6. OTHER CEQA CONSIDERATIONS

6.1. SIGNIFICANT UNAVOIDABLE IMPACTS

Section 15126(b) of the CEQA Guidelines requires that EIRs identify "significant effects which cannot be avoided if the proposal is implemented." This includes any significant impacts for which feasible mitigation measures are available but whose implementation would not reduce the impact to less-than-significant levels.

The significant unavoidable impacts associated with the Westlands Solar Park and the WSP Gen-Tie Corridors are addressed separately below.

Westlands Solar Park

As discussed throughout Chapter 3 of this EIR, all of the potential impacts associated with WSP solar development can be avoided or reduced to less-than-significant levels through mitigation measures to be implemented in conjunction with the project. There are no significant and unavoidable impacts associated with the solar development of the Westlands Solar Park.

The analysis of cumulative impacts for each environmental topic addressed in Chapter 3 found that there are no impacts associated with WSP solar development which, when considered in combination with other cumulative projects, would result in a significant and unavoidable cumulative impact, under both near-term and far-term conditions.

WSP Gen-Tie Corridors

As discussed throughout Chapter 3 of this EIR, all of the potential impacts associated with the WSP gen-tie projects can be avoided or reduced to less-than-significant levels through mitigation measures to be implemented in conjunction with the projects. There are no significant and unavoidable impacts associated with the WSP gen-tie projects.

The analysis of cumulative impacts for each environmental topic addressed in Chapter 3 found that there are no impacts associated with the WSP gen-tie projects which, when considered in combination with other cumulative projects, would be significant and unavoidable under both near-term and far-term conditions.

6.2. GROWTH-INDUCING EFFECTS OF THE PROPOSED PROJECT

Section 15126.2(d) of the CEQA Guidelines stipulates that the growth-inducing impact of a project be addressed as follows: "[d]iscuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring the construction of new facilities that could cause significant environmental effects."

Typically, growth-inducing effects would be considered significant if a project may result in population growth that is above levels assumed in local and regional land use plans, or would result in urban growth beyond the areas designated for such growth in such land use plans.

The growth-inducing effects associated with the Westlands Solar Park and the WSP Gen-Tie Corridors are addressed separately below.

Westlands Solar Park

Removal of Physical Obstacles to Growth

Growth inducement can occur where a project would result in expansions or extensions of infrastructure which can in turn support additional development. For example, road widenings add traffic capacity to the local transportation system which can facilitate further growth. Extensions of water and sanitary sewer lines to previously unserved areas can facilitate growth of neighboring lands to the extent that surplus capacity is available in the lines.

The WSP solar development would not result in any off-site improvements to urban infrastructure. The existing roadway network is sufficient to accommodate traffic generated during SGF construction and operation. Operational water needs would be provided from existing agricultural water pipelines operated by Westlands Water District. These deliveries are strictly limited to use by solar facilities only and the annual restrictions on water volumes to the relatively small volumes needed for SGF operation and maintenance would preclude more intense land uses such as urban development. Therefore, the WSP solar development would not induce growth through increased infrastructure capacities.

The WSP solar development would involve construction of off-site transmission lines to deliver the generated power to the electrical grid. Specifically, this would consist of the two 230-kV gen-tie lines that would extend from the WSP plan area to the Gates Substation to the west. These gen-tie lines would be sized to accommodate only the delivery of electrical generation from Westlands Solar Park. There would be no surplus capacity in the gen-tie lines that could serve additional electrical generation outside of the WSP plan area. Therefore, the off-site gen-tie lines would not be growth inducing.

Removal of Regulatory Obstacles to Growth

Growth inducement may occur where a project approval includes a major change in land use designation for the property, such as a General Plan amendment or zoning change which would allow the conversion

of rural lands to urban uses. Such a land use change could set a precedent which would increase pressure for similar conversion of adjacent or nearby lands.

The solar development of the Westlands Solar Park is fully consistent with the current Kings County General Plan and Development Code, both of which permit utility-scale PV solar development on certain agricultural lands such as those within the WSP plan area. Since no change in land use designation is required for WSP solar development, its approval would not set a precedent which might increase pressures for conversion of other lands. While the Kings County General Plan would allow for solar PV development on other agricultural lands within the County (subject to standards for commercial solar projects on agricultural land contained in the Development Code), the amount of solar development that will ultimately occur would be limited by state-level policy and conditions in the electric power market. Currently, the State's Renewable Portfolio Standard (RPS) is the primary factor that determines the scale and pace of statewide solar development, and any future increases in the RPS renewables target could increase the demand for solar power by Publicly Owned Utilities. Thus, while the amount of solar development that could theoretically be installed under the Kings County General Plan and Development Code is substantial, the amount of solar development that will ultimately occur will likely be limited by the upper limits of the RPS mandate (and County standards). The approval and construction of WSP solar facilities would not alter the current regulatory scheme that already allows solar development to occur on agricultural lands. Therefore, the WSP solar development would not be growth inducing by way of removing regulatory obstacles to future growth.

