California Energy Commission
DOCKETED
01-AFC-7C
TN # 69031
JAN. 03 2013

From: Boyer, Bruce@Energy
Sent: Wednesday, August 15, 2012 1:01 PM
To: govj@haywardrec.org
Cc: Flores, David@Energy; Hamblin, Mark@Energy
Subject: RE: Questions from the Board
Attachments: Commission Adoption Order.pdf; Visual Resources Section.pdf

John,
Here are the responses from CEC technical staff on the questions that the board have. Please review the responses and let me know if this satisfies the board. Also, please let me know if there are any additional questions. We are always available to answer any questions, but unless there are additional questions that cannot be answered by CEC technical staff via email we do not plan on attending the board meeting. Thank you again for your help.

From: Hamblin, Mark@Energy
Sent: Wednesday, August 15, 2012 10:41 AM
To: Boyer, Bruce@Energy
Cc: Flores, David@Energy
Subject: RE: Questions from the Board

Bruce,

The following is our responses to the three questions provided by John Gouveia, Interim General Manager of the Hayward Area Park and Recreation District.

Mark R. Hamblin, M.P.A.
California Energy Commission
Siting, Transmission & Environmental Protection Division
Environmental Protection Office
1516 9th Street, MS 40
Sacramento, CA 95814-5504
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The California Energy Commission adopted its Commission Adoption Order for the **Russell City Energy Center Amendment No.1** on September 26, 2007 (Order No 07-0926-04/Docket No. 01-AFC-7C). The Commission Adoption Order adopts by reference the text of the Commission Decision on the Russell City Energy Center Amendment No. 1, including Conditions of Certification, Compliance Verifications, Errata and Revisions, and Appendices contain in the Commission Decision.

The Commission Decision for the project is based upon the evidentiary record of the proceedings and consideration of the comments received at the September 12, 2007 business meeting conducted by the Energy Commission. The text of the Commission Decision contains a summary of the proceedings, the evidence presented, and the

rationale for the findings reached and Conditions imposed. The complete 224 page Commission Decision can be viewed at the following link: http://www.energy.ca.gov/2007publications/CEC-800-2007-003/CEC-800-2007-003-CMF.PDF.

In responding to the three questions asked by the Board of Directors of the Hayward Area Park and Recreation District provided by you (italicized below), I have attached a copy of the first three pages of the Commission Adoption Order, and the Visual Resources section from the Commission Decision (11 pages) which includes lighting related Conditions of Certification (see attached file).

Questions 1 and 2

1) *Given the existing background lighting that's already associated with the industrial park and urbanized area, as well as existing nearby bridge lighting, the only question I have is whether the lighting plan adequately mitigates possible impacts to migrating birdlife in the area?*

2) *How will the lighting affect the planes and the wildlife and what needs to be done to try to mitigate these affects?*

Energy Commission Staff Response to Questions 1 and 2
Referring to condition of certification **VIS-4** in the Commission Decision (see Visual Resources section, p. 201); lighting use for the project is to be designed so exterior light fixtures are hooded with lights directed downward or toward the area to be illuminated and so that backscatter to nighttime sky is minimized. The design of this outdoor lighting is to be such that luminescence or light source is shielded to prevent light trespass outside the project boundary. All lighting is to be the minimum necessary brightness consistent with worker safety. Non-glare light fixtures are specified to be used for the project.

In the Commission Decision, Traffic and Transportation section, page 187 "1) the proposed location presents no aviation hazard that rises to the level of a significant environmental effect." In the Biological Resources section page 128 of the Commission Decision, the Commission states "1) moving the project to a site does not encroach on wetlands or directly impact sensitive species habitat."

Questions 3

3) *What happens if we hold off on approving the VIS-9 until we get the answer we are looking for regarding the lighting?*

Energy Commission Staff Response to Question 3
Questions 1 and 2 pertaining to lighting have been by addressed by staff above. See "Response to Question 1 and 2."

In accordance with the provisions of Public Resources Code section 25500 et seq., the Energy Commission has the exclusive power to certify all sites and related facilities in the state, whether a new site and related facility or a change or addition to an existing facility. The issuance of a certificate by the commission shall be in lieu of any permit, certificate, or similar document required by any state, local or regional agency, or federal agency to the extent permitted by federal law, for such use of the site and related facilities, and shall supersede any applicable statute, ordinance, or regulation of any state, local, or regional agency, or federal agency to the extent permitted by federal law.

Any person or agency may file a complaint alleging noncompliance with the conditions of certification. Such a complaint will be subject to review by the Energy Commission pursuant to Title 20, California Code of Regulations, section 1237, but in many instances the noncompliance can be resolved by using the informal dispute resolution process.

The Energy Commission's legal authority and informal and formal complaint procedures are described on pages 37-39 in the Commission Decision.

From: John Gouveia [mailto:GouJ@haywardrec.org]
Sent: Friday, August 10, 2012 10:26 AM
To: Boyer, Bruce@Energy
Subject: Questions from the Board

Hi Bruce

Here are the questions I got back from our Board.

1) Given the existing background lighting that's already associated with the industrial park and urbanized area, as well as existing nearby bridge lighting, the only question I have is whether the lighting plan adequately mitigates possible impacts to migrating birdlife in the area.
2) How will the lighting affect the planes and the wildlife and what needs to be done to try to mitigate these affects.
3) What happens if we hold off on approving the Vis 9 until we get the answers we are looking for regarding the lighting.

As you can see the main focus so far is around the lighting. I hope this is helpful. Naturally there may be other questions at the meeting, but these are the ones they have submitted to me. If I get more I will forward them on to you. Have a great weekend.

