6. Other Considerations

2 3 Additional topics associated with implementation of the Eldorado-Ivanpah Transmission Project (EITP or the 4 proposed project) and its alternatives that must be considered under the National Environmental Policy Act (NEPA) 5 and California Environmental Quality Act (CEQA) are discussed in this chapter. The following additional 6 considerations are discussed: environmental impacts that cannot be mitigated to less than significant levels; 7 irreversible and irretrievable commitment of resources; growth-inducing effects; and a summary of cumulative 8 impacts. The Ivanpah Solar Electric Generating System (ISEGS) project is also discussed. While the EITP would not 9 be a source of additional power, the Bureau of Land Management (BLM) and the California Public Utilities 10 Commission (CPUC) have determined that because the EITP is intended to facilitate the transmission of power from 11 ISEGS, power generation from ISEGS should be considered in this EIR/EIS (Figure 1-1). 12

13 6.1 Significant Unavoidable Adverse Impacts

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15 The proposed project and its alternatives would result in significant unavoidable adverse impacts on biological 16 resources and potentially significant impacts air quality, hydrology and water quality, and public services and utilities. 17 Under NEPA, the proposed project would result in major, adverse and unavoidable impacts on aesthetics and visual 18 resources for one of the eight key observation points (KOPs) analyzed; with mitigation, impacts on aesthetics and 19 visual resources would be less than significant under CEQA. As discussed in Section 3.4, "Biological Resources," the 20 proposed project would impact several special-status wildlife species and their habitat. Mitigation measures would 21 reduce impacts to less than significant for all of the species discussed, except for desert tortoise. Impacts on desert 22 tortoise and its habitat would be significant even after mitigation (IMPACT BIO-2). 23

As described in the analysis of IMPACT AIR-2, the estimates of average daily emissions of PM_{2.5}, PM₁₀ and NO_X from project construction activities exceed The Mojave Desert Air Quality Management District (MDAQMD) daily significant thresholds. Implementation of MM AIR-1 (low-emission equipment) and MM AIR-2 (enhanced fugitive dust control measures) would reduce potential impact but are not expected to reduce emissions from construction activities to below the MDAQMD daily significant thresholds. Long-term impacts would not occur because construction would be temporary at any one location. Therefore, temporary ambient air quality impacts caused by construction activities would violate or contribute substantially to an air quality violation.

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In addition, construction of the proposed project or its alternatives would occur in an area designated non-attainment for ozone and PM₁₀ (IMPACT AIR-3). The estimates of average daily emissions of PM₁₀ and ozone precursors, NO_X and VOCs, from project construction activities exceed MDAQMD daily significant thresholds. The construction is

35 expected to adversely impact the proposed project region for a short term. Mitigation measures to be implemented,

- 36 including the use of low-emission equipment and enhanced fugitive dust control measures are not expected to 37 reduce PM₁₀ and NO_x emissions from construction activities to below the MDAQMD daily significant thresholds.
- 37 reduce PM₁₀ and NO_x emissions from construction activities to below the MDAQMD daily significant thresholds 38 Therefore, temporary emission increases of NO_x, VOCs, and PM₁₀ during construction would contribute to a
- 39 cumulatively considerable net increase of a criteria pollutant in a non-attainment area.
- 40

The proposed project and its alternatives could also result in a significant impact on water resources by impacting aquifer recharge processes and exceeding existing levels of groundwater withdrawal (IMPACT HYDRO-2). This potentially significant impact relates to IMPACT PUSVC-2, which indicates that construction of the proposed project would temporarily increase water use. Depending on the quantity and sources of water to be used, the proposed project could decrease local groundwater supply and recharge. Because the sources of the water to be used during construction is currently unknown, the impact on groundwater supplies could be significant (Section 3.8, "Hydrology

47 and Water Quality" and Section 3.11, "Public Services and Utilities").

6.1.1 Ivanpah Solar Electric Generating System Project

The ISEGS project would result in significant unavoidable adverse impacts on existing scenic visual resources as seen from several key observation points in the Ivanpah Valley and Clark Mountains (CEC and BLM 2009, CEC 2010). ISEGS project impacts, when combine with the impacts of present and reasonably foreseeable projects, would also result in significant and unavoidable cumulative impacts with respect to visual resources, land use, and traffic and transportation (CEC 2010). These ISEGS project impacts are further reviewed in Section 3.2, "Visual Resources" and Chapter 5, "Cumulative Scenario and Impacts," of the EITP EIR/EIS.

