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STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

DOCKET NO. 08-AFC-09C

Petition For Amendment for the
PALMDALE ENERGY PROJECT

**PALMDALE ENERGY, LLC's INITIAL
COMMENTS ON THE PRELIMINARY
STAFF ASSESSMENT**

Palmdale Energy, LLC hereby submits these initial comments on the Preliminary Staff Assessment (PSA) for the Palmdale Energy Project (PEP) Petition For Amendment published on March 23, 2016. In preparation for the PSA Workshop currently scheduled for April 20, 2016, Palmdale Energy, LLC offers these initial comments in advance so that the parties can be more productive towards the resolution of issues and can discuss specific condition of certification language. Palmdale Energy, LLC will submit final comments on the PSA after the PSA Workshop to capture relevant resolutions and agreements resulting from the discussions at the workshop.

For proposed changes to the text of the PSA, we are using the convention of ***bold italic*** for proposed insertions and ~~strikethrough~~ for proposed deletions. With respect to the Conditions of Certification contained in the PSA, Staff has shown proposed modifications to the Conditions of Certification using ~~strikethrough~~ for deletions and **bold underline** for insertions. To more easily show the modifications to the Conditions of Certification proposed by Palmdale Energy, LLC, we have used similar formatting but have shown our proposed modifications using a red font with ~~strikethrough~~ for deletions and **bold underline** to indicate additions. Based on our initial review of the PSA, at this time all proposed Conditions of Certification and any modifications proposed by Staff not addressed in these Initial Comments are acceptable to Palmdale Energy, LLC.

PROJECT DESCRIPTION

Page 3-5, ELECTRIC TRANSMISSION LINE, first paragraph

The description of the generator tie-line should be modified to clarify that the PEP is now owned by Palmdale Energy, LLC and no longer owned by the City of Palmdale. We

suggest the following modifications to the first paragraph of the description of the generator tie-line.

The approved generator tie-line would ***have been*** be located on land either controlled by the city of Palmdale, land owned by the applicable utility, or on land the city intended ~~eds~~ to purchase, and would consist of a 35.6-mile long overhead generator tie-line with two segments. ***With the acquisition of the project by Palmdale Energy, LLC, the City will not be purchasing any land to accommodate the generator tie-line. Palmdale Energy, LLC will be obtaining rights of way and/or easements for the generator tie-line routes.***

Page 3-6, NATURAL GAS SUPPLY LINE, first sentence

To accommodate the potential for an increase in the diameter of the gas supply pipeline once the final design is completed, Palmdale Energy, LLC requests that “20-inch diameter” be modified to read “20-24-inch diameter” when referring to the gas supply pipeline.

Page 3-6, WATER SUPPLY/ WATER SUPPLY LINE, first paragraph

This paragraph should be rewritten as follows to clarify the description of the water supply line.

Process water needs would be met by the use of reclaimed water supplied by either the Palmdale Water Reclamation Plant (PWRP) or the city of Lancaster Advanced Waste Water Treatment Plant. ***The Project will*** ~~Likely is an interconnection to the existing reclaimed water pipeline located near the intersection of Sierra Highway and East Avenue M. Reclaimed water will also be able to be conveyed to the project site,~~ via a one-mile extension ***to the Project. The pipeline will*** ~~from the PWRP located southeast of the proposed site, via a pipeline to be installed primarily in existing street ROWs within the city of Palmdale. This petition does not modify the route of the reclaimed water supply line.~~

Page 3-6, PROPOSED PROEJCT MODIFICATIONS, first paragraph

The PEP output should be referred to as having a nominal capacity of 700 MW instead of “699.4 (net)”.

Page 3-7, second paragraph

The description of the operating profiles of the PEP should be rewritten to more accurately reflect the expected operation as a flexible capacity resource. Palmdale Energy, LLC requests the first full paragraph on Page 3-7 of the PSA be deleted and replaced with the following:

The proposed PEP is designed to operate as a flexible capacity resource and have the ability to start up to 2 times per day. The expected annual capacity factor is expected to be between 40 and 60 percent. Expected availability of the PEP is expected to be in the range of 90 to 95 percent. To evaluate worst case air emissions the applicant analyzed three different operating profiles when quantifying emission estimates for the proposed operation of the PEP. The operating profiles vary in the amount operational hours up to 8000 hours per year as well as the number of start-up and shutdown events.

