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Summary of the December 14, 2007 Preliminary Staff Assessment Workshop for the Humboldt Bay Repowering Project (06-AFC-7)

I Background

The California Energy Commission Staff conducted a workshop to receive comments on staff's Preliminary Staff Assessment (PSA) for the proposed Humboldt Bay Repowering Project. The workshop provided an opportunity for agencies, the public, PG&E and other interested parties to present questions and comments on the PSA. The workshop was held on Friday, December 14, 2007, and began at 10:00 AM in the Assembly Building of PG&E's Humboldt Bay Power Plant located at 1000 King Salmon Avenue in Eureka, California. Attached to this summary is the agenda for the workshop and handouts provided at the workshop in which staff responded to PG&E's comments on proposed Conditions of Certification in the areas of Transmission Line Safety and Nuisance, Traffic and Transportation, and Visual Resources.

II Technical Areas for Which Staff Accepts PG&E's PSA Comments Without Further Discussion

- A. Facility Design
- B. Geology and Paleontology
- C. Noise
- D. Soil & Water

III Summary of Other Technical Area Discussions & Action Items:

This section summarizes discussions in reference to PG&E's comments to the PSA, which are contained in the document titled HBRP – PG&E's Initial Comments on the PSA, Docket No. (06-AFC-7) dated December 7, 2007.

A. Biology

1. Staff accepted or otherwise provided clarification for PG&E's comments and proposed changes to Conditions of Certification (COCs) BIO-3, 5, 10, 11 and 12, as will be reflected in the Final Staff Assessment (FSA); (PG&E provided on January 2, 2008 a suggested change to BIO-12 in its Supplemental Comments on the PSA, which specifies that the the Wetland Mitigation Plan will include the terms and conditions of a deed restriction in perpetuity for the 4.04 acres of wetland creation, restoration and enhancement.)

B. General Conditions & Compliance

1. Compliance-12, Unplanned Temporary Closure/On-Site Contingency Plan – Staff clarified that the Energy Commission would expect PG&E to maintain the same level and types of insurance: **coverage** during temporary closure as they would during operations;

Proof of Service List (Revised on 10/25/07)
 filed with Original Document, Mailed from
 Sacramento on 1/15/08.

C. Hazardous Materials

1. Staff accepted some of PG&E's proposed changes to the Conditions of Certification. For HAZ-1, staff agreed to remove 4 materials from the required reportable list including biocide, citric acid, mercury vapor & fluorescent lamps, and sulfuric acid in sealed batteries. For HAZ-8, staff agreed to PG&E's proposed modification of Item 10, but rejected the other proposed changes. Staff also agreed to consolidate TRANS-5 with HAZ-3, thus removing TRANS-5. HAZ-3 would require PG&E to develop a plan in coordination with the South Bay Unified School District and the Eureka City Unified School District to coordinate transportation of aqueous ammonia to HBRP to avoid periods when school bus traffic is occurring along King Salmon Ave.

D. Land Use

1. Public Coastal Access – Staff & PG&E agreed to conduct an additional workshop to review and discuss coastal access and public use enhancements as required under the Warren-Alquist Act. By mail distribution of the 2nd PSA Workshop Notice, staff is inviting the public, agencies and interest groups and including local residents of the King Salmon and Humboldt Hill communities, Coastal Commission, Humboldt County, Redwood Community Action Agency, PG&E and staff.

Action Item: Schedule and conduct 2nd PSA Workshop

Staff has scheduled the 2nd PSA Workshop to begin at 11:00 AM on January 16, 2007 at PG&E's Assembly Room of the Humboldt Bay Power Plant. PG&E has provided an expanded Property Owner mailing list to include all of the King Salmon and Humboldt Hill communities. Staff has issued the Notice of the 2nd PSA Workshop to the property owner, library, general and agency mailing lists.

E. Transmission Line Safety & Nuisance

1. Staff provided revisions to its proposed Conditions of Certification in response to PG&E's comments;

F. Traffic & Transportation

1. Staff provided revisions to its proposed Conditions of Certification in response to PG&E's comments (See attached);

G. Transmission System Engineering

1. Staff is requesting clarification from the California ISO as to how the Operational Study Report will be issued and provided to the Energy Commission in order to consider PG&E's proposed change to TSE-5;

H. Visual Resources

1. Staff and PG&E discussed the Coastal Commission and Humboldt County jurisdiction;
2. Staff provided revisions to its proposed Conditions of Certification in response to PG&E's comments (See attached);

I. Worker Safety & Fire Protection

1. Staff agreed in concept to PG&E's proposed changes to COCs Worker Safety-1 and 2 and will include the specific clarifying language in the Final Staff Assessment.
2. Staff will provide PG&E with examples of other Energy Commission-licensed projects specifying the requirements staff recommends for hiring a Construction Safety Supervisor as would be required under COCs Worker Safety – 3 and 4.

