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State of California Office of Administrative Law

California Energy Commission

Regulatory Action:

Title 20, California Code of Regulations

Adopt sections:

Amend sections: Chapter 5, Appendix B Information Requirements

Repeal sections:

NOTICE OF APPROVAL OF REGULATORY ACTION

Government Code Section 11349.3

OAL Matter Number: 2023-0621-01

OAL Matter Type: Regular Resubmittal (SR)

In this rulemaking action, the California Energy Commission updates the information required to be submitted during an application for a small power plant exemption.

OAL approves this regulatory action pursuant to section 11349.3 of the Government Code. This regulatory action becomes effective on 7/20/2023.

Date: July 20, 2023

Sam Micon

Attorney

For:

Kenneth J. Poque

Director

Original: Drew Bohan, Executive Director

Copy:

Jared Babula

STATE OF CALIFORNIA--OFFICE OF ADMINISTRATIVE LIVER NOTICE PUBLICATION/RE IU For use by Secretary of State only STD, 400 (REV, 10/2019) OAL FILE NOTICE FILE NUMBER REGULATORY ACTION NUMBER EMERGENCY NUMBER 2023-0621-01SR **NUMBERS** 7-2022-0630-01 For use by Office of Administrative Law (OAL) only **ENDORSED - FILED** in the office of the Secretary of State of the State of California JUL 2 0 2023 1:40 pm OFFICE OF ADMIN, LAW 2023 JUN PREGULATIONS O NOTICE AGENCY WITH RULEMAKING AUTHORITY AGENCY FILE NUMBER (If any) California Energy Commission 21-OIR-04 A. PUBLICATION OF NOTICE (Complete for publication in Notice Register) 1. SUBJECT OF NOTICE TITLE(S) FIRST SECTION AFFECTED 2. REQUESTED PUBLICATION DATE 3. NOTICE TYPE 4. AGENCY CONTACT PERSON TELEPHONE NUMBER FAX NUMBER (Optional) Notice re Proposed Other Regulatory Action Uther

A LISE ACTION ON PROPOSED NOTICE OAL USE NOTICE REGISTER NUMBER PUBLICATION DATE Approved as Approved as Disapproved/ ONLY 7/15/22 2022, 28-2 Submitted Modified B. SUBMISSION OF REGULATIONS (Complete when submitting regulations) 1a. SUBJECT OF REGULATION(S) 1b. ALL PREVIOUS RELATED OAL REGULATORY ACTION NUMBER(S) Small Power Plant Exemption (SPPE) 2022-1028-05 2. SPECIFY CALIFORNIA CODE OF REGULATIONS TITLE(S) AND SECTION(S) (Including title 26, if toxics related) ADOP SECTION(S) AFFECTED (List all section number(s) AMEND individually, Attach Chapter 5, Appendix B Information Requirements additional sheet if needed.) TITLE(S) REPEAL 20 TYPE OF FILING Regular Rulemaking (Gov. Certificate of Compliance: The agency officer named Emergency Readopt Changes Without Code §11346) below certifies that this agency complied with the (Gov. Code, §11346.1(h)) Regulatory Effect (Cal. provisions of Gov. Code §§ 11346.2-11347.3 either Resubmittal of disapproved Code Regs., title 1, §100) before the emergency regulation was adopted or or withdrawn nonemergency within the time period required by statute. filing (Gov. Code §§11349.3, File & Print 11349.4) Emergency (Gov. Code, Resubmittal of disapproved or withdrawn Other (Specify) emergency filing (Gov. Code, §11346.1) §11346.1(b)) ALL BEGINNING AND ENDING DATES OF AVAILABILITY OF MODIFIED REGULATIONS AND/OR MATERIAL ADDED TO THE RULEMAKING FILE (Cal. Code Regs. title 1, §44 and Gov. Code §11347.1) April 26, 2023 to May 11, 2023 EFFECTIVE DATE OF CHANGES (Gov. Code, §§ 11343.4, 11346.1(d); Cal. Code Regs., title 1, §100) Effective January 1, April 1, July 1, or Effective on filing with Secretary of State §100 Changes Without Effective other October 1 (Gov. Code §11343.4(a)) Regulatory Effect (Specify) 6. CHECK IF THESE REGULATIONS REQUIRE NOTICE TO, OR REVIEW, CONSULTATION, APPROVAL OR CONCURRENCE BY, ANOTHER AGENCY OR ENTITY Department of Finance (Form STD. 399) (SAM §6660) Fair Political Practices Commission State Fire Marshal Other (Specify) CONTACT PERSON TELEPHONE NUMBER FAX NUMBER (Optional) E-MAIL ADDRESS (Optional) Jared Babula 916-879-3028 jared.babula@energy.ca.gov 8. I certify that the attached copy of the regulation(s) is a true and correct copy For use by Office of Administrative Law (OAL) only ENDORSED APPROVED of the regulation(s) identified on this form, that the information specified on this form is true and correct, and that I am the head of the agency taking this action, or a designee of the head of the agency, and am authorized to make this certification.