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6.2 Irreversible and Irretrievable Commitment of Resources

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12 This section discusses irreversible and irretrievable commitments of resources as a result of energy and materials 13 consumption, accidental release of hazardous materials, land disturbance (and associated habitat loss for sensitive 14 biological resources), damage to or the loss of cultural or paleontological resources, land use, and visual impacts. 15 During the proposed project's operational phase, the transmission of electrical power generated from nonrenewable 16 resources would continue. Operation of the proposed project, however, would facilitate the distribution of solar 17 energy from the ISEGS project and accommodate the area's potential for renewable power generation in order to 18 achieve the State of California Renewables Portfolio Standard goals. For this reason, the irreversible and irretrievable 19 resource commitments discussed in this section are considered to be acceptable. 20

21 6.2.1 Energy and Materials Consumption

Implementation of the proposed project would result in the consumption of energy and materials. Fossil fuels would be required for construction of the proposed project as well as operation and maintenance. A total of 35,000 gallons of gasoline, 665,000 of diesel, and 8,300 of aviation fuel are estimated to be required for construction of the proposed project. The amount of fossil fuels to be stored for the emergency back-up generator for microwave telecommunications is estimated at 499 gallons.

28

29 The proposed Ivanpah Substation would be routinely visited on a monthly basis, and the Eldorado–Ivanpah

Transmission Line would be monitored routinely in its entirety by helicopter or truck on an annual basis. Additional

31 visits for maintenance purposes would be expected in response to inclement weather or other issues as needed—

- generally five or more times annually for the transmission line and 20 or more times annually for the substation. The
 Nipton, California, microwave site would also be visited for operations and maintenance purposes several times
 annually.
- 34 anni 35

Additionally, construction would require the manufacture of new materials, some of which would not be recyclable after the estimated 80-year lifespan for the proposed project. The raw materials and energy required for the production of these materials would also result in an irretrievable commitment of natural resources. Operation and maintenance of the proposed project or its alternatives would not cause a substantial increase in the consumption or use of non-renewable resources.

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6.2.2 Hazards and Hazardous Materials

Construction activities could result in the accidental release of hazardous materials in localized areas of the
transmission line, Ivanpah Substation, or telecommunication lines. Such accidents could pose a hazard to humans or
result in long-term impacts on the environment. With mitigation, however, potential impacts would be reduced to less
than significant levels. No long-term adverse impacts would occur as result of construction, operation, or
maintenance of the proposed project or its alternatives.

6.2.3 Land Disturbance

Clearing and grading activities for proposed project infrastructure (e.g., the new substation; improvements to existing access and spur roads; new access and spur roads; staging areas; powerline tension and pull areas; stringing and splicing areas; and tower and pole installation) would cause direct losses of vegetation communities and would be potential sources of direct mortality to wildlife. Wildlife would also be indirectly impacted through the loss or modification of vegetation.

9 Approximately 51 acres of land would permanently be disturbed with implementation of the proposed project.

10 Consequently, 51 acres of plant and wildlife habitat would be eliminated. Approximately 424 acres would temporarily 11 be disturbed during construction of the proposed project; therefore, total land disturbance would be approximately 12 465 acres (464.9; Table 6-1). The extent that temporary land disturbances would impact biological resources would 13 vary by vegetation or wildlife community and the location of disturbance. The loss of habitat from permanently

disturbed land would be long-term, enduring throughout the 80-year lifespan estimated for the proposed project.

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16 The amount of land that would be disturbed with the implementation of each alternative is provided in Table 6-1. The

17 effect of land disturbance with the implementation of each alternative would be similar to that of the proposed project.

