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SECTION ACRONYMS/ABBREVIATIONS

ACRONYM/ ABBREVIATION	DEFINITION
AFC	Application for Certification
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
Commission	California Energy Commission
County	San Diego County
EIR	Environmental Impact Report
FEIR	Final Environmental Impact Report
FREF	Fallbrook Renewable Energy Facility
I	Interstate
LORS	Laws, Ordinances, Regulations, and Standards
PRC	Public Resources Code
SPPE	Small Power Plant Exemption
SR	State Route

6.0 ENVIRONMENTAL INFORMATION

6.1 INTRODUCTION

This entire section presents an evaluation of the potential impacts of the Project for identified environmental resource areas based on state laws that require consideration of a wide range of potential environmental impacts from a proposed project (see the Warren-Alquist Act, PRC Section 25500 et seq., Commission requirements, PRC Section 25519, and California Environmental Quality Act (CEQA) requirements, PRC Section 21080 et seq.).

For each resource area, the analysis includes a description of the existing environment and an evaluation of potential environmental consequences associated with the Project. Project design features are identified where included to reduce environmental impacts. Cumulative impacts also are considered to account for other activities in the area which, when considered together with the Project, could potentially compound or increase environmental impacts. Supporting information to confirm compliance with applicable laws, ordinances, regulations, and standards (LORS) are included in the specific environmental resource sections.

The analyses presented in this section are based on the following: (1) details of the Project as presented in Section 2.0 - Project Description; (2) consideration of California Energy Commission (Commission) regulations (Rules of Practice and Procedure & Power Plant Site Certification Regulations, CCR Title 20, Chapters 1, 2, 5, 6 and 7; and (3) consideration of input from Commission staff and various responsible and reviewing agencies.

The resource areas analyzed in this section are as follows:

- Air Quality (6.2)
- Geologic Hazards and Resources (6.3)
- Agriculture and Soils (6.4)
- Water Resources (6.5)
- Biological Resources (6.6)
- Cultural Resources (6.7)
- Paleontologic Resources (6.8)
- Land Use (6.9)
- Socioeconomics (6.10)
- Traffic and Transportation (6.11)
- Noise Control (6.12)
- Visual Resources (6.13)
- Waste Management (6.14)
- Hazardous Materials Handling (6.15)
- Public Health (6.16)
- Worker Safety (6.17)

The significance of anticipated impacts is assessed based upon criteria established for each environmental resource area. Significance criteria were determined based on CEQA Guidelines, Appendix G, Environmental Checklist Form, amended July 2006, and on performance standards or thresholds used by responsible agencies for projects in their jurisdictions. In particular, San Diego County DPLU guidance for determining significant impacts is integrated in the assessment.

Considerations of significance are based on potential changes to the existing environment and a determination of what may constitute a substantial detrimental effect. They include:

- Resource sensitivity, or the probable response of a particular resource to Project-related activities.
- Resource quality or the present condition of the resource potentially affected.
- Resource quantity or the amount of the resource potentially affected.
- Duration of impact, or period of time, over which the resource would be affected, stated as short-term (up to a few years) or long-term (consistent with the operational life of the Project or beyond).

6.1.1 Project Design Features and/or Mitigation Measures

As part of the Project, various measures to reduce potential environmental impacts will be implemented through Project design. In this way, J Power has identified and resolved potential environmental impacts in advance, in order to develop and maintain a Project that minimizes impacts to the environment. Measures to reduce environmental impacts are also included based on applicable LORS. Planning and design efforts for the Project will incorporate provisions for compliance with these LORS.

In addition to design/operational plans and applicable LORS-derived measures incorporated into the Project, mitigation measures are presented in this SPPE application to reduce the extent of potential significant environmental impacts identified in the environmental resource area analyses. Methods available to mitigate potential environmental impacts generally include:

- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree or magnitude of an action.
- Rectifying the impact by repairing, rehabilitating or reclaiming the impacted environment.
- Reducing or eliminating the impact over time by preservation and maintenance.
- Compensating for the impact by replacing or providing substitute resources or environments.

