffic and Transportation, pg . 353, a. Plumes from the EEC,– modify the text as follows:

The EEC will emit ~~high velocity,~~ invisible, thermal plumes from its fourteen 70- foot high stacks at 4,614.16 feet per minute (23.44 meters per second (m/s) at 59° F at 100 percent load). (Ex. 1, Table 8.1-11.) The plant's 42 radiators will also emit plumes. If plumes are moving fast enough, they ~~will~~ could create turbulence, which ~~can~~ could affect the maneuverability of aircraft flying through, or in the immediate vicinity of, the plumes. As plumes rise, their speed (and thus their ability to cause turbulence), will decline. Staff uses a critical vertical velocity of 4.3 m/s as a threshold of significance for excessive vertical velocity that may cause turbulence to overflying aircraft. Staff and the Applicant disagreed regarding the extent that the plumes would ~~cause turbulence~~ produce vertical velocities of 4.3 m/s ~~up to several hundred feet~~ above the plant site. Staff asserted that vertical velocities could reach 4.3 m/s at altitudes of 480 feet above ground level (AGL) or higher. Applicant Identified numerous technical flaws in the Staff's approach that were not refuted and calculated that more than 99.9% of time, the plumes would dissipate more rapidly and the 4.3 m/s velocity would be reached at altitudes much lower than 330 feet. Applicant also noted Staff incorrectly applied the 4.3 m/s threshold, a guideline from an Australian Civil Aviation circular that has not been adopted for use in the United States. (Ex 20, Testimony of Corbin and Darvin 1-18).

Justification – The summary description does not reference the incorrect application of the 4.3 m/s threshold, Staff's numerous technical errors or the Applicant's detailed technical analysis which supports a demonstrates that EEC vertical velocities are expected to be very low and below levels of significance below 330 ft. Flights over EEC occur less than 0.01 percent of the time and there is no documented occurrence of an overflight of the EEC site below 330 ft.

Traffic and Transportation, pg . 354, c. 1. Staff,– modify the text as follows:

The Applicant asserted that Staff incorrectly calculated the thermal plume's peak velocity by doubling the average velocity, assuming no separation between the stacks and between the fans, and not accounting for the effects of wind. (Ex. 20: Testimony of Corbin and Darvin at 7 to 10.) These criticisms were not refuted by Staff. Applicant also criticized Staff for not conducting further analysis, stating that the 4.3 m/s speed was designed as a screening level tool to trigger further assessment. (Id. at 10.) Staff responded that its conservative (worse-case possibility to give maximum protection to public safety) analysis necessarily considers peak velocity as well as average velocity. (12/18/07 RT 101-103.) Staff used the same methodology in the RCEC proceeding based on the plume analysis model developed by Katestone Environmental of Australia. (Ex. 200, pp. 4.10-43 - 4.10-44.) However Staff acknowledged that the guideline specifies the use of an average, not a peak velocity. (12/18/07 RT 285-288)

Land Use, pg. 335 -336 Table 4 – modify text as follows

Applicable Law	*Description*	*Consistency*
Federal	None	
State State Aeronautics Act	The State Aeronautics Act (California Public Utilities Code §§21001 et seq) gives the California Department of Transportation (Caltrans) and local governments the authority to protect the airspace in California.	Consistency with the State Aeronautics Act, as incorporated in the Alameda County Airport Land Use Policy Plan, is discussed below.
Local Alameda County Alameda County Airport Land Use Policy Plan (ALUPP)	The Alameda County Airport Land Use Policy Plan (ACALUPP) provides for the orderly growth of airports and the area surrounding the airports within the jurisdiction of the Alameda County Airport Land Use Commission (ACALUC), excluding existing land uses. Hayward Executive Airport is within the ACALUC's jurisdiction. Noise and safety are the two fundamental compatibility concerns identified in the statutes. Impacts of aircraft overflights in locations beyond the normally mapped noise contours are addressed. Safety compatibility policies address both protection of people and property on the ground near airports and protection of airport airspace from obstructions and other hazards to flight. The Alameda County ALUPP works in concert with the Hayward General Plan and Zoning Codes, and the Hayward Executive Airport Master Plan	~~In~~Consistent: The Eastshore project would be ~~in~~consistent with the intent of the ALUPP to promote orderly expansion of airports and land uses compatible with the airport operations and the safe, efficient use of an airport's airspace.
City of Hayward General Plan (revised 2002)	The Hayward General Plan contains seven elements and is the basis for determining acceptable land uses and related park, road, and other infrastructure needs within city of Hayward jurisdiction. The Land Use Element of the Hayward General Plan identifies the goals and policies necessary to maintain and enhance neighborhoods, commercial and industrial areas, and surrounding open space. The Economic Development Element identifies the current economic conditions, constraints, and opportunities in the city of Hayward and, in conjunction with Land Use, Circulation, and Housing Elements, provides guidance when considering specific projects and analysis of long-term impacts. Hayward Executive Airport development and operations are discussed in the Airport Master Plan (see below).	~~In~~Consistent: The Eastshore project is ~~in~~consistent with the goals and policies of the 2002 city of Hayward General Plan Policy 7 to transition to high tech, information based industry. No Business and Technology Corridors have been designated by the City.
Hayward Executive Airport Master Plan (revised 2002)	This plan identifies the current operational status for the Hayward Executive Airport, including descriptions of airport airspace, flight procedures, and current aviation uses. It also includes projections of future use and proposes development plans to accommodate that increased use through the 20-year planning period for this Master Plan.	Eastshore project consistency with this Master Plan is determined primarily by consistency of the project with various airport-related City of Hayward Municipal Code sections. Unlike the General Plan, there are no applicable land-use-related goals, policies, or strategies included in the current document.
Municipal Code §§10-1 et seq	The city of Hayward Municipal Code, Chapter 10 contains ordinances that deal with planning, zoning, and subdivision standards, requirements, and restrictions. Article 1 of this chapter, also known as the Hayward Zoning Ordinance, specifically provides regulations that implement the goals, objectives, and policies of the Hayward General Plan, pursuant to the mandated provisions of	§10-1.135 - Industrial Zoning District height restrictions, setbacks, and minimum design and performance standards do not apply to the project's transmission line and underground pipelines.

