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CALIFORNIA ENERGY COMMISSION
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CEC-057 (Revised 1/21)

NOTICE OF AVAILABILITY AND COMMENT PERIOD

15-DAY COMMENT PERIOD ON THE SUPPLEMENTAL INITIAL STATEMENT OF REASONS

CEC Docket No. 21-OIR-04
OAL File Number Z-2022-0630-01

INTRODUCTION

Notice is hereby given that the California Energy Commission (CEC) proposes a 15-day public comment period on a Supplemental Initial Statement of Reasons (SISOR) covering amendments to California Code of Regulations, title 20, Appendix B.

On July 15, 2022, the CEC published proposed amendments to the Small Power Plant Exemption program set forth in California Code of Regulations, title 20, sections 1934-1947, Appendix B, and Appendix F. (TN 244071)[1] The original Initial Statement of Reasons was also published at this time, (TN 244072) as well as a Notice of Proposed Action providing a 45-day public comment period. (TN 244070)

On August 29, 2022, the required 45-day public comment period on the proposed regulatory changes and rulemaking documents ended.

On October 12, 2022, the CEC adopted the proposed regulatory changes at the CEC's publicly noticed business meeting through a resolution. (TN 246550)

On December 14, 2022, the Office of Administrative Law (OAL) approved the proposed changes to sections 1934-1947 and Appendix F with an effective date of the same day. The CEC withdrew the amendments to Appendix B from consideration in order to supplement the Initial Statement of Reasons by providing additional information in the necessity sections of the document. (TN 248161)

SCOPE OF THE SISOR AND COMMENTS

The CEC is not proposing any substantive changes to Appendix B from the version already subject to the 45-day comment period that ended on August 29, 2022, and was subsequently adopted by the CEC on October 12, 2022. The purpose of this 15-day comment period on the SISOR is for public review and comment on the SISOR

[1] The referenced documents can be found in Docket Number 21-OIR-04 using the identified Transaction Numbers or document titles. See the section of this notice titled AVAILABILITY OF DOCUMENTS ON THE INTERNET

and necessity sections that set forth additional and more specific detail as to the need for the regulatory changes to Appendix B. Because only the necessity sections related to Appendix B are being supplemented, the SISOR only contains the purpose and necessity sections related to Appendix B regulatory language changes. See the original ISOR (TN 244072) for the purpose and necessity sections addressing California Code of Regulations, title 20, sections 1934-1947. Also see the original ISOR for the Problem Statement, Benefits Statement, Economic Impact Assessment, Documents Relied Upon, Consideration of Reasonable Alternatives, Mandates on Technology, and Impacts to Business.

Attached to this notice as Attachment 1 is the SISOR which is the subject of the 15-day comment period. For reference, the adopted Appendix B language, with minor post adoption non-substantive grammatical changes or changes made for consistency with other sections of the California Code of Regulations, title 20, is attached as Attachment 2. These post adoption changes are reflected in double underline and double strike-out. See the relevant sections in the SISOR for an explanation of these non-substantive changes.

PUBLIC ADVISOR

The CEC's Office of the Public Advisor, Energy Equity and Tribal Affairs provides the public assistance in participating in CEC proceedings. For information on participation, reach out via email at publicadvisor@energy.ca.gov, or by phone at (916) 957-7910.

MEDIA INQUIRIES

Direct media inquiries to the Media and Public Communications Office at (916) 654-4989 or mediaoffice@energy.ca.gov.

PUBLIC COMMENT PERIOD

The written public comment period on the SISOR will be held from **April 26, 2023, through May 11, 2023.** Any interested person, or an authorized representative, may submit written comments on the SISOR to the CEC for consideration on or prior to **May 11, 2023**. The CEC appreciates receiving written comments at the earliest possible date. Comments submitted outside this comment period are considered untimely.

Written comments, attachments, and associated contact information (including address, phone number, and email address) will become part of the public record of this proceeding with access available via any internet search engine.

The CEC encourages use of its electronic commenting system. Visit https://efiling.energy.ca.gov/EComment/ECommentSelectProceeding.aspx, type in docket number, 21-OIR-04. Enter your contact information and a comment title describing the subject of your comment(s). Comments may be included in the "Comment Text" box or attached as a downloadable, searchable document consistent with Title 20, California Code of Regulations, Section 1208.1. The maximum files size allowed is 10 MB.

Written comments may also be submitted by email. Include Docket Number 21-OIR-04 in the subject line and email to docket@energy.ca.gov.

A paper copy may be sent to:

California Energy Commission
Docket Unit
Docket No. 21-OIR-04
715 P Street, MS-4
Sacramento, CA 95814

To ensure you receive notice regarding this proceeding, please follow the instructions provided at the end of this notice to join the proceeding subscription list or provide a valid email or mailing address with your comments.

CONTACT PERSON

For questions about the SISOR and this Notice, contact Jared Babula, Senior Attorney at Jared.Babula@energy.ca.gov or at (916) 879-3028.

AVAILABILITY OF DOCUMENTS ON THE INTERNET

The CEC maintains a website in order to facilitate public access to documents prepared and considered as part of this rulemaking proceeding. Documents prepared for this rulemaking have been posted on the CEC's website at Docket 21-OIR-04, https://www.energy.ca.gov/proceedings/energy-commission-proceedings/rulemaking-amend-regulations-small-power-plant-exemptions, see the Docket Log link on the right side of the webpage.

INSTRUCTIONS FOR RECEIVING NOTICES AND DOCUMENTS IN THIS PROCEEDING

To stay informed about this project and receive documents and notices of upcoming as they are filed, please subscribe to the **Siting Division General List** or the **Rulemaking List**, which can be accessed here: https://www.energy.ca.gov/subscriptions.

The subscription list sends out email notification and direct links when documents and notices are filed in the proceeding docket. If you are unable or do not wish to sign up for the subscription list but still would like to receive documents and notices, please contact the contact person listed in this notice.

ATTACHMENT 1

CALIFORNIA ENERGY COMMISSION
715 P Street
Sacramento, California 95814

energy.ca.gov

CEC-057 (Revised 1/21)

SUPPLEMENTAL INITIAL STATEMENT OF REASONS

Title 20. Public Utilities and Energy
Article 6: Appendix B
Information Requirements for an Application

Docket No. 21-OIR-04
Notice Published on July 15, 2022
OAL # Z-2022-0630-01

INTRODUCTION

On December 14, 2022, the Office of Administrative Law (OAL) approved proposed changes to California Code of Regulations, title 20, sections 1934-1947 and Appendix F with an effective date of the same day. The California Energy Commission (CEC) withdrew proposed amendments to California Code of Regulations, title 20, Appendix B, in order to supplement the Initial Statement of Reasons, specifically in the necessity sections. This Supplemental Initial Statement of Reasons (SISOR) contains additional detailed explanations to address the need for the changes to the regulatory language contained in Appendix B. The CEC is not proposing any substantive changes to the regulatory language in Appendix B, which was previously the subject of a 45-day public comment period and was adopted by the CEC on October 12, 2022. While some post adoption changes have been made, these non-substantive changes are grammatical or are for consistency with other sections of title 20. Post adoption changes made to Appendix B are explained in the detailed discussion set forth below. The changes are identified with double strikeouts or double underlines in the Appendix B language attached to this SISOR.

Because only the necessity sections for Appendix B are being supplemented, the SISOR only contains the purpose and necessity sections related to Appendix B regulatory language changes. See the original ISOR (TN 244072) for the purpose and necessity sections addressing California Code of Regulations, title 20, sections 1934-1947. Also see the original ISOR for discussion of the following subjects: Problem Statement, Benefits Statement, Economic Impact Assessment, Documents Relied Upon, Consideration of Reasonable Alternatives, Mandates on Technology, and Impacts to Business. The original rulemaking file, which is incorporated by reference into this SISOR can be found in Docket 21-OIR-04 at https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=21-OIR-04

STATEMENT OF SPECIFIC PURPOSE AND NECESSITY

SECTION: Appendix B - Information Requirements for an Application

SPECIFIC PURPOSE AND NECESSITY

Appendix B contains the information requirements for Applications for Certification, Opt-in Applications and Small Power Plant Exemption Applications. The core purpose of Appendix B is to ensure that CEC staff receives adequate information in the application to analyze proposed powerplant projects, determine environmental impacts, and develop appropriate mitigation. Information required in the application is based on data categories set forth in Appendix B and the California Environmental Quality Act (CEQA).

The information requirements in Appendix B have not been significantly updated in 20 years while CEQA has had several significant changes. Thus, the changes to Appendix B adopted by the CEC are necessary to ensure applications effectively address all CEQA environmental categories. In addition, power generation has changed over the years making some Appendix B categories obsolete, such as once-through cooling, while other categories, such as wildfire, have become more relevant.

A discussion of the purpose and necessity of each technical section is detailed below.

Appendix B(a)(1)(E)

SPECIFIC PURPOSE

The purpose of changes to the Project Overview section is to update the data requirements in an application to be consistent with CEQA Guidelines section 15087(a)(3) so that the CEC can ensure adequate notification to the public of the project.