John Gouveia
Interim General Manager
(510) 881-6712 (Phone)
(510) 888-5758 (Fax)

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DOCKET
01-AFC-7C
DATE OCT 02 2007
RECD. OCT 02 2007

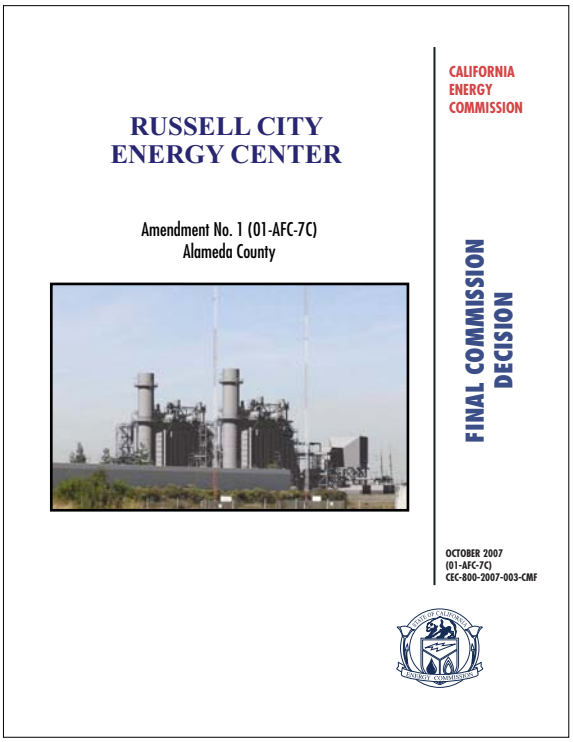
CALIFORNIA
ENERGY
COMMISSION

RUSSELL CITY ENERGY CENTER

Amendment No. 1 (01-AFC-7C)
Alameda County

FINAL COMMISSION DECISION

OCTOBER 2007
(01-AFC-7C)
CEC-800-2007-003-CMF



CALIFORNIA ENERGY COMMISSION

1516 9th Street
Sacramento, CA 95814
www.energy.ca.gov/sitingcases/russellcity_ammendment/index.html

JOHN L. GEESMAN
Chair, Presiding Member

JEFFREY D. BYRON
Commissioner, Committee Member

PAUL KRAMER
Hearing Officer

COMMISSIONERS-

JACKALYNE PFANNENSTIEL
Chair

JAMES D. BOYD
Vice Chair

ARTHUR H. ROSENFELD, Ph. D.
Commissioner

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

IN THE MATTER OF:

PETITION TO AMEND THE COMMISSION DECISION APPROVING THE APPLICATION FOR CERTIFICATION FOR THE *RUSSELL CITY ENERGY CENTER*

DOCKET NO. 01-AFC-7C

Order No. 07-0926-04

COMMISSION ADOPTION ORDER

This Commission Order adopts the Commission Decision on the ***RUSSELL CITY ENERGY CENTER Amendment No. 1***. The Commission Decision is based upon the evidentiary record of these proceedings (Docket No. 01-AFC-7C) and considers the comments received at the September 12, 2007, business meeting. The text of the attached Commission Decision contains a summary of the proceedings, the evidence presented, and the rationale for the findings reached and Conditions imposed.

This **ORDER** adopts by reference the text, Conditions of Certification, Compliance Verifications, and Appendices contained in the Commission Decision, which is compiled from the Presiding Member's Proposed Decision, modified by the Errata and Revisions to the Presiding Member's Proposed Decision dated and including the further modifications to Condition of Certification **TRANS-10** proposed by the September 25, 2007 letter from William C. Withycombe, FAA Regional Administrator, to James Adams (Exhibit 110). It also adopts specific requirements contained in the Commission Decision which ensure that the proposed facility will be designed, sited, and operated in a manner to protect environmental quality, to assure public health and safety, and to operate in a safe and reliable manner.

FINDINGS

The Commission hereby adopts the following findings in addition to those contained in the accompanying text:

1. The petition meets all the filing criteria of Title 20, California Code of Regulations, section 1769(a), concerning post-certification project modifications;

2. The project will remain in compliance with all applicable laws, ordinances, regulations, and standards; and

3. There will be no unmitigated significant environmental impacts associated with the proposed modification. Pursuant to the Global Warming Solutions Act of 2006 (AB32), the adoption of measures to mitigate greenhouse gas emissions from the project is within the responsibility and jurisdiction of the California Air Resources Board; the ARB can and should adopt appropriate standards and requirements for greenhouse gas emissions.

ORDER

Therefore, the Commission **ORDERS** the following:

1. The Petition to Amend the ***RUSSELL CITY ENERGY CENTER*** project as described in this Decision, including the two alternative transmission lines connecting the project site to the PG&E Eastshore Substation, is hereby approved and an amended certificate to construct and operate the project is hereby granted.

2. The amended certificate is subject to the timely performance of the Conditions of Certification and Compliance Verifications enumerated in the accompanying text and Appendices. The Conditions and Compliance Verifications are integrated with this Decision and are not severable therefrom. While the project owner may delegate the performance of a Condition or Verification, the duty to ensure adequate performance of a Condition or Verification may not be delegated.

3. The Commission hereby adopts the Conditions of Certification, Compliance Verifications, and associated dispute resolution procedures as part of this Decision in order to implement the compliance monitoring program required by Public Resources Code section 25532. All conditions in this Decision take effect immediately upon adoption and apply to all construction and site preparation activities including, but not limited to, ground disturbance, site preparation, and permanent structure construction.

4. This Decision is adopted, issued, effective, and final on September 26, 2007.

5. Reconsideration of this Decision is governed by Public Resources Code, section 25530.

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6. Judicial review of this Decision is governed by Public Resources Code, section 25531.

Dated September 26, 2007, at Sacramento, California.

JACKALYNE PFANNENSTIEL
Chairman

-absent-
JAMES D. BOYD
Vice Chair

JOHN L. GEESMAN
Commissioner

ARTHUR H. ROSENFELD
Commissioner

JEFFREY D. BYRON
Commissioner

E. VISUAL RESOURCES

The written testimony of the Applicant's witness, Thomas Priestly, provided existing and simulated views of the constructed project from five Key Observation Points (KOPs):

KOP 1—Office/Industrial Facility in Whitesell Business Park
KOP 2—Hayward Shoreline Interpretive Center
KOP 3—Hayward Shoreline Footbridge at Cogswell Marsh
KOP 4—State Route 92 at Toll Plaza
KOP 5—Cabot Boulevard at Depot Road

Mr. Priestly concludes that the visual impacts of constructing the project at each KOP would either be less than significant (KOPs 1, 4, and 5) or, though potentially significant, mitigated to less than significant levels with the installation of screening vegetation (KOPs 2 and 3) and "a color scheme involving a color palette of varying tones of neutral colors that can be applied to the major project structures in a way that will break up the facility's apparent mass and better integrate it into the view." (Ex. 1, pp. 3-168 – 3-170.)