Stimulus for Economic Growth

Projects can stimulate economic growth through direct employment, as well as indirectly through demand for goods and services. This can contribute to incremental secondary effects such as increased hiring by suppliers. Projects can also generate additional property and sales tax revenue for local government, enabling expenditures on capital improvement projects that could also stimulate secondary economic activity. During the construction phase of development projects, temporary jobs are created and others supported in the purchase of materials.

During the peak construction period for a typical 250-MW solar facility, up to 430 construction workers would be on-site, while the average number of workers on the site during the 13-year WSP buildout period would be about half that number. Upon full buildout of WSP, the solar facilities would include a daily average of 80 operations and maintenance staff throughout the WSP plan area. Most solar components would originate from distribution centers in northern and southern California. Construction equipment would originate from inside the region. Materials such as aggregate and concrete would be supplied from local sources, as would the haul trucks and drivers that would deliver them. The employment generated by the WSP solar development would result in increased purchases of goods and services by the workers, and could in turn generate secondary employment in the local retail and service sectors. To the extent that the solar facilities would seek materials, supplies, and equipment from local sources, additional economic activity could be stimulated in the area. Increased local sales taxes resulting from increased local purchases by workers and solar companies could contribute to local government hiring, purchases, and procurement. Property tax receipts would increase only modestly since solar improvements are exempt from property tax, and increases in land values would be limited by the Williamson Act and Farmland Security Zone contracts. The overall economic stimulus resulting from WSP solar development would be relatively modest and would not be sufficient to induce economic growth in the region.

Population and Housing Growth

New projects can result in added population and increased local housing demand, to the extent that the project employees do not already live within commuting range. For WSP solar development, most employees would consist of construction workers. Given the high unemployment rate in the region, it is expected that construction workers would be drawn from the local labor pool and would include few if any workers who would migrate to the area. It is expected that the permanent staffs of the solar facilities would also consist of existing residents in the area, although some specialized technical or supervisory personnel may transfer to the area. Thus WSP solar development may result in a slight increase in demand for housing locally. Any minor increase in potential housing demand that would be generated by the project would not be significant, and would be readily absorbed by the local housing inventory. Therefore, the population and housing growth induced by WSP solar development would be negligible.

Increased Power Generation

The WSP solar facilities would add to the state's overall energy supply, which indirectly supports growth and development. However, the solar PV generation at WSP is intended to help meet the State's 33 percent (now 50 percent) renewable energy target under the Renewable Portfolio Standard (RPS), the intent of which is to replace fossil-fueled generation with renewable generation. The WSP solar development is not intended as source of baseload power to meet increased electrical demand to support growth. Moreover, the decision to provide electrical service to a particular location follows after local land use decisions are made to approve development at that location. Since there are no electrical supply constraints to the provision of electric service at a given location (although improvements to the local distribution network may be needed to serve a particular site), any increase in statewide power supply would have no effect in terms of constraining or inducing growth. Ongoing energy planning efforts at the state level by Cal ISO, CPUC, and CEC, combined with procurement programs by the electric utilities, ensure that power generation is constantly augmented to meet projected growth in demand, before it occurs, and that improvements to the transmission grid are in place when needed to convey power from the generation facilities to the electricity users. As such, the statewide electrical infrastructure is constantly planned and improved to ensure that electric power supplies remain adequate to serve growth that is approved by others in accordance with local land use regulations and approval procedures. Thus, while the generation capacity added by WSP solar facilities would not remove any infrastructure obstacle or constraint to growth and therefore would not be considered growth inducing.

In summary, the WSP solar facilities would have a less-than-significant growth-inducing effect by way of producing a minor economic stimulus locally. This would occur through direct employment of construction workers and operations staff by the solar facility operators, and through secondary demand for goods and services. WSP solar development could also result in a slight increase in local housing demand. WSP solar development would not result in growth inducement by way of removing physical or regulatory obstacles to further growth, or through increased power generation. In conclusion, the WSP solar facilities would not have a significant growth-inducing effect.

WSP Gen-Tie Corridors

Growth Resulting from Increased Employment

As discussed in Chapter 2. Project Description, the WSP gen-tie projects are expected to have a total workforce of approximately 100 construction workers. It is expected that most of construction personnel would be drawn from the communities in the region, although some specialized workers may need to be brought in from outside the area and be temporarily lodged in local hotels. To the extent that workers would relocate to the area to work on the gen-tie projects, a minimal increase in housing demand could occur, but the growth effects would be negligible. The gen-tie line construction would be temporary, occurring over a period of less than one year for each gen-tie, and thus would have no long-term effect in terms of employment or population growth.