J. Cultural Resources

Staff and PG&E discussed the extent of NRC oversight for demolition of HBPP Units 1 and 2, as supported by PG&E's Nuclear Plant Manager, Loren Sharpe. This issue is still under investigation in coordination with PG&E and the NRC.

Action Items:

1. Staff requested and PG&E agreed to provide documentation of the SHPO determination that the HBRP would have no effect on historic properties in association with the US Army Corps of Engineers review and approval for disturbance to, and mitigation for wetlands. The Army Corps approved PG&E's pre-construction notification for obtaining a Clean Water Act Section 404 Permit for placing or removing fill in wetlands;
2. Staff requested and PG&E agreed to provide an exhibit drawing from its NRC license for nuclear Unit 3 showing the extent of the license boundary within the overall HBPP site; (Staff does not consider PG&E's reference to Appendix B of the Historical Site Assessment as previously provided in Appendix 8.15A of the AFC to satisfy this data request. PG&E's latest response, which does not satisfy staff's request, was included in its Supplemental Comments on the PSA dated January 2, 2008.)
3. Staff requested and PG&E agreed to provide suggested language for a COC that would establish a repository at the Humboldt State University Library for available photographs and other historical documents pertaining to HBPP's role in the region's history. (PG&E provided a draft COC in its Supplemental Comments on the PSA dated January 2, 2008.)

K. Air Quality

The Air Quality discussions included participation by U.S. EPA, North Coast Unified Air Quality Management District (NCUAQMD), PG&E and Energy Commission Staff.

1. **Modeling Methodology:** U.S. EPA commented that PG&E's modeling approach using CTDMPLUS was not pre-approved by EPA, and that in order for the modeling to be considered valid, PG&E would need to demonstrate to EPA that it has the quality of meteorological input data needed to support this modeling approach; PG&E's modeling using CTDMPLUS is intended to support the Prevention of Significant Deterioration (PSD) increments analysis and to demonstrate conformance with federal LORS.

Action Item: PG&E responded that it would work with EPA, the NCUAQMD and Energy Commission staff to pursue options for providing the quality of meteorological input data necessary. Following the 12/14/07 PSA Workshop, NCUAQMD initiated a new independent PSD PM10 Increments Analysis, for the purpose of responding to the U.S. EPA. Energy Commission staff will evaluate the new PSD Increments Analysis, when available, in the Final Staff Assessment.

2. **Air Toxics Control Measure (ATCM) Compliance:** The parties discussed whether or not the definition of "emergency" should include natural gas curtailments. PG&E referred to previous correspondence with ARB and the first draft of the PDOC that ARB provided to NCUAQMD as support for why it believes natural gas curtailments should be considered an emergency. Staff indicated that it has asked ARB to provide further clarification, which to date has not been received.

Action Item: Staff, NCUAQMD and PG&E will continue to work with ARB to provide clarification on interpreting the ATCM. Energy Commission staff expects that the NCUAQMD will summarize the interpretation in a revised PDOC or Final Determination of Compliance.

3. **BACT:** NCUAQMD stated that it has determined diesel particulate filters (DPFs) are not technically feasible, since they are not aware of any locations in the world where

DPFs are used on engines of the size proposed for the HBRP. Lacking technical feasibility, the NCUAQMD has indicated that there is no need to consider cost-effectiveness. In addition to encouraging further assessment of DPF emission control technology in its comments to NCUAQMD for the PDOC, EPA suggested PG&E use aftercooling technology for NOx control.

Action Item: PG&E will provide a written response to NCUAQMD, EPA and Energy Commission staff on these issues. (PG&E has since indicated its willingness to use aftercooling technology for NOx control as stated in its Supplemental Comments on the PSA dated January 2, 2008.)

4. **Offsets:** Staff expressed concern that the natural gas supply failure that occurred in late 2006 is unrepresentative of "normal operations" and should be excluded from the emissions baseline used for calculating offsets for the HBRP.

Action Item: PG&E agreed to revise its offset calculations to exclude the period of the natural gas supply failure. (The revised calculations were received as part of PG&E's Supplemental Comments on the PSA dated January 2, 2008.)

5. **Federal Land Manager Update:** The NCUAQMD reported that it had received indication from Redwood National Park that its determination of no effect for the PSD Analysis would not be affected by increasing the annual hours of HBRP operating on diesel fuel from 50 to 100 hours/year/unit.