> DATE 05/22/2023

SIGNATURE OF AGENCY HEAD OR DESIGNEE

Drew Bohan, Executive Director

TYPED NAME AND TITLE OF SIGNATORY

JUL 2 0 2023

Office of Administrative Law

Title 20. Public Utilities and Energy Division 2. State Energy Resources Conservation and Development Commission Chapter 5. Power Plant Site Certification Appendix B

Appendix B

Information Requirements for an Application <u>for Certification (AFC) or Small</u> <u>Power Plant Exemption (SPPE)</u>

(a) Executive Summary

(1) Project Overview

- (A) A general description of the proposed site and related facilities, including the location of the site or transmission routes, the type, size and capacity of the generating or transmission facilities, fuel characteristics, fuel supply routes and facilities, water supply routes and facilities, pollution control systems, and other general characteristics.
- (B) Identification of the location of the proposed site and related facilities by section, township, range, county, and assessor's parcel numbers.
- (C) A description of and maps depicting the region, the vicinity, and the site and its immediate surroundings.
- (D) A full-page color photographic reproduction depicting the visual appearance of the site prior to construction, and a full-page color simulation or artist's rendering of the site and all project components at the site, after construction.
- (E) In an appendix to the application, a list of current assessor's parcel numbers and owners' names and addresses for all parcels within 500 feet of the proposed transmission line and other linear facilities, and within 1000 feet of the proposed powerplant and related facilities. Provide the direct mailing addresses for the owners and occupants of properties contiguous to the proposed power plant, related facilities, transmission lines, or other linear facilities as shown on the latest equalized assessment roll. Provide a map showing the parcels in the notice area.

[Skipping subsections (a)(2)-(a)(3)]

(b) Project Description

(1) In a section entitled, "Generation Facility Description, Design, and Operation" provide the following information:

- (A) Maps at a scale of 1:24,000 (1" = 2000'), (or appropriate map scale agreed to by staff) along 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 power plant and all related facilities;
- (B) Scale plan and elevation drawings depicting the relative size and location of the power plant and all related facilities to establish the accuracy of the photo simulations required in Sections (a)(1)(D) and (g)(6)(F);
- (C) A detailed description of the design, <u>methods of</u> construction <u>(include depth of excavations and other ground disturbances)</u> and operation of the facilities, specifically including the power generation, 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
- (D) A description of how the site and related facilities were selected and the consideration given to engineering constraints, site geology, environmental impacts, water, waste and fuel constraints, electric transmission constraints, and any other factors considered by the applicant.

[Skipping remainder of section (b) and sections (c)-(f)]

(g) Environmental Information -

(1) General Information: For each technical area listed below, provide a discussion of the existing site conditions, the expected direct, indirect, and cumulative impacts due to the construction, operation, and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation. Describe the approach, list or projection (or a combination of) used to develop the cumulative setting for the proposed project. Include any reference materials used such as general plan or other adopted local, regional, or statewide plan. Additional requirements specific to each technical area are listed below.

