

Memorandum

Date : September 15, 2000

Telephone: (916) 654-4074

To : **Moss Landing Siting Committee**

William J. Keese, Chairman
Michal C. Moore

File: s/projects/moss/misc/memo-comments

From : **California Energy Commission** - Paul Richins, Jr.
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Project Manager

Subject : **COMMENTS ON THE MOSS LANDING PRESIDING MEMBER'S PROPOSED
DECISION**

Energy Commission staff agrees with the Presiding Member's Proposed Decision (PMPD) for the Moss Landing Power Plant Project. Below are our clarifying comments.

Introduction

Page 1, last line, after the sentence ending, "...capacity of 1,060 MW." insert the following sentences: "Note that this nominal rating is based upon preliminary design information and generating equipment manufacturers' guarantees. The project's actual maximum generating capacity will differ from, and likely exceed, this figure. If the project's actual generating capacity should exceed this nominal rating, no conditions of certification would be violated. "

Transmission System Engineering (TSE)

TSE-3 (pages 83 and 84) contains a ten-day time frame in the condition. Staff recommends placing the ten-day time frame in the verification instead of the condition of certification.

Biological Resources

Page 157, superscript 63 at the bottom of the page--while rockfish... gobies, which most *fish* do not eat. (7/17/00 RT 137). The word fish may be a direct quote but it would make more sense if it said "which most *people* do not eat.

Pg. 158, third line under *Behavior Barriers*—entrainment should be *impingement* at the water intakes.

BI0-4 (page 188) contains a one-year time frame in the last sentence prior to the verification. Staff recommends placing the one-year requirement in the verification instead of the condition of certification (protocol).

Page 188, last paragraph before **Verification**, last sentence--“These statements will be maintained...” should be removed and added as the last sentence of the **Verification** and be changed to: *The signed statements will be...*

Pg. 190, Top of page **Verification**—change 60 to **30** and delete and/or at ancillary facilities .

Pg. 190, BIO-6, under 2nd Protocol—1) Notifying the CPM within two weeks... delete the within two weeks, this is already in the **Verification**.

Pg. 193, BIO-7, Top of page---“Foundation and Environmental organizations (the *Advisory Team*). Within 60 days of Project certification, one or more *Advisory Team* meetings will be held to identify projects that could be funded with compensation funds, and for each project...”

Two changes are recommended:

1) remove Within 60 days of project certification, so that the new sentence starts with “One or more *Advisory Team*...”

2) Add to the 7th line under **Verification**: after “with the written verification.” Add the sentence: “Within 60 days of Project certification, one or more *Advisory Team* meetings will be held to identify projects that could be funded with compensation funds.”

Cultural Resources

Page 196, 2nd paragraph. sixth line—Moss Landing Power Plant Project should be spelled out the first time it is used.

Page 200, third paragraph from the top of the page, third line from the top of the paragraph—“r sum” should be résumé.

Page 202, second Verification, 2nd line from bottom of paragraph—“resum” should be résumé.

Page 203, CuL-6, First line—“specialist s” should be specialist’s.

Page 195—The PMPD summary is rather short. We suggest adding the following paragraph before or after the 3rd paragraph on page 195.

The proposed MLPP is a portion of Duke Energy’s ongoing Modernization Plan designed to make MLPP a competitive energy facility. Necessary improvements to Dolan Road and Highway 1 are being conducted as part of the Modernization Plan, but not as part of the project. The road and highway improvements are permitted by Caltrans and Monterey County. Prior to beginning road improvements, preliminary cultural resource surveys were conducted and cultural resources were identified that

were likely to be impacted by the road improvements. This constitutes an indirect impact that is mitigatable by data recovery. At present, data recovery is underway in compliance with the requirements of Caltrans and Monterey County.

Geology and Paleontology

Title of section (Page 210)—suggest changing the title of the section from “Geological and Paleontological Resources” to “Geology and Paleontology”. This recommendation is consistent with the title used in the FSA and suggests a more comprehensive topic than what is currently used in the PMPD.

Page 211 Fourth paragraph last sentence—please insert after the phrase “Geo-1 and – 2” the phrase, “Gen-5, Civil-1 through Civil-4, and Struct-1 through Struct-4 will mitigate seismic hazards at the site to a level currently practiced by the electric power generation industry in California.”

Soils and Water

SOIL&WATER-4 (page 238) contains time frames of 12 months, one month and nine months in the condition of certification. Staff recommends placing the time-frame requirements in the verification instead of the condition of certification.

SOIL&WATER-5 (page 239)—please add “CPM” after Energy Commission in the fourth line.

SOIL & WATER-5 (page 239)—The changes in the condition below are consistent with the condition that is in the FSA and PMPD, but just adds more specificity. The condition reads as follows.