L. Public Health

1. **Modeling Methodology:** Staff reiterated that contrary to PG&E's statement to the news media, that staff's Health Risk Assessment is in accordance with agency-approved modeling. Staff will consider the new, independent air quality modeling NCUAQMD has initiated for PSD PM10 Increments Analysis as it may help to refine the Health Risk Assessment in the Final Staff Assessment.
2. **Health Risk Assessment (HRA):** Staff reiterated that regardless of whether or not the definition of "emergency" under the ATCM includes natural gas curtailments, staff will need to evaluate the HRA based on the annual diesel operating hours combining the purposes for maintenance, testing, emission testing and natural gas curtailments. At this time, staff estimates this will be 100 hours/unit/year, or a combination of 1,000 hours/year for all ten units.
3. **Diesel Particulate Matter (DPM) Emission Rate:** PG&E suggested that the DPM emission rate take into account the reductions expected from the oxidation catalysts. Staff's PSA analysis already accounts for a 30% reduction.
4. **Alternative Fuels:** Staff requested and PG&E expressed a willingness to explore options to limit the use of diesel by also providing on-site storage of one of the following fuels:
 - a. Compressed natural gas (CNG);
 - b. Liquefied natural gas (LNG); or
 - c. Biodiesel.

Action Item: Staff is expecting PG&E to present information on the alternative fuel options at the next PSA Workshop. Staff will present information on emissions of toxic air contaminants and criteria pollutants from the use of biodiesel as fuel.

5. Request to Notify all residents of Humboldt Hill and the Humboldt County Superintendent of Schools

Action Item: Participants requested and staff and PG&E have complied by expanding the Property Owner and Agency mailing lists to include the above, including the distribution of the 2nd PSA Workshop Notice.

Attachments

Agenda for the December 14, 2007 PSA Workshop

Handouts in which staff responded to PG&E's comments on proposed Conditions of Certification in the areas of Transmission Line Safety and Nuisance, Traffic and Transportation, and Visual Resources;

Distribution:

Dockets

Proof of Service

Agency List

**Humboldt Bay Repowering Project (06-AFC-7)
Preliminary Staff Assessment /Preliminary Determination of Compliance Workshop
Facilitated by the California Energy Commission & North Coast Unified Air Quality
Management District
December 14, 2007**

I Introductions

II Recap of Application for Certification (AFC) Process to Date & Schedule

Committee's Initial & Staff's Projected Schedule

Committee's Schedule	Staff's Actual & Projected Schedule	Event
	9/29/06	PG&E files AFC
N/A	11/8/06	AFC data adequate
	12/18/06	Informational Hearing and Site Visit
N/A	12/06 – 11/07	Staff transmits Data Requests & PG&E provides responses
1/24/07	2/1/07	Data Response and Issue Resolution Workshop 1
N/A	3/12/07	Data Response and Issue Resolution Workshop 2
N/A	5/11/07	Staff transmits letter to PG&E identifying preliminary air quality & public health issues
N/A	9/28/07	PG&E provides revised analysis and proposes to raise exhaust stacks from 75 to 100'
3/8/07	10/24/07	Agency draft determinations and NCUAQMD PDOC
4/6/07	11/29/07	Staff files Preliminary Staff Assessment (PSA)
5/2/07	12/14/07	Staff conducts PSA workshop
5/7/07	?	Agency final determinations and NCUAQMD FDOC
6/6/07	FDOC + 30 days	Staff files FSA
	+ 45 days	Prehearing Conference
	+ 50 days	Evidentiary hearings
	+ 125 days	Committee files proposed decision
	+ 140 days	Hearing on the proposed decision
	+ 170 days	Addendum/revised proposed decision
November 2007	+ 185 days May or June 2008?	Commission Decision

III Purpose of PSA Staff Workshop:

- A. Request and exchange information;
- B. Discuss and attempt to resolve major issues;
- C. Develop staff positions and, in some cases, agency positions;
- D. Allow the public to recommend areas of inquiry, ask questions and identify issues; and
- E. Identify areas of agreement and disagreement on proposed conditions.

IV Overview of Staff's Conclusions for the PSA:

Technical Area	Complies with LORS	Impacts Mitigated
Air Quality	Unresolved	Unresolved
Biological Resources	Unresolved	Yes
Cultural Resources	Yes	Yes
Efficiency	Not Applicable	Not Applicable
Facility Design	Yes	Yes
Geology & Paleontology	Yes	Yes
Hazardous Materials	Yes	Yes
Land Use	Unresolved	Yes
Noise	Yes	Yes
Public Health	No	No
Reliability	Not Applicable	Not Applicable
Socioeconomic Resources	Yes	Yes
Soil & Water Resources	Yes	Yes
Traffic & Transportation	Yes	Yes
Transmission Line Safety/Nuisance	Yes	Yes
Transmission System Engineering	Yes	Yes
Visual Resources	Yes	Yes
Waste Management	Yes	Yes
Worker Safety and Fire Protection	Yes	Yes

V Topics for Which Staff Accepts PG&E's PSA Comments:

- A. Facility Design
- B. Geology and Paleontology
- C. Noise
- D. Soil & Water

VI Topics of Discussion:

