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APPLICANT’S SUPPLEMENTAL RESPONSE TO DATA REQUEST 16 AND 26: ADDITIONAL INFORMATION REGARDING THE EXECUTIVE SUMMARY

In this section of Applicant’s Supplemental Response to CEC Staff Data Requests 16 and 26, Applicant describes the changes to the Executive Summary section that will result from the changes to the Project Description, relating to the removal of RMS 3. Per staff’s request, Applicant uses a strike-out/underline format to identify changes to the Executive Summary section of the Application for Certification that will result from the changes to the Project Description.

The Executive Summary sub-sections that have been modified are listed in the table of contents below. If there has been no change to an Executive Summary sub-section relating to Applicant’s Supplemental Response to Data Request 16 and 26, the section is labeled “no changes” in the table of contents below.

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Appendices

Appendix 1A	Parcel Numbers and Landowners (no changes)
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SECTION 1 EXECUTIVE SUMMARY

1.1 INTRODUCTION [\(See Section 2.1.1 for updated project description\)](#)

1.2 PROJECT OVERVIEW [\(See Section 2.1.1 for updated project description\)](#)

1.2.1 Project Objectives [\(no changes\)](#)

1.2.2 Project Site Selection [\(no changes\)](#)

1.3 FACILITY LOCATION

The proposed site is situated 13 miles southwest of Blythe, California, and is located partially on private land owned by MWD, a California public agency, and partially on public land administered by BLM. Form SF-299 ROW grant applications for use of the BLM land ~~was~~ were submitted by Rio Mesa Solar ~~Holdings III~~, LLC to the BLM Desert District office in Moreno Valley, California [and Palm Springs South Coast Field Office on June 22, 2012](#) ~~on July 8, 2011~~.

~~The legal description of the land administered by BLM on which a portion of the Rio Mesa SEGF will be located is:~~

~~*Portions of Sections 2, 3, 10, 11, 14, and 15, Township 08 South, Range 21 East, San Bernardino Meridian, Riverside County, California.*~~

The legal description of the land administered by BLM on which the gen-tie line will be located is:

Portions of Sections 7, 8, 9, 15, 16, 17, 22, 23, ~~25~~-26, and 35, Township 07 South, Range 21 East, San Bernardino Meridian, Riverside County, California.

Portions of Sections 2, 11, 14, and 15, Township 08 South, Range 21 East, San Bernardino Meridian, Riverside County, California.

Four additional features, including linear corridors used for site access and electrical service lines, are also part of the Project. For purposes of defining the approximate ROW for each 200-foot corridor, the areas extending 100 feet on either side of centerline are included in the ROW descriptions. The legal description of the land on which these four linear features will be located is as follows:

Bradshaw Trail Access Road Corridor:

Portions of Sections 12 through ~~15~~14, Township 08 South, Range 21 East, and Portions of 7 and 18, Township 08 South, Range 22 East, San Bernardino Meridian, Riverside County, California.

33 kV Service Line Corridor New ROW:

Portions of Sections 12 through 14, [22](#) and 23, Township 08 South, Range 21 East, San Bernardino Meridian, Riverside County, California.

33 kV Service Line Corridor Existing ROW Overbuild:

Portions of Sections 3 through 10, 17, and 18, Township 08 South, Range 22 East, San Bernardino Meridian, Riverside County, California.

34th Avenue Access Road Corridor:

Portions of 23 through [2726](#), Township 08 South, Range 21 East, San Bernardino Meridian, Riverside County, California.

The legal description of the private lands under lease from MWD on which the Project will be located is:

All of Section 28 and portions of Sections 15, 16, 20, 21, 22, 23, 27, 29, 33, and 34, Township 08 South, Range 21 East, San Bernardino Meridian, Riverside County, California.

