APPENDIX 5.13A

# Visual Resources Evaluation Methodology

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## Introduction

The methodology applied in preparing this assessment of the proposed Project's potential visual resource impacts is the same methodology now being used by the staff of the California Energy Commission. The CEC's first application of this methodology was in its evaluation of the environmental impacts of the proposed Roseville Energy Project. This appendix explaining the methodology is drawn from and is essentially the same as Appendix VR-1 of the Visual Resources section of the Draft and Final Staff Assessments that CEC staff prepared for that project (CEC, 2004).

## The CEC Staff's Methodology

The analysis of potential impacts to visual resources caused by construction or operation of any power plant or related facility largely involves answering the four questions found in Appendix G of the CEQA Guidelines, under Aesthetics. The four questions that must be addressed regarding whether the potential impacts of a project are significant are:

1. Would the project have a substantial adverse effect on a scenic vista?
2. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway?
3. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?
4. Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

The visual analysis typically distinguishes between three different impact durations: temporary impacts, typically lasting no longer than two years; short-term impacts, generally lasting no longer than five years; and long-term impacts, which are impacts with a duration greater than five years. In general, short-term impacts are not considered significant.

In addition to visiting the project area for personal observation of how and whether a particular view is experienced, a search is made for other evidence to determine if the local community values a particular view that might be affected by the project. This includes searching the applicable planning documents covering the area produced by local governments and community groups, as well as searches for any other type of evidence showing whether valued scenic vistas exist within the project's viewshed. Professional observations and evaluations of the project site are relied on to make initial determinations of visual character or quality of the area, in comparison with all other landscapes in California, but due deference is also given to plans and policies adopted by governmental bodies concerning the value of visual resources within the project area.

Each of the four checklist questions are answered for each part of the project both during construction and during operation, including any related facility such as a transmission line or gas pipeline. To answer the first checklist question ("Would the project have a substantial

adverse effect on a scenic vista?"), a determination must first be made of whether a scenic vista exists within the viewshed of the various aspects of the project, and then a determination must be made of whether the project would have a substantial adverse effect on that vista.

To help make these determinations, visual resource professionals often answer a series of questions developed to help focus the analysis, and examine various ways that the project could create an impact to scenic vistas. In conducting this analysis, a list is used that was developed by the CEC's Visual Resources staff for each of the four CEQA guideline questions, drawing upon published methodologies and academic resources (Smardon et al., 1986), as well as on past experience with other power plant siting cases. Questions the CEC staff developed to help determine whether the project would significantly affect a scenic vista include:

1. Is the project located in the scenic view of a local/state/federal-designated scenic vista?
2. Is there compelling evidence to show that the view is designated/valued by the local community?
3. Will the project eliminate or block views of valuable visual resources?
4. Would the project create a water vapor plume that could have an adverse effect on a state/federal/local-designated scenic vista?

To help answer the second CEQA checklist question "(Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway?"), CEC staff developed the following questions:

1. Is the project located in the scenic view from a local/state/federal-designated scenic highway?
2. Does the project site or its immediate vicinity contain scenic resources, such as trees, rock outcroppings, or historic structures that could be damaged by the project?
3. Would the project create a water vapor plume that could have an adverse effect on the view from a local/state/federal-designated scenic highway?

To answer the third question ("Would the project substantially degrade the existing visual character or quality of the site and its surroundings?"), CEC staff identifies a set of issues to be assessed to determine the existing visual character and quality of the project area and then how the project would affect the character and quality of the project viewshed. To assess whether the project has the potential to substantially degrade the present visual character or quality, personal observation and such tools as visual simulations are used to determine if an impact is significant and mitigation is required to reduce the impact to a less-than-significant level. To make that determination, many factors are examined, such as: how many viewers can see a particular view and for how long, collectively called "viewer exposure"; and to what degree the project would change the aspects of a given view, such as whether the project's components would block a particular view. To help determine how the community rates and values the visual character and quality of a given site, and whether the project would substantially alter the present visual character or quality, CEC staff developed the following questions:

1. How many residential, recreational, and traveling (motorist) viewers have views of the project?
2. Is the project site properly zoned?
3. Would a conditional use permit and/or height variance have been required from the city/county (if so what conditions would the city/county place on the power plant)?
4. Does the project conform to the clear written declarations of local/state/federal agencies to protect designated visual resources of importance or the valued aesthetic character of a neighborhood (said declaration must be clear, concise, and uncompromised by conflicting declarations, and be an official action of the governing body [City Council/ Board of Supervisors] such as a General Plan element, zoning ordinance, or design guideline)?
5. Will the project substantially alter the existing viewshed, including any changes in natural terrain?
6. Does the project substantially change the existing setting?
7. Has landscaping been proposed as part of the project?
8. Would the project create a water vapor plume that could have an adverse effect on a KOP view?

The process of answering these questions includes an examination of the present views within the project viewshed in terms of aesthetics – i.e., by examining the various aspects that together define the quality of a view – followed by an assessment of how the various aspects of the aesthetics of the view would be affected by the project, which conversely could be described as an analysis of how well the project area can absorb the various aspects of the project into the landscape.

To answer the fourth CEQA Guidelines checklist question ("Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?"), the project's lighting plans are analyzed to ensure they fit with established norms for low-impact lighting designs, and then answers the following questions to determine if a potential for impact from night-lighting exists:

1. With application of standard best practices for lighting control, would light or glare be reduced to acceptable levels?
2. Will the project result in significant amounts of backscatter light into the nighttime sky?

## References

California Energy Commission. 2004. Final Staff Assessment for the Roseville Energy Park Project – Visual Resources chapter.

Smardon, R.C., J. F. Palmer, and J. P. Felleman. 1986. Foundations for Visual Project Analysis. John Wiley & Sons, New York.