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# **Article 4.2 Certification of Strategic Reliability Reserve Facilities**

# 1890. Scope and Definitions.

- (a) This article implements Chapter 8.9, Article 5, of Division 15 of the Public Resources Code related to the certification of a site on which a facility described in Water Code section 80710(b)(1) is located.
- (b) These regulations shall be effective for all applications submitted pursuant to Chapter 8.9, Article 5, of Division 15 of the Public Resources Code beginning October 31, 2022, up to and including October 31, 2026.
- (c) The department shall submit an application for certification in accordance with these regulations for any site and related facility it proposes to implement pursuant to Water Code Section 80710.
- (d) For purposes of this Article the following definitions shall apply:
  - 1. "Application" means any application submitted for the issuance of a certification for site and related facility pursuant Public Resources Code Section 25794.1.
  - 2. "Site and related facility" means any facility described in Section 80710(b)(1)(B)-(E) of the Water Code and the proposed location of the facility. It does not include any facility that, but for Public Resources Code Section 25794(b), would otherwise be subject to the Post-Certification Petition for Changes process pursuant to California Code of Regulations, title 20, Section 1769.

Note: Authority cited: Sections 25213, 25218(e), and 25793(e), Public Resources Code. Reference: Sections 25793(e), 25794, and 25794. 1, Public Resources Code.

# § 1891. Prefiling Consultation.

- (a) The department shall meet with staff regularly, but in no event less frequently than quarterly, to receive guidance from staff in accordance with Public Resources Code section 25794.2(a) on the optimal location of any facility the department is considering for applications submitted under this Article.
- (b) Before submitting any application under this Article, the department shall meet with staff to discuss information requirements for the application, and shall invite all agencies that have or would have had jurisdiction but for Public Resources Code Section 25794(b) to attend the meeting.

Note: Authority cited: Sections 25213, 25218(e), and 25793(e), Public Resources Code. Reference: Sections 25793(e) and 25794.2(a) Public Resources Code.

## § 1892. Contents of Application.

- (a) The department shall submit all the information identified in Public Resources Code section 25794.2(b) and Appendix SRR, incorporated here by reference, to complete an application. For any categories of information contained in Appendix SRR not relevant to the site and related facility, the application shall include a discussion explaining why a category does not apply. All information provided by the department shall be submitted in accordance with Section 1208 and shall be publicly accessible unless it has been designated confidential in accordance with Section 2505.
- (b) A list of federal, state, regional, and local agencies and their laws, ordinances, standards, or regulations (LORS), including long-range land use plans adopted by the state or by any local or regional planning agency, that are applicable to each site and related facility, including those that would be applicable but for the exclusive authority of the commission to certify sites and related facilities. The list shall also include the relevant contact person at each agency and their contact information.
- (c) The department shall certify the application and supporting information in accordance with Section 1707.
- (d) The executive director may request, and the department shall provide, documentation verifying any information or representations contained in the application.

Note: Authority cited: Sections 25213, 25218(e), 25793(e), and 25794.2(b), Public Resources Code. Reference: Sections 25794.2, 25794.4, and 25794.6, Public Resources Code.

# § 1893. Review of Application for Completeness.

- (a)The executive director shall review the application for completeness and may request or otherwise obtain from the department such additional information as is necessary for a complete staff analysis of the application. If no additional information is needed, the executive director shall file a statement in the docket for the proceeding noting that the application is deemed complete pursuant to Public Resources Code section 25794.4.
- (b) If additional information is requested, the department shall provide the requested information as soon as practicable, but in no event more than 30 days after a request is issued.
- (c) The executive director shall review the information submitted under subdivision (b) within 5 days of receipt and may notify the applicant that information requested remains outstanding. If information remains outstanding, the executive director shall specify what information is missing. If the department is unable to provide the additional information, it shall file a statement in the docket for the proceeding

explaining why it is unable to provide the information and shall meet with staff to resolve the matter.

- (d) Immediately after all outstanding information has been accepted pursuant to this section, the executive director shall file a statement to the docket for the proceeding indicating that the additional information has been accepted and the application is deemed compete pursuant to Public Resources Code section 25794.4.
- (e) Within 10 days after the executive director's statement is filed, staff shall transmit the statement electronically to the list of agencies provided pursuant to section 1892(b) with an internet link to where the application can be found online.

Note: Authority cited: Sections 25213, 25218(e), 25793(e), and 25794.4, Public Resources Code. Reference: Section 25794.4, Public Resources Code.

## § 1894. Tribal Consultation

- (a) <u>Within 10 days from receipt of the application, the commission shall provide the application to all California Native American tribes that are culturally and traditionally associated within the geographic area of the site.</u>
- (b) <u>Prior to the release of a preliminary staff analysis, the commission shall consult with tribes in a manner consistent with Public Resources Code sections 21080.3.1 and 21080.3.2.</u>
- (c) <u>The commission may initiate consultation earlier than specified under Public Resources Code section 21080.3.1 to ensure effective engagement, meaningful process, and information exchange.</u>

Note: Authority cited: Sections 25213, 25218(e), 25793(e), 25794.2(a), and 25794.5(b), Public Resources Code. Reference: Sections 21080.3.1, 21080.3.2, and 25794.5(b), Public Resources Code.

# **§1895 Agency Review and Consultation**

(a) In accordance with Public Resources Code Section 25794.5(a)(2), within 30 days after an application is deemed complete pursuant to subdivision 1893(d), each agency that would otherwise be responsible for enforcing a law, ordinance, regulation, or standard pertaining to the proposed site and related facility but for the commission's exclusive jurisdiction may assess the site and related facility's compliance with such laws, ordinances, regulations, or standards and provide the commission with the results of that assessment. The assessment shall identify each aspect of the proposed site and related facility for which the agency has land use or related jurisdiction or would have such jurisdiction but for the exclusive authority of the commission to certify sites and

related facilities. Staff shall give due deference to an agency's assessment under this subdivision.

(b) <u>Staff shall meet at least once with any agency that submits comments pursuant to subdivision (a) to resolve any potential noncompliance of the site and related facility with applicable laws, ordinances, regulations, or standards. The meeting may be either in person or via electronic means.</u>

Note: Authority cited: Sections 25213, 25218(e), 25793(e), 25794.2(a), Public Resources Code. Reference: Section 25794.5, Public Resources Code.

## § 1896. Preliminary Staff Analysis.

- (a) Staff shall produce a written preliminary analysis of the proposed site and related facility that includes the following:
- (1) A description of the site and related facility that includes information described in Public Resources Code sections 25520 and 25794.2(b)(1) and (2).
- (2) An analysis of substantial environmental impacts of the site and related facility, the completeness of any mitigation measures proposed by the applicant, and the need for, and feasibility of, additional or alternative mitigation measures. This shall include proposed conditions and verification and monitoring requirements needed to mitigate any potential impacts to the environment or health and safety to the maximum extent feasible, and to fully mitigate all air emissions in the surrounding community;
- (3) An analysis of the conformity of the site and related facility with public safety standards and the applicable air and water quality standards, and with other applicable local, regional, state, and federal standards, ordinances, or laws.
- (4) An analysis of the public benefits from the site and related facility including, but not limited to, environmental and electricity reliability benefits.
- (5) Identification of any requirements necessary to ensure the site is restored to its pre-certification condition.
- (b) Staff shall publish its preliminary analysis for a 60-day public comment period before completing and publishing the final staff analysis.