Operation and maintenance of the gen-tie lines would require minimal staffing which would consist of current utility employees. Therefore, no new permanent jobs would be created, and no long-term effects would occur in terms of employment or population growth.

Added Transmission Capacity

The gen-tie lines would include only enough transmission capacity to convey power from the WSP solar facilities to the Gates Substation. They would not include any surplus transmission capacity to serve other solar PV projects in the area. Thus, the gen-tie projects would not be growth inducing.

In summary, the WSP gen-tie projects would not result in growth inducement by way of generating permanent increases in population or employment, or through excess transmission capacity.

6.3. SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

This section was prepared pursuant to CEQA Guidelines Section 15126.2(c), which requires a discussion of the significant irreversible changes that would result from the implementation of a proposed project. Significant irreversible changes include the use of nonrenewable resources, the commitment of future generations to similar use, providing transportation access to previously inaccessible areas, irreversible damage resulting from industrial accidents associated with the project, and irretrievable commitments of resources. The significant irreversible environmental changes associated with the Westlands Solar Park and the WSP Gen-Tie Corridors are discussed in turn below.

Westlands Solar Park

Use of Nonrenewable Resources

The construction phase for each WSP solar facility would involve the use and consumption of nonrenewable building materials such as concrete, metals, and composites. Nonrenewable resources and energy would also be consumed in the manufacturing and delivery of solar PV components, the extraction, processing and hauling of building materials, transportation by workers to and from the site, as well as in grading and excavation. The operation of the solar facilities would consume energy in the form of electricity and natural gas for multiple purposes including operation of solar tracking systems, solar monitoring and control systems, building heating and cooling, lighting, and appliances. Energy in the form of gasoline and diesel fuel would be used for private vehicles and delivery trucks that would travel to the project, as well as maintenance vehicles used at each solar facility. Use of nonrenewable materials and energy sources represents an irretrievable commitment of resources. However, the startup and operation of the completed solar facilities would allow the decommissioning or decreased use of fossil-fueled generating stations elsewhere. These offsets would more than compensate for the relatively minor input of non-renewable energy sources consumed in the construction and operation of the WSP solar facilities. Also, most of the materials used in solar generating facilities are recyclable. The solar panels, racking systems and other components would be recycled for reuse upon decommissioning of each solar facility. Thus, while some irretrievable commitment of nonrenewable resources at fossil generating facilities that would occur elsewhere in the state without the WSP solar facilities. Therefore, the WSP solar facilities would not result in a significant irretrievable commitment of nonrenewable resources.

Opening New Areas for Transportation Access

The WSP solar facilities would all have entrances on existing County roads such as Avenal Cutoff Road, Laurel Avenue, and Nevada Avenue. All WSP solar facilities would have internal gravel access driveways for operations and maintenance access. However, these driveways would only be available for internal access to the solar facilities and access to them would be restricted by entry gates and perimeter security fencing around each solar facility. Therefore, the WSP solar facilities would not include the construction of public roadways or highways that could be used to provide public access to previously inaccessible areas. Thus WSP solar development would not result in indirect commitment of resources in the development of such previously inaccessible areas.

Commitment of Future Generations to Similar Use

The solar facilities within the WSP plan area would each have a productive life of about 25 years, with the possibility of minor time extensions beyond that. At the end of 25 years, each facility would be decommissioned and the soils would be reclaimed to a condition suitable for agricultural cultivation, in accordance with Kings County conditions that would be placed on the approval of Conditional Use Permits for each solar facility. After decommissioning, the Kings County General Plan and Development Code would limit future uses of these lands to agriculture and related operations. Therefore, the development of the WSP plan area for solar PV facilities would not commit future generations to solar PV or similar land uses.

Potential for Environmental Accidents and Contamination

Construction and operation of the WSP solar facilities would involve the use of hazardous materials such as fuels, lubricants, and cleaning solvents, and the potential use of solar panels with imbedded toxic elements. However, all on-site activities would be subject to implementation of hazardous materials management plans, spill response plans, and a Storm Water Pollution Prevention Plan (SWPPP) with Best Management Practices (BMPs). Any solar panels containing toxic elements would be safely recycled by the manufacturers. Thus the potential for permanent damage or contamination due to environmental accidents is negligible.

In summary, the planned WSP solar facilities would not result in significant irretrievable use of nonrenewable materials, open new areas to transportation access, commit future generations to similar

uses, or result in environmental accidents causing permanent damage or contamination. Therefore, the planned WSP solar facilities would not result in significant irreversible environmental changes.