NECESSITY

The proposed amendments are necessary to ensure the CEC receives more detailed contact information for those who live or own property near the project early in the process. This will allow CEC to provide adequate public notice and review, as is required under CEQA and CEC regulations. Requiring direct mail addresses for property owners and occupants living contiguous to projects ensures that actual residents are notified and not just absentee owners.

Appendix B(b)(1)(C)

SPECIFIC PURPOSE

The proposed amendments in the Project Description section do not change the substantive effect of the regulations but instead make it clear that information related to construction includes depth of any excavations.

NECESSITY

This change provides clarity to applicants and ensures that the CEC collects the information needed to conduct adequate environmental reviews under CEQA especially in relation to potential impacts of subsurface cultural and paleontological resources.

Depth is important as the information informs staff and the public if the project has the potential to disturb soils below any recent infill.

Appendix B(g)(1)

SPECIFIC PURPOSE

The proposed amendments update the requirements to be consistent with CEQA Guidelines section 15130(b)(1), which requires a discussion of cumulative impacts and ensures applicants have collected the information on cumulative impacts prior to filing the application.

NECESSITY

This change is necessary to ensure that the CEC collects the information it needs to develop a CEQA compliant environmental document and supports adequate responsible agency review under CEQA. Because CEQA provides different methods for assessing the cumulative setting, it is necessary for the applicant to describe the methods used so that staff can understand how applicants arrived at conclusions regarding cumulative impacts. Expert consultants retained by an applicant would be familiar with the requirements in CEQA for assessing cumulative impacts which are specifically identified in the CEQA Guidelines Appendix G section XXI, California Code of Regulations, title 14. These consultants would also be knowledgeable of the various methods to account for past, present and future projects.

To add clarity, staff is proposing to make a non-substantive change to the adopted regulatory text by placing the phrase “or a combination” in parentheses and adding the word “of” so the text reads (or a combination of). This change does not impact the meaning of the sentence but improves readability.

Appendix B(g)(2)(A-E)

SPECIFIC PURPOSE

The proposed amendments to the Cultural Resources section are to update the data requirements to reflect changes made to Public Resources Code sections 21074, 21080.3.1 and 21080.3.2, requiring lead agencies to consult with relevant Native American tribes and to assess the impacts of the project on tribal cultural resources. The updates also reflect changes in data needs to appropriately assess the environmental impacts of projects filed seeking an application either for project certification or for a small power plant exemption.

NECESSITY

The proposed amendments are necessary to ensure that the applicant provides the information the CEC needs to conduct an adequate tribal consultation and cultural resources environmental review under CEQA. Other proposed amendments are added to clarify existing regulatory language and to clarify that the scope of confidential information may extend to certain non-archaeological tribal or cultural resources. Amendments that specify what a particular document must address or contain provide applicants clarity regarding the required content and scope of the summary. The updates are also necessary to gather data needed to assess the environmental impacts of applications for power plant certification or small power plant exemption projects.

The term “Tribal Cultural Resources” is added to the title of subsection (g)(2) and throughout the subsection to reflect a transition in the cultural resources discipline and the addition of this term in CEQA. These changes recognize that cultural resources are more than just artifacts but comprise sacred places, cultural landscapes and other non-physical aspects of tribal culture. The proposed amendments to (g)(2) are necessary to ensure applicants are clear that the scope of information required in the application includes an analysis of the non-artifact components of tribal cultural resources. The proposed amendments to subsection (g)(2) cite Public Resources Code sections 21074 and 21084.2, which cover the concept of tribal cultural resources. Expert cultural resource consultants retained by an applicant would be aware of the CEQA requirements regarding assessing project impacts to tribal cultural resources, therefore, no additional language is necessary to further describe this topic.

Amendments to subsection (g)(2)(A) are necessary to refine the existing regulatory language to ensure that the application contains the level of detail within the regional summary so staff and the public can understand the potential for cultural resources and tribal cultural resources to occur in the project area. To support the summary, proposed language requires the applicant to identify the field methods employed to identify cultural and tribal resources in the project area. Cultural resource expert consultants retained by the applicant would be able to identify the field methods and provide information on those methods, thus, additional regulatory language is not necessary.

See the discussion on subsection (g)(2) as to the necessity for adding the term “tribal cultural resources” in subsections (g)(2)(B-E). In subsection (g)(2)(C), it is necessary to add the phrase “resources or other sensitive resource” to reflect that confidential information contained in the technical report may include information other than just archaeological site information. This change reflects updates to CEQA, specifically Public Resources Code section 21082.3, which addresses, among other things, consultation with tribes and confidentiality. Cultural resource experts retained by an applicant would be aware of the confidentiality issues with cultural resources information thus the amendments to subsection (g)(2)(C) reflect existing practice among cultural resource professionals and ensure the CEC’s regulatory language is consistent with CEQA.

It is necessary to add the term “topographic” to subsection (g)(2)(C)(iv) for consistency with how the United States Geological Service titles its maps. The change is non-substantive because the term “topographic” is already inferred from the existing text as quadrangle maps are a type of topographic map produced by the United States Geological Survey and thus the term does not alter the meaning of the section.

To improve clarity in subsections (g)(2)(D)(i) and (ii) it is necessary to move the language requiring tribal notification from subsection (i) to (ii) since subsection (ii) addresses communications with tribes. The adopted language proposed a single paragraph as subsection (D) with numbered sentences from 1-3. For formatting consistency with subsection (E), subsection (D) was reformatted with separate paragraphs labeled (i), (ii) and (iii). This change is non-substantive and improves the readability of the section.

<u>Appendix B(g)(3)(A-D)</u>

SPECIFIC PURPOSE

The proposed amendments to the Land Use section provide more specificity as to the land use and zoning data that needs to be submitted as part of the application. The proposed amendments do not change the substantive effect of the regulations but instead provide more specificity regarding the type of information required, which is not always initially provided by an applicant, requiring CEC staff to make additional data requests that can cause delays in the proceeding.

NECESSITY

The proposed amendments are necessary to ensure CEC staff are efficiently provided with the land use information necessary to develop an environmental analysis under CEQA and to understand whether the proposed project is compatible with the site's zoning.

The addition of the proposed regulatory language in subsection (g)(3)(A) is a necessary refinement to the existing language to ensure that applications provide the specific general plan land use designations for the project site as well as the zoning districts that impact the project site. CEC staff has found that the project review process is more efficient and provides greater transparency when land use non-conformities are identified as early as possible in the review process. Therefore, to ensure the application is complete, additional precision in the regulatory language is necessary. Expert land use consultants retained by the applicant would be familiar with general plan designation and zoning districts, therefore, additional regulatory language is not necessary.

The addition of the term "policies" in subsection (g)(3)(B) is necessary to ensure that applicants also consider the compatibility of the project with long range land use policies adopted by the local government. While existing language includes the term "plans" for completeness, the addition of "policies" is being added.

The proposed amendments to subsections (g)(3)(D)(i-ii) are necessary to improve the clarity and internal consistency within the section. Subsections (g)(3)(D)(i-ii) are part of a section addressing agricultural lands affected by the project. In total, section (D) and its subsections seek information that in part can be obtained from the Department of Conservation. Existing language in subsection (ii) references Department of Conservation classifications for agricultural land. Like the identification of the Department of Conservation in subsection (ii), adding the phrase "Land classifications as shown on the Department of Conservation's Farmland Mapping and Monitoring Program's Important Farmland Maps" in subsection (i) would identify the commonly known source of the maps and classifications. While the addition of "Department of Conservation's" in subsection (i) is post adoption, such an addition is non-substantive as section (D)(ii) already identifies the Department of Conservation as producing the land classification data and the referenced farmland maps which are only generated by the Department of Conservation. The proposed amended language is necessary to provide greater precision in that the classification data is located on the Farmland maps from the Department of Conservation. Land use consultants retained by applicants submitting applications already know and use the Farmland Mapping and Monitoring

Program's Important Farmland maps from the Department of Conservation, and a quick internet search of the term will take one to the Department of Conservation's website.

Finally, subsection (D) is an informational section that parallels the language of (II)(a) of Appendix G of the CEQA Guidelines, California Code of Regulations, title 14, which references the same Department of Conservation maps. The proposed amended language in subsection (g)(3)(D)(ii) replacing the term "farmland" with "agricultural land" is also necessary for consistency with Public Resources Code section 21060.1, and further parallels the language of (II)(a) of Appendix G of the CEQA Guidelines, California Code of Regulations, title 14. Therefore, the proposed amendments do not change the substance or meaning of the subsections but provide refined language necessary to ensure complete information in the application and consistency with CEQA.

For consistency with existing language in the CEC's regulations at California Code of Regulations, title 20, Appendix SSR (e)(2)(F)(ii), staff is adding the phrase post adoption, "…as specified in Public Resources Code section 21060.1; and" to subsection (D)(ii). This addition is non-substantive and provides the statutory source for the relevant definitions identified in subsection (D)(ii).

Appendix B(g)(5)(B-F)

SPECIFIC PURPOSE

The proposed amendments to the Traffic and Transportation section reflect changes made in Federal Aviation Administration (FAA) regulations regarding projects near airports as well as changes made to CEQA requiring traffic analysis based on vehicle miles traveled attributable to the project as set forth in the CEQA Guidelines California Code of Regulations, title 14, section 15064.3. Other proposed changes do not change the substantive effect of the regulations but instead provide more specificity regarding the type of information required, which is not always initially provided by an applicant, requiring CEC staff to make additional data requests causing delays in the proceeding. Finally, some renumbering is proposed to accommodate the changes required above.