Staff's witnesses, Mark R. Hamblin and Eric Knight analyzed KOPs corresponding to the Applicant's KOPs 1 through 4. They draw conclusions similar to those of Mr. Priestly except that they find mitigation is also necessary to reduce the visual impacts at KOP 4 to less than significant levels. (Ex. 100, pp. 4.12-7 – 4.12-10.)

Staff and the Applicant disagree about the location of the vegetative screening. Mr. Priestly recommends that it be planted in the marsh and between the marsh and the power plant structures. (Ex. 1, pp. 3-169 – 3-170.) He recommends deletion of Condition **VIS-10**, which, among other things, requires the installation of "trees along the west side of the warehouse and industrial park complexes that line the eastern edge of the shoreline wetlands." (Ex. 1, pp. 3-173 – 3-174.)

Staff asserts that the requirement remains necessary both to mitigate the impacts at KOPs 2 and 3 and to mitigate impacts at KOP 4.[31] Placing trees in the marsh could cause biological resources impacts by providing perching sites for raptors. (Ex. 100, pp. 4.12-8 – 4.12-10.) In the absence of any evidence that the screening could be successfully provided in the marsh and mindful of the potential biological resources issues, we find that the requirement should remain in place.

The Applicant requests that Condition **VIS-7**, requiring visual treatment of the Advanced Water Treatment facility, administrative offices, control room, warehouse, and water treatment laboratory structures consistent with City architectural guidelines be deleted. It asserts that such treatment is no longer necessary because the relocation of the project and the provision of a sound wall on the southern boundary sufficiently buffers those structures from view by motorists on public streets. (Ex. 1, p. 3-172.) Staff agrees. (Ex. 100, pp. 4.12-7 – 4.12-8.)

At its original location, the project would block views of Mt. Diablo from KOP 2, the Hayward Regional Shoreline Interpretive Center. To mitigate the impact, Condition **VIS-9** required the project owner to install benches, an information kiosk, information panels, and free-of-charge viewscopes at two nearby locations on a Shoreline trail where views toward Mt. Diablo would not be affected by the project. At its new location, the amended project will no longer create the visual impact. The Applicant remains willing to provide the amenities, however, and proposes clarifying amendments to Condition **VIS-9**. Staff agrees with the proposal. (Ex. 100, p. 4.12-8.)

The Applicant also requests the removal of that portion of Condition **VIS-8** which requires an economizer bypass and automated control system to reduce visual

[31] Staff does agree with the Applicant's proposal to delete the other planting requirements from

plumes from the HRSG, arguing that the plant's plumes will be less visible to the public due to the project's relocation, that plumes are projected to occur infrequently and that the required equipment will be an inefficient use of natural gas resources. (Ex. 1, p. 3-172.) Staff, in recognition of the predicted low plume frequency (3.4% of daylight clear hours) and that the cooling towers will be plume-abated, supports the Applicant's request. (Ex. 100, p. 4.12-11.)

A key feature of the amendment is the removal of what is generally called the "Wave." It consisted of tubular space frames around the HRSG units, HRSG stacks, and the cooling towers, spanned by stainless steel mesh and contoured to give the impression of a wave in the bay. It was intended to simplify the complexity of the plant's equipment and serve as a distinctive landmark at the State Route 92 gateway to Hayward. (2002 Decision, pp. 221-222.) The Staff Assessment indicates that the treatment was included at the behest of the City of Hayward in order to achieve consistency with City General Plan provision encouraging enhancement of entrances to the City with "distinctive planting, signing or architecture." The Staff Assessment also reports a subsequent change of position on the City's part. "In an agenda report to the City Council in October 2005, City staff supported Calpine's request to eliminate the "Wave" structure. The City did not make a general plan consistency finding in the agenda report for this action. The City Council took no formal action on the "Wave" during the meeting." (Ex. 100, p. 4.12-14.) A July 18, 2007 letter from Acting City Manager Fran David to Eric Knight confirms the City's opinion that the Wave is no longer necessary. (Ex. 35.)

Another feature of the original project that is eliminated by the amendment is the relocation of the KFAX radio towers. If moved as originally proposed, they would be located nearer to the Hayward Regional Shoreline Park parking area and trailhead. During the original proceeding Staff argued that the towers would

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Condition **VIS-10**.

cause significant visual impacts that could not be mitigated. (2002 Decision, pp. 225-233.) Although the 2002 Decision concluded that the impact would not be significant, avoiding the relocation as is now proposed eliminates the impact altogether.

Public Comment

Audrey LePell commented that she did not find the power plant visually acceptable with or without the "Wave." Joanne Gross felt the simulated photographs were misleading. She frequently used the shoreline area and did not want to see the power plant in her views. Wafaa Avorashed, representing the Healthy San Leandro Environmental Collaborative, commented that the power plant would affect the public's ability to enjoy the shoreline.

FINDINGS AND CONCLUSIONS

Based on the evidence, we find as follows:

1. The project as amended will continue to comply with all applicable LORS.
2. The revised Conditions of Certification set forth below are appropriate and will ensure that the project is designed and constructed both in accordance with applicable law and in a manner that protects environmental quality and public health and safety and to ensure compliance with all applicable LORS.
3. The Visual Resources aspects of the amended project do not create significant direct or cumulative environmental effects.

CONDITIONS OF CERTIFICATION

VIS-1 The project owner shall ensure that implementing the following measures adequately mitigates visual impacts of project construction:

- Install opaque, solid slats in the chain link fence along the RCEC site's boundary along the Hayward Regional Shoreline. Erect a 12-foot-tall fence with opaque, solid slats along the west property boundary of the site;

- Staging, material, and equipment storage areas, if visible from public rights-of-way, shall be visually screened with opaque fencing;

- All evidence of construction activities, including ground disturbance due to staging and storage areas shall be removed and remediated upon completion of construction. Any vegetation removed in the course of construction would be replaced on a 1-to-1 in-kind basis. Such replacement planting would be monitored for a period of three years to ensure survival. During this period, all dead plant material shall be replaced.