	State Planning and Zoning Law, California Environmental Quality Act (CEQA), and other applicable state and local requirements [HMC(a)]. The following sections are specifically applicable to the proposed project: • §10-1.135 Exceptions (to General Provisions of the Zoning Code) • §10-1.140 Exclusionary Zoning Ordinance • §§10-1.1600 et seq - Industrial District (I); identifies permitted uses, standards, and restrictions applicable to development in those areas zoned Industrial. • §10-1.3200 Conditional Use Permits, identifies the procedures for reviewing and conditioning projects requiring a conditional use permit before they can be approved and occupied, or before business can be conducted.	~~In~~Consistent: §10-1.140 - The Eastshore project would not result in impacts that are more objectionable than other uses within the Industrial District that would create less of a detriment to surrounding properties (e.g. airport). Therefore, siting of the project at the proposed location is ~~in~~consistent with §10-1.140. ~~In~~Consistent: §§10-1.1600 et seq – The Eastshore project would ~~not~~ be consistent with the requirements of §§10-1.1600 et seq, in that a CUP is required for this use and all findings to approve a CUP ~~could not~~ can be made. Condition of certification LAND -1 is proposed as a means of verifying that the project would be built in accordance with the City's minimum Industrial Zoning District standards, to the greatest extent feasible. ~~However, even full implementation of LAND-1 would not resolve all project inconsistencies with §10-1.1600 requirements (see Section 10-1.3200)~~ ~~In~~Consistent: §10-1.3200 - The proposed project is ~~in~~consistent (~~not~~ in harmony) with various city of Hayward regulations and policies, including Municipal Zoning Code §§10-1.140, 10-1.1620, and 10-6. All findings required to justify approval of a CUP can~~not~~ be made. Approval of the Eastshore project ~~without meeting the requirements for a CUP~~ would be ~~in~~consistent with Hayward Municipal Code §10-1.1620(b)(1)(a) and §10-1.3225
Municipal Code §10-6 - Airport Approach Zoning Regulations	This code section (per Hayward City Council Resolution #64-038; 9/15/64) is intended to prevent the creation or establishment of airport hazards, thereby protecting the lives and property of the users of the Hayward Executive Airport and of the occupants of the land in its vicinity, and prevent destruction or impairment of the utility of the airport and the public investment therein.	~~In~~Consistent: § 10-600 et seq. The Eastshore plumes will not ~~could~~ be a hazard to aircraft at traffic pattern altitude flying over the project site. The project does not have ~~has~~ the potential to directly impair the utility of the airport by increasing the complexity of the airspace. The project is, therefore, ~~in~~consistent with the purpose expressed in §10-6.00 of this regulation, if sited

Justification – The change is necessary to reflect an accurate presentation of the evidentiary record.

Traffic and Transportation, pg . 355, c. 2. Applicant – modify the text as follows:

Applicant disagreed with Staff's conclusions and argued that the EEC's plumes would not pose an aviation hazard. Applicant performed conservative calculations to ~~Instead of~~ estimate~~ing~~ the speed of the EEC plumes and ~~or their effects on turbulence~~, the Applicant presented the actual results of the effects on turbulence during a helicopter flyover of a power plant similar, but not identical, to EEC: the Barrick plant near Reno, Nevada. (Ex. 20: Testimony of Corbin and Darvin, 1-18; "Turbulence Felt in a Light Helicopter Caused by a Power Plant Thermal Plume: Final Report" [Final Report], Dec. 5, 2007, Testimony of Blumenthal, Testimony of MacDonald; 12/17/07 RT 61 et seq.) The Applicant's vertical velocity calculations demonstrate that 330 feet is the highest altitude where a threshold velocity of 4.3 m/could be reached and that more than 99.9 percent of the time, the altitude would be lower, since there were only 9 calm hours in the 7 years of data examined. (Ex. 20: Testimony of Corbin and Darvin, 6-10). Although the Barrick plant uses the same number of Wärsila engines proposed for the EEC, the Barrick stacks are arranged in groups of threes and fours, instead of individual stacks arranged linearly as proposed by EEC; the Barrick stacks are 55 feet high, while EEC's are 70 feet tall; and Barrick is at 4,340 feet MSL, compared to EEC's anticipated elevation of 15-20 feet MSL. (Ex. 20: Final Report at 6; Ex. 1, Figure 2.2-2A; Ex. 200, p. 5.2-8; 12/17/07 RT 62, 76, 256.)

Justification – The changes are necessary to accurately reflect the record which shows that Applicant performed both extensive plume vertical velocity calculations (Testimony of Corbin and Darvin) and actual overflight measurements.

Traffic and Transportation, pg . 356, c. 3. Resolution of Dispute on Plume Height – modify the text as follows:

We are ~~un~~able to rely on the Applicant's conservative vertical plume velocity calculations and Barrick flyover to estimate the plume height and turbulence from EEC, because in assessing risks to public safety, we must be assured that we are accounting for the worst-case conditions that could arise. We cannot rely on Staff's assessment because of its numerous technical deficiencies. The calculations provided by the Applicant are conservative, not technically flawed, and buttressed by actual overflight measurements that corroborate the absence of significant turbulence over a similar facility. ~~This was not the case with~~ While the Barrick test was not perfect, because: (1) not all engines were operating; (2) the cold conditions reduced radiator fan use; and (3) the presence of wind meant that the weather conditions were not worst-case (plumes rise higher in still air), we are satisfied that the overflight reflects typical operations and in any event, Applicant's plume calculations demonstrate that vertical velocities do not reach an altitude of concern. ~~In addition, several other factors made the Barrick test potentially unrepresentative of the conditions at EEC: the use of a hand-held anemometer to measure ground-level wind speed but not wind speed at the flight altitudes, the different configuration of engines at the Barrick site, failure to measure the plume's width, the use of a helicopter rather than fixed-wing aircraft, and the different geography and higher altitude of the Barrick site compared with the EEC site.~~

In contrast, the Applicant's criticisms of the Staff's modeling are unrefuted and strike to the core of the efficacy of Staff's analysis. ~~all relate to asserted conservatisms, which are appropriate when dealing with public safety. Nothing in the criticisms of the Staff's analysis indicates that it is inherently incorrect or unrepresentative of EEC conditions. Moreover, we are unwilling to secondguess~~ While we acknowledge the FAA's acceptance of the Staff's modeling "as a valid representation of hazardous exhaust velocities." (Ex. 200, p. 4.10-20; Ex. 39, p. 6.), we must discount the FAA's acceptance as the FAA's own witness testified that they performed no assessment of thermal plume velocities and indeed did not even consider thermal velocities in their assessment. (12/18/07 RT 275). The FAA witness also acknowledged that the FAA's official position had not changed that the risk associated with plumes is deemed acceptable without restriction, limitation or further mitigation. (12/18/07 RT 277 – 278). ~~Even if we~~ Since we cannot rely on ~~discounted~~ Staff's flawed modeling results of a 4.3 m/s plume at 480 feet AGL, we are left with the Applicant's assessment that a 4.3 m/s plume will not reach more than 330 feet AGL, that 99.9 percent of the time the calculated plume height will be lower, and the lowest recorded overflight of the EEC at 330 feet is below the legal minimum of 393 feet and should be therefore viewed as a rare exception. We therefore ~~would have to~~ conclude that plumes will not reach a ~~into the 300 to 400 feet AGL~~ range in which aircraft are likely to fly over the EEC.

Justification – These changes are necessary to reflect the evidentiary record and the substantial weight of evidence submitted by the Applicant to demonstrate that vertical velocities from the EEC will not reach an altitude of concern.