NECESSITY

The proposed amendments to section (g)(5)(B) are necessary to ensure that the CEC collects the information it needs to conduct an adequate environmental review and that the information provided reflects changes in both FAA requirements and CEQA.

The distances identified in the original text of 20,000 feet, 3,200 feet and 5,000 feet are being replaced with the phrase "…four miles of an airport, a planned or proposed airport runway, or an airport runway under construction…" because CEC staff must evaluate project impacts to aviation operations if a project is located within an approximately 4-mile radius of an airport, planned or proposed airport runway or an airport runway under construction. CEC staff selected "four miles" as an appropriate distance from an airport because it more generally encompasses the distances featured in the original text (3,200, 5,000, and 20,000 feet). 20,000 feet is approximately four miles.

It is necessary to delete the phrase “Objects Affecting Navigable Airspace” and update the language to “Safe, Efficient Use, and Preservation of the Navigable Airspace,” to reflect the current title of Federal Aviation Regulation Part 77. (14 CFR part 77.) It is also necessary to add the phrase “during construction” because it is possible that equipment such as cranes, could reach heights that impact aircraft. The application needs to include such information so that staff is aware of the potential impacts early in the process to allow for consultation with the FAA and airport authorities if necessary.

The language added to subsection (g)(5)(B)(i) is necessary to ensure that the existing required maps submitted as part of the application contain the regions around the proposed project that are designated airport influence areas and safety zones. These details are necessary for the CEC to assess the impacts of a project on nearby aviation activity. These terms are well understood by those in the land use and aviation fields and by consultants retained by the applicant.

The addition of subsection (g)(5)(B)(ii) is necessary to ensure a thermal plume analysis is provided with the application as opposed to later in the proceeding. Projects subject to the CEC’s jurisdiction utilize equipment that would discharge thermal plumes, high-velocity columns of hot air, during operation. High-velocity thermal plumes have the potential to affect aviation safety, and the FAA Aeronautical Information Manual identifies thermal plumes as potential flight hazards. Aircraft flying through thermal plumes may experience significant air disturbances, such as turbulence and vertical shear. To determine the project’s thermal plumes peak velocity at altitudes where aircraft would fly, the project applicant performs a thermal plume assessment. Because CEC staff typically consults with the local airport authority and the FAA on the study results and seeks comments from these expert agencies, it is necessary for staff to have the thermal plume study as part of the application so that the aviation agencies have appropriate time to review the study and consult with CEC staff.

Consultants in the transportation and other fields retained by applicants are familiar with thermal plume analysis and have been submitting those to the CEC for years.

The addition of subsection (g)(5)(B)(iii) is necessary to ensure that applicants at a minimum check on the compatibility of the proposed project with the applicable Airport Land Use Compatibility Plan. Including this information in the application provides early notice to CEC staff and the public if there are any inconsistencies between the proposed project and Airport Land Use plan. Having early notice is necessary to ensure adequate time to address any inconsistency either through project changes or variances if available. Since state law requires each county’s Airport Land Use Commission to prepare an Airport Land Use Compatibility Plan, consultants retained by applicants would be aware of these plans and the relevance of the plan to proposed projects near airports.

The addition of subsection (g)(5)(B)(iv) is necessary to ensure that CEC staff is provided with notices and information submitted to the FAA for the CEC to ensure that the project is consistent with federal requirements related to project design and aviation safety. CEC staff has specifically identified the need for any copies of FAA Form 7460-1 submitted by the applicant because the CEC is required under Public Resources Code section 25525 to make findings that projects approved by the CEC are consistent with

federal law. In addition, the forms are necessary to ensure consistency between information submitted to the CEC and information submitted to the FAA. Consultants retained by applicants with projects near airports would be familiar with the need for filing the FAA Form 7460-1.

The addition of subsections (g)(5)(C)(i-iv) is necessary because of changes to CEQA. SB 743, which was signed into law in 2013, initiated an update to the CEQA Guidelines to change how lead agencies evaluate transportation impacts under CEQA, with the goal of better measuring the actual transportation-related environmental impacts of any given project. Starting on July 1, 2020, CEQA requires agencies analyzing the transportation impacts of new projects to now look at a metric known as vehicle miles traveled (VMT) instead of level of service.

Because local jurisdictions have the most knowledge regarding traffic patterns in their cities and many have developed thresholds of significance, methodologies for evaluating impacts, transportation demand management plans, as well as having data and maps on transportation, it is necessary to require the applicant to provide this local information regarding the VMT associated with the project. For the CEC to assess whether the project is consistent with local laws as required by Public Resources Code section 25525 and otherwise determine if there are significant impacts to transportation, it is necessary for the application to contain the elements identified in subsections (i)-(iv). This will allow for CEC to engage with the local jurisdiction in a timely manner.

Transportation and CEQA consultants retained by applicants are aware of the requirement in CEQA to assess VMT and have been providing such analysis in CEC proceedings since the inception of the requirements.

The addition of subsection (g)(5)(E)(i) is necessary for CEC staff to effectively assess project construction impacts related to vehicle miles traveled. Estimated one-way trip lengths provide supporting information to staff for making an impact determination, which parallels the language of (XVII)(b) of Appendix G of the CEQA Guidelines. In addition, technical areas of Air Quality and Population and Housing, also rely on this information for quantifying emissions generated by construction vehicle trips and to confirm distances the construction workforce would commute to the project site.

The addition of subsection (g)(5)(E)(ii) is necessary for CEC staff to determine if a proposed project's construction or operation activities, occurring in the public right-of-way, would produce transportation impacts such as dangerous intersections or inadequate emergency access, which parallels the language of (XVII)(c) and (d) of Appendix G of the CEQA Guidelines.

<u>Appendix B(g)(6)(A-H</u>)

SPECIFIC PURPOSE

The proposed amendments to the Visual Resources sections of Appendix B(g)(6)(A-H) reflect changes made to CEQA, and the CEQA Guidelines. Specifically, CEQA Guidelines Appendix G Environmental Checklist Form, I. Aesthetics, which was revised in 2020. In addition, the methodologies used by professionals in the visual resources field have changed since Appendix B was last updated. To support staff's visual

resources analysis as required under CEQA, the application needs to contain information regarding the analysis of effects on a scenic vista, scenic resources, existing visual character, or quality of the public views of the site and surroundings, and light and glare. Other proposed changes include use of the definition of “public view” in CEQA Guidelines Appendix G Environmental Checklist Form, I. Aesthetics, c., and wording used in CEQA and in the CEQA Guidelines. (See Pub. Resources Code, § 21060.5; Cal. Code Regs., tit. 14, §§ 15360, 15382.) Additional changes include wording based on *Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal. App. 4th 477, and language that includes the revised definition for “urbanized area” in Public Resources Code section 21071.

While the entire Visual Resources section is being replaced with new text, many of the categories of information required in the new text are similar to existing categories such as the need for information related to key observation points. For clarity and efficiency all the original text is proposed for deletion. This allows for improved organization of the visual resources section rather than simply updating text within the current structure of the section.

NECESSITY

The changes are necessary to ensure that data and information provided by the applicant reflect current requirements of CEQA, the CEQA Guidelines, and *Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal. App. 4th 477, so CEC staff can prepare the environmental analysis, and ensure conformance with all laws relating to visual resources. Other changes improve the clarity of the information required to be submitted. The following discussion addresses the necessity for each subsection of new text.

Section (g)(6)(A) contains refinements in language that are necessary to reflect terms used in the field of visual resources and to provide a more detailed description of the information needed in the application. The applicant is required to provide a description of the existing physical environmental condition that contains enough information to allow CEC staff to analyze the environmental impact to visual resources (aesthetics) by the proposed project. The need for this information is to ensure the existing conditions as they relate to visual resources are described in the application to establish clear baseline conditions to compare impact of the project against. This need for accurate baseline conditions is reflected in the CEQA Guidelines.

“An EIR must include a description of the physical environmental conditions in the vicinity of the project. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant.” (Cal. Code Regs., tit. 14, § 15125(a).)

Section (g)(6)(A)(i) is necessary to ensure that information regarding any scenic vistas in proximity to the project are identified early in the review process and any conflicts with laws pertaining to the vistas are identified.

The applicant is asked to pinpoint on a map any federal, state, or local government designated or recognized scenic vista(s) and scenic resource(s) in a five-mile distance zone. This language comports with the broad categories in CEQA Guidelines Appendix

G Environmental Checklist Form, I. Aesthetics, a. which asks would the project "[h]ave a substantial adverse effect on a scenic vista?" and b. "substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?"