A. Biology

1. Staff's determination of conformance with LORS is pending review of Coastal Commission documents regarding compliance with the Coastal Act.
2. Discussion regarding PG&E's comments to Conditions of Certification;

B. General Conditions & Compliance

1. Compliance-12, Unplanned Temporary Closure/On-Site contingency Plan, Response to PG&E's question – The CEC would expect PG&E to maintain the same level and types of insurance coverage during temporary closure as they would during operations;

C. Hazardous Materials

1. Discussion regarding PG&E's comments to Conditions of Certification;
2. OK to consolidate COC Trans-5 to Haz-3;

D. Land Use

1. Land Use Compatibility - Due to the unresolved Public Health issue, staff cannot fully determine the project is compatible with adjacent land uses, particularly residential.
2. Public Coastal Access

E. Transmission Line Safety & Nuisance

1. PG&E's comments – to be discussed;

F. Traffic & Transportation

1. Discussion regarding PG&E's comments to Conditions of Certification;

G. Transmission System Engineering

1. Discussion regarding PG&E's comments to Conditions of Certification;

H. Visual Resources

1. Coastal Commission and Humboldt County jurisdiction;
2. Discussion regarding PG&E's comments to Conditions of Certification;

I. Worker Safety & Fire Protection

1. Discussion regarding PG&E's comments to Conditions of Certification;

J. Cultural Resources

1. NRC oversight for demolition of HBPP Units 1 and 2;
2. Discussion regarding PG&E's comments to Conditions of Certification;

DRAFT TLSN

RESPONSE TO AGENCY AND PUBLIC COMMENTS

14. DEC. 07

Staff received no public or agency comments.

CONCLUSIONS

Since the proposed lines and related facilities are not close enough to the nearest airport to pose an aviation hazard according to current FAA criteria, staff does not consider it necessary to recommend location or design changes on the basis of a potential hazard to area aviation.

The potential for nuisance shocks would be minimized through grounding and other field-reducing measures to be implemented in keeping with current PG&E guidelines (reflecting standard industry practices). These field-reducing measures would maintain the generated fields within levels not associated with radio-frequency interference or audible noise. The potential for hazardous shocks would be minimized through compliance with the height and clearance requirements of PUC's General Order 95. Compliance with Title 14, California Code of Regulations, Section 1250, would minimize fire hazards while the use of low-corona line design, together with appropriate corona-minimizing construction practices, would minimize the potential for corona noise and its related interference with radio-frequency communication.

Since electric or magnetic field health effects have neither been established nor ruled out for the proposed HBRP and similar transmission lines, the public health significance of any related field exposures cannot be characterized with certainty. The only conclusion to be reached with certainty is that the proposed lines' design and operational plan would be adequate to ensure that the generated electric and magnetic fields are managed to an extent the CPUC considers appropriate in light of the available health effects information. The long-term, mostly residential magnetic exposure of health concern in recent years would be insignificant for the proposed lines given the absence of residences in the area around them. On-site worker or public exposure would be short term and at levels expected for PG&E lines of similar design and current-carrying capacity. Such exposure is well understood and has not been established as posing a significant human health hazard.

Since the proposed project lines would be operated to minimize the health, safety, and nuisance impacts of concern to staff, while located along a route without nearby residences, staff considers the proposed design, maintenance, and construction plan as complying with the applicable LORS. With the conditions of certification proposed below, any such impacts would be less than significant.

PROPOSED CONDITIONS OF CERTIFICATION

PCU's ~~Southern California Edison's~~ **TLSN-1** The project owner shall construct the proposed transmission lines according to the requirements of California Public Utility Commission's GO-95, GO-52, GO-131-D, Title 8, and Group 2. High Voltage Electrical Safety Orders, Sections 2700 through 2974 of the California Code of Regulations, and

Verification: At least thirty days before starting construction of the transmission line or related structures and facilities, the project owner shall submit to the Compliance Project Manager (CPM) a letter signed by a California registered electrical engineer affirming that the lines will be constructed according to the requirements stated in the condition.

TLSN-2 The project owner shall hire a qualified consultant to measure the strengths of the electric and magnetic fields from the lines before and after they are energized. The measurements shall be made according to the American National Standard Institute/Institute of Electrical and Electronic Engineers (ANSI/IEEE) standard procedures at the locations of maximum field strengths along the proposed route. These measurements shall be completed not later than six months after the start of operations.

Verification: The project owner shall file copies of the pre-and post-energization measurements with the CPM within 60 days after completion of the measurements.

TLSN-3 The project owner shall ensure that all permanent metallic objects within the right-of-way of the project-related lines are grounded according to industry standards regardless of ownership.

Verification: At least 30 days before the lines are energized, the project owner shall transmit to the CPM a letter confirming compliance with this Condition.

REFERENCES

Electric Power Research Institute (EPRI) 1982. Transmission Line Reference Book: 345 kV and Above.