Traffic and Transportation, pg . 356 - 357, d.. Summary of Plume Height and Plume Height Determinations: Hazard to Aviation Safety – modify the text as follows:

In parts 3.b. and 3.c. of this section, we have determined that turbulence-causing thermal plumes from EEC are not likely to rise to an altitude in the range ~~of 400 feet AGL or higher, and~~ that aircraft are likely to fly over the site ~~at an altitude of 300 to 400 feet~~. We therefore find that the EEC plumes are not likely to cause a hazard to aviation safety. This is consistent with the FAA's views the risk associated with plumes is deemed acceptable without restriction, limitation or further mitigation. (12/18/07 RT 277 – 278). ~~plumes are hazardous to navigation when aircraft fly less than 1,000 feet above the plume source; therefore, "flight over or around plume generating facilities should be avoided as there is the potential (however low) for aircraft upset at close proximity to high velocity plumes." (Ex. 39, pp. 16 - 17 [italics in original]; see also Ex. 416.)~~

Justification – These changes are necessary to make the decision consistent with the revised PMPD, the evidentiary record and the substantial weight of evidence submitted by the Applicant demonstrating there is no aviation safety hazard.

Traffic and Transportation, pg . 357 - 358, e. Unmitigatability of the Hazard – modify the text as follows:

e. ~~Unmitigability of the~~ No Aviation Safety Hazard Requiring Mitigation

As we note above, in order to reduce or avoid the risk of over-flight of thermal plumes, the FAA has recommended that pilots avoid flying over plumes with less than 1,000 feet of vertical clearance. However such guidance is advisory only and in fact the approved pattern altitude for the Hayward Airport is 650 ft AGL. Staff and Applicant seem to agree that there would be no aviation hazard from EEC if aircraft were able to maintain ~~that~~ an acceptable vertical distance. Since the maximum height of vertical plumes is much less than this altitude, there is no significant risk that must be mitigated. This is consistent with the FAA's determination that the risk associated with plumes is deemed acceptable without restriction, limitation or further mitigation. (12/18/07 RT 277 – 278). ~~However, in this case, it is not feasible for aircraft to fly above 1,000 feet because the pattern altitude for Runway 10R/28L is limited to 600 feet due to over-flight of aircraft on approach to Oakland International Airport. (Ex. 200, p. 4.10-21; Ex. 37, p. 2; Ex. 204.) The FAA cannot raise the altitude at which Hayward related aircraft fly over the EEC site without eliminating the separation from airspace assigned to Oakland arrival and departure flights. To do so would prevent the two airports from operating independently and reduce air traffic efficiency. (12/18/07 RT 176-178, 251; Ex. 204.) As a result, the "FAA has no intention or interest of changing any air traffic operation at Hayward Executive Airport." (12/18/07 RT 178.) Moreover, regardless of the pattern altitude restriction, the Applicant's proposed mitigation to avoid the plumes when operating below 1,000 feet is, as the FAA explained, "not reasonable for aircraft operating in a traffic pattern" (Ex. 43, p. 2), because "it is not reasonable to expect pilots to look for the exhaust stacks . . . on the ground, then see and avoid any visible plumes while attending to their primary responsibility of safely operating the aircraft, looking for other aircraft in the pattern, and responding to Air Traffic Control instructions." (Ex. 37, p. 2.) "[P]ilots would be required to divert their attention from the sighting of both facilities on the ground, then maneuver the aircraft around both plumes." (Ex. 204 at 2; see also Ex. 727.) This is particularly problematic for aircraft taking off from the Hayward Airport: pilots departing the traffic pattern after takeoff from Runway 28L have their aircraft in a "nose up" configuration that limits visibility of structures on the ground. (Ex. 43, p. 2.)~~

~~EEC thus stands in contrast to the RCEC, which we approved because "see and avoid" mitigation was feasible. (RCEC Decision, Docket No. 01-AFC-7C, CEC-800-2007-003-CMF, Condition TRANS-10, pp. 190-191.) RCEC is located approximately 1.5 miles to the southwest of the Hayward Airport, and aircraft do not need to fly over the RCEC site; indeed, we determined that no flight paths would be affected by restricting the airspace above the RCEC. (Id. at pp. 184, 186-187.) The EEC is adjacent to the existing air traffic pattern at the Airport and more aircraft fly over the area, requiring pilots to be concerned about other air traffic as well as potential turbulence from stack exhaust. (12/18/07 RT 134, 136-137, 141-142; Exs. 208, 417, 418.)~~

We therefore find that the thermal plumes from EEC do not constitute a significant, adverse~~, unmitigable~~ impact on the environment in compliance with ~~violation of~~ CEQA requirements. (See Cal. Code Regs, tit. 14, § 15000, App. G, Part XV, Transportation/Traffic, Part (c).)

Justification - These changes are necessary to make the decision consistent with the revised PMPD, the evidentiary record and the substantial weight of evidence submitted by the Applicant demonstrating there is no aviation safety hazard.

Traffic and Transportation, pg . 358 - 359, f. Effect of the EEC on Airspace Congestion – modify the text as follows:

~~Even if~~ EEC's thermal plumes ~~were~~ are unlikely to pose a hazard to aircraft, the mere presence of the power plant does not create~~s~~ a safety hazard. The project's proximity to the traffic pattern for the Hayward Executive Airport and the downwind departure route for Runway 28L would not unreasonably complicate aircraft maneuverability because there is no need to maneuver the aircraft to avoid the EEC. Aircraft in this area are already generally above the 1,000 foot FAA guideline level. The site location would not ~~also~~ limit the airspace available for aircraft transit, maintenance flights, training procedures, and normal departures and arrivals that currently occur within this portion of the Hayward airport airspace. Training does not occur within the area of the EEC. (Ex. 20, Testimony of Graves, 8-15~~200, p. 4.10-21; see also Ex. 203~~.) ~~This constitutes an additional,~~ Therefore there is no adverse~~, unmitigable~~ impact on the environment that requires mitigation.

Justification - These changes are necessary to make the decision consistent with the revised PMPD, the evidentiary record and the substantial weight of evidence submitted by the Applicant demonstrating there is no aviation safety hazard.

Traffic and Transportation, pg . 360, City of Hayward – modify the text as follows:

Airport to ensure that development in the area is compatible with airport safety zones. (Ex. 410 at 5-17.) In addition, the City's Airport Approach Zoning Regulations (Airport Ordinance) limit the height of development and provide that no use is allowed within any "airport approach zone, airport turning zone, or airport transition zone in such a manner as to ...impair visibility in the vicinity of the airport or otherwise endanger the landing, take off or maneuvering of aircraft." (Ex. 409: Airport Ordinance, § 10-6.35; See Appendix F in this Decision.) The Airport Ordinance defines "airport hazard" as "any... use of land which obstructs the airspace...." (Id. at § 10.6.12.) Because the EEC will not create an aviation safety hazard, ~~W~~we conclude that the EEC does not constitute an obstruction and s ~~in~~consistent with the Airport Ordinance. See discussion in the Land Use section.

Justification - These changes are necessary to make the decision consistent with the revised PMPD, the evidentiary record and the substantial weight of evidence submitted by the Applicant demonstrating there is no aviation safety hazard.