18 Potential impacts from land disturbance are further analyzed in Section 3.4, "Biological Resources."

19

	Acres Disturbed During	
Component	Construction ^{1, 2}	Acres Permanently Disturbed ¹
Proposed Project (Proposed Action)	464.9	51.2
Transmission Route Alternative A	536.3	59.3
Transmission Route Alternative B	605.5	61.2
Transmission Route Alternative C	551.8	57.7
Transmission Route Alternative D	526.9	52.4
Transmission Route Alternative E	525.1	52.2
Golf Course Telecommunication	475.5	51.3
Alternative		
Mountain Pass Telecommunication	475.7	51.3
Alternative		

Table 6-1 Estimated Land Disturbance by Alternative

Notes:

¹ Land disturbance estimations are based on the applicant's preliminary design information and are subject to change during final engineering. ² Construction land disturbances include both temporary and permanent land disturbance estimations.

20

21 Transmission Alternative Route A would shorten the overall length of the proposed project by one mile but require 22 additional right-of-way (ROW). There would be an increase in total permanent impacts by 0.2 acres and an increase 23 in temporary impacts by 17 acres in previously undisturbed desert habitat. The increase in acreage of both 24 permanent and temporary impacts would be due to construction activities required for the completion of this 25 alternative. Transmission Alternative Routes B and C and would result in a longer transmission line and require 26 additional ROW, which would increase the acreage of permanent and temporary impacts. Transmission Alternative 27 Route D and Subalternative E would result in a slightly longer transmission line, which would increase the acreage of 28 habitat that is temporarily impacted. The acreage permanently impacted would be slightly greater than under the 29 proposed project. 30

The Golf Course and Mountain Pass Telecommunication Alternatives would result in the installation of additional communication line (20 and 25 miles, respectively). There would be a substantial increase in the acreage of habitat

32 communication line (20 and 25 miles, respectively). There would be a substantial increase in the acreage of nabilat 33 that would be impacted as a result of these alternatives. The No Project Alternative would not result in impacts to

biological resources. Under this alternative, construction, demalition, or ground disturbance would not accur be

- 34 biological resources. Under this alternative, construction, demolition, or ground disturbance would not occur because 35 neither the proposed project nor the alternatives would be implemented.
- 36

6.2.4 Cultural Resources

Construction of the proposed project would result in a significant impact on cultural resource sites 36-10315 and 36 7694/26CK4957 (Section 3.5, "Cultural Resources"). Without mitigation, impacts would be adverse and permanent.
 Implementation of mitigation measures, however, would reduce all potentially significant impacts associated with the
 proposed project to less than significant levels.

8 Site 36-10315/26CK8280, the Boulder Dam-San Bernardino 132-kV Transmission Line, would be impacted by the 9 EITP because towers from this line would be removed and replaced with new towers to accommodate the existing 10 and new transmission capacity. While this impact could not be avoided, mitigation would be incorporated that would require a full record be made of the resource before impacts are made. Site 36-7694/26CK4957, the Los Angeles 11 12 Department of Water and Power Boulder Transmission Line, was determined eligible for the National Register of 13 Historic Places in 1994. The applicant intends to span over the line using H-Frame towers, which would allow the 14 EITP line to cross the historic line without impacting it. Implementation of APM CR-2 would minimize impacts to less 15 than significant levels.

16

17 Transmission Route Alternatives A and B would cross no known cultural resources, and no newly discovered cultural 18 resources were found during the field survey of this alternative. Transmission Route Alternative C would result in 19 significant adverse permanent impacts to sites 36-10315 and 36-7694/26CK4957 by altering the setting and 20 disturbing elements of the site that contribute to its historic significance. Without mitigation, impacts would be adverse

and permanent. With mitigation, potential impacts would be reduced to less than significant levels.

Transmission Route Alternatives D and E would not result in impacts on cultural resources. The alternative routes contain no previously recorded cultural resources, and no newly discovered cultural resources were found during the field surveys. The Golf Course and Mountain Pass Telecommunication Alternatives would also not result in impacts to known cultural resources. The No Project Alternative would not result in impacts to cultural resources.

If subsurface cultural resources or human remains are discovered with the implementation of the proposed project
 and any of the alternatives, an impact could occur. Implementation of the mitigation described in Section 3.5,
 "Cultural Resources," would reduce potential impacts to less than significant levels.

