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## North Coast Regional Water Quality Control Board

June 22, 2016

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**In the Matter of**  
**Water Quality Certification**  
**for the**  
**Humboldt Bay Power Plant Final Site Restoration Plan Implementation**  
**Project**

APPLICANT: Pacific Gas and Electric Company  
RECEIVING WATER: Humboldt Bay  
HYDROLOGIC UNIT: Eureka Plain Hydrologic Unit, No. 110.00  
COUNTY: Humboldt  
FILES: PG&E Humboldt Bay Power Plant Final Site Restoration Plan  
Implementation; ECM PIN CW-816482;  
WDID No. 1B15086WNHU

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### FINDINGS BY THE EXECUTIVE OFFICER:

1. On May 18, 2016, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application from the Pacific Gas and Electric Company (Applicant) requesting Federal Clean Water Act (CWA), section 401 Water Quality Certification (certification) for the Humboldt Bay Power Plant Final Site Restoration Plan Implementation Project (Project).
2. **Public Notice:** Information describing the Project was noticed for public comment on the Regional Water Board's website on July 9, 2015. No comments were received.
3. **Receiving Waters:** The proposed Project will cause disturbances to jurisdictional wetlands in the Eureka Plain.

4. **Project Description:** The Applicant is currently decommissioning three separate, defunct power generating units, and has already constructed one new active generating facility at 1000 King Salmon Ave., in the City of Eureka. The three defunct generating units were components of the “Humboldt Bay Power Plant” (HBPP). The new power generating facility is referred to as the “Humboldt Bay Generating Station.”

Decommissioning activities have resulted in requirements to restore previously disturbed areas and implement mitigation to compensate for development impacts to jurisdictional resources. The purpose of the Project is to implement site restoration activities that are required as a component of formally decommissioning the HBPP units. Requirements associated with site restoration activities include restoring the lands formerly occupied by the defunct units, implementing mitigation requirements for impacts to jurisdictional waters, and installing permanent storm water treatment controls.

The Project involves the on-site reuse of low-level radioactive soils. This certification does not authorize or provide criteria for any cleanup or reuse of contaminated soils. Cleanup and reuse of contaminated soils are subject to the Applicant’s License Termination Plan as approved by the Nuclear Regulatory Commission.

Impacts and mitigation associated with construction of the Humboldt Bay Generating Station are addressed in a separate 401 water quality certification issued to the Applicant on October 10, 2008. Another separate 401 water quality certification was issued to the Applicant on April 18, 2014, to address impacts to jurisdictional waters associated with the Intake/Discharge Canal Remediation Project (Canal Remediation certification).

The Applicant has divided the Project site into the following twelve functional areas to facilitate the Project description:

- Buhne Point;
- Independent Spent Fuel Storage Installation (ISFSI) and ISFSI Support Area;
- Trailer City;
- HBPP Core;
- Intake Canal;
- Buhne Point Wetland Preserve;
- Buhne Slough Salt Marsh.
- Bayview Heights;
- Duck Pond;
- HBGS/60 kV Substation;
- Assembly Building Area;
- Contractor Parking Lot #1; and

Project elements within nine of the twelve functional areas include, but are not limited to:

***Buhne Point***

- Abandonment of Charlie Road, restoration of wetlands, and construction of a new road to access the ISFSI area;

### ***ISFSI and ISFSI Support Area***

- Creation of new wetlands in a portion of the existing Contractor Parking Area #1;
- Construction of a new culvert beneath the new ISFSI access road to connect a biodetention basin in the Core area with a detention basin in the ISFSI area;
- Remediation of an area of contamination associated with the former Liquid Fuel Tank #2 (formerly at the site of the Count Room) in the Frog Pond area;
- Reconfiguration of the Frog Pond as part of the ISFSI "Support Stormwater Detention Basin;"
- Construction of a biodetention basin;
- Restoration of the western portion of Contractor Parking Lot #2 to pre-project conditions;

### ***Bayview Heights***

- Excavation, grading, and possible on-site reuse of soil that may contain low levels of radioactivity;
- Soil excavation and testing to confirm the presence of lead and other potential contamination and remediation as appropriate;
- After the ongoing Canal Remediation Project is complete, up to 55,000 cubic yards of clean soils from on-site will be placed into the Discharge Canal, graded, and planted with coastal bluff scrub vegetation. Before then, the excavated canal will be used as a basin for interim storage of soils excavated during the Reactor Vessel Caisson/Spent Fuel Pool Removal Decommissioning Project;
- Stabilization of slopes exceeding 3:1 (H:V);
- Building demolition and construction trailer removal;