SOIL & WATER – 5 No earth disturbing activities for construction of the proposed project shall occur until the site has been successfully remediated by PG&E or until the Phase I Plan, listed below, is reviewed and approved by the California Energy Commission (CEC) CPM.

Protocol: Each plan shall identify measures that will be undertaken to ensure that contaminated soil and/or surface or groundwater disturbed during construction activities will not degrade adjacent water resources and associated aquatic habitats:

1. Phase I Final Soil and Groundwater Management Plan. The Phase I Plan shall include soil and groundwater remediation measures for all areas within the building footprint of the new units and/or demolition activity in the fuel tanks 1-10 area.
2. Phase II Plan: Soils and Groundwater Management Plan for Cooling Water System Construction and Ancillary Facilities. The Phase II Plan shall include the area affected by cooling water system and ancillary facility construction.

The project Owner shall implement the measures identified in the energy Commission approved plan.

Verification: At least 30 days prior to the start of construction the project owner shall submit a letter from the Department of Toxic Substances Control indicating that the site has been successfully remediated by PG&E.

If the site has not been remediated, the project owner shall submit a plan for each of the phases for review and approval to the Energy Commission CPM. The Energy Commission CPM shall coordinate review of this plan with the Department of Toxic Substances Control, Regional Water Quality Control Board, Monterey County Environmental Health Dept., the Department of Fish & Game and the Coastal Commission.

Noise

Page 259, third paragraph, line four, after the number "1,855" insert the word "feet"

Traffic and Transportation

Page 284--Staff inadvertently left the words "day-shift" out of the proposed condition language sent to the Committee in a memorandum dated August 25, 2000. Staff's intent is that the physical improvements to the State Route 1/Dolan Road intersection are completed to Caltrans' satisfaction prior to the construction day-shift staffing level reaching 400 for the project. It continues to be staff's opinion that, with the implementation of measures included in the Traffic Management Plan and the physical improvements identified in condition TRANS-6, the Moss Landing Power Plant Project will not result in a significant adverse impact to traffic and transportation.

TRANS-6 Prior to reaching a construction day-shift staffing level of 400 for the project, the project owner shall implement the following physical improvements at the State Route 1/Dolan Road intersection, to the satisfaction of Caltrans:

- construct a northbound right-turn lane on State Route 1 with shoulder;
- create a right-turn paved area on westbound Dolan Road (to facilitate right turns to State Route 1);
- improve the shoulder on the east side of State Route 1 (north of Dolan Road);
- lengthen the southbound left-turn pocket on State Route 1; and
- modify the existing two-way left turn lane in the median of State Route 1 to a southbound merge lane.

Should a construction day-shift staffing level of 400 not be reached for the project, these physical improvements shall be completed by the project owner to the satisfaction of Caltrans prior to the start of commercial operation.

Verification: At least 30 days prior to reaching the 400 day-shift staffing level for construction of the project, the project owner shall notify the CPM that the roadway improvements have been completed and are ready for inspection. As each physical improvement is completed, the project owner shall notify the CPM in the next Monthly Compliance Report.

TRANS-7 (page 284) contains a 60-day time frame in the condition. Staff recommends placing the 60-day requirement in the verification instead of the condition of certification.

TRANS 8 (Page 285)—The reference to the traffic management strategies in Condition 8 referenced the mitigation measures in the FSA but were not fully set forth in the PMPD. The traffic management strategies included in the FSA should be included in the condition as follows.

TRANS-8 The project owner shall implement the following travel demand management strategies:

- Work hours during construction will be scheduled to avoid peak travel periods with the morning shift starting no later than 7:00 a.m., the afternoon shift not ending between 3:30 – 5:30 p.m., and the evening shift not starting between 4:00 – 6:00 p.m.;
- All overweight shipments will be made by rail;
- Truck traffic related to the project will be prohibited from using State Route 1 at Dolan Road between the hours of 6:30 a.m. – 8:30 a.m. and 3:30 p.m. – 5:30 p.m.;
- Truck traffic related to the project will be prohibited from making the westbound left-turn from Dolan Road to State Route 1 during all hours;
- Workers will be required to obtain a special permit, by demonstrating the need to travel northbound on State Route 1, to exit the Dolan Road gate and travel westbound;
- On-site meal services will be provided to discourage off-site trips for food; and
- Employee carpooling will be encouraged by designating a travel demand management coordinator, providing preferred parking for carpools/vanpools, and by providing free vanpool service.

The project owner shall report on the status of each strategy element in the monthly or annual compliance report as appropriate.

Verification: The project owner shall report on the status of each strategy element in the monthly or annual compliance report as appropriate. The CPM will periodically review project compliance with these strategy elements with Monterey County.