(2) 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, all of which may have significance according to criteria outlined in sections 21074 and 21084.2 of the Public Resources Code.

(A) A summary of the ethnology, prehistory, and history of the region with emphasis on the area within no more than a 5-mile radius of the project location. This regional summary must address the potential for buried cultural resources and tribal cultural resources to occur in the project area. The summary, together with literature search results, must inform the field methods employed for identifying cultural resources and tribal cultural resources in the project area.

(B) The results of a literature search to identify cultural resources and tribal cultural resources within an area not less than a 1-mile radius around the project site and not less that than one-quarter (0.25) mile on each side of the 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. Literature searches to identify the above cultural resources and tribal cultural resources 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.

Copies of California Department of Parks and Recreation (DPR) 523 forms (Title 14 CCR §4853) shall be provided for all cultural resources and tribal cultural resources (ethnographic, architectural, historical, and archaeological) identified in the literature search as being 45 years or older or of exceptional importance as defined in the National Register Bulletin Guidelines (36CFR60.4(g)). A copy of the USGS 7.5'-5-minute quadrangle map of the literature search area delineating the areas of all past surveys and noting the California Historical Resources Information System (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 under Section (g)(2)(C), or which report on any archaeological excavations or architectural surveys within the literature search area.

(C) The results of new <u>cultural resource</u> and <u>tribal cultural resource</u> surveys or surveys less than 5 years old shall be provided if survey records of the area potentially affected by the project are more than five (5) years old. Surveys to identify new cultural resources <u>and tribal cultural resources</u> 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.

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Section.

New pedestrian archaeological surveys shall be conducted 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.

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 <u>0.5</u> 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.

A technical report of the results of the new surveys, conforming to the Archaeological Resource Management Report format (CA Office of Historic Preservation Feb 1990), which is incorporated by reference in its entirety, shall be separately provided and submitted (under confidential cover if archaeological site-resource or other sensitive resource locations are included). Information included in the technical report shall also be provided in the Application for Certification-application, except that 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. At a minimum, the technical report shall include the following:

- (i) The summary from Appendix B (g)(2)(A) and the literature search results from Appendix B (g)(2)(B).
- (ii) The survey procedures and methodology used to identify cultural <u>and tribal cultural</u> resources and a discussion of the cultural <u>and tribal cultural</u> resources identified by the survey.
- (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.
- (iv) 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 research required by Appendix B (g)(2)(B) and Appendix B (g)(2)(C) (ii).
- (v) 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.

(D) Provide:

- (i) a—A copy of your the applicant's request to the Native American Heritage Commission (NAHC) for information on Native American sacred sites and lists of Native Americans interested in the project vicinity, and copies of any correspondence received from the NAHC. Notify the Native Americans on the NAHC list about the project, including a project description and map.
- (ii) Provide a 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. Provide a
- (iii) A written summary of any oral responses.
- (E) Include in the discussion of proposed mitigation measures required by subdivision (g)(1):

- (i) A discussion of measures proposed to mitigate project impacts to known cultural <u>and tribal cultural</u> resources;
- (ii) A set of contingency measures proposed to mitigate potential impacts to previously unknown cultural <u>and tribal cultural</u> resources and any unanticipated impacts to known cultural <u>or tribal cultural</u> resources;
- (iii) Educational programs to enhance employee awareness during construction and operation to protect cultural and tribal cultural resources.