Protocol: The project owner shall submit a plan for screening construction activities at the site from views from the Hayward Regional Shoreline and staging, material, and equipment storage areas, and restoring the surface conditions of any rights-of-way disturbed during construction of the transmission line and underground pipelines. The plan shall include grading to the original grade and contouring and revegetation of the rights-of-way.

The project owner shall not implement the plan until receiving written approval of the submittal from the California Energy Commission Compliance Project Manager (CPM).

Verification: At least 60 (sixty) days prior to the start of site mobilization, the project owner shall submit the plan to the CPM for review and approval. If the CPM notifies the project owner that any revisions of the plan are needed before the CPM would approve the plan, within 30 days of receiving that notification, the project owner shall submit to the CPM a revised plan.

The project owner shall notify the CPM within seven days after installing the screening that the screening is ready for inspection.

The project owner shall notify the CPM within seven days after completing the surface restoration that the areas disturbed during construction are ready for inspection.

VIS-2 Prior to the first turbine roll, the project owner shall prepare and implement an approved onsite landscape plan to screen the power plant from view to the greatest extent possible. Suitable irrigation shall be installed to ensure survival of the plantings. Landscaping shall be installed consistent with the City of Hayward zoning ordinance and with the U.S. Fish and Wildlife Service's recommendations, if applicable, that plants not provide opportunities for perching by birds of prey.

Protocol: The project owner shall submit a landscape plan to the City of Hayward for review and comment, and to the CPM for review and

approval. The submittal to the CPM shall include the City's comments. The plan shall include, but not be limited to:

1) A detailed landscape, grading, and irrigation plan, at a reasonable scale, which includes a list of proposed tree and shrub species and installation sizes, and a discussion of the suitability of the plants for the site conditions and mitigation objectives.

2) An installation schedule. The project owner shall not implement the landscape plan until the project owner receives approval of the plan from the CPM. The planting must be completed by the start of commercial operation, and the planting must occur during the optimal planting season.

3) Maintenance procedures, including any needed irrigation and a plan for routine annual or semi-annual debris removal for the life of the project; and

4) A procedure for monitoring for and replacement of unsuccessful plantings for the life of the project.

The project owner shall not implement the plan until the project owner receives approval of the plan from the CPM.

Verification: Prior to the first turbine roll and at least 60 days prior to installing the landscaping, the project owner shall submit the landscape plan to the CPM for review and approval.

If the CPM notifies the project owner that revisions of the submittal are needed before the CPM would approve the submittal, within 30 days of receiving that notification, the project owner shall prepare and submit to the CPM a revised submittal.

The project owner shall notify the CPM within seven days after completing installation of the landscape screening that the planting and irrigation system are ready for inspection.

The project owner shall report landscape maintenance activities, including replacement of dead vegetation, for the previous year of operation in the Annual Compliance Report.

VIS-3 Prior to first turbine roll, the project owner shall treat all project structures and buildings visible to the public a) in appropriate colors or hues that minimize visual intrusion and contrast by blending with the landscape; b) such that those structures and buildings have surfaces that do not create glare; and c) such that they are consistent with local laws, ordinances, regulations, and standards.

The project owner shall submit for CPM review and approval, a specific treatment plan whose proper implementation would satisfy these requirements.

Protocol: The project owner shall submit the treatment plan to the City of Hayward for review and comment, and to the CPM for review and approval. The submittal to the CPM shall include the City's comments. The treatment plan shall include:

1) Specification, and 11" x 17" color simulations at life size scale, of the treatment proposed for use on project structures, including structures treated during manufacture;

2) A list of each major project structure, building, tank, transmission line tower and/or pole, and fencing specifying the color(s) and finish proposed for each (colors must be identified by vendor brand or a universal designation);

3) Two sets of brochures and/or color chips for each proposed color;

4) Samples of the proposed treatment and color on any fiberglass materials that would be visible to the public;

5) Documentation that the surfaces to be used on all project elements visible to the public would not create glare;

6) Documentation that non-specular conductors, and nonreflective and nonrefractive insulators would be used on the transmission facilities;

7) A detailed schedule for completion of the treatment; and

8) A procedure to ensure proper treatment maintenance for the life of the project.

The project owner shall not specify to the vendors the treatment of any buildings or structures treated during manufacture, or perform the final treatment on any buildings or structures treated on site until the project owner receives notification of approval of the treatment plan by the CPM.

Verification: At least 60 (sixty) days prior to ordering the first structures that are color treated during manufacture, the project owner shall submit its proposed treatment plan to the CPM for review and approval.

If required, the project owner shall provide the CPM with a revised plan within 30 (thirty) days of receiving notification that revisions are needed.

Prior to first turbine roll, the project owner shall notify the CPM that all buildings and structures are ready for inspection.

The project owner shall provide a status report regarding treatment maintenance in the Annual Compliance Report.

VIS-4 Prior to first turbine roll, the project owner shall design and install all permanent lighting such that a) light bulbs and reflectors are not visible from public viewing areas, b) lighting does not cause reflected glare, and c) illumination of the project, the vicinity, and the nighttime sky is minimized. To meet these requirements the project owner shall ensure that:

1) Lighting is designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of this outdoor lighting shall be such that the luminescence or light source is shielded to prevent light trespass outside the project boundary;

2) Non-glare light fixtures shall be specified;

3) All lighting shall be of minimum necessary brightness consistent with worker safety;

4) High illumination areas not occupied on a continuous basis (such as maintenance platforms) shall have switches or motion detectors to light the area only when occupied;

5) Parking lot lighting shall be provided in accordance with the City of Hayward Security Standards Ordinance; and

6) A lighting complaint resolution form (following the general format of that in Appendix VR-**3**) shall be used by plant operations, to record all lighting complaints received and to document the resolution of those complaints. All records of lighting complaints shall be kept in the onsite compliance file.

The project owner shall notify the CPM when the lighting has been installed. If after inspecting the lighting the CPM notifies the project owner that modifications to the lighting are needed to minimize impacts, the project owner shall perform the necessary modifications.

Verification: Prior to the first turbine roll, the project owner shall notify the CPM that the lighting is ready for inspection. If the CPM notifies the project owner that modifications to the lighting are needed, within thirty days of receiving that notification the project owner shall implement the modifications.