A five-mile radius from the project and one mile radius from linears are used and based on well-known visual impact assessments performed by federal government agencies. The U.S. Department of Agriculture Forest Service (USFS) and the U.S. Department of Interior Bureau of Land Management (BLM) describe the following distance zones in their visual impact assessments. The USFS subdivides landscape viewing into four distance zone classifications: immediate foreground = 0 to 300 feet from the viewer; foreground = 300 feet to ½-mile; middleground = ½-mile to 4 miles, and background = 4 miles to the horizon. The BLM subdivides landscapes into three distance zones based on relative visibility from travel routes or observation points. The three zones are foreground-middleground, background, and seldom seen. Foreground-middleground zone includes areas seen from highways, rivers, or other viewing locations that are less than three to five miles away. Based on the analytical work of these federal agencies, staff selected a five-mile radius as the appropriate distance to allow for analysis of how the project impacts scenic resources within this distance.

Section (g)(6)(A)(i)a is necessary to ensure early on that the applicant identifies any designated federal, state, or local government scenic vista and scenic resource in an adopted planning document, plan, or regulation. This information can be used by staff when considering CEQA Guidelines Appendix G Environmental Checklist Form, I. Aesthetics, a. which asks would the project "[h]ave a substantial adverse effect on a scenic vista?" and b. "substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?"

This information also addresses *Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal. App. 4th 477, where the court confirmed that under CEQA, ". . . it is appropriate for lead agencies to look to local planning thresholds when defining the visual impact standard." (e.g., general plan, specific plan, zoning) Thus, the application is required to identify any planning document or regulation that designates scenic resources so that CEC staff can understand if there are local thresholds for identifying significant impacts to visual resources.

Section (g)(6)(A)(i)b is necessary to ensure the application contains information on a recognized natural feature or object that is part of the landscape in the vicinity of the project that may be in the "*public view*." CEQA Guidelines Appendix G Environmental Checklist Form, I. Aesthetics, c. states "Public views are those that are experienced from publicly accessible vantage point."

The CEQA Guidelines define a "*significant effect on the environment"* to mean "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and **objects of historic or aesthetic significance**." [Emphasis added] (Cal. Code Regs., tit. 14, § 15382.)

An object of aesthetic significance is not defined in CEQA nor the CEQA Guidelines making the description set forth in Appendix B important so that CEC staff can identify

potential objects of aesthetic significance early on to ensure adequate analysis of impacts.

Taken together, the information requirements of Appendix B (g)(6)(A)(i) a and b are necessary to support a robust visual resources analysis consistent with the requirements of CEQA to identity objects of aesthetic significance, determine project impacts on these objects, and to consider local planning thresholds for visual impact standards. To provide a range of examples for applicants to consider when developing their applications staff included categories of natural features that may be found near projects as well as some specific examples for each category. These examples are known to consultants retained by applicants to perform visual resources analysis.

Section (g)(6)(A)(i)c is necessary for the same reasons as noted for subsections a. and b. The amended language ensures that a recognized built feature or object that embodies elements of architecture or engineering design, detail, materials, or craftsmanship which represent a significant innovation or is unique near the project are identified in the application to allow for early assessment of impacts to the any aesthetic or scenic values of the built environment. To ensure clarity as to the information being requested, examples of built structures are included. These examples, California State Capitol, Golden Gate Bridge and Hollywood Sign were selected as they are well known and provide a range of built structures and locations.

Section (g)(6)(A)(i)d is necessary to add new text to reflect a definition of “public views” in CEQA Guidelines Appendix G Environmental Checklist Form, I. Aesthetics, c. The language is necessary to ensure that applicant analyzes the project’s potential physical change to an object of aesthetic significance in the public view in the vicinity of the project as opposed to views from points with no public access.

The California Courts of Appeal, Fourth District wrote "under CEQA, the question is whether a project will affect the environment of persons in general, not whether a project will affect particular persons." (*Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal. App. 4th 477.)

Section (g)(6)(A)(ii) is necessary to comply with CEQA Guidelines Appendix G Environmental Checklist Form, I. Aesthetics, d which addresses nighttime lighting.

The new language requires the applicant to provide a description of the existing nighttime lighting (existing physical environmental condition) that ensures that CEC staff collects the information it needs to conduct an adequate environmental review. This language is like the original language found at (g)(6)(A)(ii). The existing state of nighttime lighting provides a baseline to compare the project’s nighttime lighting to. (Cal. Code Regs., tit. 14, § 15125(a).) Light pollution is a concern. Visual resource consultants are aware of the need to provide baseline information on the project area lighting and to ensure the project is designed in a way to reduce extraneous lighting. Such information has been regularly included in powerplant applications for years.

Section (g)(6)(B) is necessary to ensure the application contains information in response to CEQA Guidelines Appendix G Environmental Checklist Form, I. Aesthetics, c., for projects to be constructed within an “urbanized area” as defined in Public Resources Code section 21071. The change provides clarity to an applicant and

ensures that CEC staff collects the information it needs to conduct an adequate environmental review.

The language is also necessary to ensure the application contains a discussion about the project's conformance with the affected local government's adopted general plan, specific plan, local coastal plan, or similar planning document, and its government code or municipal code (e.g., zoning) for regulations governing scenic quality.

CEQA Guidelines Appendix G Environmental Checklist Form, I. Aesthetics, c. asks: Would the project "In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?"

In addition, information on the project's conformance with laws addressing scenic quality is necessary for a decision on the application. Public Resources Code section 25525 states, "The commission may not certify a facility ... when it finds ... that the facility does not conform with any applicable state, local, or regional standards, ordinances, or laws, unless the commission determines that the facility is required for public convenience and necessity and that there are not more prudent and feasible means of achieving public convenience and necessity."

To provide a complete citation, additional language was added to subsection (B) after adoption, providing for the Title, Division and Chapter where Appendix G can be found. The change is non-substantive and does not impact the meaning of subsection (B).

Section (g)(6)(C) is necessary to ensure the application identifies whether the project is in a non-urban area as set forth in CEQA Guidelines Appendix G Environmental Checklist Form, I. Aesthetics, c., The new language provides clarity to an applicant and ensures that CEC staff collects the information it needs to conduct an adequate environmental review. To provide a complete citation, additional language was added to subsection (C) after adoption, providing for the Title, Division and Chapter where Appendix G can be found. The change is non-substantive and does not impact the meaning of subsection (C).

CEQA Guidelines Appendix G Environmental Checklist Form, I. Aesthetics, c. asks: Would the project "In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? To address this question, it is necessary for the application to include all the information required in subsections i-vi. A core concept in visual resources analysis is the observer viewpoint or key observation point (KOP) which is a concept well known to visual resources consultants performing CEQA analysis. While information regarding KOPs was required in the original Appendix B language, the new language provides considerably more detail describing the information and analysis required in the application. These changes are discussed in the next subsections.

Section (g)(6)(C)(i) is necessary to repeal the original subsection (F) text and add new text defining a KOP, and to show on a map the exact location (pinpoint) the KOP(s) selected to analyze the proposed project.

The new language is necessary to set forth a standard definition of KOP so applicants can provide responsive information in the application. The definition is similar to definitions for KOP used in the field of visual resources. Subsection (i) defines a key observation point as a fixed position in a publicly accessible location where a public view of the project is analyzed and/or evaluated in the landscape.

Improper selection of a key observation point may limit a viewer's knowledge of the full range of visual impacts from a project or may bias the visual impact assessment by not showing or fully disclosing important effects. By requiring specific locations of KOPs in the application CEC staff and the public will be able to understand early in the process the location of the KOPs selected and can assess if the KOPs selected are representative views neither understating nor overstating the visual effects of the project. It is well known by visual resource professionals that viewpoint selection is critical to credible visual analysis and the new language ensures the precise locations of the KOPs are provided. The new language is also necessary to ensure that publicly accessible locations are selected consistent with the CEQA guidelines as previously discussed.

Finally, for consistency with CEQA Guidelines, the new language includes reference to objects of aesthetic significance. (Cal. Code Regs., tit. 14, § 15382.) This reference will help focus the information provided in the application and refine the selection of KOPs.

The adopted language of (g)(6)(C)(i) contains commentary referencing an uncited judicial holding. This language is being removed because the language is commentary and has no regulatory effect. Thus, removal of the sentence is non-substantive and provides for a more succinct section.

Section (g)(6)(C)(ii) is necessary to repeal the original subsection (F) text and add new text explaining if an object of aesthetic significance is not within the project site's vicinity, a KOP will need to be selected based on a menu of options including, direct public selection, importance to stakeholders, visibility, worst-case scenario, or other reason.

If an object of aesthetic significance is not in the project site's vicinity, a KOP could be selected based on other factors. Staff identified some common basis for selecting a KOP that applicant's consultants have used in the past and that are standard basis within the discipline. These selection examples include direct public selection, importance to stakeholders, visibility, worst-case scenario, or other. The applicant is being asked to explain why the KOP was selected. The change provides clarity to an applicant on the information that needs to be included in the application and flexibility to cover a wide variety of powerplant projects and locations. By including the potential for KOPs to be identified even if an object of aesthetic significance is not in the project's vicinity, CEC staff and the public can better assess the overall visual intrusiveness of the project.

The new language also is necessary to emphasize that the local community around the project site can be a source of KOPs. For people who live, work, and recreate in a region, the landscape consists of layers of meaning that may not be understood by a developer or a non-local professional conducting a visual assessment. Residents and other interested parties can be a valuable source of KOPs. Thus, the need for the new language to trigger consideration of this option.

