

DOCKETED

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Project Title:	Duke Energy North American's Moss Landing Power Plant Modernization Project (Compliance)
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CALIFORNIA ENERGY COMMISSION

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NOTICE OF DETERMINATION PETITION TO AMEND THE MOSS LANDING POWER PLANT PROJECT (99-AFC-4C)

On July 25, 2016, Dynegy Moss Landing, LLC (DML) filed a petition with the California Energy Commission requesting to amend the Moss Landing Power Plant, Docket No. 99-AFC-4C. The combined-cycle, natural gas-fired, 1,060 megawatt (MW) facility was certified by the Energy Commission in its October 25, 2000 Final Decision (Decision), and began commercial operation on July 11, 2002. The facility is located at the existing Moss Landing Power Plant site, at the intersection of Highway 1 and Dolan Road, east of the community of Moss Landing, near the Moss Landing Harbor, Monterey County.

The project replaced existing electric power boiler generation Units 1-5 (a total of 613 MWs built in the 1950s and shut down in 1995) with two 510 MW, natural gas-fired, combined-cycle units (Unit 1 and Unit 2). Units 1 and 2 each consists of two natural gas-fired combustion turbine generators (CTGs), two unfired heat recovery steam generators (HRSGs) and a reheat, condensing steam turbine generator (STG). Units 1 and 2 both use seawater for once-through cooling of the steam portion of the combined-cycle units.

DESCRIPTION OF PROPOSED MODIFICATION

In October 2014, DML entered a Settlement Agreement with the California State Water Resources Control Board (SWRCB) addressing requirements under the SWRCB's Water Quality Control Policy on the Use of Coastal and Estuarine Water for Power Plant Cooling. Paragraph 2.1.6.d in the Settlement Agreement states, "by December 31, 2016, Dynegy Moss Landing, LLC will install and operate variable speed drive controls on circulating water pumps serving Units 1 and 2."

The modifications proposed in this petition include the installation and operation of variable speed drive (VSD) controls on four of the six existing 4,160 Volt AC motors for the six circulating water pumps (CWP) serving Units 1 and 2. The VSDs will allow the plant to reduce circulating water flow when the units are not operating at full capacity by automatically matching motor speed to specific unit cooling load demands. The variable speed capability will allow greater control in reducing cooling water flow during certain unit loads that will reduce entrainment and impingement of marine organisms.

The Energy Commission's webpage for this facility, <http://www.energy.ca.gov/sitingcases/mosslanding/index.html>, has a link to the amendment petition on the right side of the webpage in the box labeled "Compliance Proceeding." Click on the "Documents for this Proceeding (Docket Log)" option.

ENERGY COMMISSION STAFF REVIEW AND DETERMINATION

Energy Commission staff reviewed the petition for potential environmental effects and consistency with the Energy Commission Decision and applicable laws, ordinances, regulations, and standards (LORS). Energy Commission staff has determined that the proposed modification would have no significant adverse impacts. In addition, the project modification would not significantly affect any population including the Environmental Justice population as shown in the attached **Figure 1 Environmental Justice Population Figure**. Staff's conclusions in each technical area are summarized in **Table 1**, below.

**Table 1
 Summary of Staff Responses to Petition**

TECHNICAL/ENVIRONMENTAL AREAS REVIEWED	STAFF RESPONSE			Revised Conditions of Certification Recommended
	Technical Area Not Affected	No Significant Environmental Impact*	Process As Amendment	
Air Quality		X	N/A	N/A
Biological Resources		X	N/A	N/A
Cultural Resources		X	N/A	N/A
Facility Design		X	N/A	N/A
Geological Resources	X		N/A	N/A
Hazardous Materials Management		X	N/A	N/A
Land Use		X	N/A	N/A
Noise and Vibration		X	N/A	N/A
Paleontological Resources	X		N/A	N/A
Power Plant Efficiency	X		N/A	N/A
Power Plant Reliability	X		N/A	N/A
Public Health		X	N/A	N/A
Socioeconomics		X	N/A	N/A
Soil and Water Resources		X	N/A	N/A
Traffic and Transportation		X	N/A	N/A
Transmission Line Safety and Nuisance	X		N/A	N/A
Transmission System Engineering	X		N/A	N/A
Visual Resources		X	N/A	N/A
Waste Management		X	N/A	N/A
Worker Safety and Fire Protection		X	N/A	N/A

* There is no possibility that the proposed modifications would have a significant effect on the environment, and the modifications would not result in a change in or deletion of a condition adopted by the Energy Commission in the Final Decision, or make changes that would cause project noncompliance with any applicable laws, ordinances, regulations, or standards (20 Cal. Code Regs., § 1769 (a)(2)).