Visual Resources

VIS-2 (page 296)—In VIS-2, there is a reference to the landscaping plan in VIS-4. The PMPD does not include VIS-4.

VIS-4 (page 297) is missing in the PMPD regarding landscaping of the project site. Please include in the final decision.

Land Use

Page 247, second to last line—a period is missing at the end of the following sentence: "Zoning is HI (CZ)."

Finding #4, (page 253)—the Committee states that the nearest residence to the existing MLPP site is approximately 1,500 feet to the north. To be consistent with page 248 and footnote #92 of the PMPD, staff recommends changing this distance to 1,600 feet.

Finding #5 (page 253)—please make the following changes: "The Moss Landing Power Plant Project is consistent with the current North County General Plan and zoning ~~ordinances~~ [designations of the site](#)."

Finding #6 (page 253)—please make the following changes: "[With mitigation](#), ~~T~~the proposed Project is consistent with the goals and policies of the Monterey County General Plan and Local Coastal Program ([North County Land Use Plan](#))."

LAND-1, second paragraph, second to last line—please make the following changes (see Coastal Commission letter dated 6/13/00): "...the California Energy Commission ~~staff~~ [Compliance Project Manager \(CPM\), in consultation with the Coastal Commission staff](#) will review said alternative,..."

LAND-2, paragraph #3 (page 256)—please make the following change (see Coastal Commission letter dated 6/13/00): "...the project owner shall meet with the CPM and representatives of the Elkhorn Slough Foundation and the California Coastal Commission [staff](#) to determine a mutually agreeable,..."

LAND-2, Verification, paragraph #3 (page 257)—please correct the following sentence: "Within thirty (30) days of the final meeting to discuss either the results of the environmental assessment or to choose an alternative coastal access program to receive the \$250,000 endowment, [the project owner shall deliver the \\$250,000 endowment](#), as well as interest at the rate of 8 percent accrued on the endowment since the start of project construction, to the California Energy Commission.

LAND-5, Verification (page 258)—please correct the following sentence: "At least 30 days prior to the installation of any ~~permanent~~temporary signage,..."

LAND-5, Verification (page 258)—please correct the following sentence: "At least 30 days prior to the installation of any temporary signage,..."

Air Quality

Following are our recommendations for the Air Quality conditions of certification for the Moss Landing Power Plant Project:

Starting on page 97, change **Duke Energy Moss Landing LLC or project owner** to "owner/operator" in all applicable Air Quality (AQ) conditions of certification.

AQ-1, Place time frame in verification.

Verification: Prior to first fuel firing of the gas turbine, the owner/operator The project owner shall.....

AQ-4, Place time frames in verification portion of the condition that are consistent with the time frame in the condition. The conditions states 30 days, the verification states 60 days.

AQ-4 Prior to the first firing of the gas turbines, the owner/operator shall submit a Commissioning Plan to the APCO and the CEC CPM for review and approval. Duke Energy Moss Landing LLC shall submit a plan to the District at least 30 days prior to the first firing of the gas turbines.

Verification: Within 30 days of first fuel firing of the gas turbine, the owner/operator shall provide a Commissioning Plan for approval to the CEC CPM and the District. The project owner shall provide a Commissioning Plan for approval to the CEC CPM and the District at least 60 days prior to first firing of the combustion turbines.

AQ-5, Remove time frame from condition and place in verification.

AQ-5 Prior to combusting fuel in the gas turbines, the owner/operator shall notify the District and arrange for an inspection of the equipment. No later than seven (7) days prior to combusting fuel in the Gas Turbines, Duke Energy Moss Landing LLC shall notify the District and arrange for an inspection of the equipment.

Verification: The owner/operator shall notify the APCD at least seven (7) days prior to combusting fuel in the gas turbines. Copies of the notification shall be

~~provided to the CEC CPM. The project owner shall provide copies of the notification to the CEC CPM.~~

Change the verification for AQ-7 through AQ-11 to read the same as the verification for AQ-4 instead of AQ-3.

AQ-6, Identify the required emission reduction credits by name and quantity.

AQ-8 & AQ-9, The second “r” is left out of the word “manufacturer” in both conditions.

AQ-12, Remove time frames from condition.

AQ-12 At the end of the commission period, ~~the owner/operator Duke Energy Moss Landing~~ shall conduct a District and CEC approved source test to determine compliance with Condition 15 (for shutdown limits), and Condition 17 (start-up limits), ~~and the~~. The written test results of the performance tests shall be provided to the District and the CEC CPM ~~following the testing within thirty (30) days after the testing~~.A complete test protocol shall be submitted to the District ~~prior to the testing, no later than thirty (30) days prior to testing and notification to the District at least ten (10) days prior to the actual date of the testing so that a District observer may be present. Changes to the test date made subsequent to the initial ten day notification may be communicated by telephone or other acceptable means no less than forty-eight (48) hours prior to the new test date.~~ The owner/operator shall also provide notification the District prior to the actual date of testing so that a District observer may be present.