Sections (g)(6)(C)(iii) and (iv) are related data requirements and necessary to provide more detail regarding the generation of baseline photographs and visual simulations that must be provided as part of the application. While the requirement to take baseline photos and provide visual simulations from KOPs is contained in the current Appendix B at subsection (F), the new language requires submission of the technical information as to the conditions for photographing and the generation of simulations from the KOP. Therefore, the new language is necessary to repeal the original subsection (F) text and add new text requiring color photographs showing an actual line of sight from the KOP to the project site prior to the site's alteration and providing photograph and camera information as well as accurate photo simulations with the project built.

To ensure consistency and standardization of photographs and visual simulations and to ensure the photos and simulations are as close to the view a person would see from the KOP as possible, it is necessary to provide certain details in the subsection (iii) and (iv). Such language includes use of a standard or normal lens, photographs at line of site at eye level during the daytime and with clear weather. The requirement to use a standard lens ensures the photographs provided reflect an image that roughly matches what the human eye can comfortably view. The adopted language of (g)(6)(C)(iii) used the term "normal" lens. For consistency with existing regulatory language found in California Code of Regulations, title 20, Appendix SSR (g)(4)(B(iii) the term "normal" is being replaced with the term "standard" which does not change the meaning of the section and is a non-substantive change. Within the photography and visual resources field, a normal lens is also known as a standard lens.

To allow for staff and the public to assess the validity of the photographs as representing the baseline visual conditions, it is necessary to require the application to contain key technical information about the photographs such as camera type, lens focal length, viewing angle, date, and time the photograph was taken and distance to the project site. This information is standard and routinely captured in reports submitted to the CEC by visual resources consultants performing visual analysis.

With accurate baseline photographs, language in subsection (iv) is necessary to ensure simulations are provided in the application that reflect what the view would look like from the various KOPs once the project is built. The use of photo simulations is commonly included as part of a CEQA analysis for visual impacts and consultants generating simulations routinely produce photo-realistic simulations using image-editing software that account for Earth curvature, trees, vegetation and structures. Because most projects have landscaping requirements, it is necessary to require a simulation one year after completion of construction to allow for landscaping to mature so that a more accurate long-term simulation can be provided.

Section (g)(6)(C)(v) is necessary to ensure the baseline photographs and simulations from the KOPs are at sufficient resolution to ensure printed images remain visually accurate. Dots per inch (dpi) is a measure of the resolution of a printed document or digital scan. The higher the dot density, the higher the resolution of the print or scan.

To ensure standard quality printed photographs and simulations, the new regulatory text requires photographs and simulations to be capable of printing a 11" x 17" color print on

a 600-dpi printer. The size and dpi were chosen because it allows users to print ultra-high-resolution images or pictures and 600-dpi printers are widely available.

A photo-realistic simulation of the project printed at 11” x 17” accurately positioned at the KOP at about arm’s length should match flawlessly with the existing landscape.

Section (g)(6)(C)(vi) is necessary to ensure that CEC staff receive all photographs and simulations as an electronic file. Because all photos and simulations are typically digital submission to staff as an electronic file is standard practice. The language of subsection (vi) comports with existing practice. In addition, having an electronic file is necessary to allow staff to manage or utilize the data in staff’s environmental document and public presentations.

Section (g)(6)(D) is necessary to ensure that the applicant provides a photo-realistic simulation(s) showing the existing physical condition plus the proposed project as part of the application. The applicant is to prepare a spatially accurate and realistic photo manipulated computer simulated image (photo-realistic simulation) of the proposed project one-year after completion of construction. The photo-realistic simulation(s) shows existing and proposed buildings, structures, major equipment, trees, vegetation, landscaping, etc. on the project site. As previously stated, a photo-realistic simulation of the project printed at 11” x 17” accurately positioned at the KOP at about arm’s length should match flawlessly with the existing landscape. The photo-realistic simulation(s) permits the CEC staff to analyze the physical change by the proposed project in the existing landscape. “Effects analyzed under CEQA must be related to a physical change.” (Cal. Code Regs., tit. 14, § 15358(b).) The word “include” is being removed post adoption for non-substantive grammatical reasons.

Consultants retained by applicants to perform visual resources analysis routinely generate simulations of the project and include those in the application and as part of public information presentations.

Section (g)(6)(D)(i) is necessary to add new text requiring 8.5” X 11” scaled elevations showing the buildout of the proposed project site as viewed at surface level from four directions.

An elevation drawing is an orthographic projection drawing that shows the proposed built project site at surface level from the north, south, east, and west directions. The elevation drawing shows the finished appearance of a given side of the building, structure, major equipment, etc., and dimensions. This information is necessary for staff to assess the project’s visual impacts as well as whether the project meets local building height restrictions and for those projects near airports, whether the project impacts aviation operations. Elevations are common types of drawings that are typically contained in applications and are required in the existing language in Appendix B subsection (D) of the visual resources section.

Section (g)(6)(D)(ii) addresses surface finishes. Currently, subsection (D) contains the requirements for an applicant to provide information about the surface finishes. The new language is similar to the existing language but is contained in a new subsection (ii).

The new language is necessary to ensure an accurate description as to the type of surface finishes the various project components will have. The surface finishes of the

project's components have a great influence on the visual character of the landscape and the information is necessary for staff and the public to assess the project's visual characteristics and potential impacts.

Choosing materials and surface treatments that repeat and/or blend with the form, line, color, and texture of the surrounding landscape reduces the visual contrast of project components with their backdrop, thereby reducing visibility.

Materials and coatings that diffuse illumination or collection, reflectance and scattering are of utmost importance. Material with a non-shiny, textured or matt/powder finish are preferable to glossy or shiny finishes. An ideal coating is non-specular (to decrease geometrical effects) durable, high in reflectance and spectrally flat over a wide wavelength range to give a flat spectral response in input or output.

Thus, information on exterior surface treatments and finishes is necessary at the application state so that potential issues can be identified early.

Section (g)(6)(D)(iii) is necessary to add new text requiring a description of the project specific architectural treatment or design technique mitigation unique to its siting at the location, if any.

For staff to understand the project's use of design features to mitigate visual impacts, it is necessary for the application to provide such information. This will ensure staff and the public understand why certain design features were or were not included in the project. Visual impact mitigation may include intelligent placement of facilities and measures taken to avoid, reduce, or compensate for the visual impacts of a facility. Intelligent strategies rely on a thorough understanding of the visual characteristics of both the project and the existing landscape, the latter of which is achieved through a landscape character assessment. Because design features can be subtle, it is also necessary for the application to fully describe these features.

Sections (g)(6)(D)(iv) a. and b. are necessary to repeal the original subsection (H) text and add new text requiring a project specific conceptual landscape design plan that conforms with the county government code or city municipal code and provides information as to the type of plants to be used for landscaping.

Subsections (iv) a. and b. are also necessary to ensure the project identifies at the application phase any local government landscape standards that may apply and to provide a plan on how the project will conform with the landscape standards. Post adoption, the term "provide" is being deleted from subsections (a) and (b) as a non-substantive grammatical change for consistency with the structure of the other provisions.

Based on review of various types of powerplant projects throughout California it is common for applicants to include, either as its own practice or due to local requirements, landscaping designed to integrate principles of sustainability to the greatest extent feasible. This includes principles of water conservation, the use of trees for energy conservation and to improve air quality, and the use of storm water control features for treatment and run-off reduction with an emphasis on the use of drought-tolerant and/or native plants.

The Water Conservation in Landscaping Act (Government Code sections 65591-65599) makes it a policy of the state to promote the conservation and efficient use of water and to prevent the waste of this valuable resource while recognizing that landscapes are essential to the quality of life in California by providing areas for active and passive recreation and as an enhancement to the environment by cleaning air and water, preventing erosion, offering fire protection, and replacing ecosystems lost to development. The policy sets forth the objective that Landscape design, installation, maintenance, and management be water efficient.

Thus, it is necessary for the application to detail in a landscape design plan the types of plants, location of each type, number of each type, expected height over time and the type of irrigation system so that staff can assess whether the landscaping plan conforms with any local requirements implementing the Water Conservation in Landscaping Act.

It is necessary to obtain information as to the amount of pervious surface on the project site. A pervious surface allows water to percolate through to the area underneath rather than becoming runoff. Impervious surfaces are solid surfaces that prevent aeration, infiltration, and water penetration.

Minimum pervious surface percentage often are required by the city municipal code or county government code. Pervious surface regulations are intended to provide a minimum required amount of pervious area and limit the amount of impervious surface on a parcel of land.

Pervious surfaces do not include any covering over a ground surface that impedes or prevents infiltration of water directly into the subsurface such as concrete, asphalt, brick, compacted gravel, etc. Pervious surfaces include grass, mulched groundcover, planted areas, and permeable paving.

The required information will allow staff and the public to understand the total pervious surface and total area to be landscaped and to assess how the site fits into the existing environment with its specific mix of paved and non-paved surfaces.