(3) Land Use

- (A) A discussion 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) A discussion 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.
- (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 (g)(3)(A)(ii); and
- (iv) Legible maps of the areas identified in subsection (g)(3)(A) potentially affected by the project, on which existing land uses, jurisdictional boundaries, general plan designations, specific plan designations, and zoning have been clearly delineated.
- (B) A discussion 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 discussion 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.
- (C) A discussion of the legal status of the parcel(s) on which the project is proposed. If the proposed site consists of more than one legal parcel, describe the method and timetable for merging or otherwise combining those parcels so that the proposed project, excluding linears and temporary laydown or staging area, will be located on a

- single legal parcel. The merger need not occur prior to a decision on the Application but must be completed prior to the start of construction.
- (D) 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) <u>Land classifications as shown on the California Department of Conservation's</u>

 <u>Farmland Mapping and Monitoring Program's Important Farmland maps, Ccrop types, irrigation systems, and any special cultivation practices; and</u>
- (ii) Whether farmland agricultural land affected by the project was is historically classified Farmland prime, of statewide importance, or unique as defined by the California Department of Conservation (Prime Farmland, Farmland of Statewide Importance, or Unique Farmland) as specified in Public Resources Code section 21060.1; and
- (iii) Direct, indirect, and cumulative 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.

[Skipping subsection (g)(4)]

- (5) Traffic and Transportation
- (A) A regional transportation setting, on topographic maps (scale of 1:250,000), identifying the project location and major transportation facilities. 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 20,000 feet of an airport runway that is at least 3,200 feet in actual length, or 5,000 feet of a heliport (or planned or proposed airport runway or an airport runway under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration), 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 Objects Affecting Navigable Airspace Safe, Efficient Use, and Preservation of the Navigable Airspace, specifically any potential to obstruct or impede air navigation generated by the project at 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) Aa 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 power plant site and related 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 related to vehicle miles traveled (VMT) that may include:
- (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 CEQA determination.
- (DC) 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) Current daily average and peak traffic counts;
- (iii) Current and projected levels of service before project development, during construction, and during project operation;
- (iv) Weight and load limitations;
- (v) Estimated percentage of current traffic flows for passenger vehicles and trucks; and
- (vi) An identification of any road features affecting public safety.
- (\underline{ED}) An assessment of the construction and operation impacts of the proposed project on the transportation facilities identified in subsection (g)(5)(\underline{DC}). Also include anticipated project-specific traffic, estimated changes to daily average and peak traffic counts, levels of service, and traffic/truck mix, and the impact of construction of any facilities identified in subsection (g)(5)(\underline{DC}). 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.
- (<u>F</u>E) 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.

(6) Visual Resources

- (A) Descriptions of the existing visual setting of the vicinity of the proposed project site and the proposed routes for any project-related linear facilities. Include:
- (i) Topographic maps at a scale of 1:24,000 that depict directions from which the project would be seen, the view areas most sensitive to the potential visual impacts of the project, and the locations where photographs were taken for (g)(6)(C); and
- (ii) Description of the existing visual properties of the topography, vegetation, and any medifications to the landscape as a result of human activities, including existing water vapor plumes, above-ground electrical transmission lines, and nighttime lighting levels in the project viewshed.
- (B) An assessment of the visual quality of those areas that would be affected by the proposed project. For projects proposed to be located within the coastal zone, the assessment should also describe how the proposed project would be sited to protect views to and along the ocean and scenic coastal areas, would minimize the alteration of natural land forms, would be visually compatible with the character of surrounding areas.
- (C) In consultation with Energy Commission ctaff, identify i) any designated scenic readways or seems corridors and any visually sensitive areas that would be affected by the proposed project, including recreational and residential areas and ii) the locations of the key observation points to represent the most critical viewing locations from which to conduct detailed analyses of the visual impacts of the proposed project. Indicate the approximate number of people using each of these sensitive areas and the estimated number of residences with views of the project. Also identify any major public roadways and trails of local importance that would be visually impacted by the project and indicate the types of travelers (e.g., local residents, recreationists, workers, commuters, etc.) and the approximate number of vehicles, bicyclists, and/or hikers per day.
 - (D) A table providing the dimensions (height, length, and width, or diameter) and, proposed color(s), materials, finishes, patterns, and other proposed design characteristics of each major component visible from off the project site, including any project-related electrical transmission line and/or offsite aboveground pipelines and metering stations.
 - (E) Provide the cooling tower and heat recovery steam generator (HRSG) exhaust design parameters that affect visible plume formation. For the cooling tower, data shall include heat rejection rate, exhaust temperature, exhaust mass flow rate, liquid to gas mass flow ratio, and, if the tower is plume-abated, moisture content (percent by weight) or plume-abated fogging curve(s). The parameters shall account for a range of ambient conditions (temperature and relative humidity) and proposed operating scenarios, such