### ***Trailer City***

- Creation of the "Shoreline Wetlands Mitigation Area." The created wetlands will connect with the existing brackish marsh wetland (i.e., the "Duck Pond");
- Grading of the area to pre-development elevations, including removal and characterization of approximately 30,000 cubic yards of earthen material, which is proposed for on-site reuse;
- Creation of a biodetention basin at the southern edge of Trailer City, to treat storm water runoff from the Bayview Heights and HBPP Core areas. The basin will outlet to the Shoreline Wetlands Mitigation Area;
- Removal of remnant hazardous waste surface impoundment structures. The Department of Toxic Substances Control approved a clean closure of the impoundments in 1997;
- Soil investigation to confirm presence of lead and define volume of soil to be removed;

- Soil characterization will be performed to determine whether there is any radiological contamination;
- Removal of sanitary sewer piping, sewer lift station, fire and domestic water lines, and communication lines;

#### ***HBPP Core***

- Construction of a bioretention basin to pre-treat storm water runoff from the site before being conveyed to the Assembly Building storm water detention basin;

#### ***Intake Canal***

- Modification of the intersection of Alpha Road and King Salmon Avenue to meet at a 90-degree intersection angle and conform with Humboldt County specifications;
- Replacement of the existing culvert beneath Alpha Road that connects an intermittent drainage with Buhne Slough;
- Removal of a 105-foot-long by 10-foot-wide intake canal pedestrian bridge and its concrete foundations;
- The Alpha Road Parking Lot will be removed and excavated and joined with the Intake Canal to create mitigation required by the Canal Remediation certification;
- Two small, leveled and open parking areas along the south side of Alpha Road will be restored to Coastal bluff scrub vegetation;

#### ***Assembly Building Area***

- Restoration of the Assembly Building parking area to natural conditions;
- Improvement and repaving of Bravo Road;
- Creation of a storm water pre-treatment area and bioretention basin to treat storm water;
- Construction of a storm water detention basin to collect and treat storm water from Buhne Point Hill, the IFSI area, and the Waste Management Building area, before being released to the Buhne Point Wetland Preserve. The basin will be located in portions of the former Assembly Building parking lot area and the existing Frog Pond;

#### ***Contractor Parking Lot #1***

- Removal of the existing graveled parking area and conversion of the site to freshwater wetlands.

#### ***Buhne Point Wetland Preserve***

The Buhne Point Wetland Preserve (Preserve) includes coastal salt marsh and freshwater wetlands, and was established in 2008 to mitigate for impacts to wetlands resulting from of the HBGS and HBPP decommissioning. Tidal flow is maintained to

the salt water portion of the Preserve via an inflow-outflow pipe to the HBPP intake canal. Proposed activities at the Preserve include:

- Replace the existing culvert beneath Bravo Road that connects the HBPP intake canal with the Buhne Pointe Wetland Preserve;
  - Replace the existing culvert beneath Bravo Road that connects the HBPP intake canal with the Frog Pond;
  - Restoration of the Preserve fringe with native species;
  - Replacement of selected non-native trees with native ones and planting of native shrubs and herbaceous species;
  - Removal of the contractor pedestrian trail and restoration of the area; and
  - Restore contractor parking lot #2 to natural vegetation.
5. **Construction Timing:** Project implementation is expected to last 16 months and occur between June 27, 2016, and October 18, 2017.
6. **Project Impacts:** Project implementation would result in approximately 0.434 acres of permanent and 0.261 acres of temporary impacts to jurisdictional estuarine and freshwater wetlands. Permanent and temporary impacts are summarized in the below tables.

**Table 1: Permanent Impacts to Jurisdictional Wetlands**

Activity	Functional Area	Water Body	Permanent Impact Area (acres)
Grading, storm water treatment	ISFSI and ISFSI Support Area	Frog Pond	0.295
Alpha Road realignment	Intake Canal	Buhne Slough	0.001
Biodetention basin construction	Trailer City	Drainage to Shoreline Wetlands Mitigation Area	0.023
Grading	Bayview Heights	Remnant drainage ditch and perched seasonally flooded low area	0.112
<i>Total:</i>			0.434 acres

**Table 2: Temporary Impacts to Jurisdictional Wetlands**

Activity	Functional Area	Water Body	Temporary Impact Area (acres)
Alpha Road realignment, construction access	Intake Canal	Buhne Slough	0.050
Mitigation wetland grading	Trailer City	Duck Pond	0.100
Construction access for culvert replacement	Buhne Point Wetland Preserve	Buhne Point Wetlands	0.018
Mitigation wetland grading	Contractor Parking Lot #1	King Salmon Ave. roadside wetland	0.063