Pacific Gas and Electric (PG&E) 2006a. Application for Certification. Volumes I and II for the Humboldt bay Repowering Project. Submitted to the California Energy Commission on September 29, 2006.

National Institute of Environmental Health Services 1998. An Assessment of the Health Effects from Exposure to Power-Line Frequency Electric and Magnetic Fields. A Working Group Report, August 1998.

PROPOSED CONDITIONS OF CERTIFICATION

Traffic Control and Implementation Plan

TRANS-1 The project owner shall prepare and implement a traffic control and implementation plan for the HBRP and its associated facilities, containing:

- A Traffic Management Plan (TMP) addressing the movement of vehicles and materials, including arrival and departure schedules outside of peak travel periods, designated workforce and delivery routes, hazardous materials delivery schedules outside of peak travel periods and school bus pick-up/drop-off and coordination with Caltrans, and other traffic-related activities and resulting impacts during both construction and operation of the proposed facility.
- Redirection of construction traffic with a flag person.
- Signing, lighting, and traffic control device placement
- A Heavy Haul Plan (HHP), addressing the transport and delivery of heavy and oversized loads requiring permits from Caltrans or other state and federal agencies.
- A Parking Plan to ensure designated parking areas are adequate to accommodate construction workforce vehicles and parking spaces comply with county length and width dimensions.
- Access and entry for emergency service vehicles to the project site.

The project owner shall consult with the Coastal Commission, Humboldt County Public Works Department, and Caltrans in the preparation and implementation of the traffic control and implementation plan and shall submit the proposed traffic control plan to the Coastal Commission, Humboldt County and Caltrans in sufficient time for review and comment and to the Energy Commission Compliance Project Manager (CPM) for review and approval prior to the proposed start of construction and implementation of the plan. The traffic control plan shall include and the applicant shall implement all elements normally required for review and permitting of a similar project. The project owner shall provide a copy of any written comments from the Coastal Commission, Humboldt County or Caltrans and any changes to the traffic control plan to the CPM prior to the proposed start of construction.

Verification: At least 90 calendar days prior to the start of construction, including any grading or site remediation on the power plant site or its associated easements, the project owner shall submit the proposed traffic control and implementation plan to the Coastal Commission, Humboldt County Public Works Department and Caltrans for review and comment and to the CPM for review and approval **and shall provide at least 30 days for these agencies to respond and comment on the plan.** The project owner shall also provide the CPM with a copy of the transmittal letter to the Coastal Commission, Humboldt County and Caltrans requesting review and comment.

At least 30 calendar days prior to the start of construction, the project owner shall provide copies of any comment letters received from either the Coastal Commission, Humboldt County or Caltrans, along with any changes to the proposed plan to the CPM for review and approval.

Repair of Public Right-of-Way

TRANS-2 The project owner shall restore all public roads, easements, and rights-of way (ROW) that has been damaged due to project-related construction activities to original or near original condition in a timely manner. Prior to the start of site mobilization, the project owner shall consult with Humboldt County and Caltrans (if applicable) and notify them of the proposed schedule for project construction. The purpose of this notification is to request that the local jurisdiction and Caltrans consider postponement of public ROW repair or improvement activities in areas affected by project construction until construction is completed and to coordinate with the project owner any concurrent construction-related activities that are planned or in progress and cannot be postponed.

Verification: At least 30-days prior to the start of mobilization, the project owner shall photograph or videotape all affected public roads, easements, and ROW segment(s) and/or intersections and shall provide the CPM, the affected local jurisdiction(s) and Caltrans (if applicable) with a copy of these images. Within 60 calendar days after completion of construction, the project owner shall meet with the CPM, the affected local jurisdiction(s) and Caltrans (if applicable) to identify sections of public ROW to be repaired. At that time, the project owner shall establish a schedule to complete the repairs and to receive approval for the action(s). Following completion of any public ROW repairs, the project owner shall provide a letter signed by the affected local jurisdiction(s) and Caltrans stating their satisfaction with the repairs to the CPM.

Parking Standards

TRANS-3 The project owner shall comply with the applicable parking standards for project operation as established by the Coastal Commission and Humboldt County.

Verification: At least 30 days prior to start of construction, the project owner shall submit written evidence to the CPM that the project conforms to all applicable parking standards as established by the Coastal Commission and Humboldt County standards. The submittal to the CPM shall include evidence of review by the Coastal Commission and Humboldt County.

CHP Notification

TRANS-4 Prior to the start of commercial operation the project owner shall submit written notification to the California Highway Patrol (CHP), Humboldt Area Office informing them of the start of commercial operation date for the power plant, and advising them that potential turbulence caused by thermal plumes emitted from the power plant's cooling towers and combustion turbine generator stacks may adversely affect aircraft flying directly over the power plant below an elevation of 1,000 feet above ground level.