The feasibility and effectiveness of Project design features and/or mitigation measures have been considered in developing the measures included in this SPPE application. If a particular measure has been incorporated into Project design/operational plans or is provided based on applicable LORS, it is considered integral to the Project rather than a mitigation measure.

6.1.2 Cumulative Projects

The San Diego County Discretionary Projects Map dated March 13, 2007 was reviewed by TRC and the DPLU records were reviewed in order to identify actions with the potential to create cumulative impacts when considered in conjunction with the Project. The proposed actions initially identified from records reviewed are described below. As described below, evaluation of these projects resulted in some of them being determined not to have the potential for cumulative impacts. For other projects, the cumulative impacts are considered in this Application. The location of each project described is provided in Figure 6.1-1. Table 6.1-1 summarized each of the resource areas where other projects were determined to have potential for cumulative impacts. The cumulative impacts identified are described in Sections 6.2 through 6.17 for each environmental resource area.

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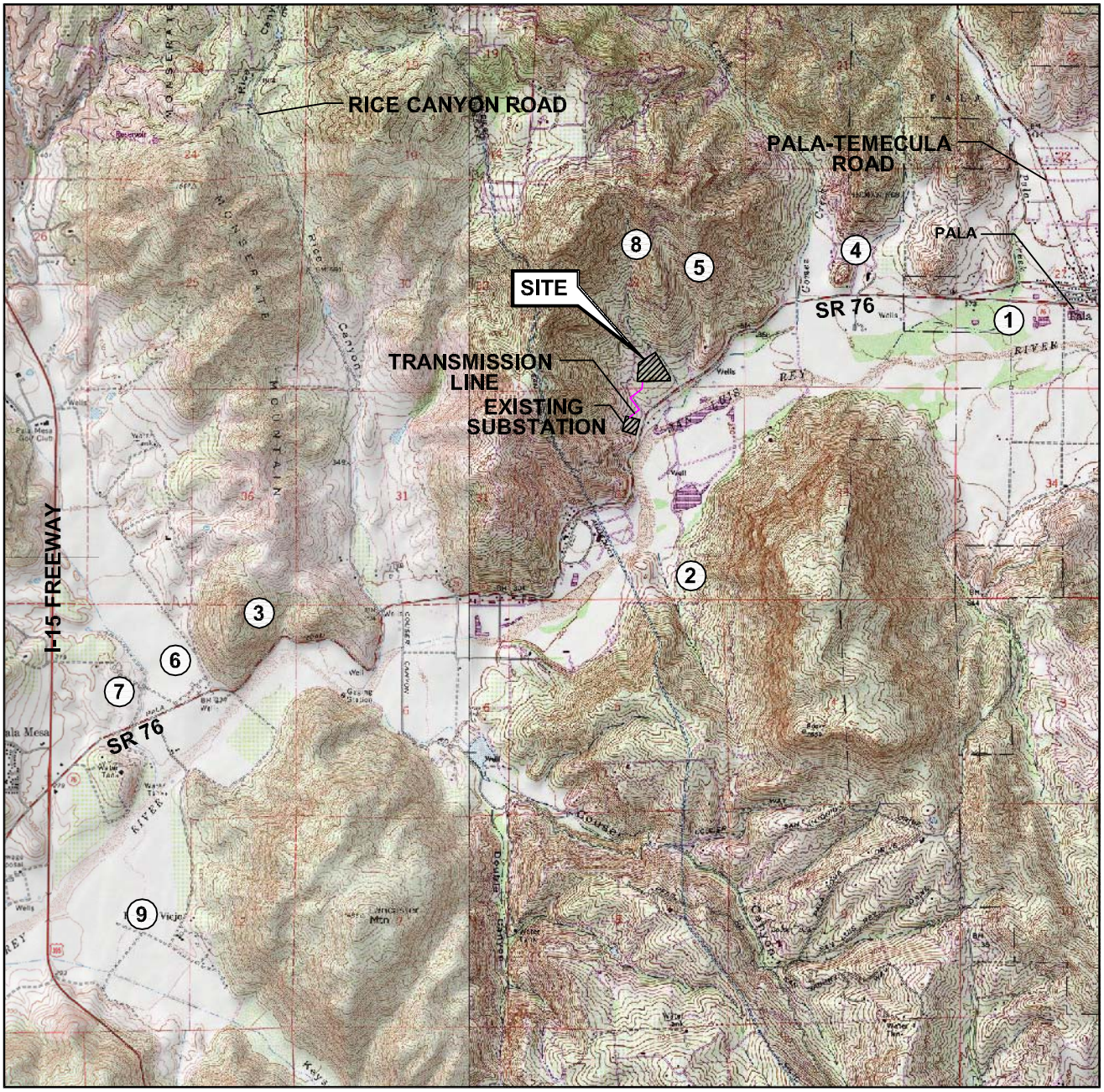
Table 6.1-1 –Projects for Cumulative Impact Analysis

