DOCKETED

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CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5112

April 27, 2016

Mr. John Carrier
Program Manager
CH2M Hill
2485 Natomas Park Drive, Suite 600
Sacramento, CA 95833

Dear Mr. Carrier:

DATA REQUESTS 1 to 45 (SET #1) FOR THE POMONA REPOWER PROJECT (16-SPPE-01)

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission staff is asking for the information specified in the enclosed data requests. The information requested is necessary to: 1) more fully understand the project; 2) assess whether the facility will be constructed and operated in compliance with applicable regulations; 3) assess whether the project will result in significant environmental impacts; 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner; and 5) assess potential mitigation measures.

The requested information in Data Requests Set #1 covers the Project Description and the technical areas of transmission system engineering, air quality, biological resources, hazardous materials management, waste management, socioeconomics, traffic and transportation, visual resources/plume analysis, and water resources. Written responses to the enclosed data requests (Set 1) are due to the Energy Commission staff on or before May 27, 2016.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, please send a written notice to me and the Committee within 20 days of receipt of this request. The notification must contain the reasons for not providing the information, the need for additional time, or the grounds for any objections (see Title 20, California Code of Regulations, section 1716 (f)).

If you have any questions, please call me at (916) 651-0966, or email me at leonidas.payne@energy.ca.gov.

Sincerely,

Leonidas Payne, Project Manager
Siting Office

Enclosure

Document Section: Project Description
Author: Melissa Mourkas

BACKGROUND

Staff has identified aspects of the project description that are unclear and raise questions about potential impacts across environmental resource categories. Clarification would ensure staff's ability to assess the analysis contained in the Small Power Plant Exemption application (SPPE) and conduct its own independent analysis. Specifically, relating to underground construction activities, the Executive Summary and Project Description are in places at odds with specific proposed activities. For example, the Executive Summary on page 1-2, highlights the use of "existing natural gas pipeline, existing potable and recycled water line, existing stormwater, sanitary sewer and wastewater lines". Additionally, the project Description states on page 2-2 that "The facility does not require any new pipelines". Further into the Project Description on page 2-8, it is noted that "floor drains, hub drains, sumps and piping" will be needed to collect wastewater and that on page 2-9, "fire protection water will be provided to a dedicated underground loop piping system". These descriptions appear to contradict the statement that the "facility does not require any new pipelines". It is not clear whether these are existing facilities that will be re-used or whether new underground piping is proposed. Questions below relate to specific areas of the SPPE where seeming contradictions appear and staff seeks clarification.

DATA REQUESTS

1. Section 2.3.2.1, p. 2-13. Mobilization. *"Due to the existing site groundwork, grading and stormwater control will not be needed or will be included as part of construction. Some of the existing paved areas may require modification to account for underground piping and sumps".* Please clarify whether grading or stormwater control would be needed or not. If so, what would be the horizontal and vertical extent of excavation required for the paved area modifications to account for underground piping and sumps?

2. Section 2.1.12.2, p. 2-8. Plant Drains and Oil/Water Separator. *"Water from these areas will be collected in a system of floor drains, hub drains, sumps and piping and routed to the process drain collection system".* Please clarify whether these are existing drains and underground pipes. If new, please describe the horizontal and vertical extent of excavation that would be required for below-grade piping, drains and sumps.

3. Section 2.1.14, p. 2-9. Fire Protection. *"Fire protection water will be provided to a dedicated underground fire loop piping system".* Please describe what would be the horizontal and vertical extent of excavation required for installation of the fire water piping system.

BACKGROUND

Staff has identified aspects of the project description regarding demolition that are unclear and raise questions about potential impacts across environmental resource categories. The SPPE lacks a description in Section 2.2 of what the demolition activities entail, it only mentions what manpower (2.2.1) and demolition equipment (2.2.2) are required. In order to analyze the potential impacts from demolition as part of the project (as stated on p. 2-11), staff needs additional information on the activities that will take place during demolition of the existing San Gabriel facility.

4. Section 2.2, page 2-11 to 2-12. The SPPE does not include a discussion of what demolition activities would take place. Please describe the type of activities that would be conducted, including, but not limited to, removal of foundations or below-grade pilings or footings from the existing plant facilities. Please identify which buildings, foundations, and equipment would be demolished, the techniques to be employed and what would be the horizontal and vertical extent of excavation required to complete the demolition.