Traffic and Transportation, pg . 361, City of Hayward – modify the text and footnotes as follows:

The City's witness testified that there is a significant difference between the location of the RCEC, approved with mitigation [temporary Notice to Airmen (NOTAM) with "see and avoid" instructions], and the EEC site.[119] However we do not find this testimony persuasive. The RCEC is located 1.5 miles from the Executive Airport, just 0.2 miles further away than the EEC. Furthermore, EEC's impacts to aircrafts overflight are much less than those created from the larger plumes emanating from the RCEC stacks.

The FAA indicated in a letter to Staff dated October 9, 2007, that the cumulative impacts of both RCEC and EEC on the airport "would make the mitigation (avoiding both facilities) impractical... unreasonable and in some cases unattainable."[120] (Ex. 204.) In addition, the FAA stated in a letter dated December 17, 2007, to the Hayward Executive Airport that "[i]t is likely that the energy center will pose a threat to aircraft in the navigable airspace around the airport....

Although the height of the stacks and structures may not represent a hazard to aircraft, the hot air plumes could endanger aircraft in the traffic pattern...." (Ex. 416.)[121] These views are based on the assumption that some restriction of the airspace is necessary. However, this assumption is faulty. The EEC plumes will not pose an aviation safety risk and not restriction to the airspace is necessary. Based on these FAA views, the City of Hayward concluded that (1) the EEC cannot be mitigated; (2) it is inconsistent with the Zoning Code, the Airport Ordinance, and airport operations; and (3) the EEC should not be sited at the proposed location. (Ex. 402 at 6.) We do not agree. The EEC does not require mitigation for aviation safety and is consistent with the Zoning Code, the Airport Ordinance and airport operations. Accordingly we see no justification to not site the EEC at the proposed location.

[119] RCEC Decision, Docket No. 01-AFC-7C, CEC 800-2007-003-CMF: RCEC Condition TRANS- 10, pp. 190-191. As noted, supra, RCEC is located approximately 1.5 miles to the southwest of the Hayward Executive Airport, to the west of the airport's two parallel runways. Aircraft do not need to fly over the RCEC for airport landing or departure. Indeed, the Commission's RCEC Decision determined that no flight paths would be affected by restricting the airspace above the RCEC. (RCEC Decision, Docket No. 01-AFC-7C, pp. 184, 186-187.) The EEC is 0.2 miles ~~much~~ closer to the existing air traffic pattern. ~~and more aircraft fly over the area, requiring pilots to be concerned about other traffic as well as potential turbulence from stack exhaust.~~ (12/18/07 RT 134, 136- 137, 141-142; Exs. 208, 417, 418.)

[120] FAA witness Butterfield testified that the October 9, 2007, letter represents the FAA's official position. (12/18/07 RT 251:1-25.)

[121] The City's Public Works Director expressed concern that FAA funding could be jeopardized if City actions related to the Hayward Airport were inconsistent with its federal grant assurances to protect airport safety. (12/18/07 RT 137-138, 144.) However, the EEC would not affect aviation safety and therefore would not impact federal funding.

Justification - These changes are necessary to make the decision consistent with the revised PMPD, the evidentiary record and the substantial weight of evidence submitted by the Applicant demonstrating there is no aviation safety hazard.

Traffic and Transportation, pg . 363, Alameda County – modify footnote 122 as follows:

[122] Caltrans witness Cathey testified that although the Hayward traffic pattern altitude is 650 MSL (600 AGL), on a pilot check ride pilots are given tolerance up to 100 feet deviation from the assigned altitude and in ~~some~~these cases a pilot could fly as low as 393 feet AGL in landing mode (FAA-approved circling altitude is 493 feet) and still be within legal operating regulations. If a pilot is also looking at the ground to observe a power plant, the aircraft could dip lower in altitude and fly into the invisible thermal plume. (12/18/07 RT 120-122); See also FAA witness Butterfield's testimony on "missed approach procedure" at Hayward Airport requiring overflight of the EEC site. (Id. at 194-195); See also Exs. 711-712: Declarations of Jay White.

Justification – The change is necessary to accurately reflect the evidentiary record.

Traffic and Transportation, pg . 364 -365, Cumulative Impacts – modify text of the last paragraph as follows:

The evidentiary record does not indicates that the cumulative effect of both projects on Hayward airport airspace will increase the potential for serious impairment to the utility of the airport by increasing the complexity of the airspace. However, the EEC will not emit thermal plumes that would cause an aviation hazard and there is no reason to restrict the airspace over the facility. Both the FAA and Caltrans concluded that it would be impractical and in some cases unattainable for pilots to see and avoid both power plants while attending to their primary responsibility of safely operating their aircraft. According to Staff, this would be a significant cumulative impact under CEQA that cannot be avoided if the project were developed at the proposed site. (Ex. 200, p. 4.10-29.) We do not agree. Since EEC will not cause an aviation safety hazard and will not further restrict airspace, there is no cumulative impact on aviation safety from the project.

Justification - These changes are necessary to make the decision consistent with the revised PMPD, the evidentiary record and the substantial weight of evidence submitted by the Applicant demonstrating there is no aviation safety hazard.

Traffic and Transportation, pg . 365 -366, Commission Discussion– modify text and footnote as follows:

Certification decisions are determined on a case-by-case basis after consideration of all the documentary evidence and testimony submitted by the parties. In this regard, we again clarify that our Decision in the RCEC proceeding is not precedential and neither the RCEC Decision nor this Decision establishes Commission policy on the practicalities of locating power plants near operating airports.

We do not believe the opinions of the expert aviation agencies because they are founded on a flawed technical analysis or flawed interpretation of the City's ordinances.~~, the City of Hayward, and the ALUC regarding the potential cumulative effects on available airspace represent the more persuasive elements.~~ The FAA and Caltrans do not recommend the "see and avoid" mitigation adopted for the RCEC nor do they propose to restrict aircraft in the Hayward airspace from flying at low altitudes. Moreover, the FAA has determined that a NOTAM cannot be issued to warn pilots of two power plant plumes because the Airmen's Information Manual restricts NOTAMs to temporary, not permanent, hazards.[124] (12/18/07 RT 168:25-169:4.) As indicated in the record, the aviation agencies, the City, the ALUC, the Port of Oakland, and the California Pilots Association believe the EEC should be located outside the Hayward Airport airspace. However ~~Since~~ the EEC does not pose an aviation risk and there is not need for its impact to ~~cannot~~ be mitigated.~~, we~~ We do not agree that the project creates a significant adverse impact under CEQA that would be cumulatively considerable. (See, Cal. Code Regs, tit. 14, § 15000, Appendix G, Part XV, Transportation/Traffic, Part (c): [Would the project] "result in a change in air traffic patterns including either an increase in traffic levels or a change in location that results in substantial safety risks.")