VIS-5 All fences and walls (including sound walls) for the project shall be non-reflective and treated in appropriate colors or hues that minimize visual

intrusion and contrast by blending with the surrounding landscape. Fences and walls for the project shall comply with the applicable requirements in the City of Hayward zoning ordinance that relate to visual resources.

Protocol: Prior to ordering fences and walls the project owner shall submit to the City of Hayward for review and comment, and to the CPM for review and approval, design specifications for fences and walls and documentation of their conformance with the City of Hayward zoning ordinance. The submittal to the CPM shall include the City's comments.

The project owner shall not order fences and walls until the submittal is approved by the CPM.

Verification: At least 30 days prior to ordering fences and walls, the project owner shall submit the specifications and documentation to the CPM for review and approval.

If the CPM notifies the project owner that revisions of the submittal are needed before the CPM would approve the submittal, within 30 days of receiving that notification, the project owner shall prepare and submit to the CPM a revised submittal.

The project owner shall notify the CPM within seven days after completing installation of the fencing that the fencing is ready for inspection.

VIS-6 The project owner shall design project signs using non-reflective materials and unobtrusive colors. The project owner shall ensure that signs comply with the applicable City of Hayward zoning requirements that relate to visual resources. The design of any signs required by safety regulations shall conform to the criteria established by those regulations.

Protocol: The project owner shall submit a signage plan for the project to the City of Hayward for review and comment, and to the CPM for review and approval. The submittal to the CPM shall include the City's comments.

The project owner shall not implement the plan until the project owner receives approval of the submittal from the CPM.

Verification: At least 60 days prior to installing signage, the project owner shall submit the plan to the CPM for review and approval.

If the CPM notifies the project owner that revisions of the plan are needed before the CPM would approve the submittal, within 30 days of receiving that notification, the project owner shall prepare and submit to the CPM a revised submittal.

The project owner shall notify the CPM within 7 days after completing installation of the signage that they are ready for inspection.

VIS-7: Deleted.

VIS-8 The project owner shall reduce the RCEC cooling tower and HRSG visible vapor plumes by the following methods:

- The project owner shall reduce the RCEC cooling tower visible plumes through the use of a plume abated wet/dry cooling tower that has a stipulated plume abatement design point of 38°F and 80 percent relative humidity. An automated control system would be used to ensure that plumes are abated to the maximum extent possible for the stipulated design point.

Verification: At least 30 days prior to first turbine roll, the project owner shall provide to the CPM for review and approval the specifications for the automated control systems and related systems and sensors that would be used to ensure maximum plume abatement for the wet/dry cooling tower plume abatement systems.

VIS-9 Prior to commercial operation, the project owner shall install new trailside amenities in the Hayward Regional Shoreline that may include, benches, free-of-charge viewscopes, and an information kiosk and set of low panels for the display of interpretive information related to Mt. Diablo and other important elements of the regional setting. The project owner shall work with the Hayward Area Recreation and Parks District (HARD) to develop the final designs for these facilities. As part of this measure, the project owner shall provide the HARD with an adequate budget that would allow its Staff to research and prepare the interpretive materials to be mounted on the kiosk and panels. The project owner shall determine the precise location of the trailside amenities in consultation with the CPM and the HARD.

Verification: Within 12 months after the start of HRSG construction, the project owner shall submit a final design plan for the trailside amenities to the HARD for review and comment and to the CPM for review and approval. If the CPM notifies the project owner that revisions are needed before the CPM would approve the plan, within 30 days of receiving that notification the project owner shall submit a revised plan to the CPM.

Not less than thirty 30 days prior to the first turbine roll, the project owner shall notify the CPM that the trailside amenities are ready for inspection.

VIS-10 Prior to the start of construction, the project owner shall prepare and implement an approved off-site landscaping plan. Consistent with Measure 3 of the Visual Mitigation Plan, the project owner shall install

trees along the west side of the warehouse and industrial park complexes that line the eastern edge of the shoreline wetlands. The extent of the landscaping area, as shown in Visual Resources Figure 14 shall be expanded to include the berm from Breakwater Avenue north to Johnson Road. Trees shall be planted close together to create a dense screen. Trees planted along the edge of the Whitesell Business Park parking lot shall be pruned up as they grow to allow westward views from the parking lot to the shoreline open space. Trees planted close to the walls of the warehouses shall be allowed to take on a bush-like form to maximize their screening potential.

All tree species shall be fast growing and evergreen and shall be 24" box size when planted. The project owner shall provide an appropriate level of irrigation and fertilization to ensure optimal tree growth, health, and appearance.

Protocol: Prior to start of construction, the project owner shall submit an offsite landscape plan to the City of Hayward and the U.S. Fish and Wildlife Service, if applicable, for review and comment, and to the CPM for review and approval. The submittal to the CPM shall include the City's comments. The plan shall include, but not be limited to:

1) A detailed landscape, grading, and irrigation plan, at a reasonable scale, which includes a list of proposed tree and shrub species and installation sizes, and a discussion of the suitability of the plants for the site conditions and mitigation objectives.

2) An installation schedule. The project owner shall not implement the landscape plan until the project owner receives approval of the plan from the CPM. The planting must be completed by the start of commercial operation, and the planting must occur during the optimal planting season.

3) Maintenance procedures, including any needed irrigation and a plan for routine annual or semi-annual debris removal for the life of the project; and

4) A procedure for monitoring for and replacement of unsuccessful plantings for the life of the project. The project owner shall not implement the plan until the project owner receives approval of the plan from the CPM.

Verification: At least 90 days prior to start of construction, the project owner shall submit the offsite landscape plan to the CPM for review and approval.

If the CPM notifies the project owner that revisions of the submittal are needed before the CPM would approve the submittal, within 30 days of receiving that

notification, the project owner shall prepare and submit to the CPM a revised submittal.

The project owner shall notify the CPM within seven days after completing installation of the landscape screening that the planting and irrigation system are ready for inspection.

The project owner shall report landscape maintenance activities, including replacement of dead vegetation, for the previous year of operation in the Annual Compliance Report.

