G. REQUIRED CEQA/NEPA TOPICS

Section G includes discussions of topics required by the California Environmental Quality Act (CEQA) and/or National Environmental Policy Act (NEPA), including growth-inducing effects (Section G.1), irreversible and irretrievable commitment of resources and environmental changes (Section G.2), a discussion of adverse unavoidable impacts (Class I) identified in Sections D.2 through D.18 (Section G.3), a discussion of the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity (Section G.4), and compliance with applicable federal environmental regulations and policies (Section G.5). Section G.6 lists the references cited in this section.

G.1 Growth-Inducing Effects

CEQA and NEPA require a discussion of the ways in which a proposed project could be an inducement to growth. The CEQA Guidelines (Section 15126.2(d)) identify a project to be growth-inducing if it fosters economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. The Council on Environmental Quality NEPA Regulations also require that an EIS discuss the growth-inducing impacts of a project (40 CFR 1508.8(b)): "Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems."

The discussion must additionally address how a proposed project may remove obstacles to growth, or encourage and facilitate other activities that could adversely affect the environment, either individually or cumulatively. New employees hired for proposed commercial and industrial development projects and population growth resulting from residential development projects represent direct forms of growth. Other examples of projects that induce growth are the expansion of urban services into a previously unserved or underserved area, the creation or extension of transportation links, or the removal of major obstacles to growth. It is important to note that these direct forms of growth have secondary effects of expanding the size of local markets and attracting additional economic activity to the area.

The discussion must additionally address how a proposed project may remove obstacles to growth, or encourage and facilitate other activities that could adversely affect the environment, either individually or cumulatively. Typically, the growth-inducing potential of a project would be considered adverse if it fosters growth or a concentration of population above what is assumed in local and regional land use plans, or in projections made by regional planning authorities. Adverse growth impacts could also occur if a project provides infrastructure or

December 2010 G-1 Draft EIR/EIS

service capacity to accommodate growth levels beyond those permitted by local or regional plans and policies.

G.1.1 Growth Caused by Direct and Indirect Employment

The ECO Substation Project would take approximately 2 years to construct and employ up to approximately 89 workers per day. The Tule Wind Project would also take approximately 2 years to construct and employ up to approximately 325 workers per day. The ESJ Gen-Tie Project would take approximately 6 months to construct and employ up to approximately 25 workers per day. During construction, these projects combined would employ a maximum of 439 personnel working at any one time. During operations, up to 12 permanent new workers would be required to staff the Tule Wind Project. Similar to the Tule Wind Project, the proposed Campo, Manzanita, and Jordan wind energy projects would result in new workers to staff these projects. As described in Sections D.14, Public Services and Utilities, and D.16, Social and Economic Conditions, neither construction nor operation of the Proposed PROJECT, including the proposed Campo, Manzanita, and Jordan wind energy projects, is anticipated to result in a substantial permanent increase to the local population. During construction, few (if any) workers are anticipated to temporarily relocate to the project area.

Local highways provide good access to the Proposed PROJECT, as the longest commute for construction workers is approximately 80 miles (less than a 2-hour drive) between downtown San Diego and Jacumba. Therefore, few (if any) workers are expected to relocate to the area permanently for construction, as their commute would be no more than 2 hours and construction would be temporary.

Additionally, following construction, 12 full-time personnel are required for operation and maintenance activities of the Tule Wind Project. Similar to the Tule Wind Project, the proposed Campo, Manzanita, and Jordan wind energy projects would require new staff for operation and maintenance activities. Both the ECO Substation and ESJ Gen-Tie projects would be operated and maintained by the existing employment base within San Diego Gas and Electric (SDG&E) and Sempra Utilities, respectively. Because the number of workers required for the operation and maintenance of the project would be significantly less than 1% of the employed population of San Diego County, it would not contribute to an increase in the population of the area, and the project would not adversely impact the local labor force. No growth-inducing impacts would result.

G.1.2 Growth Related to Provision of Additional Electric Power

As discussed in Section A.3, Project Objectives, the Proposed PROJECT is an important element in developing additional renewable energy resources required to meet the current and

future California Renewable Portfolio Standard and federal Energy Policy Act goals for developing renewable energy. As such, the Proposed PROJECT would not directly induce growth related to provision of additional electric power in a predictable manner or defined location. The project would merely produce and deliver renewable energy, offsetting the need for conventional energy production.