Energy Commission technical staff reviewed the petition for potential environmental effects and consistency with applicable LORS. Staff has determined that the technical or environmental areas of Geological Resources, Paleontological Resources, Power Plant Efficiency, Power Plant Reliability, Transmission Line Safety and Nuisance, and Transmission System Engineering are not affected by the proposed changes.

For the technical or environmental areas of Air Quality, Biological Resources, Cultural Resources, Facility Design, Hazardous Materials Management, Land Use, Noise and Vibration, Public Health, Socioeconomics, Soil and Water Resources, Traffic and Transportation, Visual Resources, Waste Management, and Worker Safety and Fire Protection, staff has determined the modified project would continue to comply with applicable LORS and no changes are needed to any conditions of certification to ensure impacts would be less than significant. Staff notes the following for these technical or environmental areas:

AIR QUALITY

Staff has determined that since construction equipment use is temporary, stationary source air permits would not be required through the local air district. Diesel equipment would still be required to meet the State of California diesel requirements. The diesel equipment used would need to be registered (if applicable) through the Statewide Portable Equipment Registration Program or Diesel Off-road On-line Reporting System and associated equipment permits would be retained onsite. The equipment is expected to comply with all applicable LORS and significant impacts to air quality are not expected from the associated short-term construction. In addition, there are no proposed changes to the existing Air Quality conditions of certification from the Decision, and the project proponent will still need to comply with the existing Air Quality conditions of certification.

BIOLOGICAL RESOURCES

Staff has determined that since the petition proposes installation of the VSD controls within the previously disturbed project site on a cement slab that will be laid next to the circulating water pumps with minimal ground disturbance activities, the proposed modification would not have any impacts on biological resources. The VSDs will allow greater control in reducing cooling water flow and will reduce entrainment and impingement of marine organisms, effectively reducing the effect of the power plant on biological resources.

CULTURAL RESOURCES

Staff has determined that the proposed modifications will not result in a significant effect to cultural resources. The area surrounding the Moss Landing facility does contain sensitive cultural resources. Therefore, the project proponent will still need to comply with the Cultural Resources Conditions of Certification from the Final Decision, including

retention of a cultural resource specialist (**CUL-1**) and monitoring during all ground disturbing activity by a cultural resource specialist (**CUL-9**).

FACILITY DESIGN

The installation of the new prefabricated building and construction of its foundation must comply with the California Building Code and related engineering LORS. Implementation of the existing Facility Design conditions of certification adopted in the Decision would ensure this.

HAZARDOUS MATERIALS MANAGEMENT

The installation of a prefabricated building to house the four new VSDs for the four CWP's for Units 1 and 2 would not have a significant effect on power plant hazardous materials. No extremely hazardous or regulated hazardous materials will be used on site specifically for the installation of the prefabricated building and the new VSDs. Therefore, with petitioner's continued compliance with existing conditions of certification, **HAZ-1** specifically, the proposed modification would not have a significant effect on the environment and would continue to comply with all applicable LORS.

LAND USE

The proposed installation and operation of the VSDs on four circulating water pumps serving Units 1 and 2 would comply with the design standards specified in the Monterey County Zoning Ordinance and the North County Land Use Plan. Land use impacts would remain less than significant with the continued implementation of Condition of Certification **LAND-5** (construction signage) if the project owner displays temporary construction signage during the three to four month construction period.

NOISE AND VIBRATION

The VSDs would be installed in a prefabricated building that would be delivered to the project site and placed on a concrete slab near the CWP's. Construction work associated with this project would be the installation of this building and construction of its foundation. This work would be temporary and would occur during daytime hours. Any noise generated during these activities would result in a less than significant impact with implementation of the existing Noise and Vibration conditions of certification set forth in the section of the Decision. The changes proposed in this petition would have no effect on the plant's operational noise, since the VSDs would be located inside the building.

PUBLIC HEALTH

The proposed installation and operation of the VSDs on the CWP's would not affect facility emissions and the related possibility of impacts on public health. Existing Air Quality conditions of certification will continue to apply.

SOCIOECONOMICS

The proposed amendment would have a less than significant socioeconomic impact as the associated activities (install VSD controls inside new prefabricated building) would require three to four months of construction. Condition of Certification **SOCIO-1** from the Decision would be applicable to proposed amendment. **SOCIO-1** requires the project owner, its contractors, and subcontractors to recruit employees and procure materials and supplies within Monterey, Santa Cruz, and San Benito counties first before going outside of the local area for these resources.

SOIL AND WATER RESOURCES

Soil and Water Resources impacts would remain less than significant with continued implementation of the existing Soil and Water conditions of certification set forth in the Final Decision. The proposed installation of four VSD controls on four of the six existing CWPs for the Unit 1 and Unit 2 combined cycle units does not change the water supply or increase the project's water use or wastewater. The pump enclosure will be installed on an area previously occupied by equipment for Units 1-5.