Note: Authority cited: Sections 25213, 25218(e), and 25793, Public Resources Code. Reference: Sections 25794.1, 25794.2 and 25794.5, Public Resources Code.

## § 1897. Final Staff Analysis

(a) After conclusion of the public comment period provided under Public Resources

Code Section 25794.5(g), the executive director shall prepare and publish a final

staff analysis, which shall include a recommendation on whether the application meets all statutory requirements, and the commission should therefore issue a certificate to construct and operate the site and related facility.

- (b) The final staff analysis shall respond to any public or agency comments that raise substantial issues, including potential environmental and public health and safety impacts and nonconformance with state, local, or federal laws, ordinances, regulations, and standards, submitted during the public or agency comment periods.
- (c) The final staff analysis shall analyze whether certification of the site and related facility is or is not prohibited under Public Resources Code section 25794.6.

Note: Authority cited: Sections 25213, 25218(e), and 25793(e), Public Resources Code. Reference: Sections 25794.2(c), 25794.5(g), 25794.5(h), 25794.6 Public Resources Code.

# § 1898. Commission Determination and Issuance of a Certificate

The commission shall consider the Final Staff Analysis of an application within 45 days of its publication and may take action including, without limitation, voting to grant certification, deny the application, or require additional information or analysis. If the commission votes to require additional information or analysis, the commission shall specify the required items and establish a schedule for subsequent actions.

Note: Authority cited: Sections 25213, 25218(e), and 25793(e), Public Resources Code. Reference: Sections 25794.2(a), 25794.4(c), and 25794.6 Public Resources Code.

# §1898.5 Withdrawal or Recommendation to Reject Application for Noncompliance

- (a) Any time after acceptance, the department may withdraw the application by filing a written notice of withdrawal. The notice of withdrawal must be authorized and verified in the same manner as the original application as provided in Section 1707. Upon receipt of a properly executed withdrawal, the Chair shall immediately issue a written notice terminating the application proceeding and closing the docket.
- (b) If at any point in the proceeding staff concludes that the site and related facility would not comply with Public Resources Code section 25794.6, the executive director may file a recommendation requesting the commission reject the application. The recommendation shall specify which provision of Public Resources Code section 25794.6 compels the commission to reject the application, describe the basis for this conclusion, and provide all facts in support of this conclusion. The department shall provide any response to the recommendation within 14 days. The commission shall consider the recommendation and any response at a business

meeting within 45 days after the date the recommendation was filed and may take action including, without limitation, approving the recommendation and denying the application, rejecting the recommendation, requesting additional information or establishing a schedule for subsequent actions.

# § 1899. Post Certification Changes.

- (a) After certification of a site and related facility, the department shall petition the commission for approval of any change it proposes to the site and related facility design, operation, or performance requirements. The petition shall contain the following information:
  - (1) A complete description of the proposed change, including new language for any conditions of certification that will be affected;
  - (2) A discussion of the necessity for the proposed change and an explanation of why the change should be permitted;
  - (3) A description of any new information or change in circumstances that necessitated the change;
  - (4) An analysis of the effects that the proposed change to the site and related facility may have on the environment and proposed measures to mitigate any substantial environmental effects;
  - (5) An analysis of how the proposed change would affect the site and related facility's compliance with applicable laws, ordinances, regulations, and standards;
  - (6) A discussion of how the proposed change would affect the public;
  - (7) A list of current assessor's parcel numbers and owners' names and addresses for all parcels within 500 feet of any affected site and related facility linears and 1000 feet of the site; and
  - (8) A discussion of the potential effect of the proposed change on nearby property owners, residents and the public.
- (b) The department shall provide the payment required under Public Resources Code section 25806(e) when submitting the petition.
- (c) Within 30 days after a petition is filed and the applicable fee is paid, staff shall review the petition and either approve the petition pursuant to Section 1899(d)(1) or submit the petition to the commission for consideration pursuant to Section 1899(d)(2).
- (d)(1) Staff Approval of Proposed Change
- (A) Staff shall approve the change where staff determines:
  - i. That there is no possibility that the change may have a substantial effect on the environment;

- ii. That the change would not cause the site and related facility to fail to comply with any applicable laws, ordinances, regulations, or standards; and
- iii. The change will not require a change to, or deletion of, a condition of certification adopted by the commission in the final decision or subsequent amendments.
- (B) <u>Staff, in consultation with the air pollution control district where the site and related facility is located, may approve any change to a condition of certification regarding air quality provided:</u>
  - i. That the criteria in subdivisions (d)(1)(A)(i) and (ii) are met; and
  - ii. That no daily, quarterly, annual, or other emission limit will be increased as a result of the change.
- (C) Staff shall file its analysis and any decision approving a proposed change in accordance with subdivision (d)(1).
- (D)Staff may submit to the commission for consideration and a decision a proposed change that could otherwise be approved by staff under subdivisions (d)(1)(A) or (B).

# (2) Commission Approval of Proposed Change

If staff determines that a change does not meet the criteria for staff approval set forth in subdivision (d)(1)(A) or (B), or if staff submits the proposed change to the commission for consideration under subdivision (d)(1)(D), the petition shall be considered by the commission at a noticed business meeting. The commission shall issue an order approving, rejecting, or modifying the petition or shall establish a schedule for subsequent actions.

Note: Authority cited: Sections 25213, 25218(e), and 25793(e), 25794.2(a) Public Resources Code. Reference: Sections 25793(e) and 25794.2(a), Public Resources Code.

# § 1899.1. Notification of DWR-Certified Facilities

For any permit granted by the department pursuant to Assembly Bill 178 (Stats. 2022, ch. 45, §112), the department shall notify the commission in writing within 30 days of the effective date of these regulations. The notification shall include the following:

(a) a description of the site and related facility the department has permitted, including name and location;

- (b) information concerning whether the department-permitted facility is located on a site that is currently under the jurisdiction of the commission;
- (c) the date the permit was issued, a construction schedule for department-permitted facility, and the expected date of operation;
- (d) the expiration date of the department-issued permit and what will happen with the department-permitted facility upon expiration of its permit.

Authority: Sections 25213, 25218(e), and 25793(e), Public Resources Code; Reference: Section 25794.1, Public Resources Code; Section 80710(a)-(b), Water Code.