G.2 Irreversible and Irretrievable Commitment of Resources and Environmental Changes

CEQA Guidelines (Section 15126.2(c)) require that an EIR identify significant irreversible environmental changes that would be caused by a proposed project. Changes may include uses of nonrenewable resources or provision of access to previously inaccessible areas, as well as project accidents that could change the environment in the long term. NEPA regulations also require that an EIS analysis include a discussion of the potential irreversible and irretrievable commitments of environmental resources as a consequence of the approval and implementation of the Proposed PROJECT (40 CFR 1502.16).

Development of the Proposed PROJECT, as well as the proposed Campo, Manzanita, and Jordan wind energy projects, would require a permanent commitment of natural resources resulting from the direct consumption of fossil fuels, construction materials, the manufacture of new equipment that largely cannot be recycled at the end of the project's useful lifetime, and energy required for the production of materials. Furthermore, construction of the transmission lines, wind turbines, and substation improvements would necessitate the permanent loss of 617.2 acres of native vegetation, which would include 1.5 acres of USFWS Quino checkerspot butterfly (*Euphydryas editha quino*) critical habitat, as well as additional suitable habitat for the Quino checkerspot butterfly that is to be determined by USFWS, as evaluated in Section D.2, Biological Resources. The permanent loss of 1.5 acres of USFWS Quino checkerspot butterfly critical habitat would be adverse and unavoidable. With the implementation of the mitigation measures provided in this EIR/EIS, adverse impacts to checkerspot butterfly critical habitat would be mitigated and permanent loss would be reduced to 617.2 acres of native vegetation. However, permanent impacts to habitat would remain adverse.

Cultural and paleontological resources are nonrenewable. Impacts to these resources would constitute an irreversible and irretrievable commitment of resources. With implementation of mitigation measures incorporated into this EIS/EIR, potential impacts to historic, prehistoric, human remains, and paleontological resources would be mitigated. However, in some cases, avoiding direct and indirect impacts to Traditional Cultural Properties (TCPs) such as traditional landscapes, topographic elements including sacred mountains, or use areas may not be

completely feasible given the geographic expanse of some of these resources. Therefore, impacts to TCPs would remain adverse

Once construction is complete, the Proposed PROJECT would permanently change the visual landscape and character of the site and surrounding area. The overall visual impacts resulting from the Proposed PROJECT, including the proposed Campo, Manzanita, and Jordan wind energy projects, would be substantial within this part of eastern San Diego County. The introduction of numerous industrial elements, including three new 500 kV/230/138 kV electrical substations (East County, Boulevard, and Tule collector substation); approximately 25 miles of overhead 138 kV, 230 kV, and/or 500 kV transmission lines, supported on over 400 structures; and hundreds of wind turbines (including the ESJ Phase 1 Wind Project) would transform the landscape settings in eastern San Diego County. Affected viewers would include motorists and travelers along I-8 and Old-Highway 80; residents in the communities of Boulevard and Jacumba, and dispersed rural residential areas along local roads; and recreationists visiting public lands. Changes to visual settings would vary, depending on the quality and character of existing views, viewing conditions, and distances to the Proposed PROJECT facilities. Overall, many views would be transformed from predominantly natural or mixed natural and community settings to landscapes with strong industrial characters. Decommissioning and deconstructing project components would restore the visual character of the area to a degree, but would not restore the visual landscape to existing conditions prior to project construction.

Once the project is built public lands that are currently isolated due to inaccessible or difficult terrain would include new access roads to the turbines. This increase in access to these lands would be irreversible. However, on the Tule Wind Project site gates would be installed on all new permanent spur access roads and instances of unauthorized access would be minimized through project design.

During the project's operational phase, the transmission lines and substation improvements would allow for the efficient transport of additional electrical power generated from renewable resources (e.g., wind energy). As a renewable energy source, the project would reduce emissions attributable to electrical generation in California, including greenhouse gas emissions. This reduction in greenhouse gas emissions over the useful operating life of the turbines would contribute to a cumulative reduction in greenhouse gas emissions and result in a net beneficial permanent impact.

G.3 Adverse Environmental Effects That Cannot be Avoided

Table G-1, Summary of Proposed Project Adverse and Unavoidable Impacts, lists the adverse environmental effects (Class I Impacts) of the Proposed PROJECT that cannot be avoided or reduced with mitigation by project component.