as duct-firing and shutting down individual cells. For the heat recovery steam generator exhausts, data shall include moisture content (percent by weight), exhaust mass flow rate, and exhaust temperature. The parameters must correspond to full-load operating conditions at specified ambient conditions, and shall account for proposed operating scenarios, such as power augmentation (i.e., evaporative coolers, inlet foggers, or steam injection) and duct firing, or proposed HRSG visible plume abatement, such as the use of an economizer bypass. For simple-cycle projects, provide analogous data for the exhaust stack(s).

- (F) Provide: i) full-page color photographic reproductions of the existing site, and ii) full-page color simulations of the proposed project at life-size scale when the picture is held 10 inches from the viewer's eyes, including any project-related electrical transmission lines, in the existing setting from each key observation point. If any landscaping is proposed to comply with zoning requirements or to mitigate visual impacts, include the landscaping in simulation(s) representing sensitive area views, depicting the landscaping five years after installation; and estimate the expected time until maturity is reached.
- (G) An assessment of the visual impacts of the project, including light, glare, and any modeling of visible plumes. Include a description of the method and identify any computer model used to assess the impacts. Provide an estimate of the expected frequency and dimensions (height, length, and width) of the visible cooling tower and/or exhaust stack plumes. Provide the supporting assumptions, meteorological data, operating parameters, and calculations used.

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- (H) If any landscaping is proposed to reduce the visual impacts of the project, provide a conceptual landscaping plan at a 1:40 scale (1"=40'). Include information on the type of plant species proposed, their size, quantity, and spacing at planting, expected heights at 5 years and maturity, and expected growth rates.
- (A) Provide a description of the existing landscape (built or natural) where the proposed project is to be sited and the vicinity, and along the proposed routes for any aboveground project-related linear facilities. Include:
- (i) Show on a map(s) (pinpoint) any designated or recognized scenic vista and scenic resource within a five-mile radius of the project and one-mile radius of a project-related linear facility. Include:
- a. Any designated scenic vista and scenic resource in an adopted federal, state, county, or city government planning document, plan, or regulation.
- b. A natural feature or object that is a part of the land, such as a geologic distinguishing characteristic (e.g., laccolith), geomorphologic feature (e.g., gorge), or other terrain feature (e.g., a water body, open space, or tree recognized for its aesthetic, botanical and ecological value, or age, rarity, and size).

- c. A man-made feature or object that embodies elements of architecture or engineering design, detail, materials or craftsmanship that represent a significant innovation or is unique, such as the California State Capitol, Golden Gate Bridge, or Hollywood Sign.
- d. Explain does the project eliminate or obstruct the public view (the visible area from a location where the public has a legal and physical right of access to real property) of a scenic vista and scenic resource? Is the project situated so that it changes the visual aspect of a scenic resource by being different or in sharp contrast?
- (ii) Describe the existing nighttime lighting on the project site and in the vicinity.
- (B) In accordance with CEQA Guidelines as found in 14 CCR Division 6, Chapter 3, Appendix G Environmental Checklist Form, I. Aesthetics c, if the project is to be constructed within an "urbanized area" as defined in Public Resources Code section 21071, 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.
- (C) In accordance with CEQA Guidelines as found in 14 CCR Division 6, Chapter 3, Appendix G Environmental Checklist Form, I. Aesthetics c, if the project is to be constructed within a non-urbanized area 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.
- (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 standard 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.
 - (iv) Using the photograph from the KOP provide a spatially accurate and realistically photo manipulated computer simulated image of the project (photo-realistic simulation) one-year after completion of construction (existing condition plus proposed project).
 - (v) The KOP photograph and the photo-realistic simulation are to be capable of 11" x 17" color print by a printer capable at a minimum 600 dots per inch output resolution.
 - (vi) Provide a copy of the KOP photograph(s) and photo-realistic simulation(s) in an electronic file.
 - (D) Show and describe the project in the landscape.