## **Appendix SRR**

# Information Requirements for Certification of Strategic Reliability Reserve Facilities

# (a) Project Design, Operation and Location

- (1) A detailed description, including drawings of the project's major structures, of the design, methods of construction (include depth of excavations and other ground disturbances) and operation of the facilities, specifically including the power generation, energy storage, cooling, water supply and treatment, waste handling and control, pollution control, fuel handling, and safety, emergency and auxiliary systems, and fuel types and fuel use scenarios; and
- (2) A detailed description of the design, construction, and operation of any electric transmission facilities, such as powerlines, substations, switchyards, or other transmission equipment, that will be constructed or modified to transmit electrical power from the proposed site and related facilities to the load centers to be served by the facility. Such description shall include the width of rights-of-way and the physical and electrical characteristics of electrical transmission facilities such as towers, conductors, and insulators. For each of the following, provide the dimensions, and typical operating data:
- (i) The power generation system;
- (ii) The heat dissipation system;
- (iii) Switchyards/transformer systems; and
- (iv) Other significant facilities, structures, or system components proposed by the applicant, such as energy storage systems.
- (3) Provide documentation from the interconnecting authority, the California Independent System Operator, or the appropriate Transmission Owner, as applicable, that the facility has approval to interconnect to the electrical grid or the status of the application for this formal approval, and an anticipated schedule for final approval.
- (4) An explanation of the site selection criteria establishing that the location selected for the proposed site and related facilities is an optimal location based on the potential to improve reliability, reduce the occurrence of public safety power shutoffs, decrease the use of high-emission backup power, minimize air pollution, and avoid impacts on disadvantaged communities, as identified pursuant to Section 39711 of the Health and Safety Code.
- (5) A detailed description of how the proposed site and related facilities will be capable of delivering energy during net peak hours in response to a dispatch by the Independent System Operator during extreme events.

- (6) A detailed description showing the site has access to the infrastructure and resources with the necessary existing capacity and in the proximity needed to operate the facility.
- **(b) Project Schedule:** Proposed dates of initiation and completion of construction, initial start-up, and full-scale operation of the proposed facilities.

# (c) Project Ownership

A list of all owners and operators of the site(s), the facilities, and, if applicable, any adjacent interest holder such as a thermal host, and a description of their legal interest in these facilities and legal relationship with the applicant.

## (d) Facility Closure

(1) A discussion of how facility closure will be accomplished at the end of the term of the certificate or in the event of premature or unexpected cessation of operations; or (2) If the applicant plans to operate beyond the term of the certificate, please provide a discussion of how the applicant will obtain all necessary permits, certificates, or similar documents required by state, local, and federal governments.

## (e) Environmental Information

# (1) Cultural Resources and Tribal Cultural Resources

Cultural resources and tribal cultural resources together comprise objects, buildings, structures, sites, features, areas, places, records, sacred places, cultural landscapes, or manuscripts.

(A) Locate and provide all relevant existing data: Obtain and submit the results of a records search to identify cultural resources and tribal cultural resources at the appropriate information center(s) of the California Historical Resources Information System (CHRIS). The records search shall cover the project site and a 1-mile buffer around the project site and 0.25 mile on each side of any linear facilities. Identify any cultural resources or tribal cultural resources listed pursuant to ordinance by a city or county or recognized by any local historical or archaeological society or museum.

Provide copies of California Department of Parks and Recreation (DPR) 523 forms for all cultural resources and tribal cultural resources identified in the records search. A copy of the USGS 7.5-minute quadrangle map of the records search area delineating the areas of all past surveys and noting the CHRIS identifying number shall be provided. Copies also shall be provided of all technical reports whose survey coverage is wholly or partly within 0.25 mile of the area surveyed for the project. Confidential information (archaeological sites, other sensitive resources, or areas of religious significance) shall be submitted under a request for confidentiality pursuant to Title 20, California Code of Regulations, § 2501 et seq.

## (B) Document and provide additional information:

- i) For the site: Conduct site specific surveys adequate to establish existing conditions, to include:
- a) Pedestrian archaeological surveys inclusive of the project site and project linear facility routes, extending to no less than 200 feet around the project site, substations, and staging areas, and to no less than 50 feet to either side of the right-of-way of project linear facility routes, unless this survey has been conducted within the last five years.
- b) New historic architecture field surveys in rural areas shall be conducted inclusive of the project site and the project linear facility routes, extending no less than 0.5 mile out from the proposed plant site and from the routes of all above-ground linear facilities. New historic architecture field surveys in urban and suburban areas shall be conducted inclusive of the project site, extending no less than one parcel's distance from all proposed plant site boundaries. New historic architecture field reconnaissance ("windshield survey") in urban and suburban areas shall be conducted along the routes of all linear facilities to identify, inventory, and characterize structures and districts that appear to be older than 45 years or that are exceptionally significant, whatever their age, unless this survey has been conducted within the last five years.
- (C) Submit (1) a copy of the applicant's request to the Native American Heritage Commission (NAHC) for information on Native American sacred sites and lists of California Native American tribes interested in the project vicinity, and copies of any correspondence received from the NAHC. (2) A copy of all correspondence sent to Native American individuals and groups listed by the NAHC and copies of all responses. Notification to Native Americans shall include a project description and map. (3) A written summary of any oral responses.
- (D) Include plans for mitigation as follows:
- (i) An explanation of measures proposed to mitigate project impacts to known cultural and tribal cultural resources:
- (ii) A set of contingency measures proposed to mitigate potential impacts to previously unknown cultural and tribal cultural resources and any unanticipated impacts to known cultural or tribal cultural resources;
- (iii) Training plans for employees to increase awareness during construction and operation of risks to, and ways to protect against impact to, cultural and tribal cultural resources.
- (E) Reports of the results of the new surveys shall be submitted. If confidential, see Title 20, California Code of Regulations, § 2501 et seq. The reports shall include:
- (i) A summary of the records search results from subsection(e)(1)(A).
- (ii) The survey procedures and methods used to identify cultural and tribal cultural resources and a discussion of the outreach to the NAHC and California Native American tribes.

- (iii) Copies of all new and updated DPR 523(A) forms. If a cultural resource or tribal cultural resource may be impacted by the project, also include the appropriate DPR 523 detail form for each such resource.
- (iii) A map at a scale of 1:24,000 (U.S. Geological Survey topographic quadrangle) depicting the locations of all previously known and newly identified cultural and tribal cultural resources compiled through the records search and cultural resource surveys.
- (iv) The names and qualifications of the cultural resources specialists who contributed to and were responsible for literature searches, surveys, and preparation of the technical report. New cultural resources and tribal cultural resources surveys must be completed by (or under the direction of) individuals who meet the Secretary of the Interior's Professional Standards for the technical area addressed.