December 2010 G-4 Draft EIR/EIS

For purposes of this EIR/EIS, the proposed Campo, Manzanita, and Jordan wind energy projects are assumed to have similar adverse impacts as described for the Tule Wind Project. The impacts of these three wind energy projects have been qualitatively evaluated at a programmatic level as sufficient project-level information has yet to be developed. These three projects will require project-specific environmental review and evaluation under all applicable environmental regulations once sufficient project-level information is developed.

Table G-1 Summary of Proposed Project Adverse and Unavoidable Impacts

Impact No.	General Impact Description	Project Specific Impact Description
	SDG&E ECO Substation – Class I Impacts	
ECO-BIO-7	Construction activities would result in direct or indirect loss of listed or sensitive wildlife or a direct loss of habitat for listed or sensitive wildlife.	With mitigation impacts, would remain adverse and under CEQA would be significant and unavoidable (Class I)on 1.5 acres of USFWS designated critical habitat for the Quino checkerspot butterfly (Euphydryas editha quino), as well as on potentially additional suitable habitat for the Quino checkerspot butterfly that is to be determined by USFWS.
ECO-VIS-1	The project would have a substantial adverse effect on a scenic vista.	With mitigation impacts would remain adverse and under CEQA significant and unavoidable (Class I) to scenic vistas along trails and pathways included in the Boulevard Community Trails and Pathways Plan (Jewel Valley Trail and the Jewel Valley Road Pathway).would result due to a new utility corridor established for the 138 kV transmission line between MP 9 and the rebuilt Boulevard Substation.
ECO-CUL-3	Construction of the project would cause an adverse change to Traditional Cultural Properties.	With mitigation impacts would remain adverse and under CEQA significant and unavoidable (Class I) to Traditional Cultural Properties as avoiding direct and indirect impacts to TCPs such as traditional landscapes, topographic elements including sacred mountains, or use areas may not be completely feasible given the geographic expanse of some of these resources.
ECO-VIS-3	The project would substantially degrade the existing visual character or quality of the site and its surroundings.	With mitigation impacts to visual resources would remain adverse and under CEQA significant and unavoidable (Class I) where the ECO Substation and SWPL Loop-in were visible from sensitive viewing locations,

Table G-1 (Continued)

Impact No.	General Impact Description	Project Specific Impact Description
		where the 138 kV transmission line would not parallel the existing SWPL and would be visible from sensitive viewing locations within a foreground viewing distance, and where the rebuilt Boulevard Substation would be visible from sensitive viewing locations.
ECO-NOI-1	Construction noise would substantially disturb sensitive receptors and violate local rules, standards, and/or ordinances.	With mitigation incorporated construction noise would create adverse and under CEQA significant and unavoidable (Class I) temporary noise impacts associated with nighttime noise, and, use of helicopters and blasting.
ECO-AIR-1	Construction would generate dust and exhaust emissions of criteria pollutants and toxic air contaminants.	Short-term, construction–related NO _x and PM ₁₀ air emissions will remain adverse with mitigation.
ECO-FF-2	Presence of project facilities including overhead transmission line would increase the probability of a wildfire.	With partial mitigation, the possibility that a transmission line fault will occur and start a fire remains an adverse and under CEQA significant and unavoidable (Class I) impact.
ECO-FF-3	Presence of the overhead transmission line/facilities would reduce the effectiveness of firefighting.	With mitigation, the presence of the overhead transmission line will reduce aerial and ground firefighter effectiveness, and the impact would remain adverse and under CEQA significant and unavoidable (Class I).
	Pacific Wind Development Tule Wind – Class I Im	pacts
Tule-BIO-10	Presence of transmission lines and wind turbines may result in electrocution of, and/or collisions by, listed or sensitive bird or bat species.	With mitigation, turbines would cause adverse and under CEQA significant and unavoidable (Class I) impacts to sensitive bird species, such as golden eagles (Aquila chrysaetos).
Tule-VIS-1	The project would have a substantial adverse effect on a scenic vista.	Adverse and under CEQA significant and unavoidable (Class I) Impacts to scenic views resulting from the project would occur where portions of the wind turbine development would be visible from the Carrizo Overlook, Ribbonwood Trail, and the Ribbonwood Road Pathway.
Tule-VIS-3	The project would substantially degrade the existing visual character or quality of the site and its surroundings.	With mitigation the wind turbines and associated energy transmission lines would substantially degrade the visual character of the project site and surrounding area and would be adverse and under CEQA significant and unavoidable (Class I).