An oblique aerial photo of the site as it currently exists is presented as Figure 1.3-1 [rev](#). A rendering (i.e., an “artist’s rendering”) of the plant after construction is presented as Figure 1.3-2 [rev](#). A close-up of common area showing the administrative building is provided as Figure 1.3-3 [rev](#). A close up of the project switchyard and warehouse building is provided as Figure 1.3-4 [rev](#). [Figure 1.3-5 is an aerial view of the construction staging area.](#)

Parcel numbers and the names of the landowners within 1,000 feet of the plant site and within 500 feet of the centerline of the linear corridors are included in Appendix 1A.

1.4 PROJECT SCHEDULE

The Rio Mesa SEGF is a ~~two~~^{three}-phase project. Under Phase I, the Applicant will construct a solar power plant with a total capacity of 250 MW that will connect to the SCE CRS via the new 220 kV interconnect transmission line that the Applicant will construct. Under Phases ~~II and III~~, the Applicant will construct ~~one~~^{two} additional plants, ~~each~~ with a capacity of 250 MW, ~~via the installation of a second circuit to the 220 kV interconnect transmission line that the Applicant will construct during Phase I.~~ The total Project capacity, when complete, will be ~~500~~⁷⁵⁰ MW. The commercial online date for Phase I of the Project is 2015.

1.5 PROJECT OWNERSHIP

The ~~two~~^{three} plants will be separately owned as follows: the southernmost plant, Rio Mesa Solar I, will be owned by Rio Mesa Solar I, LLC; the ~~next contiguous plant to the northernmost plant~~, Rio Mesa Solar II, will be owned by Rio Mesa Solar II, LLC; ~~the northernmost plant, Rio Mesa Solar III, will be owned by Rio Mesa Solar III, LLC.~~ The owners of the ~~two~~^{three} separate solar plants will each hold an equal ~~one-half~~^{one-third} share ownership of certain shared facilities required by the ~~two~~^{three} solar plants for construction and operation of the Rio Mesa SEGF. These ~~two~~^{three} companies are Delaware limited liability companies and will be licensed to do business in California. They are wholly owned by Rio Mesa Solar Holdings, LLC (a Delaware limited liability company), which is in turn wholly owned by BrightSource.

BrightSource, also a Delaware corporation, is a technology and development company and the ultimate parent company of the limited liability companies.

The Applicant resubmitted a ROW grants application for the portions of linear facilities associated with the Project (gen-tie line, 33kV construction/emergency backup power supply line, and upgraded Bradshaw Trail access road) for Rio Mesa Solar III and the 220 kV gen-tie line to the BLM on June 22, 2012~~July 8, 2014~~. Portions of this ROW will be assigned to Rio Mesa Solar I, LLC (gen-tie line), and Rio Mesa Solar II, LLC (gen-tie line ~~and portions of the solar field~~). The gen-tie line will link the project facilities to the new CRS.

1.6 PROJECT ALTERNATIVES

The Applicant is seeking regulatory approval from the CEC. As a result, an alternatives analysis was prepared to meet the requirements of CEQA as well as assist the BLM with preparation of an independent analysis required by NEPA.

This AFC discusses the reasonable range of alternatives analyzed for the Rio Mesa SEGF and examines their ability to feasibly attain most of the project objectives and minimize or avoid significant environmental impacts. Alternatives analyzed and discussed in this AFC include:

- The No Project Alternative: This alternative discusses existing conditions as well as what would be reasonably expected to occur in the foreseeable future if the Project is not approved and does not take place. An evaluation of this no project or “no action” alternative is required by CEQA and NEPA.
- On-Site Project Alternatives: Three on-site alternatives, including the Preferred Alternative (the Project), are evaluated and compared in terms of their environmental impacts and compliance with the project objectives.
- Off-Site Project Alternatives: Nine off-site alternatives were considered but were ultimately rejected based on their inability to meet Project feasibility screening criteria developed by the Applicant.
- Technology Alternatives: Nine alternative types of energy technologies are assessed with respect to commercial availability, implementation feasibility, and cost-effectiveness.
- Alternative Access Routes: Four alternative routes for accessing the project site are described.
- Alternative Water Supply Options: Five alternative water supply options, including the preferred groundwater option, are described and evaluated for feasibility.
- ~~Bradshaw Trail Re-Route Alternatives: The existing location of Bradshaw Trail and three re-route alternatives are described.~~
- Construction Back-up Power and Telecommunications: Two alternatives for Project construction and emergency back-up power and the approach for providing telecommunications are discussed.