## (2) Land Use

- (A) In an appendix to the application, list current assessor's parcel numbers and owners' names and addresses for all parcels within 1000 feet of the site and related facilities. Provide the direct mailing addresses for the owners and occupants of properties contiguous to the proposed site and related facilities as shown on the latest equalized assessment roll.
- (B) In an appendix to the application, provide maps at a scale of 1:24,000 (1" = 2000'), (or appropriate map scale agreed to by staff) with an identification of the dedicated leaseholds by section, township, range, county, and county assessor's parcel number, showing the proposed final locations and layout of the facilities.
- (C) A complete description of existing land uses, general plan land use designations, and current zoning districts (including any overlay districts) at the site, land uses and land use patterns within one mile of the proposed site and within one-quarter mile of any project-related linear facilities. Include:
- (i) An identification of residential, commercial, industrial, recreational, scenic, agricultural, natural resource protection, natural resource extraction, educational, religious, cultural, and historic areas, and any other area of unique land uses;
- (ii) An inventory of any recent or proposed zone changes and/or general plan amendments noticed by an elected or appointed board, commission, or similar entity at the state or local level impacting the proposed site.
- (iii) Identification of all discretionary reviews by public agencies initiated or completed within 18 months prior to filing the application for those changes or developments identified in subsection (e)(2)(C); and
- (iv) Legible maps of the areas identified in subsection (e)(2)(C) potentially affected by the project, on which existing land uses, jurisdictional boundaries, general plan designations, specific plan designations, and zoning have been clearly delineated.

- (D) An explanation of the compatibility of the proposed project with present and expected land uses, and conformity with any long-range land use plans and policies adopted by any federal, state, regional, or local planning agencies. The explanation shall identify the need, if any, for land use decisions by another public agency or as part of the commission's decision that would be necessary to make the project conform to adopted federal, state, regional, or local coastal plans, land use plans, or zoning ordinances. Examples of land use decisions include: general plan amendments, zoning changes, lot line adjustments, parcel mergers, subdivision maps, Agricultural Land Conservation Act contracts cancellation, and Airport Land Use Plan consistency determinations.
- (E) A description of the legal status of the parcel(s) on which the project is proposed.
- (F) A map at a scale of 1:24,000 and written description of agricultural land uses found within all areas affected by the proposed project. The description shall include:
- (i) Land classifications as shown on the Farmland Mapping and Monitoring Program's Important Farmland maps, crop types, irrigation systems, and any special cultivation practices; and
- (ii) Whether agricultural land affected by the project was historically classified Farmland as defined by the California Department of Conservation (Prime Farmland, Farmland of Statewide Importance, or Unique Farmland).
- (iii) Adverse effects on agricultural land uses. If the proposed site or related facilities are subject to an Agricultural Land Conservation contract, provide a written copy and a discussion of the status of the expiration or canceling of such contract.

#### (3) Noise

- (A) On the map submitted pursuant to (e)(2)(a), identify residences, hospitals, libraries, schools, places of worship, or other facilities where quiet is an important attribute of the environment within the area impacted by the proposed project. The area potentially impacted by the proposed project is that area where, during either construction or operation, there is a potential increase of 5 dB(A) or more, over existing background levels.
- (B) A description of the existing ambient noise levels at those sites identified under subsection (e)(3)(A) that the applicant believes provide a representative characterization of the ambient noise levels in the project vicinity, and a discussion of the general atmospheric conditions, including temperature, humidity, and the presence of wind and rain at the time of the measurements. The existing noise levels shall be determined by taking noise measurements for a minimum of 25 consecutive hours at a minimum of one site. Other sites may be monitored for a lesser duration at the applicant's discretion, preferably during the same 25-hour period. The results of the noise level measurements shall be reported as hourly averages in Leq (equivalent sound or noise level), Ldn (day-night sound or noise level) or CNEL (Community Noise

Equivalent Level) in units of dB(A). The L<sub>10</sub>, L<sub>50</sub>, and L<sub>90</sub> values (noise levels exceeded 10 percent, 50 percent, and 90 percent of the time, respectively) shall also be reported in units of dB(A).

- (C) A description of the major noise sources of the project, including the range of noise levels and the tonal and frequency characteristics of the noise emitted.
- (D) An estimate of the project noise levels, during both construction and operation, at residences, hospitals, libraries, schools, places of worship, or other facilities where quiet is an important attribute of the environment, within the area impacted by the proposed project.
- (E) An estimate of the project noise levels within the project site boundary during both construction and operation and the impact to the workers at the site due to the estimated noise levels.
- (F) The audible noise from existing switchyards and overhead transmission lines that would be affected by the project, and estimates of the future audible noise levels that would result from existing and proposed switchyards and transmission lines. Noise levels shall be calculated at the property boundary for switchyards and at the edge of the rights-of-way for transmission lines.

# (4) Traffic and Transportation

- (A) A regional transportation setting, on topographic maps (scale of 1:250,000), identifying the project location and major transportation facilities used during the construction or operation of the facility. Include a reference to the transportation element of any applicable local or regional plan.
- (B) If the proposed project including any linear facility is to be located within four miles of an airport, a planned or proposed airport runway, or an airport runway under construction, discuss the project's compliance with the applicable sections of the current Federal Aviation Regulation Part 77 Safe, Efficient Use, and Preservation of the Navigable Airspace, specifically any potential to obstruct or impede air navigation generated by the project during construction or operation; such as, a thermal plume, a visible water vapor plume, glare, electrical interference, or surface structure height. The discussion should include:
- (i) A map at a scale of 1:24,000 that displays the airport or airstrip runway configuration, the airport influence area including all safety zones, and the proposed facilities;
- (ii) A thermal plume analysis that describes the plume's velocity;
- (iii) A discussion of the project's conformance with applicable Airport Land Use Compatibility Plan policies; and
- (iv) Copies of FAA Form 7460-1, Notice of Proposed Construction or Alteration, that were submitted or approved for any project component requiring notice.

- (C) An evaluation of the project's potential impacts, during construction and operation, related to vehicle miles traveled (VMT) that shall include one or more of the following:
- (i) The local jurisdiction's thresholds of significance;
- (ii) Methodologies (such as local VMT Evaluation Tool);
- (iii) VMT heat maps; and
- (iv) Transportation demand management plans and any documents supporting the project applicant's VMT evaluation.
- (D) An identification, on topographic maps at a scale of 1:24,000 and a description of existing and planned roads, rail lines (including light rail), bike trails, airports, bus routes serving the project vicinity, pipelines, and canals in the project area affected by or serving the proposed facility. For each road identified, include the following information, where applicable:
- (i) Road classification and design capacity;
- (ii) Weight and load limitations;
- (iii) An identification of any road features affecting public safety.
- (E) An assessment of the construction and operation impacts of the proposed project on the transportation facilities identified in subsection (e)(4)(D). Also include anticipated project-specific traffic, estimated daily average and peak traffic trips and traffic/truck mix, and the impact of construction of any facilities identified in subsection (e)(4)(D). Include:
- (i) Estimated one-way trip lengths for workers, deliveries, and truck haul trips generated by the construction of the project.
- (ii) Description of public roadways and intersections temporarily or permanently altered by construction and operation including the duration of activities.
- (F) A discussion of project-related hazardous materials to be transported to or from the project during construction and operation of the project, including the types, estimated quantities, estimated number of trips, anticipated routes, means of transportation, and any transportation hazards associated with such transport.