Technical Area: Air Quality
Author: Tao Jiang

BACKGROUND

Cumulative Air Quality Impacts

The application (Section 4.1.8.1) describes the methodology for the cumulative impact analysis but does not include the analysis itself because a project list had not been provided by the District at the time the application was prepared and submitted to the Energy Commission. The cumulative analysis should include all reasonably foreseeable new projects with a potential to emit 5 tons per year or more and located within a 6-mile radius. This includes all projects that have received construction permits but are not yet operational and those that are either in the permitting process or can be expected to be in permitting in the near future. A complete cumulative impacts analysis should identify all existing and planned stationary sources that affect the baseline conditions and consider them in the modeling effort.

DATA REQUESTS

5. Please provide a copy of the District's correspondence regarding existing and planned cumulative sources located within six miles of the project site.

6. Please provide the list of sources to be considered in the cumulative air quality impact analysis.

7. Please provide the cumulative modeling and impact analysis, including Pomona Repower Project (PRP) and other identified new and planned projects within 6 miles of the PRP site.

BACKGROUND

Emission Offsets

The project only triggers emission offsets of NOx and VOC based on the District offset threshold levels. At the time of the application, the applicant controlled NOx RTCs in an amount that only partially covers project NOx emissions. Additionally, the Energy Commission generally requires CEQA mitigation of all nonattainment criteria pollutants and their precursors at a ratio of at least 1:1, including NOx, VOC, SOx, PM10 and PM2.5.

DATA REQUESTS

8. Please provide NOx and VOC offset strategy to meet District requirements.

9. Please provide the mitigation strategy for all nonattainment criteria pollutants to meet the Energy Commission's CEQA mitigation requirements, including NOx, VOC, SOx, PM10 and PM2.5.

BACKGROUND

Power Output

Section 2.1 of the application states that the LMS100PA combustion turbine generator (CTG) used in PRP has a nominal net rating of 100 MW based on ISO conditions. Figure 2.1-3 in this section indicates that based upon turbine vendor analysis of metrological conditions at the site, the CTG can generate up to 104 MW net at full load (Case 1, 74°F, 31% relative humidity).

DATA REQUESTS

10. Please document or verify the maximum power output of the CTG based on site conditions.

11. Please evaluate the emissions at the maximum documented power output. If the emissions are higher than the current worst scenario emissions in the application, please also update the air quality analysis accordingly.

BACKGROUND

Auxiliary Equipment and Emergency Engines

In addition to the new LMS100PA CTG, cooling tower and fuel gas compressor, the application does not mention any auxiliary equipment or emergency engines (fire pumps or emergency generators) which would have air pollutant emissions.

DATA REQUESTS

12. Please indicate if any auxiliary equipment or emergency engines will be used at PRP.

13. If any auxiliary equipment or emergency engines to be used at PRP would be fossil-fueled, please estimate air pollutant emissions, provide all air quality modeling parameters of the equipment/engines and conduct the modeling analysis accordingly.

Technical Area: Biological Resources
Author: Ann Crisp

BACKGROUND

Nesting Bird Surveys

Section 4.2.6.1, page 4.2-8 of the Application for the Pomona Repower Project Small Power Plant Exemption (PRP SPPE) discusses methods proposed for preconstruction nesting bird surveys. Pre-construction nesting bird surveys would be required to avoid impacts on avian species protected by the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS). The proposed methods do not define the timing for implementing the surveys in relation to start of project-related construction activities. In addition, staff is unclear of what is proposed by "standard Migratory Bird Treaty Act (MBTA) avian buffer practices". In order to determine if methods are adequate to avoid and minimize impacts, staff requires more details regarding how the nesting bird surveys would be implemented and how buffers would be implemented to protect any nests detected during surveys. The city of Pomona General Plan establishes how to implement nesting bird surveys as part of the Conservation Element of the General Plan under Policy 7E.P13.

DATA REQUESTS

14. Please describe in detail the methods that would be used to implement nesting bird surveys including how many days prior to start of construction activities the surveys would be conducted. Surveys should follow those methods included in city of Pomona General Plan Goals and Polices under Policy 7E.P13.

15. Please describe in detail what the "standard MBTA avian buffer practices" are, include how the buffers would be marked and monitored, and provide references to any literature or document where this information is contained.