TRAFFIC AND TRANSPORTATION

The additional trips generated by the worker pick-up, dump truck deliveries, and construction vehicles required for the project modification would be negligible and would not cause significant impacts to traffic level of service or transportation infrastructure. Appropriate permits for overweight vehicles and encroachments would be obtained through California Department of Transportation and Monterey County as required by Conditions of Certification **TRANS-1** and **TRANS-2**. Traffic and transportation system impacts would remain less than significant with continued implementation of the conditions of certification set forth in the Decision.

TRANSMISSION LINE SAFETY AND NUISANCE

Staff has determined that the proposed installation and operation of the VSDs on the CWPs would have no impacts on transmission line operations, meaning no impacts on safety and efficiency. The project proponent will still need to comply with the Transmission Line Safety and Nuisance conditions of certification from the Decision.

VISUAL RESOURCES

The new VSD controls and prefabricated building for equipment housing would not produce a significant impact to visual resources from offsite public views. The existing landscaping would screen views along Cabrillo Highway, the nearest public vantage point to the project modification. From other vantage points along the Elkhorn Slough, the visible profile of the project modification would match the profile of the existing structures. Visual resource impacts are expected to remain less than significant. Conditions of Certification **VIS-1**, **VIS-2**, **VIS-3**, and **VIS-4** set forth in the Decision, are still applicable.

WASTE MANAGEMENT

Staff concludes the proposed modifications would not have a significant negative effect on Waste Management or that the modifications would result in a change or deletion of a condition adopted by the Decision. Implementation of the existing Waste Management conditions of certification would ensure there are no significant impacts from the proposed project modifications and the project would be in compliance with applicable Waste Management LORS.

WORKER SAFETY AND FIRE PROTECTION

The installation of a prefabricated building to house the new four VSDs for the four CWPs for Units 1 and 2 would not have a significant effect on power plant worker safety. Activities to be performed during the construction duration required for the installation would comply with worker safety and fire safety requirements already contained in health and safety plans utilized for construction of the main facility per Condition of Certification **WORKER SAFETY-1** in the Decision.

Section 1769(a)(2) of Title 20, California Code of Regulations, states, "(w)here staff determines that there is no possibility that the modifications may have a significant effect on the environment, and if the modifications will not result in a change or deletion of a condition adopted by the commission in the final decision or make changes that would cause the project not to comply with any applicable laws, ordinances, regulations, or standards, no commission approval is required...."

Pursuant to that section, Energy Commission staff has determined for this petition that approval by the full Commission is not required and the proposed modifications meet the criteria for approval at the staff level because:

- The modifications will not have any significant effect on the environment;
- Existing conditions of certification are sufficient to cover the proposed modifications without changes to, or deletions of, any conditions of certification; and
- The project as modified will maintain full compliance with applicable LORS.

This Notice of Determination has been mailed to the Energy Commission's facility mail list of interested parties and property owners adjacent to the facility site. It has also been e-mailed to the facility listserv. The listserv is an automated Energy Commission e-mail system by which information about this facility is e-mailed to parties who have subscribed. To subscribe, go to the Energy Commission's webpage for this facility, cited above, scroll down the right side of the project's webpage to the box labeled "Subscribe," and provide the requested contact information.

Any person may file an objection to staff's determination within 14 days of the date of this Notice on the grounds that the project modification does not meet the criteria set forth in section 1769(a)(2). Absent any relevant objections, the amendment petition will

be approved 14 days after this Notice is docketed. To use the Energy Commission's electronic commenting feature to object to staff's determination, go to the Energy Commission's webpage for this facility, cited above, click on the "Submit e-Comment" link, and follow the instructions in the on-line form. Be sure to include the facility name in your comments. Once submitted, the Energy Commission Dockets Unit reviews and approves your comments, and you will receive an e-mail with a link to them.

Written comments may also be mailed or hand-delivered to:

California Energy Commission
Dockets Unit, MS-4
Docket No. 99-AFC-4C
1516 Ninth Street
Sacramento, CA 95814-5512

All comments and materials filed with and approved by the Dockets Unit will be added to the facility Docket Log and be publicly accessible on the Energy Commission's webpage for the facility.

If you have questions about this Notice, please contact Mary Dyas, Compliance Project Manager, at (916) 651-8891, or by fax to (916) 654-3882, or via e-mail at mary.dyas@energy.ca.gov.

For information on participating in the Energy Commission's review of the petition, call Alana Mathews, Public Adviser, at (916) 654-4489 or (800) 822-6228 (toll-free in California) or send your e-mail to publicadviser@energy.ca.gov.

News media inquiries should be directed to the Energy Commission Media Office at (916) 654-4989, or by e-mail to mediaoffice@energy.ca.gov.

Date: 9/19/16

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Figure 1
ENVIRONMENTAL JUSTICE POPULATION FIGURE
Moss Landing Project - Environmental Justice Population Figure