[124] FAA witness Butterfield testified that the FAA is required by Code of Federal Regulations Part 77 to do a hazard determination on any proposed structure. That determination is limited to the brick and mortar aspects of the structure. The brick and mortar aspects of the EEC do not pose a hazard to navigation. (See Ex. 40.) The FAA does not currently have statutory authority to rule on the effects of thermal plumes. However, the witness referred to the FAA Safety Risk Analysis, which reports incidents of flights over visible plumes from older power plant facilities

that were not permitted near airport airspace. According to the witness, the new technology represented by both the RCEC and the EEC, which emit invisible plumes, raises a new concern for the FAA as indicated in the recommendations contained in the Safety Risk Analysis. However the FAA findings of the Safety Risk Assessment that the risk associated with plumes is deemed acceptable without restriction, limitation or further mitigation. remain valid (12/18/07 RT 113:17- 25-115.) See also, Exhibit 416.

Justification - These changes are necessary to make the decision consistent with the revised PMPD, the evidentiary record and the substantial weight of evidence submitted by the Applicant demonstrating there is no aviation safety hazard.

Traffic and Transportation, pg . 367 -368, Findings and Conclusions – modify text as follows:

8. The mitigation measures described in the evidentiary record and contained in the Conditions of Certification ensure that the project will not result in any direct, indirect, or cumulative adverse roadway traffic impacts in the project area.

9. The project site is located approximately one mile south of the Hayward Executive Airport, adjacent to the downwind departure route for Runway 10R/28L.

10. Aircraft operating in the area ~~currently~~ rarely fly over the EEC site.

11. Hayward Executive Airport operations are expected to increase over the next 10 to 20 years.

12. The airspace surrounding Hayward Executive Airport is subject to several operational and noise abatement restrictions to accommodate the high level of aircraft activity in the Bay Area.

13. The flight pattern altitude for Runway 10R/28L cannot exceed 750 feet above ground level (AGL) due to over-flight of jetliners or other aircraft on approach to Oakland International Airport and cannot be raised.

14. Pilots fly below 500 feet when they use instrument control for a missed approach or circle the runway due to poor weather conditions and may fly as low as 393 feet AGL in landing mode (FAA-approved circling altitude is 493 feet) and still be within legal operating regulations.

15. The EEC will emit ~~high velocity~~ invisible thermal plumes from its fourteen 70-foot high stacks and 42 radiator fans ~~that can cause unexpected turbulence to aircraft flying over the site~~.

16. Staff calculationsed of the worst-case plume (all engines and radiators operating under calm wind conditions) using a 4.3 meters per second (m/s) vertical velocity significance threshold are technically flawed and cannot be relied upon~~and found that the power plant plumes could significantly disturb atmospheric stability to 480 AGL or higher~~.

17. Applicant conducted detailed vertical velocity calculations that indicate worst-case plumes with a velocity of 4.3 m/s would occur at 330 feet and 99.9% of the time the elevation at which this velocity is reached would be lower. Applicant also conducted an empirical, helicopter fly-over test at the Barrick power plant, a facility similar to the EEC in Reno, Nevada to identify the altitude at which vertical plume turbulence would occur and determined the worst-case would not exceed 300 feet AGL.

18. Invisible thermal plumes exceeding the 4.3 meters per second significance threshold may occur ~~within a range of 300 to480~~ below 330 feet AGL ~~or higher~~ and do not require mitigation because aircraft are not expected to fly below this level over EEC.~~cannot be mitigated~~

~~by "see and avoid" measures adopted in the Russell City Energy Center (RCEC) Decision because it would cumulatively exceed a safe cockpit workload level.~~

19. The "no fly zone" mitigation planned for RCEC ~~cannot~~does not need to be implemented at the EEC site since the impacts to aviation safety are insignificant~~air space cannot be reduced further without significantly impacting the Hayward Executive Airport~~.

20. The cumulative effect of the EEC and RCEC on Hayward Airport airspace will not increases the potential for serious impairment to the utility of the airport or ~~by~~ increase~~ing~~ the complexity of the airspace.

21. The EEC ~~does not~~ conforms with the purpose of the City of Hayward Airport Approach Zoning Regulations because project will not generate~~d~~ thermal plumes that create a hazard to aircraft flying at pattern altitude.

22. The Alameda County Airport Land Use Commission (ALUC) adopted a resolution recommending that the EEC be located outside the Airport Influence Area for the Hayward Airport. However this recommendation was based on a flawed Staff technical analysis.

23. The FAA, Caltrans, the Port of Oakland, and the California Pilots Association recommended that the EEC be located outside the Hayward Airport flight pattern area. However these recommendations were based on a flawed Staff technical analysis.

24. The project's invisible thermal plumes at the proposed site do not create a significant adverse impact under CEQA that would be cumulatively considerable to available Hayward Airport airspace.

25. The project ~~does not~~ complies~~y~~ with LORS regarding aviation traffic since it will not result in a significant aviation hazard ~~that cannot be mitigated~~ at the proposed site.

26. Implementation of the Conditions of Certification, below, ensure that project construction and operation will comply with all applicable laws, ordinances, regulations, and standards (LORS) related to roadway traffic and transportation as identified in the pertinent portions of Appendix A.

We conclude that construction and operation of the project, as mitigated in the Conditions of Certification will not result in any significant, direct, indirect, or cumulative adverse impacts to local or regional roadway traffic. ~~However~~In addition, the project will not result in any significant, direct, indirect, or cumulative aviation impacts that cannot be mitigated~~ and we therefore decline to certify the project~~.

Override, pg 428 – modify text as follows:

In the **Land Use** and **Traffic and Transportation** sections of this Decision, we determined (1) that operation of EEC ~~will cause~~ will not result in significant, adverse, unmitigable effects on the environment, ~~in violation of~~ thereby conforming with the California Environmental Quality Act (CEQA), and (2) that construction and operation of EEC will ~~not~~ comply with applicable laws, ordinances, regulations, or standards (LORS). Under California law, both of those findings ~~prevent~~ allow us ~~from certifying~~ to certify the facility~~.~~. Despite finding that an override is not necessary, we are including the following discussion to explain why we would override any perceived LORS "inconsistencies" or "significant impacts environmental impacts" if they did

exist. ~~unless we make other determinations that "override" the LORS inconsistencies and significant environmental impacts.~~ This section contains a summary of the parties' positions on override as well as the applicable law, and then explains why we ~~decline~~ would ~~to~~ make the necessary "override" determinations if the unsupported LORS inconsistencies in fact existed and an override was required. ~~Because we are not making the requisite override determinations, we cannot, and therefore we do not, certify the project.~~

Justification – There is substantial evidence in the record to support the determination that the Eastshore Energy Center will comply with applicable LORS and be mitigated to insignificant impact levels.

Override, pg 429 – insert the following paragraph between the second and third paragraphs as follows:

Next, Applicant explains the reasoning of three previous Energy Commission override decisions: the Metcalf Energy Center ("Metcalf"), Los Esteros Critical Energy Facility Phase 2 ("Los Esteros") and the El Segundo Power Redevelopment Project ("El Segundo"). (Applicant's Override Brief at 10-17.) In its Override Brief, Applicant discussed at length the reasoning and standards behind the three previous Energy Commission override decisions, including heavy local reliance on imported electrical energy, the need to generate locally consumed electrical energy, the Warren-Alquist Act's emphasis on electricity's essential nature to the welfare of the state as a whole, and the overarching question of whether the project can supply a need that is recognized under state energy policy. Applicant concludes its discussion by asserting that applying the reasoning and standards behind these three previous override decisions to the EEC should compel us to find in favor of an override of LORS, if necessary.