## (5) Socioeconomics

- (A) Provide a discussion of the socioeconomic impacts caused by the construction and operation of the project (note year of estimate, model, if used, and appropriate sources), including:
- (i) An estimate of the number of workers to be employed each month by occupation during construction, and for operations, an estimate of the number of permanent operations workers during a year;

- (ii) An estimate of the percentage of non-local workers who will relocate to the project area to work during the project construction and operation;
- (iii) An estimate of the potential temporary and permanent population increase caused directly and indirectly by the project. For those additional persons, describe whether any political subdivisions serving residents and visitors are impacted by the population change. Include applicable impacts to school districts, hospital or ambulance districts, fire districts, parks and recreational districts, etc.

## (6) Air Quality

- (A) The information necessary for the air pollution control district where the project is located to complete a Determination of Compliance review to determine whether the proposed facility meets the requirements of the applicable new source review rule and all other applicable district regulations.
- (B) The heating value and chemical characteristics of the proposed fuels, the stack height and diameter, the exhaust velocity and temperature, the heat rate and the expected capacity factor of the proposed facility.
- (C) A description of the control technologies proposed to limit the emission of criteria pollutants.
- (D) If applicable, a description of the cooling system, the estimated cooling tower drift rate, the rate of water flow through the cooling tower, and the maximum concentrations of total dissolved solids.
- (E) The emission rates of criteria pollutants and greenhouse gases (CO2, CH4, N2O, and SF6) from the stack, cooling towers, fuels and materials handling processes, delivery and storage systems, and from all on-site secondary emission sources.
- (F)(i) A description of typical operational modes, and start-up and shutdown modes for the proposed project, including the estimated frequency of occurrence and duration of each mode, and estimated emission rate for each criteria pollutant during each mode.
- (ii) A description of the project's planned initial commissioning phase, which is the phase between the first firing of emissions sources and the commercial operations date, including the types and durations of equipment tests, criteria pollutant emissions, and monitoring techniques to be used during such tests,
- (G) Representative meteorological data approved by the California Air Resources Board or the local air pollution district.
- (H) An evaluation of the project's air quality impacts, consisting of the following:
- (i) An analysis of the criteria pollutant impacts of project construction activities, including fugitive dust (PM10) emissions from grading, excavation and site disturbance, as well as the combustion emissions [nitrogen oxides (NOx), sulfur dioxide (SO2), carbon monoxide (CO), and particulate matter less than 10 microns in diameter (PM10) and

particulate matter less than 2.5 microns in diameter (PM2.5)] from construction-related equipment according to local air district requirements;

- (ii) A screening level air quality modeling analysis, or a more detailed modeling analysis if so desired by the applicant, of the direct criteria pollutant (NOx, SO2, CO and PM10 and PM2.5) impacts on ambient air quality conditions of the project during typical (normal) operation, and during shutdown and startup modes of operation. Identify and include in the modeling of each operating mode the estimated maximum emissions rates and the assumed meteorological conditions; and
- (iii) A cumulative air quality modeling impacts analysis of the project's typical operating mode in combination with sources in the vicinity of the project that are not adequately represented by ambient monitoring data.
- (iv) an air dispersion modeling analyses of the impacts of the initial commissioning phase emissions on state and federal ambient air quality standards for NOx, SO2, CO, PM10 and PM2.5.
- (I) If an emission offset strategy is proposed to mitigate the project's impacts under subsection (f)(1), provide the following information:
- (i) The quantity of offsets or emission reductions that are needed to satisfy air permitting requirements of local permitting agencies (such as the air district), state and federal oversight air agencies, and the California Energy Commission. Identify by criteria air pollutant, and if appropriate, greenhouse gas; and
- (ii) Potential offset sources, including location, and quantity of emission reductions.
- (J) a detailed description of the mitigation, if any, that an applicant may propose, for all project impacts from criteria pollutants that currently exceed state or federal ambient air quality standards, but are not subject to offset requirements under the district's new source review rule.

## (7) Public Health

- (A) An assessment of the potential risk to human health from the project's hazardous air emissions using the Air Resources Board Hotspots Analysis and Reporting Program (HARP) (Health and Safety Code §§ 44360-44366), incorporated here by this reference, or its successor and Approved Risk Assessment Health Values. These values shall include the cancer potency values and noncancer reference exposure levels approved by the Office of Environmental Health Hazard Assessment (OEHHA Guidelines, Cal-EPA 2022), incorporated here by this reference.
- (B) A listing of the input data and output results, in both electronic and print formats, used to prepare the HARP health risk assessment.
- (C) A map showing sensitive receptors within the area exposed to the substances identified in subsection (e)(7)(A).

- (D) For purposes of this section, the following definitions apply:
- (i) A sensitive receptor refers to infants and children, the elderly, and the chronically ill, and any other member of the general population who is more susceptible to the effects of the exposure than the population at large.
- (ii) An acute exposure is one that occurs over a time period of less than or equal to one (1) hour.
- (iii) A chronic exposure is one that occurs from one (1) year to a lifetime.

# (8) Hazardous Materials Handling

- (A) A list of all materials used or stored on-site that are hazardous or acutely hazardous, as defined in Title 22, California Code of Regulations, § 66261.20 et seq., and a discussion of the toxicity of each material.
- (B) A map at a scale of 1:24,000 depicting the location of schools, hospitals, day-care facilities, and long-term health care facilities, within the area potentially affected by any release of hazardous materials.
- (C) A discussion of the storage and handling system for each hazardous material used or stored at the site.
- (D) The protocol that will be used in modeling potential consequences of accidental releases that could result in offsite impacts. Identify the model(s) to be used, a description of all input assumptions, including meteorological conditions. The results of the modeling analysis can be substituted after the application is complete.
- (E) A discussion of whether a risk management plan (Health and Safety Code § 25531 et seq.) will be required, and if so, the requirements that will likely be incorporated into the plan.
- (F) A discussion of measures proposed to reduce the risk of any release of hazardous materials.
- (G) A discussion of the fire and explosion risks associated with the project.

# (9) Worker Safety

- (A) A description of the safety training programs that will be required for construction and operation personnel.
- (B) A complete description of the fuel handling system and the fire suppression and fire alarm systems for the project.

# (10) Waste Management

(A) A Phase I Environmental Site Assessment (ESA) for the proposed site using methods prescribed by the American Society for Testing and Materials (ASTM)

document entitled "Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process" (Designation: E 1527-93, May 1993), incorporated here by this reference, which is incorporated by reference in its entirety; or an equivalent method agreed upon by the applicant and the CEC staff that provides similar documentation of the potential level and extent of site contamination. The Phase I ESA shall have been completed no earlier than one year prior to the filing of the application.

- (B) A description of each waste stream estimated to be generated during project construction and operation, including origin, hazardous or nonhazardous classification pursuant to Title 22, California Code of Regulations, § 66261.20 et seq., chemical composition, estimated annual weight or volume generated, and estimated frequency of generation.
- (C) A description of all waste disposal sites that may feasibly be used for disposal of project wastes. For each site, include the name, location, classification under Title 23, California Code of Regulations, § 2530 et seq., the daily or annual permitted capacity, daily or annual amounts of waste currently being accepted, the estimated closure date and remaining capacity, and a description of any enforcement action taken by local or state agencies due to waste disposal activities at the site.
- (D) A description of management methods for each waste stream, including methods used to minimize waste generation, length of on- and off-site waste storage, re-use and recycling opportunities, waste treatment methods used, and use of contractors for treatment.