Activity	Functional Area	Water Body	Temporary Impact Area (acres)
Culvert replacement and bridge footing removal	Intake Canal	Intake canal	0.036
Construction access for culvert replacement	Intake Canal	Drainage to Buhne Slough from Alpha parking lot	0.005
Wetland enhancement	Trailer City	Drainage to Shoreline Wetlands Mitigation Area	0.016
<i>Total:</i>			0.261 acres

7. **Mitigation for Project Impacts:** To mitigate for permanent impacts to 0.434 acres of jurisdictional wetlands, the Applicant shall:
- Create no less than 0.638 acres of wetlands at the Shoreline Wetlands Mitigation Area, at the current location of Trailer City. These wetlands will be hydraulically connected to the existing Duck Pond; and
  - Create no less than 0.234 acres of wetland adjacent King Salmon Ave., in the existing Contractor Parking Lot #1 area.

The above mitigation acreages would be a portion of total wetland creation in the respective areas, as additional creation would be implemented to satisfy other regulatory permit requirements.

To mitigate for temporary impacts to 0.261 acres of jurisdictional wetlands, the Applicant proposes to restore all temporarily impacted areas with native species and remove invasive species in existing wetlands.

The Applicant has prepared an Eelgrass Mitigation and Monitoring Plan that provides eelgrass avoidance measures and mitigation measures in the event of unintended eelgrass impacts during work in the Intake Canal.

8. **Disturbed Soil Area:** Project implementation will result in greater than one acre of disturbed soil area. The Applicant shall obtain coverage under the National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ) and prepare a Stormwater Pollution Prevention Plan detailing best management practices (BMPs) to control pollution from the Project area during construction. All temporarily disturbed areas within the Project area shall be appropriately stabilized and/or replanted with appropriate native vegetation.
9. **Other Agency Actions:** The Applicant has applied to the United States Army Corps of Engineers for coverage under Nationwide Permit Nos. 3, *Maintenance*, 18, *Minor Discharges*, 38, *Cleanup of Hazardous and Toxic Wastes*, and 43, *Stormwater*

*Management Facilities*, pursuant to section 404 of the Clean Water Act. The Applicant is consulting with the United States (U.S.) Fish and Wildlife Service and the U.S. National Marine Fisheries Service to determine whether Project implementation may result in impacts to special-status species. The Applicant has also applied for a Coastal Development Permit from the California Coastal Commission.

10. **CEQA Compliance:** As lead agency, the Humboldt Bay Harbor Recreation and Conservation District prepared a Mitigated Negative Declaration for the Project (SCH no. 2015062028). The Applicant signed a Notice of Determination adopting the Mitigated Negative Declarations on August 27, 2015, in order to comply with the California Environmental Quality Act.
11. **Antidegradation Policy:** The federal antidegradation policy requires that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. This certification is consistent with applicable federal and State antidegradation policies, as it does not authorize the discharge of increased concentrations of pollutants or increased volumes of treated wastewater, and does not otherwise authorize degradation of the waters affected by this Project.
12. This discharge is also regulated under State Water Resources Control Board Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification," which requires compliance with all conditions of this water quality certification. The Order may be accessed at this web address:  
[http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2003/wqo/wqo2003-0017.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0017.pdf)

Receiving Water:	Humboldt Bay	
Filled and/or Excavated Areas:	Permanent impacts to jurisdictional wetlands:	0.434 acres
	Temporary impacts to jurisdictional wetlands:	0.261 acres
Latitude/Longitude:	40.741, -124.213 <sup>1</sup>	

<sup>1</sup> WGS84 datum

Certification Expiration:	June 22, 2021
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Accordingly, based on its independent review of the record, the Regional Water Board certifies that the Humboldt Bay Power Plant Final Site Restoration Plan Implementation Project (WDID No. 1B15086WNHU) as described in the application will comply with sections 301, 302, 303, 306 and 307 of the Clean Water Act, and with applicable provisions of state law, provided that the Applicant complies with the following terms and conditions:

**All conditions of this certification apply to the Applicant (and their employees) and all contractors (and their employees), sub-contractors (and their employees), and any other entity or agency that performs activities or work on the Project as related to this Water Quality Certification.**

