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Memorandum

To:

Commissioner Karen Douglas, Presiding Member Commissioner Janea Scott, Associate Member

Date: May 1, 2019

From:

California Energy Commission 1516 Ninth Street

Sacramento, CA 95814-5512

Leonidas Payne Siting Project Manager (916) 651-0966

Subject:

ISSUES IDENTIFICATION REPORT FOR THE LAURELWOOD DATA CENTER SMALL **POWER PLANT EXEMPTION (19-SPPE-01)**

Attached is staff's Issues Identification Report for the Laurelwood Data Center project application for a Small Power Plant Exemption (19-SPPE-01). This report serves as a preliminary scoping document identifying potential issues Energy Commission staff believes will require careful attention and consideration. Staff will present this Issues Identification Report at the Committee Conference to be held on May 8, 2019.

Attachment

cc: Docket (19-SPPE-01) Laurelwood Listserve

LAURELWOOD DATA CENTER SMALL POWER PLANT EXEMPTION (19-SPPE-01)

ISSUES IDENTIFICATION REPORT May 1, 2019

CALIFORNIA ENERGY COMMISSION

Siting, Transmission & Environmental Protection Division

ISSUES IDENTIFICATION REPORT

LAURELWOOD DATA CENTER APPLICATION FOR SMALL POWER PLANT EXEMPTION (19-SPPE-01)

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ISSUES IDENTIFICATION REPORT

This report has been prepared by the California Energy Commission staff to inform the Committee and all interested parties of potential issues identified in staff's evaluation thus far. This Issues Identification Report contains a brief project description, summary of potential issues, and a discussion of the proposed project schedule.

PROJECT DESCRIPTION

The Laurelwood Data Center (LDC) would consist of two four-story buildings, with 56 3megawatt (MW) diesel-fired backup generators, and a maximum 99-MW load of information technology, cooling, and ancillary equipment. Both buildings would include loading docks, backup generator yards, and storm water bio-swales. The LDC would also include an onsite 60-kilovolt (kV) substation with an electrical supply line that would connect to a Silicon Valley Power (SVP) distribution line located 0.1 mile west of the project site. The generators would be distributed in redundant configurations (5 to make 4) to ensure uninterrupted power up to 99 MW, which is the maximum building load of the LDC. Each generator would have an approximately 10,300-gallon diesel fuel tank located underneath, to provide sufficient fuel storage to operate the generator at steady state continuous load for at least 48 hours. Each building's standby generators would be supported by an uninterruptible power supply (UPS) system consisting of batteries, an inverter, and switches to facilitate the uninterrupted transfer of electrical power from the SVP substation to the onsite standby generators in the event of a utility or equipment failure. The approximately 29,000-square-foot substation would be located in the southwest corner of the project site, with an approximately 600-foot-long electrical supply line that would head west from the substation to tie into SVP's existing 60-kV distribution line. Additional project features include electrical switchgear and distribution lines between the substation and buildings as well as from the backup generator yards and each respective building.

SMALL POWER PLANT EXEMPTION (SPPE) PROCESS

The Energy Commission is responsible for reviewing, and ultimately approving or denying, all thermal electric power plants, 50 MW and greater, proposed for construction in California. The SPPE process allows applicants with projects between 50 and 100 MW to obtain an exemption from the Energy Commission's jurisdiction and proceed with local approval rather than requiring an Energy Commission license. The Energy Commission can grant an exemption if it finds that the proposed project would not create a substantial adverse impact on the environment or energy resources. (Pub. Resources Code, § 25541.) In reviewing an SPPE application, the Energy Commission acts as the lead agency under section 25519(c) of the Public Resources Code and the California Environmental Quality Act (CEQA) and will perform any required environmental analysis. Should the exemption be granted for the project, responsibility for further evaluation and permitting would fall to the City of Santa Clara. The applicant is responsible for determining and obtaining any other permits that are required, such as a permit from the Bay Area Air Quality Management District.

There are two process-related issues that staff would like to bring to the attention of the Committee. Guiding regulations applicable to SPPEs, which were consolidated into California Code of Regulations, title 20, section 1934 et seq., took effect at the beginning of 2019. Additionally, modifications to the technical areas identified in CEQA Appendix G, and to the evaluation questions that are addressed in CEQA documents, took effect at the beginning of 2019. Key changes include new chapters discussing Energy and Wildfire.