Verification: The project owner shall provide to the CPM a copy of the transmittal letter submitted to the CHP, Humboldt Area Office. The project owner shall provide any written comment(s) received on the written notification from the CHP, Humboldt Area Office to the CPM for review.

Hazardous Materials Transport Restriction

~~**TRANS-5** During operation, the project owner shall schedule delivery of hazardous materials to the HBRP site so as not to coincide with school bus traffic along King Salmon Avenue.~~

Comment: Deletion of TRANS-5 dependent on revision of HAZ-3.

~~**Verification:** At least 60 days prior to start of operation, the project owner shall submit a hazardous materials transport plan and implementation program to the CPM for review and approval that describes how the project owner will conform to this restriction. The project owner shall consult with the South Bay Union School District and the Eureka City Unified School District in developing the plan. The submittal to the CPM shall include evidence that the school districts were consulted.~~

Encroachment Permit

TRANS-6 Prior to any ground disturbance or obstruction of traffic (for example, temporary delays) within any public road, easement, or ROW, the project owner or its contractor(s) shall coordinate with the Humboldt County Public Works Department and Caltrans (if applicable) and obtain all required permits. All activities by the project owner or its contractor(s) shall comply with the applicable requirements of any affected local jurisdiction and Caltrans.

Verification: At least 20 days prior to ground disturbance or interruption of traffic in or along any public road, easement, or ROW, the project owner shall provide copies of all permit(s) received from Caltrans or other affected jurisdiction to the CPM. In addition, the project owner shall retain copies of the issued/approved permit(s) and supporting documentation in its compliance file for a minimum of 180 calendar days after the start of commercial operation.

HUMBOLDT BAY REPOWERING PROJECT
REVISED DRAFT VISUAL RESOURCES CONDITIONS OF CERTIFICATION
January 7, 2008

Staff proposes the following revised draft conditions of certification, shown below. Deleted text is in strikethrough, new text is **underlined and bolded**.

PROPOSED CONDITIONS OF CERTIFICATION

Construction Lighting

VIS-1 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:

- a) All lighting shall be of minimum necessary brightness consistent with worker safety and security;
- b) All fixed position lighting shall be shielded/hooded, ~~and directed to~~ **direct light** downward and toward the area to be illuminated to prevent direct illumination of the night sky and direct light trespass (direct light extending outside the boundaries of the power plant site or the site of construction of ancillary facilities, including any security related boundaries);
- c) Wherever feasible and safe and not needed for security, lighting shall be kept off when not in use; and
- d) If the project owner receives a complaint about construction lighting, the project owner shall notify the Compliance Project Manager (CPM) and shall use the complaint resolution form shown in the General Conditions section of the Compliance Plan to record each lighting complaint and to document the resolution of that complaint. The project owner shall provide a copy of each complaint form to the CPM.

Verification: Within seven days after the first use of construction lighting, 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 to minimize impacts, within 15 days of receiving that notification the project owner shall implement the necessary modifications and notify the CPM that the modifications have been completed.

Within 48 hours of receiving a lighting complaint, the project owner shall provide to the CPM a) a report of the complaint b) a proposal to resolve the complaint, and c) a schedule for implementation of the proposal. The project owner shall notify the CPM within 48 hours after completing implementation of the proposal.

The project owner shall provide a copy of the completed complaint resolution form to the CPM in the next Monthly Compliance Report.

Surface Restoration

VIS-2 The project owner shall remove all evidence of construction activities, and shall restore the ground surface to the original condition or better condition, including the replacement of any vegetation or paving removed during construction where project development does not preclude this. The project owner shall submit to the CPM for review and approval a surface restoration plan the proper implementation of which will satisfy these requirements. The project owner shall complete surface restoration within 60 days after the start of commercial operation. If the identified ground surface area has been specifically included in an approved biological resources mitigation plan by the California Energy Commission the timeframe specified in the mitigation plan for completion of restoration of the ground surface area shall apply.

Verification: At least 60 days prior to the start of commercial operation, the project owner shall submit the surface restoration plan to the CPM for review and approval.

If the CPM notifies the project owner that any revisions of the surface restoration plan are needed, within 30 days of receiving that notification the project owner shall submit to the CPM a plan with the specified revisions.

The project owner shall complete surface restoration within 60 days after the start of commercial operation unless the timeframe is specific otherwise in a biological resources mitigation plan approved by the California Energy Commission. The project owner shall notify the CPM within seven days after completion of surface restoration that the restoration is ready for inspection.

Surface Treatment of Project Structures and Buildings

VIS-3 The project owner shall color and finish the surfaces of all project structures and buildings visible to the public to ensure that they: (1) minimize visual intrusion and contrast by blending with the landscape; (2) minimize glare; and (3) comply with local design policies and ordinances. The transmission line conductors shall be non-specular and non-reflective, and the insulators shall be non-reflective and non-refractive.