BACKGROUND

Avian Power Line Interaction

The SPPE Application contains information in Section 3.0 about the transmission line upgrades which include installation of new conductors. Avian species, including raptors, are protected by the CDFW and USFWS. Although raptors and other large birds are unlikely to use the site, they could be adversely affected by colliding with transmission lines or by getting electrocuted while perching on power poles if they were to use the transmission line while passing through the project area.

DATA REQUEST

16. Please provide additional information on the existing transmission line spacing, the existing pole design and grounding measures that are currently being implemented, and any proposed changes that would occur with the installation of the new conductors. The information may be provided in writing and/or in a figure. Measures should be consistent with the Avian Power Line Interaction Committee's publication Reducing Avian Collisions with Power Lines: The State of the Art in 2012 (2012).

Technical Area: Hazardous Materials Management
Author: Brett Fooks

BACKGROUND

Worst Case Analysis

Section 4.5.4.2 mentions that there are three schools located within one-quarter mile of the project site and section 4.5.6.2 mentions that CalARP requires a risk management plan (RMP) that includes hazard assessment to evaluate potential effects of an accidental release. However, the applicant has not submitted a worst case off-site consequence analysis (OCA) to determine if there would be an off-site impact to the surrounding public in case of catastrophic accidental release of the aqueous ammonia.

DATA REQUEST

17. Please provide a worst case OCA to determine the impact to the surrounding community.

BACKGROUND

Secondary Containment

Section 4.5.3.1 mentions that the existing vertical oriented 10,000 gallon aqueous ammonia tank would be replaced by a new 10,000 gallon horizontal tank. There is no discussion about replacing or reusing the secondary containment. There is also no information provided about the secondary containment's capacity or its dimensions.

18. Please clarify whether or not the existing secondary containment would be reused or if a new secondary containment would be built. Please provide dimensions for whichever secondary containment would meet current standards for a 24-hour, 25-year storm event plus 100 percent of the capacity of the largest tank within its boundary.

Technical Area: Waste Management
Author: Ellen Townsend-Hough

BACKGROUND

Waste Volume and Methods

Staff reviews the applicant's proposed solid and hazardous waste management methods and determines if the methods meet the state standards for waste reduction and recycling. Staff then reviews the available off-site treatment and disposal sites available and determines whether or not the proposed power plant's waste would have a significant impact on the disposal sites' allotted daily, yearly, or lifetime volume of waste it is allowed to receive.

DATA REQUESTS

19. Please provide estimates of the volume (in cubic yards) of nonhazardous and hazardous waste for each of the demolition, construction, and operation phases.

20. Please identify the proposed disposal facilities (Class I and Class III) where waste generated from the PRP project would be disposed, including names, locations, remaining capacity, and closure dates for each facility.

BACKGROUND

Waste Diversion

The Integrated Waste Management Act of 1989 (AB 939) established landfill waste diversion goals of 50 percent by the year 2000 for state and local jurisdictions. To meet the solid waste diversion goals, many local jurisdictions have implemented Construction and Demolition Waste Diversion Programs.

DATA REQUESTS

21. Please identify whether the city of Pomona or Los Angeles County operates a Construction and Demolition Waste Diversion Program, and cite the jurisdiction to which the PRP would report.

22. Please describe how PRP will meet each of the requirements of the program cited in the previous data request.

Technical Area: Socioeconomics
Author: Ellen LeFevre

BACKGROUND

Impacts on School Facilities

California Government Code Section 65995 expressly provides that payment of fees levied by the governing board of any school district pursuant to California Education Code, Section 17620 is full and complete mitigation of the impacts of the use and development of real property on the provision of adequate school facilities. Fees are calculated based on the square foot area of chargeable covered and enclosed space. Fees are imposed for industrial construction and construction is defined in Government Code Section 65995 (d) as new construction and reconstruction of existing building for industrial, residential, or commercial.

Based on the definition of construction in Government Code Section 65995 (d) and the proposed project as described in the SPPE, staff requests the following:

DATA REQUEST

23. Please identify the buildings, including the amount of covered and enclosed square footage AltaGas proposes to construct or reconstruct and identify the impact fee that will be paid to the school district(s).

BACKGROUND

Fiscal Resources

Section 4.10 on pages 4.10-9 and Section 1.8 on pages 1-6 are the only sections in the SPPE that discuss the fiscal estimates of the project. The SPPE did not identify the dollar year used to calculate the fiscal resource estimates.