Section (g)(6)(D)(v) is necessary to repeal the original subsection (G) text and add new text requiring a project specific conceptual outdoor lighting control and management plan, and an explanation of how control of reflectance from exterior surfaces is to be accomplished. Outdoor lighting control plans are common within the visual resources field and consultants hired by applicants would be knowledgeable about the contents of such reports. The term “include” is being deleted post adoption as a non-substantive grammatical change for consistency with the structure of the other provisions.

The outdoor lighting plan is necessary to permit CEC staff to conduct an environmental analysis consistent with CEQA and confirm the project conforms with local lighting requirements. A lighting plan means and refers to a project site plan depicting proposed design and materials of exterior light fixtures, location of exterior lighting, and directional focus of exterior light.

CEQA Guidelines Appendix G Environmental Checklist Form, I. Aesthetics asks: Would the project “[c]reate a new source of substantial light or glare which would adversely affect day or nighttime views in the area?”

Light pollution occurs when outdoor lighting is misdirected, misplaced, unshielded, excessive, or unnecessary. As a result, light spills unnecessarily upward and outward, causing glare, light trespass, and a nighttime urban ‘sky glow’ overhead, indicating wasted energy and obscuring the stars overhead.

Reflectance is the proportion of perpendicularly incident light reflected from the surface or body of a material. Reflectance from the project towards occupants inside neighboring buildings and outdoor passersby can be a nuisance. Potential reflectance from various viewpoints, the angle and orientation of the exterior surface of project components towards the sun and surrounding buildings and public places need to be examined.

Local government outdoor light, glare, and reflectance regulations are commonly applied to all new development by the county government code or city municipal code (e.g., City of San Diego Outdoor Lighting Regulations, Riverside County Ordinance Regulating Light Pollution, San Diego County Dark Sky Ordinance). Thus, the new regulatory language is necessary in Appendix B to ensure early identification of any impacts regarding lighting to the surrounding environment is included in the application.

Section (g)(6)(D)(v)a. is necessary to repeal the original subsection (G) text and add new text to provide a list of exterior project-specific luminaires and their locations on the project site. Post adoption, the term “noncut off” is being replaced with the correct form of the word, “non cutoff” which is a non-substantive correction.

CEQA Guidelines Appendix G Environmental Checklist Form, I. Aesthetics asks: Would the project “[c]reate a new source of substantial light or glare which would adversely affect day or nighttime views in the area?”

For staff to assess the potential impacts of the project regarding light pollution and glare, the new language is necessary. Information regarding the design of luminaires and whether any of the luminaires have the International Dark-Sky Association Fixture Seal of Approval is necessary for staff and the public to understand what measures the project is already taking to mitigation light pollution.

The International Dark-Sky Association (IDA) is a recognized authority on light pollution and consultants retained by an applicant would be familiar with IDA and understand that to minimize the harmful effects of light pollution, lighting should: only be on when needed; only light the area that needs it; be no brighter than necessary; minimize blue light emissions; and be fully shielded.

IDA’s Fixture Seal of Approval program provides an objective, third-party certification for luminaires that minimize glare, reduce light trespass, and do not pollute the night sky. All products approved in the program are required to be fully shielded and to minimize the amount of blue light during nighttime. Therefore, staff included a requirement to indicate in the application whether any of the exterior luminaires are IDA certified.

Shielding is the key element of night-sky-friendly lighting. Fully shielded fixtures, also known as "full-cutoff lights" are the gold standard. The design of a fully shielded fixture is simple. The light source is flush with or recessed from the bottom of the fixture and the top and sides of the fixture are opaque, this ensures that the fixture lights up the ground only. No stray light escapes upward or outward, and a passerby is not blinded

by the glare from an exposed bulb. Because of the importance of luminaire design, it is necessary to include such information in the application.

Section (g)(6)(D)(v)b. is necessary to add text to describe reflectance from the exterior surface of the project's large buildings, structures, and major equipment offsite to the surrounding area. The information requirement of this subsection relates to the section addressing surface coatings.

The new language is also necessary for staff to obtain information in the application to assess the visual impacts from reflected light as well as the project's conformance with any local government outdoor light, glare, and reflectance regulations.

Reflectance is the proportion of perpendicularly incident light reflected from the surface or body of a material. The specific terms used in (g)(6)(D)(v)b. ensure that information contained in the application is of sufficient technical detail for staff to perform an analysis. The terms used in the new language, such as intensity, reflectance, and specular reflectance were also selected because they are terms commonly understood by those in the visual resources field.

Reflectance from the project towards occupants inside neighboring buildings and outdoor passersby can be a nuisance. Potential reflectance from various viewpoints, the angle and orientation of the exterior surface of project components towards the sun and surrounding buildings and public places need to be examined. Therefore, the new language is necessary to allow staff and the public to understand the potential for impacts from reflective light.

Sections (g)(6)(E)(i)-(iii) are necessary to repeal the original subsection (E) and (G) text and add new text in a distinct section addressing visible water vapor plumes from powerplant cooling towers. Within the power generation sector, assessing the potential to generate visible plumes and developing mitigation to address the plumes is common practice. The CEC has been receiving plume analysis in applications for years. The new language is necessary to improve the clarity of the information required by placing visible plume related information into a separate section and to provide more specificity using technical terms as to the information needed in the application.

A visible plume emitted in the atmosphere by a proposed cooling tower for a thermal power plant is analyzed to determine; if the plume would substantially degrade the existing visual character or quality of public views of the site and its surroundings, substantially damage scenic resources, and have a substantial adverse effect on a scenic vista.

Where a power plant cooling system includes a cooling tower, the operation of the cooling tower will emit a column of rising warm moisture (vapor plume) filled exhaust in the atmosphere. The vapor is normally not visible. However, when the warm vapor and cooler ambient air converge, the atmosphere may become more saturated in water content than the carrying capacity of the ambient air, so that the vapor condenses forming microscopic droplets of water. The droplets refract sunlight at all different angles appearing as a white cloud—a publicly visible water vapor plume also known as a visible plume.

CEQA Guidelines Appendix G Environmental Checklist Form, I. Aesthetics asks: Would the project "[h]ave a substantial adverse effect on a scenic vista?" Would the project "substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?"

CEQA Guidelines Appendix G Environmental Checklist Form, I. Aesthetics asks: "Would the project "[i]n non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?"

To model the potential for a plume, under what conditions the plume will form, and its potential size as well as mitigation strategies, it is necessary for staff to receive technical information in the application about the cooling towers.

The Combustion Stack Visible Plume (CSVP) model is used by staff to forecast a visible plume's frequency and size emitted from the project's proposed cooling tower. The CSVP model inputs include cooling tower design and operational data (e.g., cell stack height and diameter, number of cells, exhaust temperature flow rate, heat rejection), and a representative meteorological data set spanning a three to five-year period from the geographic region where the cooling tower is sited. Thus, it is necessary to include these specific parameters in the regulatory language set forth in (g)(6)(E)(i).

Fogging is a reference to the visibility and path of the effluent air stream after having exited the cooling tower. If visible and close to the ground, it is referred to as fog. If elevated, it is normally called a plume.

If ambient temperatures are warm, and normal atmospheric stability exists, vapor plumes, which may condense at the cooling tower stack, quickly evaporate into the atmosphere. However, problems occur when the ambient temperature drops below 50-60° Fahrenheit and the relative humidity exceeds 80%. Under these conditions, air is carrying close to its saturation load of water vapor and the additional vapor from a plume may be sufficient to produce a supersaturated region near the stack. Water droplets then form to produce a localized fog.

In some areas, because of local topography, or frequent fogs, and under certain atmospheric conditions, a condensing vapor plume may descend to ground level, thereby obstructing visibility on streets, highways, and railways. In this instance, visible plumes are a safety hazard. If the ambient temperature is low (below 32°) icing of roadways, sidewalks, and electrical power lines may create a danger.

To assess fogging potential fogging curves specific to the cooling tower's exhaust discharge are necessary. Given site-specific weather statistics, it is possible to determine the fogging frequency at a given location, which can be expressed as the proportion of operating hours wherein visible plumes may occur. Staff has included three ambient air temperature measurements in the regulatory language to ensure an accurate curve.

Subsection (g)(6)(E)(iii) is necessary to complement the prior two subsections. If the applicant forecasts visible plumes, the new language is necessary to ensure the

application addresses what impacts the plume could have on an existing public view of a scenic vista and scenic resource. The California Court of Appeal, Fourth District wrote "Under CEQA, the question is whether a project will affect the environment of persons in general, not whether a project will affect particular persons." (*Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal. App. 4th 477.)

CEQA Guidelines Appendix G Environmental Checklist Form, I. Aesthetics, c. states "Public views are those that are experienced from publicly accessible vantage point."

Thus, the new regulatory language is necessary to ensure the application contains an assessment of impacts from any forecasted visible plume which will allow for staff and the public to identify potential forms of mitigation.

Appendix B(g)(7)(A-B)

SPECIFIC PURPOSE

The proposed amendments to the Socioeconomics section do not change the substantive effect of the regulations but instead add clarity by removing dated terms and adding more precise language. The proposed amendments add a requirement for information to support the CEC's analysis of environmental justice impacts. This change will ensure information regarding impacts to relevant environmental justice communities are identified earlier in the process resulting in greater transparency.