## (11) Biological Resources

- (A) A regional overview and discussion of terrestrial and aquatic biological resources, with particular attention to sensitive biological resources within ten (10) miles of the project. In the discussion include a list of the USGS topographic quadrangle(s) utilized to search records from the California Natural Diversity Database (CNDDB), and a citation that includes the date the CNDDB was accessed. Include a map at a scale of 1:6,000 (under confidential cover) and at 1:350,000 (for public) showing sensitive biological resource location(s) in relation to the project site and related facilities and any boundaries of a local Habitat Conservation Plan or similar open space land use plan or designation. Label the biological resources and survey areas as well as the project facilities. Sensitive biological resources include the following:
- (i) species listed under state or federal Endangered Species Acts;
- (ii) species identified as state Fully Protected;
- (iii) species covered by Migratory Bird Treaty Act;
- (iv) species and habitats identified by local, state, and federal agencies as needing protection, including but not limited to those identified by the CNDDB, California Fish

and Game Code, Title 14 of the California Code of Regulations, or where applicable, in Local Coastal Programs or in relevant decisions of the California Coastal Commission or other responsible agency;

- (v) locally significant species that are rare or uncommon in a local context such as county or region or is so designated in local or regional plans, policies, or ordinances;
- (vi) plant species listed as rare under the California Native Plant Protection Act;
- (vii) established native resident or migratory wildlife corridors or wildlife nursery sites.
- (B) Include a list of the species and habitat(s) actually observed and those with a potential to occur within 1 mile of the project site.

Maps or aerial photographs shall include the following:

- (i) Detailed maps at a scale of 1:6,000 or color aerial photographs taken at a recommended scale of 1-inch equals 500 feet (1:6,000) with a 30 percent overlap (provided under confidential cover) that show the proposed project site and related facilities, biological resources including, but not limited to, those found during project-related field surveys and in records from the CNDDB, and the associated areas where biological surveys were conducted. Label the biological resources and survey areas as well as the project facilities.
- (ii) Provide an aerial map of the isopleth graphic depicting modeled nitrogen deposition rates. The geographical extent of the nitrogen deposition map(s) should include the entire plume and a radius of 6 (six) miles from the source, specifically identifying acres of sensitive habitat(s) within each isopleth. Modeling parameters and files shall be provided.
- (iii) An aerial photo map depicting state and federal jurisdictional aquatic features including waters of the US and waters of the state, delineated on maps at a scale of (1:2,400). Maps must depict any potential jurisdictional features delineated out to 250 feet from the edge of disturbance if jurisdictional features occur within 250 feet of the project site. Maps shall also depict any related features that would be subject to US Army Corps of Engineers jurisdiction pursuant to Section 404 of the Clean Water Act, state Regional Water Quality Control Board (RWQCB) jurisdiction, or California Department of Fish and Wildlife Section 1600 et seq. (Lake and Streambed Alteration) permit requirements. For projects proposed to be located within the coastal zone, also provide aerial photographs and maps as described above that identify wetlands as defined by the Coastal Act and under the jurisdiction of the California Coastal Commission.
- (iv) Provide Geographic Information System (GIS) data (shape and/or geodatabase files) for all data mapped for biological resources.
- (C) A discussion of the biological resources at the proposed project site and related facilities. Related facilities include, but are not limited to, laydown and parking areas,

gas and water supply pipelines, transmission lines, and roads. The discussion shall address the distribution of vegetation community types, denning or nesting sites, population concentrations, migration corridors, breeding habitats, and other appropriate biological resources including the following:

- (i) A list of sensitive species and habitats with a potential to occur (as defined in (A) above) and include status (state, federal, California Native Plant Society, global rank, state rank, etc.).
- (ii) Perform nitrogen deposition modeling including the complete citation for references used in determining deposition rates and location. Specify the amount of total annual nitrogen deposition in kilograms of nitrogen per hectare per year (kg N/ha/yr) in special status species habitats and vegetation types for wet and dry deposition. Describe habitat and species potentially affected.
- (D) A description and results of all field studies and specialized surveys (e.g., focused and protocol) used to provide biological baseline information about the project site and associated facilities. Include copies of the CNDDB records and field survey forms completed by the applicant's biologist(s). Identify the date(s) the surveys were completed, methods used to complete the surveys, and the name(s) and qualifications of the biologists conducting the surveys. Include:
- (i) Current biological resources surveys conducted using appropriate field survey protocols (include references) during the appropriate season(s). State and federal agencies with jurisdiction shall be consulted for field survey protocol guidance prior to surveys if a protocol exists.
- (ii) If the project or any related facilities could impact federal or state jurisdictional wetland, provide completed Army Corps of Engineers wetland delineation forms and/or determination of wetland status pursuant to Coastal Act or CDFW requirements, as applicable to the location, name(s) and qualifications of biologist(s) completing the delineation, the results of the delineation and a table showing jurisdictional features including state waters and wetland acreage amounts to be impacted.
- (E) A Discussion of all impacts (direct, indirect, and cumulative) to biological resources from project site preparation, construction activities, plant operation, maintenance, closure, and decommissioning. Discussion shall also address sensitive species habitat impacts from air emissions (i.e., nitrogen deposition).
- (F) A discussion of all feasible mitigation measures and an evaluation of their anticipated efficacy in reducing the level of impacts, including, but not limited to the following:
- (i) All measures proposed to avoid and/or reduce adverse impacts to biological resources.

- (ii) Educational programs to enhance employee awareness during construction and operation to protect biological resources.
- (G) A discussion of compliance and monitoring programs to ensure the effectiveness of impact avoidance and mitigation measures incorporated into the project.
- (H) Submit copies of any preliminary correspondence between the project applicant and state and federal resource agencies regarding whether federal or state permits from other agencies such as the U. S. Fish and Wildlife Service, the National Marine Fisheries Service, the U.S. Army Corps of Engineers, the CDFW, and the RWQCB will be required, or would be required but for the exclusive authority of the commission, for the proposed project.