POTENTIAL DEVELOPMENTS(1)	ENVIRONMENTAL RESOURCE AREA															
	Air Quality	Geologic Hazards and Resources	Agriculture and Soils	Water Resources	Biological Resources	Cultural Resources	Paleontological Resources	Land Use	Socioeconomics	Traffic and Transportation	Noise	Visual Resources	Waste Management	Hazardous Materials Handling	Public Health	Worker Safety
Orange Grove Project	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿
PROJECTS WITH POTENTIAL FOR CUMULATIVE IMPACTS																
1. Pala Casino Expansion	○	○	○	○	○	⦿	○	○	⦿	⦿	○	○	⦿	○	○	○
2. Gregory Canyon Landfill	⦿	○	⦿	○	⦿	⦿	○	○	⦿	⦿	○	⦿	○	○	○	○
3. Rosemary's Mountain Quarry	⦿	○	⦿	○	⦿	⦿	○	○	⦿	⦿	○	○	⦿	○	○	○
4. Warner Ranch Development	○	○	⦿	○	⦿	⦿	○	○	⦿	⦿	○	⦿	⦿	○	○	○
5. Verizon Cell Tower Generator	⦿	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
6. Meadowood Development	○	○	⦿	○	⦿	⦿	○	○	⦿	⦿	○	○	⦿	○	○	○
7. Campus Park Development	○	○	⦿	○	⦿	⦿	○	○	⦿	⦿	○	○	⦿	○	○	○
8. Prominence at Pala	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
9. Lake Rancho Viejo	○	○	⦿	○	⦿	⦿	○	○	⦿	⦿	○	○	⦿	○	○	○
10. Fallbrook Renewable Energy Facility	⦿	○	⦿	○	⦿	⦿	○	○	⦿	⦿	○	○	○	○	○	○

LEGEND: ⦿ = Potential for Cumulative Impacts.
○ = No Potential Cumulative Impacts when considered with the Project.

(1) See Figure 6.1-1 for location of offsite development projects that correspond to the numbers on this table.
(2) No impact anticipated since this project is considered not reasonably foreseeable. See Section 6.1.2.8.



0 1/2 1 1 1/2 2 MILES

SCALE 1:48,000

N

LEGEND

(1) Location of Project (Number Corresponds to Table 6.1-1)

SOURCE:

United States Geological Survey 7.5 Minute Topographic Map, 2000: Pala, Bonsall, Temecula, and Pechanga Quadrangles

TRC

PROJECT: 29031902

FACILITY:

ORANGE GROVE PROJECT
SAN DIEGO COUNTY, CALIFORNIA

LOCATION OF PROJECTS WITH POTENTIAL CUMULATIVE IMPACTS

FIGURE 6.1-1

PS=1:1 L:□Graphics□ProjectsByNumber□29-xxxx□29-0319□290319 Cumulative.dwg Jun 29, 2007 - 2:52pm RCollins

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6.1.2.1 Pala Casino Expansion

The Pala Band of mission Indians is planning on expanding their existing hotel and casino which is located on tribal lands on the south side of SR 76, approximately 1.5 miles east of the Site. The expansion will be completely contained on the existing casino footprint, converting paved parking areas and landscaped areas for the casino expansion. The expansion will include an increase in the main casino floor area, an expansion of the casino spa facility, expansion of the existing parking structure that will include approximately 2,000 new parking spaces, and an internal restructuring of hotel rooms and resort amenities such as restaurants and gaming rooms. The hotel expansion, as planned, will not result in any net increase in hotel rooms. As part of the project, the tribe is considering selective improvements to Pala Road, including a new signalized intersection located on the west end of the casino property. The casino project in contained on tribal lands and does not, therefore, require any authorization from the County. Based on discussions with Tribe representatives, there is no currently no planned construction start date for this project (Volturno, 2007). With no currently planned start date for construction, the analysis of potential for cumulative impacts with this project considers that this project is not likely to be constructed until sometime after the Orange Grove Project is operational.