1.7 ENVIRONMENTAL CONSIDERATIONS

The AFC investigates potential environmental impacts in 16 areas. Detailed descriptions and analyses of these areas are presented in alphabetical order in Sections 5.1 through 5.16. The Project will result in less than significant impacts for all 16 areas. Potential environmental effects for key areas of air quality, biological resources, cultural resources, land use, transportation and traffic, visual resources, and water resources are summarized in this section.

1.7.1 Air Quality [\(no changes\)](#)

1.7.2 Biological Resources

The Project will have less than significant biological resources impacts with implementation of mitigation measures. The project site, portions of which have been previously disturbed, is not located within a Desert Wildlife Management Area, Area of Critical Environmental Concern, Wilderness Area, Herd Management Area, or designated critical habitat and the Project will not adversely affect the integrity of these areas or any other area of high biological value or importance. Additionally, the Project will not substantially prevent wildlife movement to and from high-value biological areas. Construction and operations of the Project will result in less than significant impacts to biological resources, including special status wildlife species on the project site, Desert tortoise and Gila woodpecker, with implementation of mitigation measures. The Project minimizes development within the large washes located on the site, although potentially jurisdictional Waters of the United States and Waters of the State of California will be affected by the Project.

[The Applicant's Environmental Enhancement Proposal to remove RMS 3 will result in certain benefits to biological resources compared to the original project design. As discussed in Section 5.2, many of these impacts will be reduced. These reductions include: 2,108 acres of reduction in total impacts to vegetation communities, 541 acres in impacts to desert tortoise habitat and 126 kit fox den complexes will be avoided.](#)

1.7.3 Cultural Resources

The Project will have less than significant impacts on cultural resources. Cultural resources identified at the project site include archaeological sites and archaeological isolated finds, including archaeological sites recommended eligible for the National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR). Several cultural resources, including sites recommended eligible for the NRHP and CRHR, will be avoided through project design. In addition, a Memorandum of Agreement or a Programmatic Agreement, along with treatment plans are anticipated to resolve potential impacts.

[The Applicant's Environmental Enhancement Proposal to remove RMS 3 will result in certain benefits to cultural resources compared to the original project design. The key benefits to cultural resources compared to the original design are that removal of RMS 3 will allow the Applicant to avoid disturbing 388 cultural resource sites.](#)

1.7.4 Land Use

The Project will have less than significant land use impacts. The Project has applied for a zoning change for the privately-owned parcels. BLM-administered land requires a CDCA Plan amendment since the Project and its linear facilities are not identified in the existing CDCA Plan as amended by the Northern and Eastern Colorado Desert (NECO) Resource Management Plan. The solar power towers and gen-tie line structures will also require a height variance as part of the CEC licensing process.

The Change of Zone, height variance, and the CDCA Plan amendment will ensure consistency with applicable land use plans, policies, and regulations. Additionally, the Project will not divide an established community. The Project does not lie within critical habitat for the desert tortoise and does not conflict with any habitat conservation plans, natural community conservation plans, or other applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. It will not convert ~~prime farmland, unique farmland, farmland of statewide importance~~ and will not result in the conversion of farmland subject to the Williamson Act. Farmlands may be indirectly affected, but impacts will be less than significant. ~~The a~~Approximately 1.55 acres of prime farmlands and 0.67 acres of farmlands of statewide importance small portion of active farmland within existing~~north of Riverside County ROW will be converted to nonagricultural use as a result of the access road improvements for and paving of 34th Avenue. However, the Project~~ will not significantly alter agricultural uses and is considered a less than significant impact.