- (i) Provide an 8.5" x 11" sized scaled elevation(s) of project buildings, structures, and major equipment; a table listing their dimensions (height, length, width, diameter).
- (ii) 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.
- (iii) 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.
- (iv) Provide a project specific conceptual landscape design plan that conforms with the city municipal code or county government code. Include:
- a. the type of plant and/or tree species, location, quantity, size, spacing at installation/planting, expected growth rates, and expected heights at one-year, five years, and maturity. Specify irrigation system components and show their locations.
- b. the calculated total pervious surface amount for the project site; include the surface to be replaced, the new surface, and the total area to be landscaped.
- (v) 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.
- a. Provide a list of the project-specific luminaires, identify the design (e.g., full cutoff, semi cutoff, non cutoff) and indicate if the luminaires have the International Dark-Sky Association Fixture Seal of Approval to the extent feasible consistent with safety and security considerations. Show the project-specific luminaires locations on a diagram or elevation.
- b. Describe reflectance, the intensity of the specular reflectance from the exterior surface of the project's large buildings, structures, and major equipment offsite to the surrounding area (e.g., the light reflected from the shiny surface). The reflectance of the object—how bright it shines—depends on the intensity of the light striking it and the materials from which it is made (e.g., glass, reinforced concrete, structural steel).
- (E) 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 designate or

recognized scenic vista, scenic resource, and the existing visual character or quality of public views of the site and its surroundings.

(7) Socioeconomics

- (A) A description of the socioeconomic circumstances of the vicinity and region affected by construction and operation of the project. Include:
- (i) The economic characteristics, including the economic base, fiscal resources, and a list of the applicable local agencies with taxing powers and their most recent and projected revenues;
- (ii) The social characteristics, including population and demographic and community trends;
- (iii) Existing and projected unemployment rates;
- (iv) Availability of skilled workers by eraft occupation required for construction and operation of the project;
- (v) Availability of temporary and permanent housing and current vacancy rate; and
- (vi) Capacities, service standards, existing and expected use levels, and planned expansion of utilities (gas, water and waste) and public services, including fire protection, law enforcement, emergency response, medical facilities, other assessment districts, and school districts, parks and recreation facilities, libraries, and other public facilities. For projects outside metropolitan areas with a population of 500,000 or more, information for each school district shall include current enrollment and yearly expected enrollment by grade level groupings, excluding project-related changes, for the duration of the project construction schedule.
 - (B) 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 eraft 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 en during the project construction and operation;
 - (iii) An estimate of the potential population increase caused directly and indirectly by the project;
 - (iv) The potential impact of population increase on housing during the construction and operations phases;

- (v) The potential impacts, including additional costs and ability to meet local service standards, on utilities (gas, water and waste) and public services, including fire, law enforcement, emergency response, medical facilities, other assessment districts, and school districts. Include response times to hospitals and for police protection, fire protection, and emergency services, parks and recreation facilities, libraries, and other public facilities. For projects outside metropolitan areas with a population of 500,000 or more, information on schools shall include project-related enrollment changes by grade level groupings and associated facility and staffing impacts by school district during the construction and operating phases;
- (vi) An estimate of applicable school impact fees;
- (vii) An estimate of the total construction payroll and separate estimates of the total operation payroll for permanent and short-term (contract) operations employees;
- (viii) An estimate of the expenditures for locally purchased materials for the construction and operation phases of the project; and
- (ix) An estimate of the capital cost (plant and equipment) of the project-;
- (x) An estimate of sales taxes generated during construction and separately during an operational year of the project;-
- (xi) An estimate of property taxes generated during an operational year of the project.;
- (xii) The expected direct, indirect, and induced income and employment effects due to construction and, operation, and maintenance of the project; and.
- (xiii) A discussion of impacts to environmental justice populations by technical areas and whether any impacts would disproportionately affect the environmental justice populations.
- (8) Air Quality
- (A) The information necessary for the air pollution control district where the project is located to complete a Determination of Compliance.
- (B) The heating value and chemical characteristics of the proposed fuels, the stack height and diameter, the exhause exhaust velocity and temperature, the heat rate and the expected capacity factor of the proposed facility.