6.2.5 Geology, Soils, Minerals, and Paleontology 33

The proposed project would result in minor long-term impacts to geology and soil resources because of transmission line, Ivanpah Substation, and telecommunication line construction. Activities associated with the construction of access road and structures along the transmission and telecommunication line routes would disturb the existing ground surface and natural drainages, causing minor erosion-related impacts. Operations and maintenance activities would result in continued erosion.

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40 Expansive soils in the proposed project area could result in low to moderate levels of structural failure of the

41 transmission and telecommunication line poles and towers and the Ivanpah Substation. There is also the potential for

42 impacts as a result of changing geologic conditions including seismic events (fault rupture and ground shaking),

43 subsidence, or liquefaction. Numerous non-metallic and metallic mineral deposits occur along or near the

transmission line route. Non-metallic deposits within the general project area include pumice, feldspar, limestone,

45 and sand and gravel, with sand and gravel potential being the highest along the routes.

47 Several paleontological resources would be located within 1 mile of the proposed project and one paleontological

resource location would be within 300 feet. The nearest location identified in record searches indicated the presence

- 49 of indeterminate large mammal bone fragments. All potentially significant geology, soil, mineral, and paleontological
- 50 impacts would be mitigated to less than significant levels. All potentially significant short and long-term geology, soil,

mineral, and paleontological impacts associated with the proposed project would be mitigated to less than significant
 levels (Section 3.6, "Geology, Soils, Minerals, and Paleontology").

Implementation of Transmission Route Alternatives A and B would result in negligible impacts associated with seismic ground shaking, and seismic-related ground failure including liquefaction. Minor impacts would be associated with erosion and unstable geologic units (subsidence). Negligible impacts would be associated with expansive soil and non-metallic mineral resources. Construction of Transmission Route Alternatives A and B may also impact buried paleontological resources as a result of ground-disturbing activities. The two routes could impact areas where underlying formations have been identified as high paleontological sensitivity.

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Implementation of Transmission Route Alternative C could result in several impacts. A segment of the Stateline Fault System crosses Transmission Route Alternative C along the California–Nevada border. This impact would be negligible and localized but long term. Minor impacts would be associated with erosion and result from unstable geologic units (subsidence). Negligible impact would be associated with expansive soil and non-metallic mineral resources. Areas where underlying formations have been identified as high paleontological sensitivity could also be impacted.

18 Impacts and mitigation associated with Transmission Route Alternatives D and E would be similar to those

19 associated with Transmission Route Alternative C. Only Transmission Route Alternatives C and D, however, would

20 cross a segment of the Stateline Fault System. Impacts associated with the Golf Course and Mountain Pass

Telecommunication Alternatives would also be similar to those associated with the proposed project and

Transmission Route Alternatives A, C, and D. The No Project Alternative would have no impact on existing geologic, soil, mineral, or paleontological resources. All potentially significant short and long-term geology, soil, mineral, and

paleontological impacts associated with the alternatives would be mitigated to less than significant levels (Section

25 3.6, "Geology, Soils, Minerals, and Paleontology").

6.2.6 Land Use

Long-term negligible adverse impacts on the Clark Mountain grazing allotment would occur as a result of proposed project construction. No additional long-term adverse impacts on existing, approved land use plans, livestock grazing management, livestock, or Special Management Areas would occur as a result of implementation of the proposed project or Transmission Route Alternatives A through E, the Golf Course or Mountain Pass Telecommunication Alternatives, or the No Project Alternative (Section 3.9, "Land Use").

While an EIS for the Southern Nevada Supplemental Airport is currently in progress and is expected to be completed by 2012, the applicant would consult with the Federal Aviation Administration prior to final project design to determine if a Hazard/No Hazard Determination is necessary as discussed in Section 3.7, "Hazards, Health, and Safety." Once this determination is made, land use impacts on the Ivanpah Airport Environs Overlay would be reduced.

The portion of the proposed project that crosses the BCCE would be constructed mostly within the boundary of BLMmanaged utility corridors; however, less than one mile would cross outside of the corridor at MP 2 along an existing 70-foot ROW, which would require approval from Clark County and Boulder City. With the approval of these jurisdictions, impacts on land use within the BCCE would be reduced.