Page 3-8, bullet at top of page

To clarify that the modification of the CO₂ fire suppression system to an FM200 based system pertains only to the gas turbine components, Palmdale Energy, LLC requests the bullet at the top of Page 3-8 be modified as follows:

- Possible change from a CO₂ based fire suppression system for ~~some~~ **gas turbine** components to an FM200 based system.

Page 3-8, first full paragraph

Palmdale Energy, LLC requests the following modifications to reflect the correct amounts of reclaimed water use.

The proposed PEP would consume a maximum of about ~~320~~ **400** acre-feet/year (AFY) of process water, a significant reduction of approximately ~~2,800~~ **3,725** AFY,...

Page 3-8, PROJECT CONSTRUCTION AND OPERATION

Palmdale Energy, LLC requests the average and peak numbers of workers estimated for the PEP be revised from 339 to 371, and from 706 to 710, respectively.

AIR QUALITY

Pages 4.1-56 through 4.1-57, Offset Package

Staff quotes from an USEPA comment letter on the Antelope Valley Air Quality Management District (AVAQMD) Preliminary Determination of Compliance (PDOC) concerning the offset package. The comments largely reflect that the proposed offset package was sent to the CEC and the AVAQMD under request for confidentiality. The CEC Executive Director granted the offset package confidential status and the AVAQMD similarly has treated it confidentially. The USEPA however would not treat the submittal confidentially and therefore its comments are largely based on its lack of review of offset package. Since the comments were filed Palmdale Energy, LLC has worked with the AVAQMD and USEPA, and has agree to submit to the AVAQMD and the CEC, under the confidential designation for the offset package, a detailed analysis of the proposed offsets to be used for the PEP. The details include the dates of the offset creation, approval dates, and SIP approved RACT rules and adjustments that apply, or would apply, to the offset at the time of use for both NO_x and VOCs.

Staff also cites USEPA comments regarding the procedures for AVAQMD Rule 1305. Palmdale Energy, LLC notes that AVAQMD Rule 1305 is not SIP approved. The SIP approved version of the offset rule is Rule 1309. This version of the rule only requires approval from both the upwind and downwind Governing Board and does not include consultation with the ARB or USEPA.

Pages 4.1-57 through 4.1-58, Offset Ratios

In its PSA Staff reiterates USEPA comments on the PDOC relating to the offset ratios.

Palmdale Energy, LLC is not proposing any different offset ratios for the PEP than those that were adopted in the Final Decision for the Approved Project.

Ozone precursor's offsets of NO_x and VOCs are generally of limited availability within the AVAQMD bank. While opportunities to obtain locally sourced ERCs, the project owner also proposes to secure additional inter-basin ozone precursor ERCs from either the Mojave Desert Air Quality Management District (MDAQMD) (located within the Mojave Desert Air Basin (MDAB)) or from the San Joaquin Valley Air Pollution Control District (SJVAPCD). Both districts regulations allow such an approach. There are meteorological circumstances where ozone and ozone precursor (NO_x and VOC) emissions from the SJVAPCD result in significant contributions to ozone violations in the AVAQMD. Therefore, the use of ERCs from the SJVAPCD to mitigate the facility NO_x and VOC emissions contribution to existing violations of ozone air quality standards would comply with LORS.

On December 17th, 2013, the AVAQMD adopted a resolution to approve the transfer of certain offsets credited and registered within the MDAQMD and the SJVAPCD to the AVAQMD for potential use as offsetting emissions reductions. The approved ERCs include:

- 150 tons of NO_x from the MDAQMD

- 60 tons of VOCs from the SJVAPCD

For any ERCs proposed for acquisition from the SJVAPCD, PEP will provide information covering sufficient emission reductions are in good standing in the SJVAPCD emission reduction credit registry. This information is provided under a separate confidential submittal.

The AVAQMD will independently verify that the issuance of emission reduction credits by SJVAPCD meets USEPA criteria of being real, quantifiable, permanent, surplus and enforceable. The above noted mitigation strategies were approved for implementation on the previously proposed project, and they are again, proposed for implementation on the current project. Background for these strategies is presented as follows:

- Health and Safety Code section 40709.6 allows increases in emissions of air pollutants at a stationary source located in one district to be offset by credits from another district in two situations. When both sources are within the same air basin but regulated by different districts, section 40709.6(a) allows for an inter-district credit transfer. When sources are in different air basins, a transfer is still allowed under section 40709.6(a), provided the stationary source to which the emission reductions are credited is located in an upwind district that is classified as being in worse nonattainment status than the downwind district where the credits will be used, and the downwind district is overwhelmingly impacted by emissions transported from the upwind district. The districts involved in the transfer may only consider and approve such offset transfers after considering the impact of the offset on air quality, public health, and the regional economy.
- The current proposed project, like the previous project is located in the AVAQMD which is part of the MDAB. The Air Resources Board (ARB) has found that the MDAB is significantly impacted by emissions from upwind areas such as the SJVAPCD and the South Coast AQMD. Pursuant to these findings, ARB has designated AVAQMD as overwhelmingly impacted by transported air pollutants from the SJVAPCD. Therefore, the requirements of HSC 40709.6(a) are met, i.e., AVAQMD is downwind of the SJVAPCD, and AVAQMD is overwhelmingly impacted by emissions from the SJVAPCD.
- HSC section 40709.6(d) requires the transfer of credits to be evaluated for the impacts on air quality, public health, and the economy. The CEC considered each of those issues in the context of the previously proposed project prior to approving that project in 2011. Based on the CEC's findings and approval of the previous project, the applicant believes the offset strategies proposed for the revised project meet all the required regulatory requirements.

The project owner will demonstrate to the satisfaction of the AVAQMD and the CEC and that adequate emission reduction credits have been purchased prior to start of construction. The project emissions of 139.99 and 51.64 tons per year of NO_x and VOC,

respectively, shall be offset at a ratio of 1.3 to one for ERC's within the MDAB or areas in the San Joaquin Valley Air Basin (SJVAB) that are within 15 miles of AVAQMD's western boundary. If ERCs are obtained from locations greater than 15 miles from the western boundary of the AVAQMD, an offset ratio of 1.5 to one shall be utilized for those offsets. Table 1 lists the amounts of ERCs, based on the appropriate offset ratios approved in the Final Decision, for both NO_x and VOCs.

TABLE 1 OFFSETS/MITIGATION PROPOSED FOR PEP					
Emission Reduction Credits - TPY					
	PM ₁₀	VOC	NO _x	SO ₂	CO
AVAQMD Offset Trigger Thresholds	15	25	25	25	NA
Facility PTE ¹	81.01	51.64	139.99	11.39	351.09
AVAQMD Offset Ratio	1:1	1.3:1	1.3:1	1:1	1:1
Total Offsets Required	81.01	67.13	181.99	0	0
Total Mitigation Required at 1.5:1 Ratio from ERC Transfers > 15 Miles from AVAQMD Boundary	0	77.46	209.99	0	0
¹ Values derived from Section 4.1. ² Although the proposed facility is being permitted for full operations, the facility will be operated such that the current level of mitigation credits are not exceeded. As additional mitigation credits are obtained the facility will increase operations to comply with the new level of credits (on an annual basis).					

To clarify, Palmdale Energy, LLC is no longer proposing the use of inter-pollutant offsets.

Pages 4.1-58 through 4.1-59, InterBasin Transfers

Staff identified a concern in the PSA relating to the ability of offsets from SJVAPCD to qualify for transfer to the AVAQMD for offsetting the PEP.

The proposed VOC ERCs to be transferred from SJVAPCD to the AVAQMD for use as project mitigation have been clearly analyzed by the SJVAPCD as real, quantifiable, permanent, enforceable, and surplus. As stated earlier, a detailed listing of the proposed VOC ERCs from the SJVAPCD is provided.

These proposed VOC ERCs have already been RACT adjusted pursuant to the District rules. In addition, the proposed transfer has been approved by both districts pursuant to current district rules. The District approval took into account the requirements imposed on transport couplets in the relevant sections of the California Health and Safety Code. Furthermore, if the VOCs are transferred to the AVAQMD for project application as mitigation, these ERCs would be permanently removed from the SJVAPCD and would no longer be available for credit against future VOC emissions increases in the SJVAPCD.

The SIP equivalency issue within the SJVAPCD only impacts NO_x ERCs and is not associated with the VOC ERCs that have been banked. The Applicant is **NOT** proposing

to use or transfer NOx ERCs from the SJVAPCD to the AVAQMD for use as project mitigation. Therefore, NOx equivalency under NSR is not impacted.

Page 4.1-59-4.1-60, Interpollutant Offsets

To clarify and alleviate Staff and USEPA's concern, no inter-pollutant offsets will be proposed for use for the PEP.

Page 4.1-88, **AQ-SC3**

Staff modified Item C of Condition of Certification **AQ-SC3** to reduce the speed limit on unpaved roads from 10 mph to 5 mph. This may have been based on an error in the Revised Petition To Amend. However, since there is no new impact associated with fugitive dust to justify a change to the mitigation, Palmdale Energy, LLC requests the modification be deleted.