### **Project-Specific Conditions**

1. The Applicant shall implement the *Biological Mitigation and Monitoring Plan for the Humboldt Bay Power Plant Final Site Restoration Project*, dated April 2016 (MMP), and create no less than 0.638 acres of brackish marsh wetlands at the Shoreline Wetlands Mitigation Area, and create no less than 0.234 acres of seasonal freshwater wetland adjacent King Salmon Ave., in the existing Contractor Parking Lot #1 area.
2. Mitigation success shall be subject to the review and acceptance by Regional Water Board staff, and shall not be considered successful until a minimum of five years of monitoring has occurred.
3. The Applicant shall implement the *Eelgrass Mitigation and Monitoring Plan for the Humboldt Bay Power Plant Final Site Restoration Project*, dated April 2016. Deviations from this plan are subject to the prior review and acceptance of Regional Water Board staff.

### **Project-Specific Conditions Requiring Reports**

4. Annual mitigation and monitoring reports shall be submitted annually for no less than five years following mitigation implementation (Reports). Reports shall be submitted to the Regional Water Board by January 31 and detail the monitoring results from the prior calendar year. The year 1 report shall be due January 31, 2018. Reports shall include:
  - Maintenance activities performed
  - Monitoring methods
  - Monitoring results
  - Time-series photographs
  - Status of achievement towards success criteria; and
  - Recommendations for adaptive management.

### **Standard Conditions**

5. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Water Code section 13330 and title 23, California Code of Regulations, section 3867.
6. This certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to title 23, California Code of Regulations, section 3855, subdivision (b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
7. The validity of this certification is conditioned upon total payment of any fee required under title 23, California Code of Regulations, section 3833, and owed by the Applicant. The total application fee is \$4,541. The Regional Water Board received \$600 from the Applicant on July 8, 2016, and \$3,941 on June 13, 2016.
8. This certification will be subject to annual billing during the construction phase ("Annual Active Discharge Fee") and during the monitoring phase of the Project ("Annual Post Discharge Monitoring Fee"), per the current fee schedule, which can be found on our website:  
[http://www.swrcb.ca.gov/northcoast/water\\_issues/programs/water\\_quality\\_certification.shtml](http://www.swrcb.ca.gov/northcoast/water_issues/programs/water_quality_certification.shtml). These fees will be automatically invoiced to the Applicant.
9. The Applicant shall notify the Regional Water Board upon Project construction completion to request termination of the Annual Active Discharge Fee and to receive a "Notice of Completion of Discharges Letter." If the Project is subject to the Annual Post Discharge Monitoring Fee, then the Applicant shall also notify the Regional Water Board at the end of the monitoring period to request termination of the fee and receive a "Notice of Project Complete Letter." The Applicant may be required to submit completion reports at the end of each of these phases. Regional Water Board staff may request site visits at the end of each Project phase to confirm Project status and compliance with this certification.
10. This certification does not authorize drafting of surface waters. Any drafting of surface waters shall be in compliance with State water rights law and diversion requirements overseen by the State Water Resources Control Board's Division of Water Rights.
11. Herbicides and other pesticides shall not be used within the Project limits. If the Applicant has a compelling case as to why pesticides should be used, then a request for pesticide use and a BMP plan may be submitted to the Regional Water Board staff for review and acceptance.

12. Only wildlife-friendly, 100 percent biodegradable erosion and sediment control products that will not entrap or harm wildlife shall be used. Erosion and sediment control products shall not contain synthetic (e.g., plastic or nylon) netting. Photodegradable synthetic products are not considered biodegradable. The Applicant shall request approval from the Regional Water Board if an exception from this requirement is needed for a specific location.
13. BMPs shall be implemented as proposed in the application materials. BMPs for erosion, sediment and turbidity control shall be implemented and in place at commencement of, during and after any ground clearing activities or any other Project activities that could result in erosion or sediment discharges to surface water. Severe and unseasonal rain events are becoming more frequent due to the effects of climate change. Therefore, BMPs shall be immediately available for deployment at all times to prevent discharges to waters of the state.
14. The Applicant is prohibited from discharging waste to waters of the State, unless explicitly authorized by this certification. For example, no debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete washings, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature, other than that authorized by this certification, shall be allowed to enter into or be placed where it may be washed by rainfall into waters of the state. When operations are completed, any excess material or debris shall be removed from the work area.
15. The Applicant is liable and responsible for the proper disposal, reuse, and/or recycling of all Project-generated waste in compliance with applicable State and Federal laws and regulations.
16. The Applicant shall provide Regional Water Board staff access to the Project site to document compliance with this certification.
17. Work in flowing or standing surface waters, unless otherwise proposed in the project description and approved by the Regional Water Board, is prohibited.
18. If, at any time, an unauthorized discharge to surface water (including wetlands, lakes, rivers or streams) occurs, or any water quality problem arises, the associated Project activities shall cease immediately until adequate BMPs are implemented including stopping work. The Regional Water Board shall be notified promptly and in no case more than 24 hours after the unauthorized discharge or water quality problem arises.
19. All Project activities shall be implemented as described in the submitted certification application package and the findings and conditions of this certification. Subsequent Project changes that could significantly impact water quality shall first be submitted