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46 **6.2.7 Visual Impacts**

48 The proposed project would result in permanent, minor, adverse impacts on visual resources because of the use of

49 taller transmission line structures and construction of the Ivanpah Substation and microwave tower. The

50 undergrounded portion of the telecommunications line would result in temporary moderate impacts on visual

resources. All visual impacts would be consistent with applicable BLM visual resource designations for the proposed
 project area, however, and would not significantly impact visual resources (Section 3.9, "Visual Resources").

Implementation of Transmission Route Alternatives A through E would result in stronger overall visual contrast in comparison to the proposed project. Increased visual contrast would occur in areas where the alternative routes would veer from the existing transmission line route. Visual impacts would still be consistent with applicable BLM visual resource designations, however, and would not significantly impact visual resources.

8 9 The Golf Course and Mountain Pass Telecommunication Alternatives would result in moderate temporary impacts on 10 visual resources because of an additional segment of trenching along Nipton Road but would not result in long-term 11 impacts. A segment of the Mountain Pass Telecommunication Alternative would traverse an area designated by the 12 BLM with stricter objectives for visual resources than the proposed project or other alternative routes, but would still 13 not result in significant impacts. This segment of telecommunication line would be strung on existing 33-kV 14 distribution structures. It would not result in a visual impact because the new telecommunication line would not be 15 noticeable with respect to the existing distribution lines. Under the No Project Alternative, there would be no impact 16 on visual resources. 17

6.2.8 Hydrological and Water Quality

Construction of the proposed project and its alternatives would result in localized erosion and sedimentation impacts ranging from minor to moderate. Additionally, the proposed project and its alternatives would use water for dust suppression during construction, and water would be used at the substation for sanitary purposes and fire control during emergencies during proposed project operation. The applicant has stated that no wells would be drilled for water supply; however, until the water source is identified by the applicant, potential minor to moderate localized impacts on groundwater are assumed (see MM W-2, Water Use Plan).

6.2.9 Ivanpah Solar Electric Generating System Project

Implementation of the ISEGS project would result in the consumption of a substantial amount of energy from fuel (i.e., gasoline, diesel, and jet fuel) for construction activities. Additionally, construction would require the manufacture of new materials, some of which would not be recyclable when the ISEGS project is decommissioned. The raw materials and energy required for the production of these materials would also result in an irretrievable commitment of natural resources. Operation of the ISEGS project would not cause a substantial increase in the consumption or use of non-renewable resources.

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The use of a limited amount of hazardous materials (e.g., fuel, lubricants, and cleaning solvents) would be required. Hazardous materials would be stored, handled, and used in accordance with best management practices and applicable federal, state, and local regulations. Assuming appropriate implementation of plans and practices, impacts associated with the degradation of the environment because of the accidental release of hazardous materials would be less than significant.

41

Implementation of the ISEGS project would require the loss of approximately 4,073 acres of vegetation and wildlife and habitat. The loss of this habitat would be long-term, enduring throughout the proposed 50-year lifespan of the ISEGS project facility. Following decommissioning, restoration would be conducted which would involve removal of structures, restoration of topography, and revegetation, all of which would work towards restoration of the original habitat. However, it is likely that restoration of native vegetation would be slow and the success uncertain. The loss of

47 desert tortoise habitat would be permanent since restoration of vegetation for which they depend for foraging and

48 other factors affecting the quality of the restored habitat would be uncertain.

1 The majority of access required for construction, operation, and maintenance of the ISEGS project would use existing

ROW and access roads. Opportunities for public access would not be significantly affected nor would previously
 inaccessible areas be made accessible.

4 5 Visual impacts would be significant and long-term enduring throughout the proposed 50-year lifespan of the facility. 6 The ISEGS project site would be near a national preserve, two designated wilderness areas, and an area used for 7 land sailing-moving on land in a wind-powered wheeled vehicle with a sail on flat open spaces such as Ivanpah Dry 8 Lake. Concerns were expressed during the public comment period regarding potential impacts on visual resources 9 as well as the level of glare from the solar towers; and concern over cumulative visual effects of renewable projects 10 on the Southern California Mojave Desert as a whole. After the end of the ISEGS project's useful life, it would be 11 decommissioned and the area restored and revegetated, but visual recovery is would likely take a very long period of 12 time.