Page 4.1-90 and 91, **AQ-SC5**

Staff has modified Condition of Certification **AQ-SC5** to require the use of Tier 4 equipment instead of Tier 3 equipment.

Palmdale Energy, LLC believes that the requirement to use Tier 4 or 4i engines is excessively aggressive in light of the potential situation that the current equipment population in the project area may not reflect a significant amount of equipment types and sizes that actually meet or are certified as Tier 4 or 4i. This requirement could cause the significant economic impacts in the areas of hiring construction contractors who may or may not have Tier 4 or 4i equipment, thus requiring rental of Tier 4 or 4i from outlets well outside the project region and incurring significant costs to transport them to the site. Therefore, Palmdale Energy, LLC requests that Condition of Certification **AQ-SC5** remain unmodified from the Final Decision.

Page 4.1-96, **AQ-SC-10**

Palmdale Energy, LLC requests the NOx emission limit for commissioning be increased from 250 pounds per hour to 254 pounds per hour to reflect the updated commissioning modeling analysis, which shows that there are no significant impacts with an emission rate of 254 pounds per hour.

BIOLOGICAL RESOURCES

Page 4.2-36, **BIO-17**

Staff recalculated the amount of habitat compensation required for Swainson's Hawk impacts. Palmdale Energy, LLC would like to discuss how the mitigation amounts were calculated at the upcoming PSA Workshop to understand why the amounts are different than those proposed in its Petition To Amend. Palmdale Energy, LLC requests Staff to bring the maps it relied upon so that it can understand the basis for the habitat compensation.

Additionally, Staff added a requirement to the Approved Condition of Certification that the Swainson's Hawk mitigation lands be within 15 miles of known Swainson's Hawk nesting sites. This requirement was not part of the conditions contained in the Final Decision and Palmdale Energy, LLC is not aware of any new law, ordinance, regulation or standard (LORS), or new Swainson's Hawk impacts caused by the change from the PHPP to the PEP. Therefore, Palmdale Energy, LLC requests that the new requirement be deleted from Condition of Certification **BIO-17**.

Page 4.2-52, **BIO-20**

As discussed above for Condition of Certification **BIO-17** above, Palmdale Energy, LLC would like to discuss at the PSA Workshop Staff's methods for calculating the habitat compensation acreages for Mohave Ground Squirrel in Condition of Certification **BIO-20**.

CULTURAL RESOURCES

4.3-26, **CUL-6**

Staff revised Condition of Certification **CUL-6** to protect the California Aqueduct, the Pearblossom Pumping Plant and other ancillary facilities. Palmdale Energy, LLC has no plans to impact these facilities and agrees to concept of the condition. However, Staff has included the phrase "including but not limited to damage to topography and natural features" as one of the ways the resource could be damaged. Palmdale Energy, LLC proposes the phrase be deleted as it is not well defined and could be interpreted to prohibit work necessary to construct the transmission line.

In addition, Staff added a new requirement that a Native American monitor be present during all grading activities where archaeological monitoring is also required. The previously Approved Condition of Certification **CUL-6** required Native American monitoring only when Native American artifacts were discovered. Staff's justification is simply that a tribe, in a private conversation with Staff, requested it. Staff has not identified any new law, ordinance, regulations, standard, or any new significant impact that would require this additional monitoring. The PEP actually reduces the grading area from 333 acres to 50 acres thereby reducing impacts to cultural resources. Palmdale Energy, LLC requests the requirement, which adds cost without any justification, be deleted.

LAND USE

Page 4.5-6 and 7, LAND-3

In its PSA, Staff corrected a mistake in one of the parcel numbers (#AIN3039011005) identified in the Verification to Condition of Certification **LAND-3**. The same correction should be made to the parcel number in the body of the condition language as well.

SOIL & WATER RESOURCES

Page 4.9-16, SOIL&WATER-3

Staff modified Condition of Certification **SOIL&WATER-3**. Palmdale Energy, LLC would like to discuss the modification at the PSA Workshop to understand the basis for the modification, and to ensure that the change to the condition would not require Palmdale Energy, LLC to disinfect the water delivered.

Page 4.9-16, SOIL&WATER-4

In its PSA, Staff added the requirement to Condition of Certification **SOIL&WATER-4** that the project owner provide an agreement for recycled water for the life of the project. It may be commercially infeasible to obtain a contract for such an undefined term. Therefore, Palmdale Energy, LLC requests the modifications proposed below.