NECESSITY

The proposed amendments are necessary to provide more specificity regarding the type of information required, which is not always initially provided by an applicant, requiring CEC staff to make additional data requests causing delays in the proceeding. The proposed amendments to add information requirements for environmental justice are necessary to prepare these required analyses under the Public Resources Code and CEQA.

The change to subsection (g)(7)(A)(iv) is necessary to remove a dated term, "craft", which may infer a limitation to union trades, and replace with the broader term "occupation".

The changes to subsection (g)(7)(A)(vi) are necessary to capture concepts found in Appendix G of the CEQA Guidelines at subsection XV, specifically service standards. Appendix G subsection XV identifies the need for an agency to discuss acceptable service ratios, response times or other performance objectives for various public services. To ensure that applications contain relevant information on the topic of socioeconomics to support the CEC's environmental analysis, it is necessary to amend subsection (g)(7)(A)(iv) to add "service standards" to capture the various metrics used by local agencies to measure its ability to meet public service demands.

To ensure that the application also addresses the impacts of the project on local parks, recreation facilities, libraries and other public facilities, such language is necessary. This information is not only relevant to Appendix G of CEQA subsection XV but also subsection XVI covering recreation. A consultant hired by the applicant to perform a socioeconomic analysis of the project would be aware of the requirements of CEQA and the information necessary to meet subsection (g)(7)(A)(vi). Such analysis is already

provided to the CEC as part of various types of applications. But the proposed amendments provide additional clarity to ensure a comprehensive application.

The change to subsection (g)(7)(B)(i) is necessary to remove a dated term, “craft”, which may infer a limitation to union trades, and replace with the broader term “occupation”.

Amendments to subsection (g)(7)(B)(ii) are necessary to clarify the information in the application covers both construction and operations which typically have different levels and types of workers.

For the same reasons discussed above related to subsection (g)(7)(A)(vi) parallel changes are necessary in subsection (g)(7)(B)(v).

Changes to subsections (g)(7)(B)(viii)-(x) are grammatical and non-substantive.

The change to subsection (g)(7)(B)(xii) is necessary for clarity as the term “maintenance” is a component of operations and thus is redundant and may cause confusion for an applicant.

The changes to subsection (g)(7)(B)(xiii) are necessary to add the category of environmental justice to the required information to be provided in an application to harmonize Appendix B with existing requirements. California law defines environmental justice as “the fair treatment of people of all races, cultures and income with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies” (Gov. Code, § 65040.12; Pub. Resources Code, §§ 71110-71118). Under California Natural Resources Agency policy, all departments, boards, commissions, conservancies, and special programs must consider environmental justice in their decision-making process if their actions have an impact on the environment, environmental laws, or policies. Environmental justice has been included in both the information submitted by applicants related to the CEC’s siting programs and by CEC staff as part of their environmental analysis for at least the last 15 years. The addition of subsection (g)(7)(B)(xiii) ensures clarity that the application is required to have a discussion of environmental justice. This will result in a more efficient review process as staff will not have to request environmental justice related information later in the review process but can expect it as part of the application.

Expert consultants retained by an applicant will be versed in the requirements of an environmental justice analysis including the use of CalEnviroScreen 4.0 and guidelines set forth by the Office of Planning and Research on environmental justice.

Appendix B(g)(8)(B)

SPECIFIC PURPOSE

The proposed amendment corrects a typographical error without making any substantive change.

NECESSITY

The proposed amendment is necessary to correct a typographical error in the regulations.

Appendix B(g)(10)(B) and (D), (g)(12)

SPECIFIC PURPOSE

The proposed amendment to subdivision (B) removes the requirement that emergency response facilities, such as fire departments, hazmat response teams, ambulance services, and police departments, be shown on the maps.

NECESSITY

Amendments to section (g)(10)(B) are necessary to refine the regulatory language as it is not necessary to analyze the impacts of a hazardous release on these types of facilities and persons that are trained to respond to hazardous releases, rather than be affected by them. The proposed amendment to subdivisions (g)(10)(D) and (g)(12) broadens the language to refer to an "application" to comport with recent regulatory changes applying Appendix B as the informational requirements for not only Applications for Certification, but also Small Power Plant Exemption Applications and Opt-in Applications.

Appendix B(g)(13)(A-H)

SPECIFIC PURPOSE

The proposed amendments to the Biological Resources section reflect updates in required data submissions to correspond to changes to the CEQA Guidelines and Appendix G related to biological resources. Other changes implement requirements from the California Department of Fish and Wildlife which require restricted public release of maps of a scale showing greater detail than 1:350,000 if the maps contain sensitive biological resources. Other proposed changes reflect a need for different types of information to accommodate different types of powerplants, for example, information specific to once through cooling, a process no longer used in new powerplants, has been removed. The impacts of nitrogen deposition are a greater concern, so information requirements have been added to account for this type of impact. Other proposed changes provide greater specificity in the data being requested to ensure an adequate environmental analysis or renumber due to repealed provisions.

NECESSITY

The proposed changes are necessary to ensure the application contains the information needed for staff to develop a CEQA compliant environmental analysis.

Changes to subsection B(g)(13)(A) will ensure that applicant files into the CEC's public docket essential information that explains the regional scale of the area considered by the project applicant to potentially affect biological resources, and to make explicit the regional topography considered by the applicant to influence onsite conditions, and therefore, inform offsite direct and indirect impacts analysis. Additionally, language requiring that maps of a certain scale be submitted to the CEC as confidential is necessary to ensure maps are not made public that would allow one to locate sensitive biological resources such as endangered plants, animals, or nests. Ensuring confidentiality of these maps for resource protection is also consistent with CDFW's CNDDB licensing contract and stated position to CEC biological resources staff. Further

language added clarifies what sensitive biological features should be identified on provided maps to fully disclose potential impact.

Amendments to subsection B(g)(13)(A)(ii) are necessary to update information requirements for project applications as the relevant terms have been removed from the California Code of Regulations, title 20, section 1201(d), and (u), and replaced with the definitions contained in the CEQA Guidelines at section 15380.

Edits to subsection B(g)(13)(A)(v) are necessary to utilize the acronym “CNDDB” which was established in subsection (13)(A). The addition of the phrase “or other responsible agency” further clarifies language by ensuring awareness by an applicant that project specific responsible agencies may have identified sensitive species near the project site. Post adoption, the reference to Fish and Game Code title 14 is being deleted. This language does not cite to a specific section, is not necessary, and its removal is non-substantive as the project is already subject to the requirements of the Fish and Game Code.

Newly added subsection B(g)(13)(A)(vi) captures previously missing language pursuant to CEQA Appendix G checklist IV. a), which will ensure project applicants provide all information in an application regarding locally significant species.

Subsection B(g)(13)(A)(vii) is also new language, which acknowledges the authority of the California Native Plant Protection Act pursuant to California Fish and Game Code Section 1900 et seq., and as required under CEQA Appendix G checklist IV. a).

Edits to subsection B(g)(13)(A)(viii) remove language not found in CEQA Appendix G, IV. a) and replace with correct checklist question correlating to Appendix G, IV. d).

Subsection B(g)(13)(B) contain amendments to include “habitat”, as well as species, observed, to ensure project applications are complete, and staff is provided enough data to perform an independent analysis. Adding “habitat” is necessary because the existence of habitat is a key consideration when assessing impacts to species and potential presence of species.

Subsection B(g)(13)(B)(i) again ensures that applicants do not docket, for public review, locations of sensitive biological resources such as nesting locations, endangered plants, or animals, etc. The other amendment updates language to use an acronym.

Subsection B(g)(13)(B)(ii) contains edits to remove data requirements necessary to evaluate the impacts of once-through cooling, as that type of water use has been prohibited under California law since 2010, per Section 316(b) of the Clean Water Act, 33 U.S.C Section 1326(b). New language to this section captures potential adverse effects of deposition of nitrogen oxides to sensitive species, necessary for CEC staff to evaluate potential project impacts pursuant CEQA Appendix G checklist part IV. a). Post adoption, a period is being added. The addition of the period, which was inadvertently left out, is a non-substantive grammatical correction.

Refinements to subsection B(g)(13)(B)(iii) are necessary to ensure applications contain sufficient detail related to the nature of any waterways on the project site which depending on certain physical features may be under state jurisdiction or federal jurisdiction. The amendments also ensure sufficient data for CEC staff to analyze impacts to waters of the state and develop mitigation consistent with Regional Water

Quality Control Board issue permits and Fish and Game Code section 1600 Lake and Streambed Alteration Agreements. The addition of the “California Coastal Commission” is necessary to clarify the wetlands to be identified in the application are those under the jurisdiction of the Coastal Commission.

Additional subsection B(g)(13)(B)(iv) requires a project applicant to provide supporting GIS data files to substantiate mapped biological resources as represented in the application, and further allows CEC staff to perform independent analysis, and add additional GIS information layers as independently researched and gathered. This amendment is necessary to ensure the regulations are current regarding new ways in which information can be expressed, in this case with layered mapping tools.

Subsection B(g)(13)(C)(i) was deleted as it already captured in proposed edits to B(g)(13)(B).