VIS-11 The project owner shall ensure that lighting for construction of the power plant is used in a manner that minimizes potential night lighting impacts, as follows:

1) All lighting shall be of minimum necessary brightness consistent with worker safety.
2) All fixed position lighting shall be shielded, hooded, and directed downward to minimize backscatter to the night sky and direct light trespass (direct lighting extending outside the boundaries of the construction area).
3) Wherever feasible and safe, lighting shall be kept off when not in use and motion detectors shall be employed.
4) A lighting complaint resolution form (following the general format of that in Appendix VR-3, of the Amendment No. 1 Staff Assessment shall be maintained by plant construction management, to record all lighting complaints received and to document the resolution of that complaint.

Verification: At least 30 (thirty) days prior to the start of ground disturbance, the project owner shall provide to the CPM documentation demonstrating that the lighting would comply with the condition.

If the CPM notifies the project owner that modifications to the lighting are needed, within 30 (thirty) days of receiving that notification the project owner shall implement the necessary modifications and notify the CPM that the modifications have been completed.

The project owner shall report any lighting complaints and documentation of resolution in the Monthly Compliance Report, accompanied by any lighting complaint resolution forms for that month.

VI. ENVIRONMENTAL ASSESSMENT

A. BIOLOGICAL RESOURCES

Staff witness Marc Sazaki, in his written assessment, indicates that the amended project would comply with all LORS and would have "considerably less potential for impacts to biological resources" than the currently approved location. (Ex. 100, p. 4.2-1.) He recommends eliminating seven Conditions of Certification and making changes to five other Conditions. With the revised Conditions, he finds that the amended project would not cause any significant effects on biological resources. (Ex. 100, p. 4.2-5.)

The reduction in potential impacts results from 1) moving the project to a site that does not encroach on wetlands or directly impact sensitive species habitat; 2) eliminating the visual screening of the power plant structures (the "Wave," described in the **Visual Resources** section of this Decision) that could serve as perches for raptors who would prey on sensitive species nearby; and 3) the increased distance from the project site to sensitive species habitat that will reduce the impacts from construction and operations noise on those species. The new site is "nonexistent to marginal at best" wildlife habitat and no sensitive species are expected to be found there. Staff therefore recommends deletion of Conditions **BIO-6** requiring a Biological Opinion, **BIO-10** requiring habitat compensation and **BIO-15** requiring a Wetlands Mitigation Plan as no longer necessary. (Ex. 100, p. 4.2-2 – 4.2-4.)

Staff also recommends removing Condition **BIO-14** (Perch Management Plan) as no longer necessary due to the removal of the visual screening. (Ex. 100, p. 4.2-3.) Similarly, **BIO-8**, is no longer necessary as the substitution of a zero liquid discharge water treatment process for the previous Advance Water Treatment system eliminates the discharges into the Bay that required a Section 401 Clean Water Act certification from San Francisco Bay Regional Water Quality Control Board. (Ex. 100, p. 4.2-4 – 4.2-5.)

hazards.[28] We agree with the FAA, Staff, the Applicant, and the Alameda County ALUC that an advisory warning pilots not to overfly the power plant at low altitudes provides an additional measure of safety. With or without the advisory, though, the impact is less than significant.

While the overflight restriction will have the effect of removing a portion of the navigable airspace around the Hayward Executive Airport, it does not appear to be a significant reduction. The space is one-half mile outside of the airport's defined traffic pattern and is very lightly (.4%) traversed. The radio towers 1000 feet to the south already call for caution. Sufficient unencumbered airspace will remain for the operation of the airport and its users. While Staff believes that the FAA has agreed with its position that the project should not be approved as proposed due to potential aviation hazards, all we find in the FAA's letter is agreement that pilots should be advised to avoid overflying the plumes at low altitudes. The FAA does not complain about the loss of navigable airspace; as the agency responsible for the designation of air routes and air traffic control, its lack of concern in this regard is telling.

We respectfully disagree with the recommendation of the ALUC that an alternative site be chosen for the power plant. Its resolution states that the RCEC airspace restriction would "alter the flight pattern[29]" but cites no evidence to support that conclusion.

We accept the City's interpretation of its own ordinance that the project site is outside of the zones subject to Municipal Code Section 10-6.35.

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[28] In addition to Mr. Graves' testimony to this effect, the FAA Study speaks of "rules and regulations restricting the altitude for overflight of power plant facilities coupled with pilot training, alerting, and the common sense aviator aptitude" as factors in the scarcity of reported incidents relating to power plants. (Ex. 20, Attachment 5, p. 15.)

[29] August 16, 2007 ALUC resolution, p. 2, fourth "Whereas" clause.

If the proposed Eastshore Energy Center is approved, it is possible that the navigable airspace above that facility would be similarly restricted. That project appears to be located just outside the Traffic Pattern Zone, approximately one-half mile closer than the RCEC. On the record before us, we can only note the possibility of cumulative effects from restricting the airspace above both projects. We also note that the Eastshore project is undergoing Energy Commission review; during that review the Commission can and should consider whether there are any significant direct or cumulative effects of any airspace restrictions over that project and impose proper mitigation or, if mitigation is not feasible, deny the project or override unmitigated effects. We do not intend this Decision to determine in any way the conclusions or outcome of the Commission's review of the Eastshore Energy Center, which must be judged on its merits and the evidence presented in that proceeding.

To answer the questions we pose above, 1) the proposed location presents no aviation hazard that rises to the level of a significant environmental effect; 2) though no significant effect requiring mitigation is presented, an additional measure of pilot safety will be afforded by advising pilots not to fly over the facility as Staff, the Applicant, the FAA, and the Alameda County ALUC recommend;[30] and 3) the removal of the navigable airspace above the power plant will not cause a significant environmental effect as it is not within any established traffic pattern and sufficient navigable airspace remains after its removal.

This decision is, of necessity, specific to this proposed project location; each power plant must be evaluated in the context of its local setting and aviation environment.

[30] We have incorporated additional pilot awareness/notification methods recommended by the ALUC and FAA as the last three bullets of **TRANS-10**.