The project owner shall submit a surface treatment plan to the CPM for review and approval. The surface treatment plan shall include:

- a) A description of the overall rationale for the proposed surface treatment, including the selection of the proposed color(s) and finishes;

- b) A list of each major project structure **and building (e.g., building, tank, pipe, and wall; transmission line towers and/or poles; and fencing)**, specifying the color(s) and finish proposed for each. Colors must be identified by vendor, name, and number; or according to a universal designation system;
- c) One set of color brochures or color chips showing each proposed color and finish;
- d) ~~One set of 11" x 17" color photo simulations at life-size scale of the proposed treatment for project structures, including structures treated during manufacture at the least from KOP 1, KOP 2, and KOP 3 (Visual Resources Figures 13, 15, and 18);~~
- e) A specific schedule for completing the treatment; and
- f) A procedure to ensure proper treatment maintenance for the life of the project.

The project owner shall not request vendor **surface** treatment of any buildings or structures during their manufacture, or perform final field treatment on any buildings or structures, until the project owner has received treatment plan approval by the CPM.

The project owner shall notify the CPM that surface treatment of all listed structures and buildings has been completed and is ready for inspection; and shall submit one set of electronic color photographs from the selected KOPs 1, 2, and 3 showing the "as built" surface treated structures and buildings.

Verification: At least 45 days prior to specifying **applying** vendor color(s) and finish(es) for structures or buildings to be surface treated during manufacture, the project owner shall submit the proposed treatment plan to the CPM for review and approval, and simultaneously to the **Executive Director of the California Coastal Commission for review.** The project owner shall allow the **Executive Director of the California Coastal Commission** at least 30 days to provide comment on the submitted surface treatment plan.

The project owner shall provide to the CPM a copy of the transmittal letter submitted to the **Executive Director of the California Coastal Commission** requesting their review of the submitted surface treatment plan.

If the CPM determines that the plan requires revision, the project owner shall provide to the CPM a plan with the specified revision(s) for review and approval by the CPM before any treatment is applied. Any modifications to the treatment plan must be submitted to the CPM for review and approval.

If the CPM determines that the plan requires revision, the project owner shall provide to the **Executive Director of the California Coastal Commission** a plan with the specified revision(s) for review before the plan is implemented.

Within ninety (90) days after the start of commercial operation, the project owner shall notify the CPM that surface treatment of all listed structures and buildings has been completed and is ready for inspection; and shall submit one set of electronic color photographs from the selected KOPs 1, 2, and 3, at the least, **showing the "as built" surface treated structures and buildings.**

The project owner shall provide a status report regarding surface treatment maintenance in the Annual Compliance Report. The report shall specify a) the condition of the surfaces of all structures and buildings at the end of the reporting year; b) maintenance activities that occurred during the reporting year; and c) the schedule of maintenance activities for the next year.

Permanent Exterior Lighting

VIS-4 To the extent feasible, consistent with safety and security considerations and commercial availability, the project owner shall design and install all permanent exterior lighting such that a) light fixtures do not cause obtrusive spill light beyond the project site; b) lighting does not cause excessive reflected glare; c) direct lighting does not illuminate the nighttime sky; d) illumination of the project and its immediate vicinity is minimized, and e) lighting complies with local policies and ordinances. The project owner shall submit to the CPM for review and approval and simultaneously to the **Executive Director of the California Coastal Commission** for review and comment a lighting mitigation **management** plan that includes the following:

- a) A process for addressing and mitigating **lighting related** complaints received about potential lighting impacts;
- b) Lighting shall incorporate commercially available fixture hoods/shielding, with light directed downward or toward the area to be illuminated;
- c) ~~Light fixtures shall not cause obtrusive spill light beyond the project boundary;~~
- d) All lighting shall be of minimum necessary brightness consistent with operational safety and security; and
- e) Lights in high illumination areas not occupied on a continuous basis (such as maintenance platforms) shall have (in addition to hoods) switches, timer switches, or motion detectors so that the lights operate only when the area is occupied.

Verification: At least 45 days prior to ordering any permanent exterior lighting, the project owner shall contact the CPM to determine the required documentation for the lighting ~~mitigation~~ management plan.

At least 60 days prior to ordering any permanent exterior lighting, the project owner shall submit to the Executive Director of the California Coastal Commission for review and ~~comment~~ a lighting ~~mitigation~~ management plan. The project owner shall allow the Executive Director of the California Coastal Commission at least 30 days to provide comment on the submitted lighting plan.

The project owner shall provide to the CPM a copy of the transmittal letter submitted to the Executive Director of the California Coastal Commission requesting their review of the submitted lighting plan.

The project owner shall provide the Executive Director of the California Coastal Commission comments to the CPM at least 10 days prior to the date lighting materials are ordered.