SOIL&WATER-4 The project's use of water for **project**^{PHPP} operations shall be tertiary-treated **recycled** water from the **city of Palmdale** ~~Los Angeles County LACWD regional supply~~ and shall comply with CCR Title 22, ~~Division 4, Chapter 3~~ and Title 17, ~~Division 1, Chapter 5~~. **The project owner shall provide the CPM a copy of an agreement demonstrating the city of Palmdale is committed to delivery of recycled water ~~for the~~ life of the project.**

Verification: No later than sixty (60) days prior to operation, the **project**^{PHPP} owner shall submit the Engineering Report and Cross Connection inspection report to the Lahontan RWQCB, California DPH, and CBO. The **project**^{PHPP} owner shall submit to the CPM two (2) copies of the Engineering Report and Cross Connection inspection report and include all comments from the Lahontan RWQCB and California DPH prior to the **accepting** delivery of recycled water ~~from the LACWD~~. **No later than thirty (30) days prior to operation, the project owner shall provide a copy of the agreement with the city of Palmdale for the recycled water supply.**

TRAFFIC AND TRANSPORTATION

Page 4.10-9, TRANS-2

Palmdale Energy, LLC proposed revisions to Condition of Certification **TRANS-2** in its Revised Petition To Amend. Those revisions requested that the cooling tower, clarified water tank, and crystallizer be deleted and replaced with the air cooled condenser. Staff agreed to the revisions proposed but also added several other components to the list of equipment that would require FAA Determinations. Palmdale Energy, LLC would like to discuss this change with Staff to understand the basis of Staff's inclusion of equipment inside the power block that would be shorter than the structures immediately adjacent to them.

Page 4.10-10, TRANS-4

Palmdale Energy, LLC requests a modification to the Verification of Condition of Certification **TRANS-4** to clarify the timing of submittal of draft language for the letters required by the condition.

Verification: ~~Within~~ **No later than** 30 days **prior to following** the start of construction, the project owner shall submit draft language for the letters of request to the FAA (including SOCAL TRACON) and Air Force Plant 42 to the CPM for review and approval.

WASTE MANAGEMENT

Page 4.13-16, WASTE-14

It appears that Condition of Certification **WASTE-14** which was contained in the Final Decision was inadvertently left out of the PSA and should be added to the FSA.

WORKER SAFETY AND FIRE PROTECTION

Page 4.12-5, WORKER SAFETY-2

The first bullet in Condition of Certification **WORKER SAFETY-2** refers to the solar array and therefore, Palmdale Energy, LLC requests it be modified as follows:

- An Operation Injury and Illness Prevention Plan which shall also include a Heat Stress Protection Plan and a Best Management Practices (BMPs) for the storage and application of herbicides used to control weeds ~~beneath and around the solar array;~~

Page 4.12-9, **WORKER SAFETY-11**

Palmdale Energy, LLC understands by Staff included new Condition of Certification **WORKER SAFETY-11** and is still reviewing how strict compliance with NFPA 850 would affect its design. To that end, Palmdale Energy, LLC requests Staff be present at the PSA Workshop in the event that additional discussion is necessary to understand the requirements.

FACILITY DESIGN

Page 5.1-9, **GEN-5**

Paragraph B.2 of Condition of Certification **GEN-5** refers to both CBC Chapter 18, § 1803, and Chapter 18A, § 1803A, each section titled Geotechnical Investigations. CBC Chapter 18A, § 1801A.1.1 states the scope of application of Chapter 18A is structures regulated by the Division of the State Architect-Structural Safety and the Office of Statewide Health Planning and Development. Palmdale Energy, LLC, requests that the reference to Chapter 18A of the CBC be deleted as the proposed project is not within the scope of application of the chapter.

Page 5.1-11, **GEN-6**

Condition of Certification **GEN-6** refers to both CBC Chapter 17 and Chapter 17A, each titled Special Instructions, Contractor Responsibilities and Structural Observations. CBC Chapter 17A, § 1701A.1.1 states the scope of application of Chapter 17A is structures regulated by the Division of the State Architect-Structural Safety and the Office of Statewide Health Planning and Development. Palmdale Energy, LLC, requests that the reference to Chapter 17A of the CBC be deleted as the proposed project is not within the scope of application of the chapter.

Page 5.1-13, **CIV-1**

Condition of Certification **CIV-1** is missing its Verification which should be added.

CONCLUSION

Palmdale Energy, LLC looks forward to a productive PSA Workshop with the objective of resolving any outstanding issues.

Dated: April 14, 2016

Respectfully Submitted,



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