6.3 Growth-Inducing Effects

The proposed project would induce growth if it results in additional development, such as increases in population, employment and/or housing above and beyond what is already assumed will occur in local and regional land use plans or in projections made by regional planning authorities, irrespective of the proposed project. Under CEQA (Section 15126.2(d)), the proposed project would be growth-inducing if it:

- Directly or indirectly fosters economic or population growth or the construction of additional housing;
- Taxes community facilities to the extent that the construction of new facilities would be necessary;
- Removes obstacles to population growth; or
- Encourages or facilitates other activities that cause significant environmental effects.

Typical growth inducing factors might be the extension of urban services or transportation infrastructure to a previously unserved or under-served area or the removal of major barriers to development. This section evaluates the proposed project's potential to create such growth inducements. It should also be noted that growth inducement can be positive or negative depending on resulting effects and the development objectives of the planning authorities in the proposed project area. Negative impacts associated with growth inducement would occur only where growth associated with the proposed project would result in significant/adverse environmental impacts.

6.3.1 Workforce for the Proposed Project / Proposed Action

6.3.1.1 Construction

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Section 3.13, "Socioeconomics, Population and Housing, and Environmental Justice" provides a detailed description
 of the availability of existing labor within the proposed project area. Construction employment for the proposed

39 project would include both skilled and semi-skilled positions. The construction workforce available in San Bernardino 40 County, California is 35,973 and Clark County, Nevada 92,364. As discussed in Chapter 2.0, "Description of the

Proposed Project and Alternatives," construction of the proposed project would occur over an estimated 18-month period and require a total construction workforce of approximately 190 workers.

42 43

Because the total expected construction workforce is 190 workers (approximately 0.015 percent of the total workers available), it is not expected that any additional workers would be required to relocate into the proposed project area during construction. The presence of 190 workers in the proposed project area would have a localized beneficial effect as a result of the temporary localized spending on goods and services, but this effect would be short-term and would not be expected to result in a permanent increase in housing or need for community facilities that could not be met by existing services and facilities. The analysis presented in Section 3.11, "Public Services and Utilities," confirms that construction of the proposed project would not create significant additional demands for emergency response services, schools, drinking water, or solid waste and wastewater facilities that could not be met by existing providers and facilities. Therefore, workforce required for construction of the proposed project would not have any direct or indirect growth inducing effect.

6.3.1.2 Operation

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9 Operation and maintenance of the proposed project would be conducted by the existing work force currently

10 assigned to the operation and maintenance of the existing Eldorado-Ivanpah Transmission Line (Section,

"Socioeconomics, Population and Housing, and Environmental Justice") and would not create new jobs locally or 11 12 regionally. Operation of the proposed project would not cause growth in population, employment, or housing because

13 no additional workers would be required beyond those currently employed. 14

15 The analysis presented in Section 3.11, "Public Services and Utilities," confirms that operation and maintenance of 16 the proposed project would not create long-term demands for emergency response services, schools, drinking water, 17 or solid waste and wastewater facilities that could not be met by existing services and facilities. Therefore, workforce 18 required for operation and maintenance of the proposed project would not have any direct or indirect growth inducing 19 effect.

20 21 6.3.1.3 Alternatives

22 23 Potential growth-inducing impacts from implementation of each alternative would be similar to that for the proposed 24 project. The alternatives would require a similar number of workers as the proposed project. Under the No Project 25 Alternative, there would be no growth-inducing impacts on the proposed project area. Therefore, workforce required 26 for implementation of the alternatives would not have any direct or indirect growth inducing effect. 27

28 6.3.2 Provisions for Additional Electric Power

29 30 As described previously, growth inducement can occur directly, as a result of increases in employment, housing, and 31 demands for public facilities and services. Growth inducement can also occur indirectly as the result of the removal of 32 existing constraints to growth or the creation of factors that encourage or otherwise facilitate development that would 33 not otherwise have occurred. The provision of electrical power can be a trigger for growth, either by alleviating a 34 constraint where limitations on power availability are curtailing development and growth that would otherwise occur or 35 by providing easier and/or cheaper access to power. 36