Justification – The summary of "Applicant's Position" fails to mention Eastshore's extensive discussion of the three previous Energy Commission override decisions. These previous decisions provide valuable reasoning behind the Energy Commission's override factors and indicate that the Eastshore Energy Center will satisfy those factors.

Override, pg 433 – modify text as follows:

LORS Override. As stated above, because we find the EEC complies with all applicable LORS and will be mitigated to insignificant impact levels, an override finding is not necessary. ~~In response to the Applicant's request for the Energy Commission to exercise our override authority~~However, we considered the totality of the evidence and the parties' arguments as discussed in the following hypothetical override analysis.

In the **Land Use** and **Traffic & Transportation** sections of this Decision we found that construction and operation of EEC would ~~not~~ specifically comply with the following LORS:

- City of Hayward's Airport Approach Zoning Regulations (Hayward Municipal Code (HMC), §§ 10-6.00, 10-6.12);
- City of Hayward's General Plan Policy 7;
- Conditional Use Permit requirements of the City of Hayward's Zoning
- Ordinance (HMC, §§ 10-1.1605, 10-1.1620, 10-1.3225, 10-1.140); and
- County of Alameda's Airport Land Use Policy Plan.

Justification – There is substantial evidence in the record to support the determination that the Eastshore Energy Center will comply with applicable LORS and be mitigated to insignificant impact levels.

Override, pg 434, end of last paragraph – modify text as follows:

~~Moreover~~However, even if we make both requisite determinations, the law does not necessarily compel us to certify the project. The language of section 25525 – "[t]he Commission shall not certify . . . unless the commission determines" – indicates that the decision to certify the project remains within the Commission's sound discretion: i.e., certification is permissible, but not mandatory.

Override, pg 435 – modify the text as follows:

a. Is the EEC "Required for Public Convenience and Necessity"?

We find the answer is ~~No~~ Yes.

While there is no judicial decision interpreting section 25525, numerous decisions address the phrase "public convenience and necessity" as it appears in Public Utilities Code section 1001. This phrase is used in a similar context in both statutes and, absent evidence of legislative intent to the contrary, it is presumed to have a similar meaning. (*Building Material & Construction Teamsters' Union v. Farrell* (1986) 41 Cal.3d 651, 665.) It is well-settled by judicial decisions on section 1001 that "public convenience and necessity" has a broad and flexible meaning, and that the phrase "cannot be defined so as to fit all cases." (*San Diego & Coronado Ferry Company v. Railroad Commission* (1930) 210 Cal. 504, 511.) "[A]ny improvement which is *highly* important to the public convenience and desirable for the public welfare *may* be regarded as necessary. . .. The word connotes different degrees of necessity. It sometimes means indispensable; at others, needful, requisite, or conducive. It is relative rather than absolute." (*Id.* at pp. 511 - 512 [emphasis added] [internal quotation marks and citations omitted].) However, in each of its three most recent override decisions, the Commission has taken as its starting point for finding public convenience and necessity the extent to which a project is reasonably related to the goals of the Warren-Alquist Act, which expressly recognizes that electric energy is essential to the health, safety, and welfare of the people of California, and to the state's economy. (Metcalf Commission Decision at 463; El Segundo Commission Decision at 296; and Los Esteros Commission Decision at 367-368.) These principles demonstrate that the Commission has considerable flexibility and discretion in determining whether a facility is "required for public convenience and necessity~~.~~," but that discretion must be exercised consistently with the policies and purposes of the Warren-Alquist Act.

~~In applying our discretion, we note first that the Commission has consistently regarded a LORS override "an extraordinary measure which . . . must be done in as limited a manner as possible." (Commission Decision, *Metcalf Energy Center*, Publication No. P800-01-023, Docket No. 99-AFC-3 (Sept. 2001) ("*Metcalf*"), p. 469.)~~

In applying section 25525 override criteria, the Energy Commission has consistently held that determining "public convenience and necessity" must rely on the totality of the evidence of record and consider environmental impacts, consumer benefits, and electrical system reliability – hewing precisely to the criteria set forth in the statute. (E.g., Metcalf Commission Decision at 461.)

Justification - Although it may be true that the Energy Commission has broad discretion in deciding if public convenience and necessity requires a project be built and therefore whether or not to override applicable LORS, the PMPD fails to acknowledge that such discretion must be exercised consistently with the policies of the Warren-Alquist Act. The Warren-Alquist Act declares that it is the responsibility of state government to ensure the state is provided with an adequate and reliable supply of electrical energy. (Los Esteros Commission Decision at 368, citing California Public Resources Code § 25001.)

Override, pg 436 – modify text as follows:

In the context of statutory factors that section 25525 requires us to examine – the impacts of the facility on the environment, consumer benefits, and electric system reliability – we find the benefits of EEC are substantial in their ability to serve the public convenience and necessity ~~modest at best. There is little "public convenience and necessity" that would be served by the project.~~ The EEC would provide 115 MW of capacity primarily to the Hayward area, which currently imports nearly all of its electricity. ~~approximately one-fifth of one percent of current statewide demand.~~ As a result, the project's electricity system reliability benefits to the local area, and the state as a whole (flexibility in responding to demand), which we discuss in the **Reliability, Local System Effects**, and **Transmission System Engineering** sections of this Decision, are comparatively large ~~commensurately small~~. This is also true of the consumer benefits of the project. The **Local System Effects** section shows savings in a range of $11.4 million to $16.3 million over 20 years, or an average of approximately $675,000 per year spread among all PG&E ratepayers. ~~There are no~~ oOther major benefits of the project that would serve the public convenience and necessity include displacing or encouraging the retirement of older plants which do not meet current environmental performance standards. Indeed, with regard to the impacts of the facility on the environment, the project would provide such a benefit ~~provides a disservice to the public convenience and necessity because of its significant, adverse, unmitigable effects on aviation safety, which are described in the **Traffic and Transportation** section~~. Furthermore, as we discussed in the **Socioeconomic** section of this Decision, EEC will also provide benefits in the form of construction and operations payroll, local purchase of construction materials and equipment, and substantial property tax revenues. In sum, EEC is ~~not~~ "required for public convenience and necessity."

Justification - This paragraph completely misinterprets Eastshore's contribution to the public convenience and necessity. In order to properly assess the benefits the Eastshore project would provide to the Hayward area and California, the PMPD should have looked beyond Eastshore's straightforward and quantifiable MW capacity and consumer benefit figures. What the PMPD fails to acknowledge, and what has been made clear by Eastshore, is that it will contribute greatly to the local demand in Hayward, in addition to the state as a whole. Eastshore emphasizes that the amount of local demand is not what matters; what does matter is the significance of that demand to the community. Hayward imports nearly all of its electricity, therefore, on a percentage basis, the Eastshore project would clearly be a significant contributor to Hayward's public convenience and necessity. (Eastshore's Override Rebuttal Brief at 12, 20.)