DATA REQUEST

24. Please identify the dollar year used to calculate the fiscal resource estimates.

Technical Area: Traffic and Transportation
Author: John Hope

BACKGROUND

Bridge Clearance

SPPE Figure 4.12-2 depicts the truck route for trucks transporting large and heavy components for the proposed project. As shown in the figure, one portion of the truck route would potentially include the southbound off-ramps at SR-71 and East Valley Boulevard/Humane Way, then travel eastbound on West Holt Avenue to Erie Street. Trucks using this portion of the route would require travelling under SR-71 for which the bridge provides 15 feet 3 inches of clearance. Based on staff's previous experience with the size of power plant components, it is unclear how trucks transporting large and/or heavy equipment, such as a turbine, generator, or generator step-up (GSU) transformer, would clear the bridge for SR-71.

DATA REQUESTS

25. Please confirm whether large and heavy components would be transported by truck under the bridge for SR-71.

26. If large and heavy components would be transported by truck under the bridge for SR-71, please identify the size of power plant components that would transported along this route.

27. If there is not sufficient clearance, please identify and analyze an alternative route for transporting large and/or heavy equipment.

BACKGROUND

Airspace Obstructions

As identified in the SPPE Section 4.12.4.6 (Air Traffic), Federal Aviation Administration (FAA) Regulation, 14 C.F.R. Part 77, establishes standards for determining obstructions in navigable airspace and sets forth requirements for notification of proposed construction activities that occur over 200 feet above ground level (AGL). As noted in the SPPE Section 4.12.3.1, "Brackett Field is a public airport owned by the County of Los Angeles ...and is located 2.1 miles north of the project site." Section 4.12.4.6 notes PRP submitted FAA Form 7460-1, Notice of Construction or Alteration, for the exhaust stack to request that the FAA review PRP for any potential hazards to air navigation. On January 7, 2016, the FAA responded with a determination of no hazard to air navigation. Staff reviewed a copy of the determination provided in Appendix 4.12a. As noted on page 2, the "determination does include temporary construction equipment cranes, derricks, etc. which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above [90 feet AGL]. Equipment which has a height greater than the studied structure requires separate notice to the FAA." It is likely that a construction crane would extend higher than 90 feet AGL which would require the submittal of an additional 7460-1 form to the FAA.

The SPPE does not identify the potential use of cranes during construction of the proposed project.

DATA REQUESTS

28. If cranes would be used during construction activities, please identify the height(s) of the crane(s).

29. If the construction crane(s) would be higher than 90 feet AGL, please provide a copy of the 7460-1 form(s) submitted to the FAA and a copy of FAA's Hazard Determination(s).

BACKGROUND

Thermal Plume

As identified in the SPPE Section 4.12.4.6 (Air Traffic), "[a] thermal plume analysis was conducted to determine the height where the plume velocity equals the established threshold velocity of 10.6 meters per second (m/s)" which was used to determine the potential for thermal plumes to affect the safe operation of aircraft overflights.

Staff continues to advocate that a plume-average vertical velocity of 4.3 m/s, which includes a centerline peak vertical velocity of 8.6 m/s, more properly measures risk of upset conditions to light aircraft. The SPPE does not identify the reasoning for selecting a 10.6 m/s velocity threshold and does not provide any details or calculations in modeling the thermal plumes.

DATA REQUESTS

30. Please justify the use of a thermal plume velocity of 10.6 m/s as the threshold for determining the potential effects to safe operation of light aircraft.

31. Please provide the necessary data (e.g., input parameters, model used) for staff to replicate the thermal plume output modeling and calculations.

32. Please provide the height AGL where the plume-average vertical velocity equals an established threshold of 4.3 m/s.

Technical Area: Transmission System Engineering
Authors: Laiping Ng

BACKGROUND

Transmission Facilities

Applicants should provide a detailed description of the change in design, construction, and operation of any electric transmission facilities, such as generators, transformers, interconnection power lines, substations, switchyards, or other transmission equipment, which will be constructed or modified to transmit electrical power from the Pomona Repower Project (PRP) to the SCE Ganesha Substation.

DATA REQUESTS

33. Clarify the point of interconnection of the PRP.

    A. If the point of the interconnection is the Ganesha Substation, provide the following:

    - Provide a one-line diagram of the existing Ganesha Substation before the interconnection of the PRP.
    - Provide a one-line diagram of the Ganesha Substation after the addition of the PRP. Show all equipment ratings, including bay arrangement of the breakers, disconnect switches, buses, etc., which are required for the addition of the PRP.