WSP Gen-Tie Corridors

Use of Nonrenewable Resources

Construction of the WSP gen-tie projects would require a permanent commitment of natural resources resulting from the direct consumption of fossil fuels, construction materials, and the manufacture of new equipment, much of which would not be recyclable at the end of the useful life of the gen-tie facilities. Some proportion of non-renewable energy would also be consumed in the manufacture of equipment and the construction of the gen-tie lines. In addition, the gen-tie projects would involve the permanent removal of approximately 2 acres of important farmland.

During the operational phase, the gen-tie lines would be solely dedicated to delivery of renewable solar energy to the electrical grid. By facilitating delivery of renewable energy to the grid, the gen-tie lines would indirectly offset the consumption of non-renewable resources consumed in their manufacture and construction.

Opening New Areas for Transportation Access

The WSP gen-tie projects would require temporary access driveways for construction and some permanent access driveways for operation and maintenance. In the areas of the valley floor traversed by the gen-tie corridors, temporary and permanent access to transmission towers would largely be gained by passing through farmlands from the nearest rural roadway or field perimeter lane. Thus few if any permanent access driveways would be constructed for the gen-tie lines. Therefore, the WSP gen-tie projects would not involve the construction of public roadways or highways that could be used to provide public access to previously inaccessible areas. Thus, the WSP gen-tie projects would not result in indirect commitment of resources in the development of previously inaccessible areas.

Commitment of Future Generations to Similar Use

The use of the planned gen-tie corridors for transmission lines would essentially be permanent. While some transmission towers and conductors may be decommissioned over time, it is more likely that they would be replaced and upgraded with new equipment. The potential abandonment of the transmission corridors in the future is not currently foreseeable, so the construction of the planned gen-tie lines would be considered a permanent commitment to this or similar uses.

Potential for Environmental Accidents and Contamination

Hazardous materials that would be used during construction and operation of the WSP gen-tie projects would be used, stored, handled, and disposed of in accordance with applicable federal, state, and local regulations to minimize the potential for accidental discharges of contaminants into the environment.

6.4. ENERGY CONSERVATION

As provided in Appendix F (Energy Conservation) of the CEQA Guidelines, an EIR must address the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy. As stated Appendix F, the means of achieving the wise and efficient use of energy include: 1) decreasing overall per capita energy consumption; 2) decreasing reliance on fossil fuels such as coal, natural gas, and oil, and; 3) increasing reliance on renewable energy sources.

The energy conservation characteristics of the Westlands Solar Park and the WSP Gen-Tie Corridors are addressed in turn below.

Westlands Solar Park

The construction of the WSP solar facilities would involve the consumption of fuels for vehicles and equipment. Energy would also be used in the manufacture of the solar modules and associated equipment, although the solar modules and other array equipment would be recyclable. Construction materials would also be required to be recycled to the extent practicable by Kings County. The efficient use of fuel during construction would occur through implementation of the San Joaquin Valley Air Pollution Control District's requirement for clean fleet equipment to minimize emissions under Rule 9510 (ISR) which would also indirectly result in greater fuel efficiency. In addition, the WSP solar facilities would be required to conform to applicable state energy standards for construction.

Operationally, the main objective of the WSP solar facilities is to generate renewable solar energy in order to provide for the reduced statewide reliance on non-renewable fossil fueled generation. The full buildout of Westlands Solar Park would allow for the decommissioning of the equivalent of several large natural gas fired power plants. This would also result in energy saved that would otherwise be consumed in transporting fossils fuels to the conventional power plants. Thus, the WSP solar facilities would have a substantial beneficial effect in terms of reducing reliance on fossil fuels and increasing reliance on renewable energy resources.

In summary, the WSP solar facilities would not have an adverse effect in terms of energy conservation, and would have a substantial beneficial effect by way of implementing the statewide goal of conversion from fossil-fueled power generation to renewable power generation.

WSP Gen-Tie Corridors

The construction of the WSP gen-tie projects would involve the consumption of fuels for vehicles and equipment. Energy would also be used in the manufacture of transmission towers and electrical cables, some of which would be recyclable. Construction materials would also be required to be recycled to the extent practicable pursuant to the construction standards of the proponent utility.

Operationally, the main objective of the WSP gen-tie projects is to deliver the renewable solar energy generated at Westlands Solar Park to the state electrical grid. This would help achieve the statewide goal of converting from fossil-fueled power generation to renewable power generation. Thus the

relatively small amount of energy consumed in construction of the gen-tie lines would be off-set by the critical role of the gen-tie facilities in enabling the delivery of the renewable solar generation from the Westlands Solar Park to the state electrical grid.

In summary, the WSP gen-tie projects would not have an adverse effect in terms of energy conservation, and would have a substantial beneficial effect by way of facilitating statewide conversion from fossil-fueled power generation to renewable power generation.

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