Edits to subsection B(g)(13)(C)(ii) which is now (C)(i), are necessary to ensure that impacts to sensitive biological features are captured and identified utilizing the standard ranking systems and status of sensitive species and habitats. These ranking systems and legal statuses are as put forth by the California Native Plant Society, the USFWS and other organizations focused on biodiversity conservation and must be made available to the public and CEC staff to assist in evaluating potential impacts of a proposed project. Biological consultants retained by an applicant would be familiar with these various species statuses and where to find them. The adopted language for subsection (C)(i) contains a list of sources that index species status. Specifically, the language reads, “(state, federal, California Native Plant Society, global rank, state rank, etc).” The “etc” is being removed post adoption of the regulations as a non-substantive change because the parenthetical list is complete and including “etc” may introduce some ambiguity into the provision and is unnecessary to communicate the purpose of the subsection and the specific information required.

Subsection B(g)(13)(C)(iii) was edited pursuant to the enactment of Section 316(b) of the Clean Water Act, 33 U.S.C Section 1326(b), which prohibits the use of once-through cooling, and replaced with language addressing potential impacts of the deposition of nitrogen oxides by a proposed project. This depositional impact must be analyzed by CEC staff pursuant to CEQA Appendix G subsection IV. a). While applicants provide nitrogen deposition analysis, the amendments are necessary to ensure applicants provide modeling information on nitrogen deposition in the application. This will allow early assessment of impacts by staff and more opportunity to develop mitigation.

The existing language of subsection B(g)(13)(D) was amended to delete “seasonal surveys”, a broad and vague term, and add “specialized” which means surveys commonly referred to as “focused and/or protocol.” This regulatory language change is necessary to ensure that the results of any surveys performed, that follow the species-specific protocols that have been developed for special status species, are provided in the application. An abbreviation of a previous-used term, the CNDDB, was incorporated, and is a non-substantive change. Biological consultants retained by an applicant would have knowledge of what surveys may be required, which special-status species have survey protocols and where to obtain those survey protocols.

The language of subsection B(g)(13)(D)(i) was clarified that survey protocols issued by USFWS, CDFW, California Coastal Commission, etc, are periodically updated, and therefore it is crucial for CEC staff to ascertain that data was collected per best available science and most recent protocols. Thus, it is necessary to ensure in the application references the protocols used.

The entire subsection B(g)(13)(D)(ii) was deleted as, previously mentioned above, once-through cooling has been prohibited by state law since 2010.

Amendments to subsection B(g)(13)(D)(iii), which is now (D)(ii), are necessary to appropriately acknowledge both state (CDFW) and federal (Army Corps of Engineers) regulatory oversight of wetlands, remove the reference to “non jurisdictional” as that information is not required for CEC to perform independent analysis of wetland impacts, and further refine directions to the applicant in terms of information necessary for CEC staff evaluate potential effects to wetlands. Specifically, it is necessary to add the phrase “jurisdictional features including state waters” to ensure the application provides sufficient detail for staff to understand the basis for the applicant’s wetland delineation.

Edits to subsection B(g)(13)(E) are necessary to remove subparts (ii) and (iii) because the information requirements relate to facilities proposing once-through cooling, a process that is damaging to ocean ecosystems. With the state ban on once-through cooling, the information requirements are no longer needed. The addition of the term “decommissioning” was added to the existing list of facility phases to ensure the application discusses any impacts from the decommissioning process. While language related to the obsolete process of once-through cooling is being removed, the term “nitrogen deposition” is being added to ensure the application contains information regarding potential impacts of nitrogen deposition so that CEC staff can address CEQA Appendix G subsection IV. a).

Subsection B(g)(13)(F) was edited to clarify that the anticipated efficacy of applicant-proposed mitigation measures is a mandated part of a CEQA analysis and must be made available to both the public and CEC staff for critical analysis.

Subsection B(g)(13)(F)(ii) has been modified which is necessary to ensure that for proposed off-site mitigation, applications provide essential information necessary for CEC staff to conduct an independent evaluation of mitigation and its effectiveness. The term “management” is being moved up earlier in the paragraph to ensure clarity that information about the long-term effectiveness of any off-site mitigation is included in the application. Because many off-site mitigation programs are run through other agencies, language requiring the application include agency contacts ensures timely and accurate communications between CEC staff and appropriate agencies.

Deletion of subsection B(g)(13)(F)(iii) and (iv) is necessary as once-through cooling is now prohibited by state law, as previously mentioned in subsection B(g)(13)(E).

Subsection B(g)(13)(F)(v), due to proposed changes to preceding subsections (iii) and (iv), has been edited as necessary to correct the document numbering.

Subsection B(g)(13)(H) has been edited to incorporate acronyms for previously named agencies.

Appendix B(g)(14)(iii)

A hyphen is being added to subsection (iii) which is a non-substantive grammatical change.

Appendix B(g)(19)(A-C)

SPECIFIC PURPOSE

The proposed amendments add a new section of required data related to wildfires. The CEQA Guidelines now include a section on wildfire. The proposed amendments will ensure staff obtains information in the application regarding the impacts of the project on wildfire as required to be assessed under CEQA.

NECESSITY

The proposed amendments are necessary to ensure that the CEC collects the information staff needs to conduct an adequate environmental review under CEQA. The language added is derived from CEQA Appendix G subsection XX and provisions of California Code of Regulations, title 14, sections 1265.00 and 1280.01 as well as Public Resources Code section 4102 and provides applicants and their consultants with sufficient information to submit data regarding wildfire as part of the application.

Subsection (19)(A) is necessary to ensure the application identifies if any of the project site is within a zone known as a State Responsibility Area. This information is necessary so that CEC staff understands if the state has responsibility for fire protection of the site.

Subsection (19)(B) is necessary to ensure the application identifies the fire hazard severity zone category the project is within. This information is necessary for CEC staff and the public to understand the risk to the facility and potential impacts on grid reliability.

For projects that are within a State Responsibility Area or very high fire severity zone, subsections (19)(C)(i) and (ii) require the application to contain information regarding how the project could impact emergency response and how project pollutants can be contained on site during a wildfire. Subsection (19)(C) is necessary to establish whether the project is at risk from wildfire and if so, what are the impacts on the environment and public safety from the project during a wildfire near the site.

For clarity and to provide reference to relevant statutory and regulatory provisions, the adopted language will be changed to include citations to the Public Resources Code and the California Code of Regulations, title, 14. The addition of these citations is a non-substantive change and does not add any new information consultants preparing applications are not already aware of.

DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS

These proposed amended regulations do not duplicate or conflict with any federal regulations or statute contained in the Code of Federal Regulations. There is no federal equivalent to the CEC's powerplant certification and small power plant exemption authority and thus, no duplicative or conflicting federal laws related to the regulations at issue in this rulemaking. Appendix B covers informational requirements for applications related to powerplants within the jurisdiction of the CEC. The CEC has found no federal law that

duplicates or conflicts with the amended Appendix B language. The CEC has regularly engaged with the US Department of Energy (DOE) on various energy related matters and the CEC has not been made aware by the DOE of any conflicts with federal laws. The CEC is unaware of any federal law that defines the categories of information required to evaluate the environmental impacts of a proposed project. This is especially so given that some version of Appendix B has been in effect for 40 years and no duplication or conflict with federal regulations has been discovered.

ATTACHMENT 2

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

The proposed new adopted language appears as underline (example) and proposed deletions appear as strikeout (~~example~~). Non-substantive changes post adoption appear as double underline and double strikeout (example and ~~example~~). Existing language appears as plain text.

. . .

Appendix B

Information Requirements for an Application for Certification (AFC) or Small Power Plant Exemption (SPPE)

(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, methods of construction (include depth of excavations and other ground disturbances) 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 cultural resource and tribal cultural resource 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 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.

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 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.

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 and tribal cultural resources and a discussion of the cultural and tribal cultural 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 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) 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) Land classifications as shown on the California Department of Conservation's Farmland Mapping and Monitoring Program's Important Farmland maps, ~~C~~crop types, irrigation systems, and any special cultivation practices; and

(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) A~~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 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.

(D~~C~~) 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.

(E~~D~~) An assessment of the construction and operation impacts of the proposed project on the transportation facilities identified in subsection (g)(5)(D~~C~~). 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)(D~~C~~). 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~~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 modifications 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 staff, identify i) any designated scenic roadways or scenic 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.~~

~~(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 above-ground 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. ~~A California court has said you may look to local government planning thresholds for guidance when defining the visual impact standard for the purpose of CEQA (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"~~ 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. ~~Include:~~

(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. ~~Provide~~ ~~T~~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. ~~Provide~~ ~~T~~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. ~~Include:~~

a. Provide a list of the project-specific luminaires, identify the design (e.g., full cutoff, semi cutoff, non cutoff ~~noncut off~~) 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 ~~craft~~ 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 ~~craft~~ 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 ~~on~~ 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:~~100~~6,000 (~~or 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, ~~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; ~~and~~

(vi) 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;

(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 and habitat(s) 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~~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.~~

(~~i~~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~~).

(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 jurisdictional features including state waters and 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 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) All off-site habitat mitigation and such as habitat improvement or compensation including management, and an identification of appropriate agency contacts for coordination and verification of proposed 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~~ CDFW, and the ~~Regional Water Quality Control Board~~ RWQCB 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.