Although the Eastshore project would indeed provide straightforward and quantifiable benefits, it cannot be considered in that light alone. Instead, it must be viewed in the context of each piece of the California energy policy picture. This section of the PMPD does not recognize the fact that bringing Eastshore on line would result in the replacement of aging facilities and provide much-needed peaking power to the California grid. Eastshore would more than simply contribute 115

MW of capacity, it would fulfill the Energy Commission's stated need for resources to meet peak demand. (2007 Integrated Energy Policy Report ("IEPR") at 7.) In its efforts to downplay Eastshore's value to Hayward and California, the PMPD declares that Eastshore would only add "one-fifth of one percent of current statewide demand." However, what the PMPD fails to acknowledge is the fact that the Energy Commission's own 2007 IEPR specifically calls for increasing the efficiency and flexibility of conventional natural gas powered generation. (Eastshore's Override Brief at 24.) The 2007 IEPR emphasizes that newer natural gas electricity generation facilities like Eastshore provide efficiency and environmental benefits by reducing greenhouse gas emissions as they reduce the amount of natural gas used. (Eastshore's Override Brief at 25.) Peaker plants like Eastshore also replace aging and inefficient facilities that are being misused as peakers. (*Id.*)

Furthermore, the Override section of the PMPD completely neglects to include the economic benefits to the Hayward community generated by the construction and operation of the Eastshore project. These additional benefits are an important contribution to the local community.

Override, pgs 436-437 – modify text as follows:

Our conclusion is bolstered by a comparison of the facts in this case with the facts that justified a LORS override in the *Metcalf*, *Los Esteros* and *El Segundo* proceedings:

- consumer benefits in *Metcalf* were $200 million per year or more (*Metcalf, supra,* at 467);

- "the [local] area uses much more electrical energy than is generated locally . . . and the hallmark industries in the . . . area are heavily dependent upon a reliable and adequate supply of electrical energy" (*Id.* at 465);

- the project would "allow more power to flow from the Moss Landing generator into the local area, reduce [the area's] vulnerability to catastrophic outages by providing real and reactive power, and reduce the occurrence of voltage collapse problems" (*id.* at 467); and

- "the area's supply-demand imbalance and the need to augment electrical system reliability . . . require prompt action. The evidence establishes that the [Metcalf powerplant] is . . . the only identified major generation project capable of becoming reality within the near-term future." (*id.* at 468.)

- The *Los Esteros* Decision stated the evidence conclusively established that the project would meet the goals and policies of the Warren-Alquist Act by generating electrical energy and having that energy consumed in the local area. (Los Esteros Commission Decision at 368.)

- "Since the LECEF ["Los Esteros"] will provide a portion of the electrical energy supply essential to the well-being of the state's citizens and its economy, we conclude that this project is required for public convenience and necessity within the meaning of section 25525." (Los Esteros Commission Decision at 368.)

- "The evidence establishes that the El Segundo project's duct-firing capability will provide the electrical system with flexible peaking capacity that is necessary to keep the electrical grid stable." (El Segundo Commission Decision at 297.)

~~No similar~~ All of these factors characterize EEC. Of course, it is not necessary for *Metcalf, Los Esteros, or El Segundo*-type factors, singly or in combination, to be present in order to justify a LORS override. But the substantial similarity ~~contrast~~ between the benefits of the *Metcalf, Los Esteros* and *El Segundo* projects and EEC, *inter alia*, suggests that the EEC's benefits ~~are not overwhelming and do not~~ would compel us to exercise our discretion, determine that EEC is "required for public convenience and necessity," and override LORS noncompliance, if noncompliance existed here.

Justification - This section of the PMPD has again mischaracterized the benefits that would be provided by the Eastshore project, in fact, several of the so-called "Metcalf factors" are met by Eastshore. As discussed above, Hayward imports nearly all of its electricity supply and virtually all of Eastshore's generation would go to meet Hayward's demand, therefore on a percentage basis, Eastshore would be much larger relative to the area it would serve than the Metcalf was. (Eastshore's Override Rebuttal Brief at 12, 20.) This fact reflects the Hayward area's "supply-demand imbalance" and Eastshore's ability to relieve that imbalance. The local generation that would be supplied by Eastshore is essential to providing local and system-wide reliability and flexibility, as well as the ability to deal with increasing peak demand. These benefits would reduce the Hayward area's "vulnerability to catastrophic outages." Finally, the consumer benefit savings of Metcalf cannot be directly compared to Eastshore because Metcalf generates nearly six times as much electricity as Eastshore would.

The PMPD should not have focused exclusively on the Metcalf Decision in laying out LORS override factors. The more recent 2006 Los Esteros Decision presents a more comparable override situation to Eastshore. Los Esteros added 140 MW to the existing facility, where Eastshore would add 115 MW of electrical generation. In addition, the Los Esteros Decision made three points regarding public convenience and necessity that are not adequately addressed in the PMPD: (1) the evidence conclusively established that the Los Esteros project would meet the goals and policies of the Warren-Alquist Act by generating electrical energy to be consumed locally; (2) the evidence established that the San Jose area used much more electrical energy than was generated locally and this created a need for more generation to address demand and reliability concerns; and (3) the Decision noted the enabling statute focused on electricity's essential nature to the state as a whole and substantial additions to the state's generating system are needed. (Los Esteros Decision at 368.)

As discussed above, the Eastshore project would meet the first two factors enumerated in the Los Esteros Decision. Eastshore would also meet the need for peaking capacity factor listed in the El Segundo Decision. In addition, contrary to the Eastshore PMPD's mischaracterization of Eastshore's contribution of 115 MW as "minimal," the Los Esteros Decision found that the Los Esteros project's addition of 140 MW would meet the third criterion by providing a portion of the electrical energy supply essential to the well-being of California's citizens and economy. (Los Esteros Decision at 368.)

In conclusion, the Eastshore project satisfies most of the Metcalf Decision public convenience and necessity factors contained in the PMPD. Furthermore, the PMPD should not have relied exclusively on the Metcalf Decision alone to provide public convenience and necessity factors.

Override pg 437 – modify text as follows:

b. Are There "More Prudent and Feasible Means of Achieving Such Public Convenience and Necessity"?

~~Having found that EEC is not "required for public convenience and necessity," which prevents us from overriding the project's LORS inconsistencies, we need not address this issue.~~

Having found that construction and operation of EEC, as mitigated in the Conditions of Certification, will not result in any significant, direct, indirect, or cumulative adverse impacts, we conclude that there are no more prudent and feasible means of achieving public convenience and necessity.

Justification – Even where the Committee found the project to be inconsistent with LORS, the PMPD had improperly interpreted the term "public convenience and necessity." If it had accurately applied the term, it would have found that the Eastshore project would in fact be required for public convenience and would therefore be required to include a discussion of "more prudent and feasible means of achieving such public convenience and necessity."