FINDINGS AND CONCLUSIONS

Based on the evidence, we find as follows:

1. The project as amended will continue to comply with all applicable LORS.
2. The revised Conditions of Certification set forth below are appropriate and will ensure that the project is designed and constructed both in accordance with applicable law and in a manner that protects environmental quality and public health and safety and to ensure compliance with all applicable LORS.
3. The Traffic and Transportation aspects of the amended project do not create significant direct or cumulative environmental effects. To the extent that a possible cumulative effect on aircraft safety exists by virtue of the restriction of navigable airspace for the proposed Eastshore Energy Center project in addition to that set aside for this project, there is insufficient information to fully evaluate the impact at this time but the Energy Commission can and should fully consider that possible cumulative impact in its consideration of the Eastshore project.

CONDITIONS OF CERTIFICATION

TRANS-1 The project owner shall develop a construction traffic control and transportation demand implementation program that limits construction-period truck and commute traffic to off-peak periods in coordination with the City of Hayward and Caltrans. Traffic associated with construction of the RCEC shall be mitigated by avoiding peak transportation hours associated with the area, including peak work hours for Gillig Corporation, Berkeley Farms Incorporated, and other major employers in the area. In addition, the use of the railroad spur shall not block traffic during a.m. or p.m. peak hours. Specifically, this plan shall include the following restrictions on construction traffic:

- Establish construction work hours outside of the peak traffic periods to ensure that construction workforce traffic occurs during off-peak hours, except in situations where schedule or construction activities require travel during peak hours, in which case workers will be directed to routes that will not deteriorate the peak hour level of service below the City of Hayward's LOS D standard;
- Schedule heavy vehicle equipment and building material deliveries as well as the movement of materials and equipment from laydown areas to occur during off-peak hours;

- Route all heavy vehicles and vehicles transporting hazardous materials as follows: from SR 92 exit northbound at Clawiter Road, turn left at Enterprise Avenue, and enter the Russell City Energy Center shortly after passing Whitesell Street; and
- During the construction phase (every 4 months), monitor and report the turning movements for the intersection at Enterprise Avenue and Clawiter Road during the A.M. (7:30 to 8:30 a.m.) and P.M. (4:30 to 5:30 p.m.) peak hours to confirm construction trip generation rates.
- The construction traffic control and transportation demand implementation program shall also include the following restrictions on construction traffic addressing the following issues for linear facilities:
- Timing of pipeline construction (all pipeline construction affecting local roads shall take place outside the peak traffic periods to avoid traffic flow disruptions);
- Signing, lighting, and traffic control device placement;
- Temporary travel lane closures;
- Maintaining access to adjacent residential and commercial properties; and
- Emergency access.

Verification: At least 30 days prior to start of site preparation or earth moving activities, the project owner shall provide to the City of Hayward and Caltrans for review and comment, and to the CPM for review and approval, a copy of their construction traffic control plan and transportation demand implementation program. Additionally, every 4 months during construction the project owner shall submit turning movement studies for the intersection at Enterprise Avenue and Clawiter Road during the A.M. (7:30 to 8:30 a.m.) and P.M. (4:30 to 5:30 p.m.) peak hours to confirm that construction trip generation rates identified in the AFC and used to determine less than significant impacts to City of Hayward streets and are not being exceeded.

TRANS-2 Deleted.

TRANS-3 Deleted.

TRANS-4 The project owner shall complete construction of Enterprise Avenue along the project frontage. Enterprise Avenue is to be constructed as a standard 60-foot industrial public street per City of Hayward Detail SD-102. This includes removal of the temporary asphalt curb, construction of approximately 21 feet of street pavement and a standard 6-foot sidewalk.

Verification: At least 30 days prior to operation of the RCEC plant, the project owner shall submit to the CPM, written verification from the City of Hayward that construction of Enterprise Avenue along the project frontage has been completed in accordance with the City of Hayward's standards.

TRANS-5 Deleted.

TRANS-6 The project owner shall resurface Enterprise Avenue and Clawiter Road, if damage is caused by construction traffic. The degree of rehabilitation is dependent on a condition inspection by the City Engineer after completion of the RCEC project.

Verification: At least 30 days prior to project site mobilization, the project owner shall submit to the CPM a letter agreeing to resurface Enterprise Avenue, if in the opinion of the City of Hayward City Engineer, damage to the asphalt overlay is caused by heavy equipment used in the construction of the RCEC. If required, the project owner shall resurface Enterprise Avenue and Clawiter Road in accordance with City of Hayward standards.

TRANS-7 Deleted.

TRANS-8 Deleted.

TRANS-9 The project owner or its contractor shall comply with the City of Hayward Planning Department limitations for encroachment into public rights-of-way and shall obtain necessary encroachment permits from the City of Hayward Public Works Department.

Verification: In the Monthly Compliance Reports, the project owner shall submit copies of any encroachment permits received during that month's reporting period to the Compliance Project Manager (CPM). In addition, the project owner shall retain copies of these permits and supporting documentation in its compliance file for at least six months after the start of commercial operation.

TRANS-10 The project owner shall ensure that the following mitigation measures are implemented to discourage pilots from flying over or in the proximity to the RCEC. These would include:

1. Request that a Notice to Airman (NOTAM), Category D, be issued advising pilots of the location of the RCEC and maintained in active status until all navigation charts and the Airport Facilities Directory (AFD) have been updated;

2. Request that the Hayward Executive Airport Air Traffic Control Tower (ATCT) coordinate with the Northern California Terminal Radar Approach Control to ensure that local missed approach instructions preclude the vectoring of aircraft over the RCEC;

3. Request that the FAA insert a power plant depiction symbol at the RCEC site location on the San Francisco VFR Terminal Area Chart (scale: 1:250,000);

4. Request that the Hayward ATCT add a new remark to the Automatic Terminal Information Service (ATIS) advising pilots of the location of the RCEC and to avoid overflight below 1,000 feet;

5. Deleted.

6. Request that the Hayward Executive Airport submit aerodrome remarks describing the general location of the RCEC plant and advising against direct overflight of the RCEC plant to:

    - the FAA National Aeronautical Charting Office (Airport/Facility Directory, Southwest United States);
    - Jeppesen Sanderson Inc. (JeppGuide Airport Directory, Western Region); and
    - Airguide Publications (Flight Guide, Western States);

7. Modify the Hayward Executive Airport "fly friendly" pilot guides at the project owner's expense to include: a graphical/pictorial depiction of the RCEC site, bearing and distance to the site from airport center and the OAKLAND VORTAC, latitude and longitude of the RCEC center point and the recommendation to avoid overflight of the site below 1,000 feet to avoid potentially unstable flight conditions;

8. Install obstruction lighting and marking on each RCEC exhaust stack and cooling tower. Reference FAA Advisory Circular 70/7460-I for guidance. Install lighting at each corner of the facility fence line that would be visible to an aircraft in flight, to be operated 24 hours a day, 7 days a week; and

9. Provide the Hayward Executive Airport and the Metropolitan Oakland International Airport Air Traffic Control Towers written notice at least 10 days in advance of the first test or commissioning procedure that would produce a thermal plume, provide verbal notification 2 hours in advance of any subsequent test or commissioning procedure, and 10 days written notice prior to the start of commercial operations.