## (12) Water Resources

- (A) All the information required to apply for the following permits, if applicable, including:
- (i) Waste Discharge Requirements; National Pollutant Discharge Elimination System Permit(s); and/or a Section 401 Certification or Waiver from the appropriate Regional Water Quality Control Board (RWQCB);
- (ii) Construction and Industrial Waste Discharge and/or Industrial Pretreatment permits from wastewater treatment agencies;
- (iii) Nationwide Permits and/or Section 404 Permits from the U.S. Army Corps of Engineers, if applicable; and
- (iv) Underground Injection Control Permit(s) from the U.S. Environmental Protection Agency, California Geologic Energy Management Division (CalGEM), and RWQCB.
- (B) A detailed description of the hydrologic setting of the project. The information shall include a narrative discussion and on maps at a scale of 1:24,000 (or appropriate scale approved by staff), describing the chemical and physical characteristics of the following nearby water bodies that may be affected by the proposed project:
- (i) Ground water bodies and related geologic structures;
- (ii) Surface water bodies;
- (iii) Water inundation zones, such as the 100-year flood plain and tsunami run-up zones;
- (iv) Flood control facilities (existing and proposed); and
- (v) Groundwater wells within 1/2 mile if the project will include groundwater pumping.
- (C) A description of the water to be used and discharged by the project. This information shall include:
- (i) Source(s) of the primary and back-up water supplies and the rationale for their selection;

- (ii) The expected physical and chemical characteristics of the source and discharge water(s) including identification of both organic and inorganic constituents before and after any project-related treatment. For source waters with seasonal variation, provide seasonal ranges of the expected physical and chemical characteristics. Provide copies of background material used to create this description (e.g., laboratory analysis);
- (iii) Average and maximum daily and annual water demand and wastewater discharge for both the construction and operation phases of the project;
- (iv) A detailed description of all facilities to be used in water conveyance (from primary source to the site), water treatment, and wastewater discharge.;
- (v) For all water supplies intended for industrial uses to be provided from public or private water purveyors, a letter of intent or will-serve letter indicating that the purveyor is willing to serve the project, has adequate supplies available for the life of the project, and any conditions or restrictions under which water will be provided. In the event that a will-serve letter or letter of intent cannot be provided, identify the most likely water purveyor and discuss the necessary assurances from the water purveyor to serve the project.
- (vi) For all water supplied that necessitates transfers and/or exchanges at any point, identify all parties and contracts/agreements involved, , and provide the status of all appropriate agencies' approvals for the proposed use, environmental impact analysis on the specific transfers and/or exchanges required to obtain the proposed supplies, a copy of any agency regulations that govern the use of the water, and an explanation of how the project complies with the agency regulation(s);
- (vii) Provide water mass balance and heat balance diagrams for both average and maximum flows that include all process and/or ancillary water supplies and wastewater streams. Highlight any water conservation measures on the diagram and the amount that they reduce water demand.
- (viii) For all projects that have a discharge, provide a copy of a will-serve letter, permit or contract with the public or private entity that will be accepting the wastewater and contact (oil-contaminated) storm water from the project. The letter, permit or contract, if possible, shall identify the discharge volumes and the chemical or physical characteristics under which the wastewater and contact storm water will be accepted.

In the event that a will-serve letter, permit, or contract cannot be provided, identify the most likely wastewater/storm water entity and discuss why the applicant was unable to secure the necessary assurances to serve the project's wastewater/storm water needs. Also, discuss the term of the wastewater service to the project, whether the wastewater entity has adequate permit capacity for the volume of wastewater from the project and has adequate permit levels for the chemical/physical characteristics of the project's wastewater and storm water for the life of the project, and any issues or conditions/restrictions the wastewater entity may impose on the project.

- (D) Identify all project elements associated with stormwater drainage, including a description of the following:
- (i) Monthly and/or seasonal precipitation and stormwater runoff and drainage patterns for the proposed site and surrounding area that may be affected by the project's construction and operation;
- (ii) Drainage facilities and the design criteria used for the project site and ancillary facilities, including, but not limited to, capacity of designed system, design storm, and estimated runoff:
- (iii) All assumptions and calculations used to calculate runoff and to estimate changes in flow rates between pre- and post- construction; and
- (iv) A copy of applicable regional and local requirements regulating the drainage systems, and a discussion of how the project's drainage design complies with these requirements.
- (E) An impacts analysis of the proposed project on water resources and a discussion of conformance with water-related Laws, Ordinances, Regulations, and Standards (LORS) and policy. This discussion shall include:
- (i) The effects of project demand on the water supply and other users of this source, including, but not limited to, water availability for other uses during construction or after the facility begins operation, which includes preparation of a water supply assessment (WSA) by the water supplier if the project meets any of the criteria described in California Water Code, sections 10910-1091; consistency of the water use with applicable RWQCB basin plans or other applicable resource management plans, and any changes in the physical or chemical conditions of existing water supplies as a result of water use by the facility;
- (ii) If the project will pump groundwater, an estimation of aquifer drawdown, including the estimated drawdown at neighboring wells within 0.5 mile of the proposed well(s), based on mathematical or numerical modeling analysis conducted by a professional geologist, and an assessment of any effects on the migration of groundwater contaminants, and the likelihood of any changes in existing physical or chemical conditions of groundwater resources shall be provided;
- (iii) The effects of construction activities and facility operation on water quality and to what extent these effects could be mitigated by implementation of best management practices;
- (iv) Unless the facility will use a zero liquid discharge system for cooling and process waters, include an assessment of the effects of the proposed wastewater disposal method on receiving waters, the feasibility of using pre-treatment techniques to reduce impacts, and beneficial uses of the receiving waters. Include an explanation why a zero liquid discharge process is "environmentally undesirable," or "economically unsound."

- (v) If using fresh water, include a discussion of the cumulative impacts, alternative water supply sources and alternative cooling technologies considered as part of the project design. Include an explanation of why alternative water supplies and alternative cooling methods are environmentally undesirable, or economically unsound.
- (vi) The effects of the project on the 100-year flood plain, flooding potential of adjacent lands or water bodies, or other water inundation zones.
- (vii) All assumptions, evidence, references, and calculations used in the analysis to assess these effects.

## (13) Soils

- (A) A map at a scale of 1:24,000 and written description of soil types and all agricultural land uses that will be affected by the proposed project. The description shall include:
- (i) The depth, texture, permeability, drainage, erosion hazard rating, and land capability class of the soil;
- (ii) An identification of other physical and chemical characteristics of the soil necessary to allow an evaluation of soil erodibility, permeability, re-vegetation potential, and cycling of pollutants in the soil-vegetation system;
- (iii) The location of any proposed fill disposal or fill procurement (borrow) sites; and
- (iv) The location of any contaminated soils that could be disturbed by project construction.
- (B) An assessment of the effects of the proposed project on soil resources and agricultural land uses. This discussion shall include:
- (i) The quantification of accelerated soil loss due to wind and water erosion; and
- (ii) The effect of facility emissions on surrounding soil-vegetation systems.

## (14) Paleontologic Resources

- (A) Identification of the Geomorphic Province, as defined by the California Department of Conservation, California Geologic Survey Note 36, and a brief summary of the geologic setting, formations, and stratigraphy of the project area. The size of the paleonotological study area may vary depending on the depositional history of the region.
- (B) A discussion of the sensitivity of the project area described in subsection (e)(14)(A) and the presence and significance of any known paleontologic localities or other paleontologic resources within or adjacent to the project. Include a discussion of sensitivity for each geologic unit identified on the most recent geologic map at a scale of 1:24,000. Provide rationale as to why the sensitivity was assigned.