Override, pg 437 – modify text as follows:

3. CEQA Override

In the **Traffic & Transportation** section of this Decision we determined that operation of EEC would not cause a significant adverse environmental impact~~;~~. More specifically, we found ~~because (1)~~ the project's thermal plumes would not constitute a safety hazard to aviation~~, and (2) pilots would need to do substantial additional work in the cockpit to avoid the plume areas, which would also constitute an aviation hazard~~. We ~~also determined,~~ concluded in that section and in the **Alternatives** section, ~~that there are no~~ that construction and operation of the project will not result in any significant, direct, indirect, or cumulative adverse impacts and that the mitigation measures contained in the Conditions of Certification ~~or feasible alternatives to the project, which~~ would reduce or avoid the adverse impacts.

Justification - There is substantial evidence in the record to support the determination that the Eastshore Energy Center will comply with applicable LORS and be mitigated to insignificant impact levels.

Override, pg 438-439 – modify text as follows:

b. Balancing the Benefits and the Adverse Impacts

We previously determined that the EEC's benefits are substantial, particularly for the Hayward area ~~minimal~~. The ~~purported~~ benefits are ~~neither individually, nor in combination,~~ sufficient to outweigh the project's adverse impacts, of which there are few. ~~Every~~ Although some entities, ~~entity~~ relying on flawed technical analysis, ~~with responsibility concerning the Hayward Airport — from local (the Hayward City Council and the Alameda County Airport Land Use Commission), to state (Caltrans), to federal (the FAA) — as well as several individual pilots and pilots' associations, has~~ have stated that operation of EEC ~~*will*~~ will create a significant risk to aviation safety, we conclude that it will not. In addition~~contrast~~, the evidentiary record indicates that EEC will provide substantial ~~only trivial~~ economic benefits, and improve system reliability ~~in only a minor way~~. ~~If~~ Because the project will provide benefits ~~were~~ necessary for reliable electric service ~~— that is, if without the project there would be increased power outages or electricity prices to consumers would significantly increase — then~~ we ~~would be~~ are compelled to balance those considerations against the perceived, but unsubstantiated, ~~potentially catastrophic~~ risks of an aviation accident resulting from EEC. Since we find that EEC will not result in any significant direct or indirect aviation impacts and because ~~the electrical system, both~~ ratepayers statewide and in the Bay Area will be benefited by ~~can be sustained without~~ ~~the~~

~~EEC's 115 megawatts, the project's minor~~ the EEC's contribution to the system, ~~does not outweigh the project's potentially hazardous impacts on aviation safety. Therefore,~~ we can~~not~~ easily ~~justify the public safety risk and we cannot~~ make the requisite overriding considerations under CEQA.

Justification - See the above discussion for analysis of the Eastshore project's significant economic benefits and contribution to electric reliability. The PMPD should therefore balance the benefits of the project against the perceived adverse impacts to properly address the CEQA override issue. If it had done so, the Committee would have found that the adverse impacts touted by the other parties are based on erroneous technical analysis and the benefits far outweigh the minimal adverse impacts.

Override, pgs 439-441, Findings – modify text as follows:

3. Substantial evidence establishes that the project is ~~in~~consistent with local land use and traffic/transportation LORS ~~since its invisible thermal plumes have the potential to cause turbulence to aircraft flying at low altitude over the EEC site~~.

4. The project is ~~in~~consistent with the City of Hayward's Airport Approach Zoning Regulations, Alameda County's Airport Land Use Policy Plan (ALUPP), and the City's 2002 General Plan goal to transition the area to information technology use.

5. Substantial evidence establishes that the addition of the EEC will not increase the potential for serious impairment to the utility of the airspace~~, resulting in a cumulatively considerable environmental impact that cannot be mitigated~~.

6. The project's ~~LORS inconsistencies also create~~ therefore does not create CEQA violations because ~~the~~ any perceived public health and safety impacts are based on flawed technical analysis and ~~cannot~~ have been ~~be~~ avoided or mitigated at the proposed site.

7. If necessary, Applicant requests the Energy Commission to override the project's unsupported inconsistencies with land use and traffic/transportation LORS in the interest of public convenience and necessary.

8. To exercise its authority to override LORS inconsistencies, the Energy Commission must find: (1) the EEC is required for public convenience and necessity; and (2) that there are not more prudent and feasible means of achieving the public convenience and necessity.

9. To exercise its authority to override CEQA violations, the Energy Commission must find that: (1) all other alternatives are infeasible; and (2) the benefits of the EEC outweigh the unavoidable adverse environmental effects.

10. The EEC's economic benefits represent ~~modest~~ substantial savings and reliability to the Hayward area and other ~~spread among the millions of~~ PG&E~~'s~~ ratepayers in Northern California. Further economic benefits include EEC's substantial contribution to the local economy in the form of construction and operation payroll, local purchase of construction materials and equipment and property tax revenues.

11. The project objective of interconnecting at the Eastshore Substation is a term of the Applicant's Request for Offer (RFO) contract with PG&E.

12. Applicant's contract does not supersede LORS or vitiate the Energy Commission's authority to weigh the project's benefits against the LORS inconsistencies.

13. ~~The project's~~ No adverse impacts on aviation safety and airport utility ~~cannot be mitigated or avoided~~ exist if the EEC is located at the proposed site on Clawiter Road in Hayward.

14. Applicant has ~~not~~ sufficiently met its burden of establishing the project's benefits represent a level of statewide electricity benefits that would compel override of the LORS inconsistencies and CEQA noncompliance.

THEREFORE, even if significant adverse aviation-related impacts occurred, we would still select ~~decline~~ to override the EEC's perceived, but unsubstantiated, inconsistencies with land use and traffic/transportation LORS and purported noncompliance with CEQA requirements.

Justification –

As detailed above, these findings do not adequately reflect the benefits beyond straightforward cost savings figures that would be provided by the Eastshore project. Eastshore believes that it has established the project's beneficial contribution to both the local and statewide electrical needs. Based upon the reasoning of the PMPD, no small targeted peaker could ever obtain an override. But, it is just these types of projects that are recognized as needed by the 2007 IEPR.

In addition, the Findings should have included the considerable benefits of the Eastshore project to the local economy described in the Socioeconomic section of the PMPD.

DATED: July 15, 2008

DOWNEY BRAND LLP

By: Jane E. Luckhardt
Jane E. Luckhardt

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

APPLICATION FOR CERTIFICATION FOR THE EASTSHORE ENERGY CENTER IN CITY OF HAYWARD BY TIERRA ENERGY	DOCKET NO. 06-AFC-6 (AFC Accepted 11/8/06) **PROOF OF SERVICE** (Revised 4/21/08)

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:

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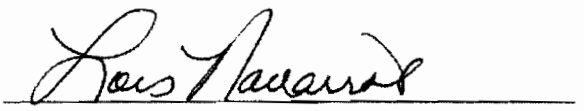
DECLARATION OF SERVICE

I, Lois Navarrot, declare that on July 15, 2008, I deposited copies of the attached **EASTSHORE ENERGY LLC'S COMMENTS ON THE PRESIDING MEMBER'S PROPOSED DECISION** 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.



Lois Navarrot