Correct the verifications for AQ-13 through AQ-19, AQ-21 through AQ-36, AQ-40, -42, and 44 through 46 by deleting AQ-37 and adding AQ-39. The verification should read “~~See AQ-38 and AQ-39.~~”

AQ-18, Add verification for AQ-18.

Verification: ~~See AQ-38 and AQ-39.~~

AQ-20, Remove time frames from condition and place in verification. Correct the verification.

AQ-20 ~~Within sixty (60) days after the commissioning of the Gas Turbines,~~ Following the commissioning of the gas turbines, a Relative Accuracy Test Audit (RATA) must be performed on the CEMS in accordance with 40 CFR Part 60 Appendix B Performance Specifications and a performance test shall be performed, and the written test results of the performance tests shall be provided to the District. ~~within thirty (30) days after testing~~. A complete test

protocol shall be submitted to the District ~~later than thirty (30) days prior to testing. Notification shall be given to the District prior to the actual date of the testing so that a District observer may be present. and notification to the District at least ten (10) days prior to the actual date of testing shall be provided so that a District observer may be present.~~ Changes to the test date made subsequent to the initial ten day notification may be communicated by telephone or other acceptable means no less than forty-eight (48) hours prior to the new test date.

Verification: See AQ-41.

AQ-29, Described the equipment referred to in the condition.

AQ-29 Units 6-1 and 7-1 ~~This equipment~~ shall be abated by a

AQ-33, Correct the verification.

Verification: The owner/operator shall submit monthly reports to the APCO within 10 working days following the end of the month. Monthly reports shall be submitted to the CEC CPM within 30 days following the end of the calendar quarter in an electronic format. ~~See AQ-37 and 38.~~

AQ-37, Revise the verification for AQ-37.

Verification: The owner/operator shall provide the written Quality Assurance Program to the District. ~~See AQ-37 and 38~~

AQ-41, Remove time frames from the condition.

AQ-41 Annual performance tests shall be conducted in accordance with the ~~Monterey Bay Unified Air Pollution Control~~ District test procedures during the third quarter of each year, and the written results of the performance tests shall be provided to the District ~~within thirty (30) days~~ after testing. A testing protocol shall be submitted to the District ~~no later than thirty (30) days~~ prior to the testing, and notification to the District ~~at least ten (10) days~~ prior to the actual date of testing shall be provided so that a District observer may be present. ~~Changes to the test date made subsequent to the initial ten day notification may be communicated by telephone or other acceptable means no less than forty-eight (48) hours prior to the new test date.~~

If the testing cannot be completed during the third quarter of the year due to the equipment being nonoperational or due to the power generation requirements of the grid being such that a unit would be unable to operate at greater than 50% load, the testing can be delayed, such that the testing be completed during the fourth quarter of the following year provided that Duke

Energy Moss Landing LLC notify the District that they will be unable to meet the third quarter testing requirement as soon as it becomes known, but in no event later than September 15

SC-AQ-50, Change the first verification to "Protocol". Change "AQ-47" to AQ-51 in number three of the protocol section. Change "commencement of construction" to **start of rough grading**.

Verification:-Protocol: The plan shall include.....

SC-AQ-53, Change "commencement of construction" to **start of rough grading**.

SC-AQ-54 requires oxidizing soot filters, or diesel particulate filters (DPFs) for construction equipment. We understand that there are still concerns about the efficacy of the DPF and the negative effects of fuel sulfur on sulfate and PM emissions from DPF controlled equipment. It is our understanding that sulfate formation is understood and can be corrected for by adjusting the reactivity of the catalyst for the likely fuel sulfur content range. A higher fuel sulfur content, the lower catalyst reactivity reduces sulfate emissions with a small loss in PM10 control efficiency (from >95% to <95%).

Additionally, the recent drafts of CARB's proposed Risk Reduction Plan report indicate that that DPFs are effective with current diesel fuels, but ultra low sulfur diesel fuel will significantly improve the performance of DPFs. Discussion with CARB staff found them to be supportive of our efforts to implement DPFs where appropriate. They understood our insistence on the suitability report as a mechanism to assure that the DPF applications are appropriate and successful. We believe that successes will broaden DPF use and acceptance. Poor DPF performance will slow their use and acceptance, to the detriment of air quality, and should not be forced on equipment operators.

We believe that any proposal to permanently retrofit a smaller portion of the construction fleet, or to tie construction emissions mitigation to another project to be unworkable. We do not have a mechanism to assure permanence or enforceability once the equipment leaves the site or at the other the other project.