1.7.5 Public Health and Safety

The Project will ~~not~~ have less than significant impacts to public health and safety during construction or operation. With minimal air emissions, the nature of the solar generating facility is such that it will not pose significant health risks at any location, under any weather conditions, or under any operating conditions. Criteria air pollutant emissions will be below levels that exceed ambient air quality standards or add a significant contribution of PM₁₀, background concentrations of which already exceed ambient standards. The Project will not generate concentrations of pollutants that result in significant public health impacts.

Moreover, there are no sensitive receptors in close enough proximity to the Project that could potentially be exposed to public health effects. The nearest residence to the project site boundary is approximately 8,200 feet south of the solar array fence line for Plant 1. The nearest residence to any power block equipment is approximately ~~13,120~~ 14,760 feet east of the Plant ~~1~~ 3 power block. No daycare, hospital, park, preschool, or school receptors were found within six miles of the project site.

The Project will have a beneficial effect on public health by facilitating the retirement of older, less-efficient fossil fuel plants and reduce the need for new gas-fired plants with relatively higher GHG emissions and air pollution. Supplying power to the grid during hours of peak consumption will reduce the need for older, less-efficient peaker plants with significantly greater air pollution and GHG emissions.

1.7.6 Traffic and Transportation

The Project will have less than significant impacts to traffic and transportation. Scheduling construction worker arrival and departure times to off-peak periods will ensure that impacts to freeway, highway, and

roadway segments and intersections are less than significant during construction. Operations under the Preferred Alternative will have less than significant impacts to freeway, highway, and roadway segments and intersections due to the minimal number of vehicle trips associated with the operational workforce.

In conjunction with construction and operations, the Project will pave the segment of [Bradshaw Trail34th Avenue](#) between the project site and State Route 78 and install a stop sign at the eastbound approach to the intersection of State Route 78 and [Bradshaw Trail34th Avenue](#).

1.7.7 Visual Resources

The Project will have less than significant impacts to visual resources. The site is currently characterized by gently rolling open terrain and is dominated by desert scrub vegetation and well-defined ephemeral washes. Additionally, man-made features including off highway vehicle trails and electric and natural gas transmission lines are also present. Nearby population centers include Palo Verde, Ripley and Blythe. Other notable features in the surrounding area include I-10, State Route 78, the Colorado River, and Cibola National Wildlife Refuge. Views of the Project from these locations will be partially screened by natural and man-made structures including vegetation, topography, elevated irrigation canals, and residential or agricultural related buildings. The approximately 750-foot-tall solar power towers are the most visually noticeable elements of the Project. While the Project will change the existing visual character of the area, it will not substantially dominate or degrade existing viewsheds. [The Applicant's Environmental Enhancement Proposal removes RMS 3, the northern-most plant and nearest tower to sensitive receptors, thereby reducing the visibility of the Project from I-10 and the nearby populations of Ripley and Blythe.](#)

The visual impact analysis demonstrates that impacts to the six key observation points (KOPs) in the surrounding area will be less than significant. This conclusion is based on the moderate to low quality of the existing landscape; the higher elevation of the Project on Palo Verde Mesa relative to KOPs; and the presence of natural and man-made features within each KOP viewshed which serve to interrupt portions of each. Existing open and expansive views in the area will not be occluded by the Project. Neither day nor nighttime views in the area will be adversely affected by new sources of substantial light and/or glare associated with the Project.

Moreover, the Project may draw positive visual interest to the area. As one of the largest projects of its kind in California, the Project is a potential tourist attraction. Potential visitors include members of the public seeking direct personal experience with progressive renewable energy solutions. As a result, the visual resources impact of the Project will be beneficial to some viewers.