If the CPM determines that the lighting management plan requires revision, the project owner shall provide to the CPM a plan with the specified revision(s) for review and approval by the CPM before any treatment is applied. Any modifications to the ~~treatment~~ lighting management plan must be submitted to the CPM for review and approval.

The project owner shall not order any exterior lighting until receiving CPM approval of the lighting ~~mitigation~~ management plan.

Prior to commercial operation, the project owner shall notify the CPM that the lighting has been installed and is ready for inspection. If after inspection the CPM notifies the project owner that modifications to the lighting are needed, within 30 days of receiving that notification the project owner shall implement the modifications and notify the CPM that the modifications have been completed and are ready for inspection.

Within 10 days of receiving a lighting complaint, the project owner shall provide the CPM with a complaint resolution form report as specified in the Compliance General Conditions including a proposal to resolve the complaint, and a schedule for implementation. The project owner shall notify the CPM within 10 days after completing implementation of the proposal. A copy of the complaint resolution form report shall be submitted to the CPM within 30 days of complaint resolution.

Landscaping

VIS-5 The project owner shall install landscaping consistent with the draft landscape plan, dated February 7, 2007, shown on **Visual Resources Figures 11a** and **Figure 11b**. The project owner shall submit to the CPM for review and approval and simultaneously to the Executive Director of the California Coastal Commission for review and comment a landscaping plan.

The Executive Director of the California Coastal Commission shall have 30 calendar days to review the landscaping plan and provide written comments to the project owner. The project owner shall provide a copy of the Executive Director of the California Coastal Commission's written comments to the CPM for review and approval.

The project owner shall not implement the landscaping 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.

Verification: Prior to commercial operation and at least 45 days prior to installing the landscaping, the project owner shall provide a copy of the landscaping plan to the Executive Director of the California Coastal Commission for review written comment. The project owner shall allow the Executive Director of the California Coastal Commission at least 30 days to provide comment on the submitted landscaping plan.

The project owner shall provide to the CPM a copy of the transmittal letter submitted to the Executive Director of the California Coastal Commission requesting their review of the submitted landscaping plan.

If the CPM determines that the plan requires revision, the project owner shall provide to the CPM, and the Executive Director of the California Coastal Commission a landscaping plan with the specified revision(s) for review, and to the CPM for final approval before the plan is implemented.

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

Signage

VIS-6 The project owner shall install minimal signage visible to the public, which shall a) have unobtrusive colors and finishes that prevent excessive glare; and b) be consistent with the policies and ordinances stipulated in the certified Humboldt County Local Coastal Program if the signage is to be located within the state designated coastal zone, or the applicable ordinances of the county of Humboldt if the signage is to be located outside of the coastal zone. The design of any signs required by safety regulations shall conform to the criteria established by those regulations. The project owner shall submit a signage plan for the project to the CPM for review and approval and simultaneously to the Executive Director of the California Coastal Commission, or the Humboldt County Community Development Services Department, Planning Division, if applicable, for review and comment. The project owner shall not implement the plan install any signage until the project owner receives approval of the submittal from the CPM.

Verification: Prior to the start of commercial operation and at least 60 days prior to installing signage, the project owner shall submit the signage plan to the CPM for review and approval and simultaneously to the **Executive Director of the California Coastal Commission, or the** Humboldt County Community Development Services Department, Planning Division, **if applicable**, for review and comment.

If the CPM determines that the **signage** plan requires revision, the project owner shall provide to the CPM a **signage** plan with the specified revision(s) for review and approval by the CPM before any signage visible to the public is installed.

The project owner shall provide the CPM with electronic color photographs after completing installation of signage.

REFERENCES

Buhyoff, G.J., P.A. Miller, J.W. Roach, D. Zhou, and L.G. Fuller. 1994. An AI methodology for Landscape Visual Assessments. AI Applications Vol. 8, No 1

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COC2007a - California Coastal Commission website:
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BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE
STATE OF CALIFORNIA

APPLICATION FOR CERTIFICATION FOR THE
HUMBOLDT BAY REPOWERING PROJECT
BY PACIFIC GAS AND ELECTRIC COMPANY

Docket No. 06-AFC-7
PROOF OF SERVICE
(Revised 10/25/07)

INSTRUCTIONS: All parties shall 1) send an original signed document plus 12 copies OR 2) mail one original signed copy AND e-mail the document to the web address below, AND 3) all parties shall also send a printed OR electronic copy of the documents that shall include a proof of service declaration to each of the individuals on the proof of service:

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DECLARATION OF SERVICE

I, April Esau, declare that on January 15, 2008, I deposited copies of the attached Summary of the December 14, 2007 Preliminary Staff Assessment Workshop for the Humboldt Bay Repowering Project (06-AFC-7) in the United States mail at Sacramento, CA with first-class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above.

OR

Transmission via electronic mail was consistent with the requirements of 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.



April Esau