6.1.2.2 Gregory Canyon Landfill

The Gregory Canyon Landfill site is located approximately one-half mile southwest of the Project Site and approximately 2 mile east of I-15. The Gregory Canyon Landfill project site is 1,770 acres with an actual project footprint (for all landfill activities) of 308 acres. The landfill basin itself would be 196 acres. The Gregory Canyon Landfill would require the removal of approximately 1.5 million cubic yards of material. The landfill would be operated in three phases and the project includes all operations and the eventual landfill closure. The Gregory Canyon Landfill Final Environmental Impact Report (FEIR) was submitted in December 2002 and approved in February of 2003. However, the biology, traffic, and water allocation aspects of the FEIR were deemed insufficient in a court ruling on January 20, 2006 and were required to be redrafted. The Revised Partial Draft Environmental Impact Report (EIR) was submitted in June 2006 for circulation. The Gregory Canyon Landfill project has been ongoing for over ten years and project construction and completion dates remain uncertain. Accordingly, the analysis of potential for cumulative impacts with this project considers that this project is not likely to be constructed until after the Orange Grove Project is operational, if it is constructed at all.

6.1.2.3 Rosemary's Mountain Quarry

The Rosemary's Mountain Quarry project is located approximately 1.3 miles east of I-15 and approximately two miles southwest of the Project Site on the north side of SR-76. The Rosemary's Mountain Quarry will be a 38 acre aggregate quarry that is projected to produce approximately 1.1 million tons of aggregate a year for 20 years. Construction is tentatively scheduled to begin in late fall of 2007. The first phase of the quarry project will be a widening and straightening improvement to SR-76 between the quarry site and I-15, and construction of the quarry will largely be concurrent with the SR-76 improvements construction. SR-76 will be widened to two lanes in each direction between the quarry site and I-15. The analysis of

potential cumulative impacts of this action considers that construction of this project may coincide with the construction for the Orange Grove Project, and the quarry will operate concurrent with the power plant.

6.1.2.4 Warner Ranch Multiple Use Development Project

The Warner Ranch project is located approximately 1.5 miles northeast of the Project Site and is over 500 acres in size. The Warner Ranch project footprint borders the Pala Indian Reservation to the east and northeast and borders SR-76 to the south. The Warner Ranch project consists of over 800 plots consisting of multi-family and single family dwellings, a 5.5 acre commercial development, a new fire station, a community stable facility, a one acre club house facility, and over 300 acres of open space. The Warner Ranch project currently has specific plan, rezone, tentative map, major use, and administrative permits under review by San Diego County (County). The analysis of potential cumulative impacts of this project considers that, if this project is constructed, it would not be until after the Orange Grove Project is in Operations.

6.1.2.5 Pala Band of Mission Indians Cell Tower Generator

The Pala Tribe is proposing to install a 30 kW backup generator for a Verizon Cellular Tower located a t 10690 Pala Road, approximately 0.5 mile northeast of the Site. The generator would also be equipped with a 132 gallon fuel storage tank. Construction is tentatively scheduled to begin in early 2008.

6.1.2.6 Meadowood Residential Development

The Meadowood residential development is a 390 acre project that would include up to 393 single family detached homes and a maximum of 1,248 total dwelling units. The Meadowood project is located approximately one-half mile east of I-15 and 2.75 miles southwest of the Site. The Meadowood project footprint begins from the north side of SR-76 and extends approximately one and one-half miles north to Pala Mesa Heights Drive. Meadowood would include six private parks, four miles community trails, and approximately 130 acres of open space and 60 acres of agricultural lands. One elementary school is also planned as part of the development. A DEIR for the Meadowood project was submitted to the County for review in May 2007. The Meadowood project has tentative hearing date with the County for spring 2008. Project construction cannot begin before the County permit hearing for the project has occurred.