[Skipping remainder of subsection (g)(8) and all of subsection (g)(9)]

- (10) Hazardous Materials Handling
- (A) A list of all materials used or stored on-site which 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, emergency response 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 off site 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 AFC-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.

[Skipping subsection (g)(11)]

- (12) Waste Management
- (A) A Phase I Environmental Site Assessment (ESA) for the proposed power plant 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), 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 AFC 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 which 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.
- (13) 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 which includes the date the CNDDB was accessed. Include a map at a scale of 1:4006,000 (er other suitable scale 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) resources defined in sections 1201(d) and (u) of Title 20 of the California Code of Regulations; species receiving consideration during environmental review under CEQA Guidelines 14 CCR Section 15380;
- (iii) species identified as state Fully Protected;
- (iv) species covered by Migratory Bird Treaty Act;
- (v) species and habitats identified by local, state, and federal agencies as needing protection, including but not limited to those identified by the California Natural Diversity Database CNDDB, or where applicable, in Local Coastal Programs or in relevant decisions of the California Coastal Commission or other responsible agency; and
- (vi) <u>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;</u>
- (vii) plant species listed as rare under the California Native Plant Protection Act;
- (viii) fish and wildlife species that have commercial and/or recreational value established native resident or migratory wildlife corridors or wildlife nursery sites.
- (B) Include a list of the species <u>and habitat(s)</u> actually observed and those with a potential to occur within 1 mile of the project site and 1,000 feet from the outer edge of linear facility corridors.

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) and 1:350,000 (for public viewing) 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 California Natural Diversity Database CNDDB, and the associated areas where biological surveys were conducted. Label the biological resources and survey areas as well as the project facilities.
- (ii) A depiction of the extent of the thermal plume at the surface of the water if cooling water is proposed to be discharged to a water source. Provide the location for the intake and discharge structures on an aerial photograph(s) or detailed maps. Water sources include, but are not limited to, waterways, lakes, impoundments, oceans, bays, rivers, and estuaries. 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 depicting or state and federal jurisdictional features including state waters and wetlands delineation delineated on maps at a scale of (1:2,400) showing any potential jurisdictional and non-jurisdictional wetlands features delineated out to 250 feet from the edge of disturbance if jurisdictional features wetlands occur within 250 feet of the project site and/or related facilities that would be included with the a US Army Corps of Engineers Section 404 Permit application, Regional Water Quality Control Board (RWQCB) application, or California Department of Fish and Wildlife Section 1600 et seq. permit requirements. For projects proposed to be located within the coastal zone, also provide aerial photographs or 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 all the species actually observed.
 - (ii) 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).