to Regional Water Board staff for prior review, consideration, and written concurrence. If the Regional Water Board is not notified of a significant alteration to the Project, it will be considered a violation of this certification, and the Applicant may be subject to Regional Water Board enforcement actions.

20. Prior to implementing any change to the Project that may be a material change as defined in California Water Code section 13260(c) as a proposed change in character, location, or volume of the discharge, the Applicant shall obtain prior written approval of the Regional Water Board Executive Officer. If the Regional Water Board is not notified of the material change to the discharge, it will be considered a violation of this certification, and the Applicant may be subject to Regional Water Board enforcement action(s).
21. The Applicant shall provide a copy of this certification and State Water Resources Control Board (SWRCB) Order No. 2003-0017-DWQ to any contractor(s), subcontractor(s), and utility company(ies) conducting work on the Project, and shall require that copies remain in their possession at the work site. The Applicant shall be responsible for ensuring that all work conducted by its contractor(s), subcontractor(s), and utility companies is performed in accordance with the information provided by the Applicant to the Regional Water Board.
22. Disturbance or removal of existing vegetation shall not exceed the minimum necessary to complete the Project.
23. Fueling, lubrication, maintenance, storage, and staging of vehicles and equipment shall not result in a discharge or threatened discharge to any waters of the state including dry portions of the shoreline. At no time shall the Applicant or its contractors allow use of any vehicle or equipment, which leaks any substance that may impact water quality.
24. The Applicant shall not use leaking vehicles or equipment within State waters or riparian areas. Vehicles and equipment used within State waters shall be checked for leaks at the beginning of each work day.
25. In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under applicable state or federal law. For the purposes of section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this certification. In response to a suspected violation of any condition of this certification, the State Water Board may require the holder of any federal permit or license subject to this certification to furnish, under penalty of perjury, any technical or monitoring

reports the State Water Board deems appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In response to any violation of the conditions of this certification, the Regional Water Board may add to or modify the conditions of this certification as appropriate to ensure compliance.

26. The Regional Water Board may add to or modify the conditions of this certification, as appropriate, to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.
27. In the event of any change in control of ownership of land presently owned or controlled by the Applicant, the Applicant shall notify the successor-in-interest of the existence of this certification by letter and shall email a copy of the letter to the following email address: [NorthCoast@waterboards.ca.gov](mailto:NorthCoast@waterboards.ca.gov).

The successor-in-interest shall email the Regional Water Board Executive Officer at: [NorthCoast@waterboards.ca.gov](mailto:NorthCoast@waterboards.ca.gov) to request authorization to discharge dredged or fill material under this certification. The request must contain the following:

- i) Effective date of ownership change;
  - ii) Requesting entity's full legal name;
  - iii) The state of incorporation, if a corporation;
  - iv) The address and phone number of contact person; and
  - v) A description of any changes to the Project or confirmation that the successor-in-interest intends to implement the project as described in this certification.
28. Except as may be modified by any preceding conditions, all certification actions are contingent on:
    - i) The discharge being limited to and all proposed mitigation being completed in strict compliance with the Applicant's Project description and CEQA documentation, as approved herein; and
    - ii) Compliance with all applicable water quality requirements and water quality control plans including the requirements of the Water Quality Control Plan for the North Coast Region (Basin Plan), and amendments thereto.
  29. The authorization of this certification for any dredge and fill activities expires on June 22, 2021. Conditions and monitoring requirements outlined in this certification are not subject to the expiration date outlined above, and remain in full effect and are enforceable.

**Condition 4 has requirements for information and reports.** Any requirement for a report made as a condition to this certification is a formal requirement pursuant to California Water Code section 13267, and failure or refusal to provide, or falsification of such required report is subject to civil liability as described in California Water Code, section 13268.

If you have any questions or comments, please call Brendan Thompson of my staff, at (707) 576-2699, or via e-mail at [Brendan.Thompson@waterboards.ca.gov](mailto:Brendan.Thompson@waterboards.ca.gov).

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Matthias St. John  
Executive Officer

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