37 The purpose of and need for the EITP is to connect renewable generation sources in the Ivanpah Valley region to the 38 existing electrical transmission grid and to enable the applicant to comply with California's Renewables Portfolio 39 Standards (Chapter 1, "Purpose and Need"). The Renewables Portfolio Standards and Energy Action Plan require 40 utilities, including the applicant, to increase the sale of electricity produced by renewable energy sources including 41 solar facilities to meet a goal of 20 percent renewable energy generation by 2010. The Ivanpah Valley area has been 42 identified as an area with high potential for solar resource development. The proposed project would allow the 43 applicant to increase the percentage of renewable resources in its energy portfolio and assist them in reaching the 44 goals set in the Renewable Portfolio Standards.

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46 In addition, the Energy Policy Act of 2005 requires the Department of the Interior (the BLM's parent agency) to 47 approve at least 10,000 megawatts (MW) of renewable energy on public lands by 2015. Currently, proposed

48 renewable energy projects amounting to 1,900 MW of electricity are on file with the BLM for the Ivanpah Valley area.

49 The EITP would allow for the transmission and distribution of energy from proposed renewable energy generation facilities.

1 Irrespective of the proposed project, population in both San Bernardino and Clark counties has increased

2 substantially in the last decade and is expected to continue to increase (Section 3.13, "Socioeconomics, Population

and Housing, and Environmental Justice"). It is anticipated that growth would occur regardless of the availability of

- additional renewable energy and electrical transmission capacity. Further, it is not anticipated that the proposed
 project would have any effect on population growth because associated energy demands would be met by other
 means.
- 6 m 7

Additionally, as described in Section 2.3.5, "No Project/No Action Alternative," if the EITP is not constructed, it is
assumed that the proposed renewable power generation projects that the EITP would be intended to serve would still
proceed. These renewable power projects would need alternate means to connect to electrical transmission systems.
SCE or other electrical transmission companies that currently serve the Ivanpah Valley region would be likely
candidates for providing electrical transmission projects if the EITP was not constructed.

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Therefore, because the proposed project would not result in increases in employment, housing, or the demands for public facilities and services nor result in the removal of existing constraints to growth or the creation of factors that encourage or otherwise facilitate development that would not otherwise have occurred, its implementation would not have any direct or indirect growth inducing effect due to the provision for additional electric power.

19 **6.3.2.1 Alternatives** 20

Potential growth-inducing impacts from implementation of each alternative would be similar to that for the proposed project. The alternatives comprise route variations of the proposed project transmission and telecommunication lines and would not result in differences in the amount of power that would be transmitted or the location of substations where power would be transmitted. Under the No Project Alternative, there would be no growth-inducing impacts on the proposed project area. Therefore, provisions for additional electric power resulting from implementation of the alternatives would not have any direct or indirect growth inducing effect.

6.3.3 Ivanpah Solar Electric Generating System Project 29

The ISEGS project would employ up to 959 construction personnel and 90 operations personnel. Construction workers would commute as much as 2 hours each direction from their communities rather than relocate, and operations workers would commute as much as 1 hour.

33

Socioeconomics data for the 1- and 2-hour commute ranges in counties were reviewed. The counties included San Bernardino and Clark and others that were within the commute range. It was determined that there are approximately 231,000 construction workers within the commute-range study area. The number of workers required for the ISEGS project would be negligible with respect to the total number of workers available. Additionally, all workers would reside within the study area, and no impacts on existing population levels would occur.

39

The primary need for the ISEGS project relates to federal and state requirements for the generation of renewable energy. According to the California Energy Commission (CEC), peak electricity demand within California is projected to increase at a rate of 1.35 percent per year (CPUC, CEC, and CPA 2008), and therefore, additional generating capacity from new sources will be required. The ISEGS project is not intended to supply power related to growth for any particular development and would not result in direct growth-inducing impacts. However, the ISEGS project could facilitate growth indirectly through the additional increased capacity of electric power that it would make available (CEC and BLM 2009). This finding differs from the discussion of the EITP above, which concludes that there would

47 no direct or indirect growth inducing impact from the implementation of the EITP.

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