- (iii) If cooling water is taken directly from or discharged to a surface water feature source, include a description of the intake structure, screens, water volume, intake velocity hydraulic zone field of influence, and the thermal plume dispersion area as depicted in response to B(ii) above. Describe the thermal plume size and dispersion under high and low tides, and in response to local currents and seasonal changes. Provide a discussion of the aquatic habitats, biological resources, and critical life stages found in these affected waters. For repower projects that anticipate no change in cooling water flow, this information shall be provided in the form of the most recent federal Clean Water Act 316(a) and (b) studies of entrainment and impingement impacts that has been completed within the last five (5) years. For new projects or repower projects proposing to use once-through cooling and anticipating an increase in cooling water flow, provide a complete impingement and entrainment analysis per guidance in (D)(ii), below. 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 seasonal specialized surveys (e.g., focused and protocol) used to provide biological baseline information about the project site and associated facilities. Include copies of the California Natural Diversity Database 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 cooling water is proposed to be taken directly from or discharged to a surface water feature source, seasonal aquatic resource studies and surveys shall be conducted. Aquatic resource survey data shall include, but is not limited to, fish trawls, ichthyoplankton and benthic sampling, and related temperature and water quality samples. For new projects or repower projects anticipating a change in cooling water flows, sampling protocols shall be provided to the Energy Commission staff for review and concurrence prior to the start of sampling. For repower projects not anticipating a change in cooling water flows, this information shall be provided in the form of the most recent federal Clean Water Act 316(b) impingement and entrainment impact study completed within five (5) years of the AFC filing date.
- (iii) If the project or any related facilities could impact a federal or state jurisdictional or non-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 <u>jurisdictional features including state waters and</u> wetland acreage amounts to be impacted.

- (E) Impacts discussion of the following:
- (i) all impacts (direct, indirect, and cumulative) to biological resources from project site preparation, construction activities, plant operation, maintenance, and closure, and decommissioning. Discussion shall also address sensitive species habitat impacts from cooling tower drift and air emissions –(i.e. nitrogen deposition).
- (ii) facilities that propose to take water directly from, and/or discharge water to surface water features, daytime and nighttime impacts from the intake and discharge of water during operation, water velocity at the intake screen, the intake field of influence, impingement, entrainment, and thermal discharge. Provide a discussion of the extent of the thermal plume, effluent chemicals, oxygen saturation, intake pump operations, and the volume and rate of cooling water flow at the intake and discharge location.
- (iii) Methods to control biofouling and chemical concentrations, and temperatures that are currently being discharged or will be discharged to receiving waters.
- (F) A discussion of all feasible mitigation measures <u>and an evaluation of their</u> <u>anticipated efficacy in reducing the level of impacts, including, but not limited to the following:</u>
- (i) All measures proposed to avoid and/or reduce adverse impacts to biological resources.
- (ii) All off-site habitat mitigation and <u>such as</u> habitat improvement or compensation <u>including management</u>, and an identification of <u>appropriate agency</u> contacts for <u>coordination and verification of proposed</u> compensation habitat and management mitigation measures.
- (iii) Design features to better disperse or eliminate a thermal discharge.
- (iv) All measures proposed to avoid or minimize adverse impacts of cooling water intake. This shall include a Best Technology Available (BTA) discussion. If BTA is not being proposed, the rationale for not selecting BTA must be provided.
- (v) 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 California Department of Fish

and Game <u>CDFW</u>, and the <u>Regional Water Quality Control Board RWQCB</u> will be required for the proposed project.

(14) Water Resources

[Skipping subsections (g)(14)(A)-(g)(14)(C)]

- (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 plant 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.

[Skipping remainder of subsection (g)(14) and all of subsections (g)(15)-(g)(18)]

(19) Wildfire

- (A) A map showing State Responsibility Areas (SRA), as defined in Public Resources Code section 4102, relative to the proposed project.
- (B) A map showing state Fire Hazard Severity Zones, as defined in 14 CCR section 1280.01, relative to the proposed project.
- (C) If the project would be in the vicinity of an SRA or a Very High Fire Hazard Severity Zone, as defined in 14 CCR section 1265.00, provide:
- (i) Local emergency response or evacuation plans and a description of how the proposed project could influence their effectiveness.
- (ii) A discussion of how potential project pollutants could be contained onsite during a wildfire event.
- (iii) A description of infrastructure that would be built or maintained (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate the risk of wildfire.

(iv) Describe people or structures downslope or downstream of the proposed project that could be impacted by flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

[Skipping remainder of Appendix B]

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, and 25540.6, and 25541, Public Resources Code.