Verification: At least sixty days prior to the start of construction, the project owner shall submit to the CPM for approval final design plans for the power plant that depict the required air traffic hazard lighting. The lighting shall be inspected

and declared operational by the CPM (or designate inspector) prior to the start of operations.

At least six months prior to the first test or commissioning procedure, the project owner shall demonstrate to the CPM that it has coordinated with the Hayward Executive Airport manager and changes to the San Francisco VFR Terminal Area Chart have been submitted.

At least sixty days prior to the first test or commissioning procedure, the project owner shall demonstrate to the CPM that it has coordinated with the Hayward Executive Airport manager and changes to the AFD have been submitted.

At least sixty days prior to the first test or commissioning procedure, the project owner shall provide verification to the CPM from the Hayward Executive Airport ATCT that any necessary modifications to local missed approach procedures have been coordinated with Northern California Terminal Radar Approach Control.

At least thirty days prior to the first test or commissioning procedure, the project owner shall provide verification to the CPM from the Hayward Executive Airport manager that he has an adequate supply, as determined by him, of the “fly friendly” brochure used for pilot education.

At least thirty days prior to the first test or commissioning procedure, the project owner shall provide verification to the CPM from the Hayward Executive Airport and Oakland International ATCT that the proposed language for the ATIS accurately describes the location of the RCEC and recommendation to avoid overflight below 1,000 feet.

The project owner shall provide simultaneously to the CPM copies of all advisories sent to the Hayward and Oakland Air Traffic Control Towers.
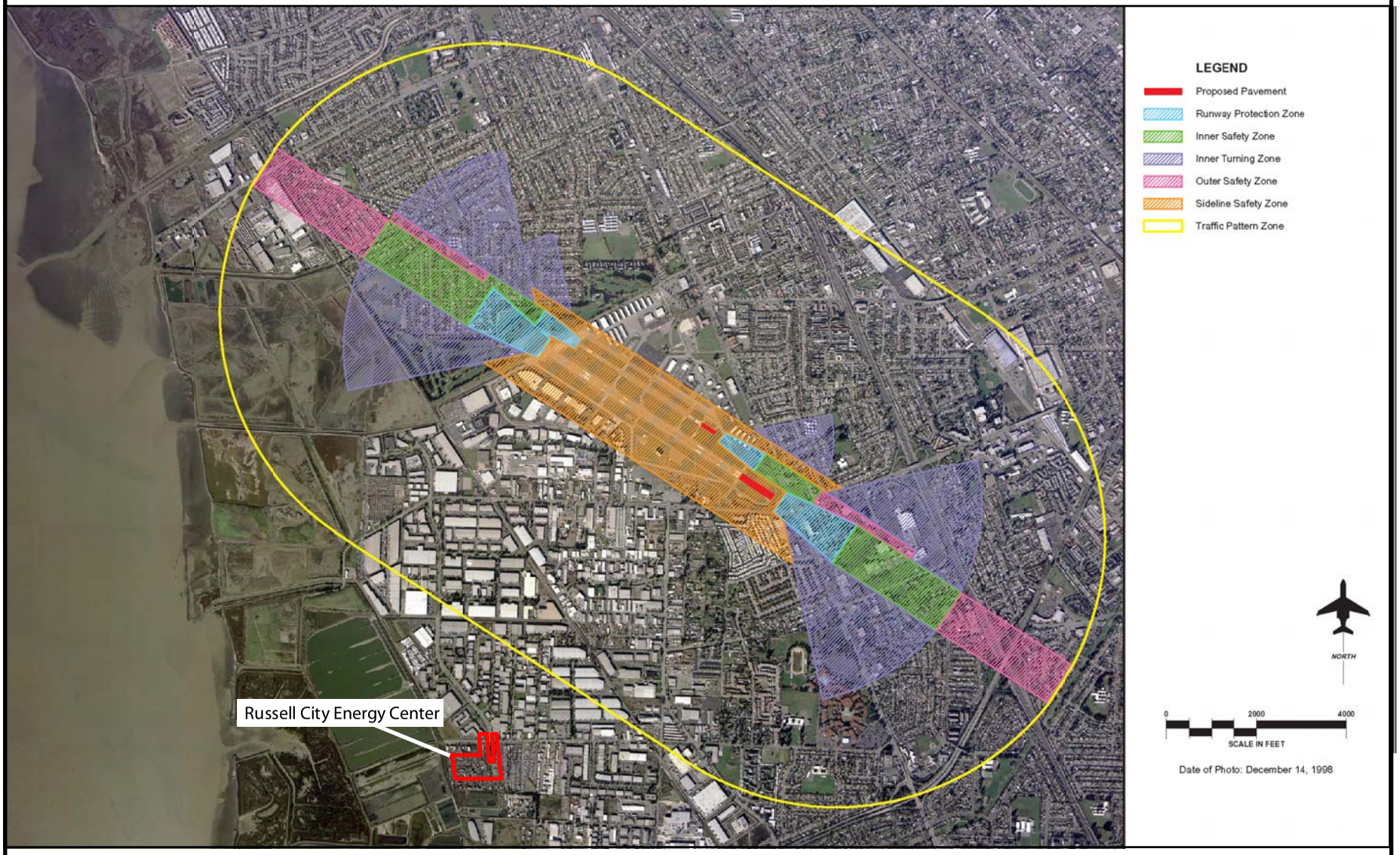
FIGURE 4 - TRAFFIC AND TRANSPORTATION
SOURCE: Exhibit 28. Attachment 5