1.7.8 Water Resources

Water resources impacts will be less than significant. Of the 600 acre feet per year (afy) of groundwater secured by the Applicant through its land lease agreement with MWD, the Project will use less than [one-third-half](#) of its annual water allocation ([173.3260](#) afy) during operations and approximately two-thirds (400 afy) during peak construction. Notably, the quality of groundwater available to the Project is degraded, and does not meet drinking water standards.

The Project will implement feasible water saving measures. The use of air-cooled condensers for the main steam cycle minimizes water consumption by up to 90 percent relative to wet cooling technology. Over 25 to 30 years, Project water use will constitute less than 0.10-2 percent of water storage within the Palo Verde Mesa Groundwater Basin. Groundwater will be accessed through wells that will be installed on site, and wastewater will be discharged to a treatment process plant. Concentrate from the wastewater treatment will be disposed into evaporation ponds located in the common area. Furthermore, construction and operation will not have significant impacts associated with stormwater or surface runoff, surface water quality, groundwater quality, and wastewater discharge. Natural channels and washes will be minimally disturbed and occupied structures will not be placed within a 100-year floodplain.

1.7.9 Cumulative Effects (no changes)

1.8 KEY BENEFITS

1.8.1 Environmental

The Rio Mesa SEGF will provide major long-term environmental benefits including lower fossil fuel consumption, reduced greenhouse gas emissions, cleaner air, and water conservation. The advanced, high-efficiency solar power tower technology will provide 500750 MW of dependable power to the grid, generally during the hours of peak power consumption by the interconnecting utility. The Project will facilitate the retirement of older, less-efficient fossil fuel plants and reduce the need for new gas-fired plants with relatively higher GHG emissions and air pollution. Supplying power to the grid during hours of peak consumption will reduce the need for older, less-efficient peaker plants with significantly greater air pollution and GHG emissions. With only limited fossil fuel combustion, the Project will produce minimal air pollution and greenhouse gas emissions.

Additionally, the Rio Mesa SEGF will minimize water use. The Project utilizes air-cooled condensers requiring 90 percent less water than wet cooling technology. The Rio Mesa SEGF will use less than one-third of its annual water allocation during operations and no more than about two-thirds during peak construction. Over 25 to 30 years, the Project will use less than 0.10-2 percent of water storage in the underlying basin. It relies on a degraded water source that does not meet drinking water standards.

1.8.2 Employment

The Project will create jobs for communities with unemployment rates well above the State average. It will provide for a peak of approximately 2,2002,500 construction jobs at the site, with an average of 8401,040 construction workers per month over the 3536-month construction period. Most of the construction workforce is expected to be hired from labor unions affiliated with the Building and Construction Trades Council in Riverside, California as well as other labor unions in the surrounding area. In addition, the Project will provide up to 100 approximately 150 full-time, living-wage jobs throughout the life of the Project.

1.8.3 Financial

Project-related spending will lead to over ~~\$632~~~~\$899~~ million in total income creation during the ~~3536~~-month construction period and approximately ~~\$15~~~~\$20~~ million in total income creation over the life of the Project. The Rio Mesa SEGF also will increase tax revenues for the county government. Assuming purchases are made within Riverside County, the three-year construction phase will generate approximately ~~\$5.5~~~~\$7.9~~ million in total sales and use tax revenue for Riverside County. Locally purchased materials for operations will result in annual sales tax revenue of approximately ~~\$45,694~~~~\$68,200~~ for the life of the Project. In accordance with California tax law, the Project will pay property taxes on the generation portion of the ~~two~~~~three~~ plants, which will provide California and Riverside County with approximately \$7 million annually in additional tax revenue.

1.8.4 Renewable Energy (no changes)

1.9 PERSONS WHO PREPARED THE AFC (NO CHANGES)

1.10 LAWS, ORDINANCES, REGULATIONS, AND STANDARDS (NO CHANGES)

1.11 PERMITTING REQUIREMENTS (NO CHANGES)

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