POTENTIAL ISSUES

The following discussion focuses on issues where staff has concluded that (a) a "potentially significant impact" may occur, (b) resolution of the issue may cause delay in the schedule, and (c) staff has insufficient information at this time to reach a conclusion. The Committee should be aware that this report may not include all the significant issues that may arise during the proceeding, as discovery is not yet complete, and other parties have not had an opportunity to identify their concerns.

Air Quality Modeling

Air Quality and Public Health staff have identified several issues with the air quality and public health impact modeling assessment, as well as the emission estimates done for routine readiness testing of the diesel-fueled engines. Staff therefore has made a combination of formal data requests and informal data requests in the form of emails. The applicant has communicated that revised air quality modeling files will not be available until the week of May 20-24, 2019. Staff expects that the routine readiness testing could be done without adversely affecting air quality or public health. However, until an adequate air quality and public health impact assessment is made available, staff will not be able to verify that routine readiness testing can be conducted on the 56 diesel-fueled engines without causing an adverse air quality or public health impact.

Biological Resources

The project is 500 feet east of the San Tomas Aguino Creek corridor and within 2 miles of several other important wildlife habitats containing wetlands, riparian woodlands, and aquatic habitats that support multiple state and federally listed special-status species. Readiness testing of each of the 58 diesel backup generators for up to 50 hours per year would result in emissions of oxides of nitrogen (NOx) that have the potential to negatively impact the specialstatus species and supporting habitats mentioned above through nitrogen deposition. Biology staff has determined that it is desirable to estimate the nitrogen deposition that could result from the proposed project, and has asked Air Quality staff to conduct in-house nitrogen deposition modeling. Air Quality staff is waiting to get needed information from the applicant before the nitrogen deposition modeling can be done. In addition, project construction activities could impact nesting birds, including those that may be nesting in the site perimeter landscape trees and vegetation bordering San Tomas Aquino Creek. Although the applicant has proposed pre-construction nesting surveys and no-work buffer zones for any identified nests as part of the Project Design Measures for biological resources (section 2.5.2), staff anticipates adding more detail to these measures in staff's Initial Study for the project in order to reduce potential biological impacts to less than significant levels.

Demolition

The application states that demolition of existing buildings and grading will be conducted by the current owner of the site, and thus are separate and distinct from the data center/back-up generation facility project. Staff has corresponded with the City of Santa Clara to confirm this understanding. Although the City of Santa Clara has confirmed that demolition will be handled separately, there is no confirmation via the city's website that a permit has been issued for the demolition and grading work—this raises a potential issue in terms of whether demolition and grading activities should be evaluated by staff in any way, or be considered resolved. This may also affect the CEQA baselines to be applied in each of the technical sections for evaluation of potential impacts.

Water Supply

The project meets one or more of the criteria of a "project" for Water Supply Assessment (WSA) purposes. Upon inquiring if the applicant had obtained a WSA from the City of Santa Clara, which is the water supplier, the applicant informed staff that it had requested one from the city. Staff checked and confirmed that the city has received a WSA request from the project applicant. The city has prepared a draft WSA and it is currently going through internal review. The city representative informed staff that while recycled water is available within 0.3 mile of the site, the WSA will only analyze the proposed potable water use. After internal review, it will move to the City Council for final approval and adoption. The city said that staff can get a copy of the draft WSA once the internal review is complete, which as of the date of this report has not yet occurred.

PROPOSED SCHEDULE

The proposed schedule that follows lists key project miles tones that have already occurred, and reflects staff's best estimate of key future milestones given the information that is currently available. Staff understands that this schedule exceeds 135 days, which is the recommeded time period from application to decision specified in the regulations governing the SPPE process. Accordingly, staff requests that the applicant stipulate to this timeline to permit a full and fair exploration of the issues.

Staff's Proposed Schedule

Application materials docketed		3/5/19
Notice of Receipt and agency coordination letters docketed and		3/14-20/19
Staff Data Requests docketed		3/28/19
Tribal consultation letters docketed		3/28/19
Committee named at Business Meeting		4/10/19
Applicant data responses received		4/11/19
Issues ID report docketed		5/1/19
Committee Conference		5/8/19
Revised AQ modeling expected		5/20-24/19
Initial Study publication		7/11/19
Mitigation resolution workshop (if needed)		7/25-26/19
Deadline for comments on the Initial Study (30 days per CEQA)	8/12/19
Staff responses to comments plus errata docketed		8/21/19
Prehearing Conference/Hearing		8/26-30/19
Presiding Member's Proposed Decision		TBD
Commission Decision at Business Meeting		10/2/19 or 11/13/19
Commission Decicion at Datimise meeting		