    B. If the point of the interconnection is where the generator tie-line taps into the Ganesha-Simpson 66 kV line, provide a one-line diagram showing all the required equipment with ratings.

    C. In either case, provide a map showing the generator tie-line route, the segment which requires reconductoring, include the length of the reconductored segment.

    D. Clarify the conductor type and rating of the generator tie-line.

34. Resubmit Figure 2.1-4. Show all equipment ratings including generators, transformers, isolated phase bus, circuit breakers, disconnect switches, etc., that are required for the project.

35. Provide detail drawings for the take-off structures, pole and tower configurations required to interconnect the PRP to the SCE system.

36. Provide a completed Phase I and/or Phase II Interconnection Study from the California Independent System Operator for the PRP.

Technical Area: Visual Resources
Author: William Kanemoto

BACKGROUND

Night Lighting

Land use in the project vicinity is mixed, with residential neighborhoods and the city's main commercial street located within a short distance of the plant. Consequently, night lighting and potential nighttime light pollution are concerns.

DATA REQUESTS

37. Please provide additional information on how night lighting on the exhaust stack, cooling tower, and other tall project features could be minimized in extent, brightness, and amount of time in operation. Please address:

    A. Ways that the amount of lighting on exhaust stack and other tall features would be minimized; and ways the hours of operation of those lights would be minimized

    B. Methods of eliminating all uplighting and night sky light pollution

    C. Methods of eliminating all direct off-site illumination

Technical Area: Visible Plume
Author: Tao Jiang

BACKGROUND

Cooling Tower Operating Data

Staff needs to address the visual impact associated with water vapor plumes emitted from the proposed cooling tower. The impact assessment should be based on the results of a visible plume modeling analysis.

DATA REQUESTS

38. Please summarize for the proposed cooling tower the conditions that affect vapor plume formation including cooling tower heat rejection, exhaust temperature, and exhaust mass flow rate. Please provide values to complete or correct the table below. All combinations of temperature and relative humidity, if provided by the applicant, will be used to represent the cooling tower exhaust conditions.

	Case 1	Case 2	Case 3	...
Operating Mode				
Number of Cells				
Cell Height (m)	2	2	2	
Cell Diameter (m)	10.668	10.668	10.668	
Tower Housing Length (m)	6.096	6.096	6.096	
Tower Housing Width (m)				
Ambient Temperature (°F)				
Ambient Relative Humidity				
Number of Cells in Operation				
Heat Rejection (MW/hr)				
Exhaust Temperature (°F)				
Exhaust Flow Rate per cell (lbs/hr)				

39. Please provide the detailed visible plume modeling analysis. The Combined Stack Visible Plume (CSVP) model is preferred by Energy Commission staff. If another model is to be used, please justify the use of that model.

Technical Areas: Water Resources
Author: Chris Dennis

BACKGROUND

Potable and Recycled Water

The application states that the city of Pomona has available recycled water and has agreed to serve PRP with the volume of recycled water required (estimated average of 170.8 acre feet per year (afy)). The application also states that the existing city potable water connections would be used (estimated average of 49.4 afy). The PRP proposes to use potable water for evaporative inlet air-cooling and NOx control. Recycled water would be used for intercooler cooling tower makeup water.

DATA REQUESTS

40. Please provide a will-serve letter or agreement for the recycled water supply.

41. Please provide a will-serve letter or contract for the potable water supply.

42. Would a Water Supply Assessment (WSA) be required for the potable water supply?
    a. If no, please provide a detailed explanation why.
    b. If yes, please provide the WSA or a WSA preparation schedule for the potable water supply.

43. Would a Water Supply Assessment be required for the recycled water supply?
    a. If no, please provide a detailed explanation why.
    b. If yes, please provide the WSA or a WSA preparation schedule for the recycled water supply.

44. Please provide detailed explanations for why the following are not proposed or cannot be used for this project: Refrigerative (mechanical) inlet-air chilling; dry inter-cooling; dry low NOx; and recycled water for all industrial processes, not just cooling tower makeup.

BACKGROUND

Wastewater Discharge

The AFC states that Pomona Water Reclamation Plant, operated by the Sanitation Districts of Los Angeles County, has available capacity to receive and treat the proposed wastewater discharge by PRP. PRP would discharge an estimated 37.5 afy of wastewater.

DATA REQUEST

45. Please provide a will-serve letter or agreement for the proposed wastewater discharge.