- (C) A summary of all local museums, literature searches and field surveys used to provide information about paleontologic resources in the project area described in subsection (e)(14)(A). Identify the dates of the surveys, methods used in completing the surveys, and the names and qualifications of the individuals conducting the surveys.
- (D) Information on the specific location of known paleontologic resources, survey reports, locality records, and maps at a scale of 1:24,000, showing occurrences of fossil finds, if known, within a one-mile radius of the project and related facilities shall be included in a separate appendix to the Application and submitted to the Commission under a request for confidentiality, pursuant to Title 20, California Code of Regulations, § 2501 et seq.
- (E) A discussion of any educational programs proposed to enhance employees' awareness of potential impacts to paleontological resources, measures proposed for mitigation of impacts to known paleontologic resources, and a set of contingency measures for mitigation of potential impacts to currently unknown paleontologic resources.

## (15) Geological Hazards and Resources

- (A) A summary of the geology, seismicity, and geologic resources of the project site and related facilities, including linear facilities.
- (B) A map at a scale of 1:24,000 and description of all recognized stratigraphic units, geologic structures, and geomorphic features within two (2) miles of the project site and along proposed linear facilities. Include an analysis of the likelihood of ground rupture, seismic shaking, mass wasting and slope stability, liquefaction, subsidence, tsunami runup, and expansion or collapse of soil structures at the facility site. Describe known geologic hazards along or crossing linear facilities.
- (C) A map and description of geologic resources of recreational, commercial, or scientific value that may be affected by the project. Include a discussion of the techniques used to identify and evaluate these resources.

# (16) Transmission System Safety and Nuisance

- (A) The locations and a description of the existing switchyards and overhead and underground transmission lines that would be affected by the proposed project.
- (B) An estimate of the existing electric and magnetic fields from the facilities listed in (e)(16)(A) above and the future electric and magnetic fields that would be created by the proposed project, calculated at the property boundary of the site and at the edge of the rights of way for any transmission line. Also provide an estimate of the radio and television interference that could result from the project.
- (C) Specific measures proposed to mitigate identified impacts, including a description of measures proposed to eliminate or reduce radio and television interference, and all measures taken to reduce electric and magnetic field levels.

# (f) Engineering

# (1) Transmission System Design

- (A) A discussion of the need for any additional electric transmission lines, substations, or other equipment, the basis for selecting principal points of junction with the existing electric transmission system, and the capability and voltage levels of the proposed lines, along with the basis for selection of the capacity and voltage levels.
- (B) A discussion of the extent to which the proposed electric transmission facilities have been designed, planned, and routed to meet the transmission requirements created by additional generating facilities planned by the applicant or any other entity.

# (2) Reliability

- (A) A discussion of the sources and availability of the fuel or fuels to be used over the estimated service life of the facilities.
- (B) A discussion of the anticipated service life and degree of reliability expected to be achieved by the proposed facilities based on a consideration of:
- (i) Expected overall availability factor, and annual and lifetime capacity factors;
- (ii) The demonstrated or anticipated feasibility of the technologies, systems, components, and measures proposed to be employed in the facilities, including the power generation system, the energy storage system, and the heat dissipation system;
- (iii) Geologic and flood hazards, meteorologic conditions and climatic extremes, and cooling water availability;
- (iv) Special design features adopted by the applicant or resource supplier to ensure facility reliability including equipment redundancy; and
- (v) For technologies not previously installed and operated in California, the expected facility maturation period.

# (3) Efficiency

- (A) Heat and mass balance diagrams for design conditions for each mode of operation.
- (B) Annual fuel consumption in BTUs for each mode of operation, including hot restarts and cold starts.
- (C) Annual net electrical energy produced in MWh for each mode of operation, including starts and shutdowns.
- (D) Number of hours the plant will be operated in each design condition in each year.
- (E) If the project will be a cogeneration facility, calculations showing compliance with applicable efficiency and operating standards.

(F) A discussion of alternative generating technologies available for the project, including the projected efficiency of each, and an explanation why the chosen equipment was selected over these alternatives.

## (g) Compliance with Laws, Ordinances, Regulations and Standards

- (1) Provide tables that identify:
- (A) Laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and
- (B) Each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state, and federal land use plans, and agencies that would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.
- (2) The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.
- (3) A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.
- (4) Compliance with visual standards:
- (A) Explain the project's conformance with the city/county General Plan, and city municipal code or county government code (e.g., zoning) governing scenic quality.
- (B) If any aspect of the facility is not in conformance with (g)(4)(A) provide the following:
- (i) Show on a map the pinpoint location of the key observation point(s) (KOP) for the project. A KOP is a fixed position in a publicly accessible location where a public view of the project is analyzed and/or evaluated in the landscape. Objects of aesthetic significance are the primary focus in the KOP selection. You may look to local government planning thresholds for guidance when defining the visual impact standard (e.g., city/county General Plan, zoning)
- (ii) If an object of aesthetic significance is not in the vicinity of the project, a KOP is to be selected based on importance to stakeholders, visibility, direct public selection, worst-case scenario, or other reason. Explain the reason the KOP was chosen. At a minimum two KOPs are to be selected.
- (iii) Provide a color photograph(s) showing an actual line of sight at eye level during daytime and clear weather from the KOP to the project site prior to any alteration (existing condition). The photographer at the KOP is to use a "normal" lens. For each

photograph provide the following information: camera type, lens focal length, viewing angle; date and time the photograph was taken, and the distance to the project site.

- (C) Show and describe the project in the landscape. Include:
- (i) Provide dimensioned elevation(s) of project buildings, structures, and major equipment; a table listing their dimensions (height, length, width, diameter).
- (ii) Provide manufacturer brochure or cut sheets that include unit description, specifications, and renderings for major equipment.
- (iii) Provide a table and description of the exterior surface treatments and finishes for the buildings, structures, major equipment (e.g., colors, flat and/or textured finishes), and structural materials.
- (iv) Describe project specific architectural treatment or design technique mitigation unique to the project's siting at the location (e.g., camouflage, disguise, screen), if any.
- (v) Provide a project specific conceptual landscape design plan that conforms with the city municipal code or county government code.
- (vi) Provide a project specific conceptual outdoor lighting control and management plan (lighting plan) and explain the control of reflectance from exterior surfaces offsite that conform with the city municipal code or county government code.
- (D) If the project is to use a cooling tower emitting a publicly visible water vapor plume (visible plume) in the atmosphere provide the following information:
- (i) Provide the cooling tower's number of fan cells, the fan cell stack height and diameter, the exhaust mass flow rate, heat rejection rate, and exhaust temperature.
- (ii) Provide fogging curves specific to the cooling tower's exhaust discharge for at least three ambient air temperature conditions (a low, average, and high temperature condition).
- (iii) Explain if the project's forecasted visible plume emitted in the atmosphere by the cooling tower would eliminate or obstruct an existing public view of a designated or recognized scenic vista, scenic resource, and the existing visual character or quality of public views of the site and its surroundings.

Note: Authority cited: Sections 25213, 25216.5(a), 25218(e), Public Resources Code. Reference: Sections 21080.5, 25519(a), 25519(c), 25520, 25522(b), 25523(d)(1), 25540.1, 25540.2, 25540.6, and 25541, Public Resources Code.