6.1.2.7 Campus Park Multiple Use Development

The Campus Park project is a 120 acre mixed development project located immediately east of I-15 and approximately 3.25 miles southwest of the Site. The Campus Park development would include a maximum of 566 dwelling units, 150,000 square feet of general community development, 8 acres of office development, 10 acres of highway community development, and 23 acres of open space (including a four acre park). The Campus Park project DEIR is expected to be submitted to the County for review in August 2007 and the project has a tentative hearing

date with the County scheduled for March 2009. Project construction cannot begin before the County permit hearing for the project has occurred.

6.1.2.8 Prominence at Pala

The Prominence at Pala project is a tentative subdivision map for a residential development that would be located approximately 0.35 mile north of the Site. The Prominence at Pala is approximately 346.6 acres and would include 30 new homes. The County has requested that the project proponent, Prominence Partners, LLC, withdraw their application for this project due to problems with fire service and secondary access. The project proponents were granted a 90 day extension to rectify these issues and then submit a notice of preparation to draft an EIR for the project. The 90 day extension will expire in August, 2007. Due to the early stage of this development and apparent issues with project feasibility, this project is not considered reasonably foreseeable for the purposes of this cumulative impact analysis.

6.1.2.9 Lake Rancho Viejo Residential Development

The Lake Rancho Viejo residential development is located approximately 3.25 miles southwest of the Project Site, on the east side of I-15. The development is approximately 419 acres in size and would include 598 single family lots as well as space for mobile homes. This development has changed many times over the past 15 years and continues to undergo multiple design changes.

6.1.2.10 Fallbrook Renewable Energy Facility

The Fallbrook Renewable Energy Facility (FREF) project is a proposed 90 megawatt power generation facility located approximately one mile east of I-15 along the south side of SR-76 and approximately two and one-half miles southwest of the Project Site. The FREF would utilize biomass materials to fuel combustion units that would in turn produce thermal and electrical energy. Energy generated would be used to power the onsite biomass facility and the surplus would be available for sale to various energy suppliers. The FREF would consume approximately 600,000 tons per year of organic waste during the combustion processes. This amount of waste would represent approximately 15,000 truck trips a year. Because this facility is over 50 megawatts, it falls under the jurisdiction of the CEC. This project has not yet submitted an application to the CEC.

6.1.3 Summary

The analyses in Sections 6.2 through 6.17 present detailed evaluations of environmental impacts associated with the Project and with identified cumulative projects. No significant Project impacts were identified for any environmental resource area that could not be reduced to below a level of significance by Project design features and construction procedures. Similarly, no significant cumulative impacts were identified after evaluation of Project impacts with the cumulative projects for the environmental resource areas. Therefore, additional mitigation measures are not required for cumulative impacts. Based on the evaluations contained in each

environmental resource area analysis in following sections, it is concluded that overall environmental impacts from the Project are less than significant.

6.1.4 References

County of San Diego. Discretionary Review Projects Map dated March 13, 2007. Reviewed April 12, 2007.

County of San Diego, Department of Planning and Land Use Project Files. Reviewed May 23, 2007.

Stevenson, Christine. Planner for the County of San Diego, Department of Planning and Land Use. Personal communications with Joshua Taylor of TRC. June 14, 2007.

Hingtgen, Robert. Planner with the County of San Diego, Department of Planning and Land Use. Personal communications with Joshua Taylor of TRC. June 13, 2007.

Hoag, Michael. Representative for Granite Construction, Rosemary's Mountain Quarry Project proponent. Personal communications with Joshua Taylor of TRC. June 18, 2007.

San Diego County Department of Environmental Health. Revised Partial Draft Environmental Impact Report for The Gregory Canyon Landfill dated June 2006.

Tierra Environmental Services. Draft Tribal Environmental Impact Report for the Pala Casino and Spa Expansion Project dated November 28, 2006.

Volturno, Lenore. Pala Band of Mission Indians, Director of Environmental Services, personal communication, June 27, 2007.