Table G-1 (Continued)

Impact No.	General Impact Description	Project Specific Impact Description
Tule-VIS-4	The project would create a substantial new source of light or glare that would adversely affect day or nighttime views in the area.	Nighttime lighting of the project would be visible in the area and would adversely impact the nighttime views of the site. No mitigation is available to reduce this impact and under CEQA would be significant and unavoidable (Class I).
Tule-VIS-5	Construction of the project or the presence of project components would result in an inconsistency with federal, state, or local regulations, plans, and standards applicable to the protection of visual resources.	The project would not be consistent with all applicable plans, policies, and regulations relevant to the project area, including the County of San Diego Draft General Plan Conservation and Open Space Element, and the Mountain Empire Subregional Plan. Since the project would conflict with identified policies, the resulting impact would be adverse and cannot be mitigated.
Tule-CUL-3	Construction of the project would cause an adverse change to Traditional Cultural Properties.	With mitigation impacts would remain adverse and under CEQA significant and unavoidable (Class I) to Traditional Cultural Properties as avoiding direct and indirect impacts to TCPs such as traditional landscapes, topographic elements including sacred mountains, or use areas may not be completely feasible given the geographic expanse of some of these resources.
Tule-NOI-1	Construction noise would substantially disturb sensitive receptors and violate local rules, standards, and/or ordinances.	With mitigation incorporated construction noise would create adverse and under CEQA significant and unavoidable (Class I) temporary noise impacts.
Tule-NOI-2	Construction activity would temporarily cause groundborne vibration	Construction noise would create adverse and under CEQA significant and unavoidable (Class I) temporary groundborne vibration impact.
Tule-AIR-1	Construction would generate dust and exhaust emissions of criteria pollutants and toxic air contaminants.	Short-term, construction-related VOC, NO _x , PM ₁₀ , and PM _{2.5} air emissions will remain adverse with mitigation and under CEQA significant and unavoidable (Class I).
Tule-FF-2	Presence of project facilities including overhead transmission line would increase the probability of a wildfire.	With partial mitigation, the possibility that a transmission line fault will occur and start a fire remains an adverse impact and under CEQA significant and unavoidable (Class I)

Table G-1 (Continued)

Impact No.	General Impact Description	Project Specific Impact Description
Tule-FF-3	Presence of the overhead transmission line/facilities would reduce the effectiveness of firefighting.	With mitigation, the presence of the overhead transmission line will reduce aerial and ground firefighter effectiveness, and the impact would remain adverse and under CEQA significant and unavoidable (Class I)
	Energia Sierra Juarez U.S. Transmission, LLC ESJ Gen-Tie	Class I Impacts
ESJ-VIS-1	The project would have a substantial adverse effect on a scenic vista.	Impacts would be adverse and unmitigable and under CEQA significant and unavoidable (Class I) where the ESJ Wind Project Phase 1¹ turbines would be visible from the hiking trails or viewpoints within the Table Mountain Area of Critical Environmental Concern and other public land.
ESJ-VIS-3	The project would substantially degrade the existing visual character or quality of the site and its surroundings.	Impacts would be adverse and unmitigable and under CEQA significant and unavoidable (Class I) where the ESJ Wind Project Phase 12 turbines would be visible
ESJ-VIS-4	The project would create a substantial new source of light or glare that would adversely affect day or nighttime views in the area.	Nighttime lighting would adversely alter the views where the ESJ Wind Project Phase I turbine lights would be visible. No mitigation is available to reduce this impact and under CEQA would be significant and unavoidable (Class I).
ESJ-CUL-3	Construction of the project would cause an adverse change to Traditional Cultural Properties.	With mitigation impacts would remain adverse and under CEQA significant and unavoidable (Class I) to Traditional Cultural Properties as avoiding direct and indirect impacts to TCPs such as traditional landscapes, topographic elements including sacred mountains, or use areas may not be completely feasible given the geographic expanse of some of these resources.
ESJ-AIR-1	Construction would generate dust and exhaust emissions of criteria pollutants and toxic air contaminants.	Short-term, construction-related PM ₁₀ air emissions will remain adverse and

¹ As stated in Section A.2, this EIR/EIS also addresses potential biological and visual resource impacts to the United States associated with construction of the ESJ Project Phase I wind turbines in Mexico.

_

² As stated in Section A.2, this EIR/EIS also addresses potential biological and visual resource impacts to the United States associated with construction of the ESJ Project Phase I wind turbines in Mexico.

Table G-1 (Continued)

Impact No.	General Impact Description	Project Specific Impact Description
		unmitigable and under CEQA significant and unavoidable (Class I).
ESJ-FF-2	Presence of project facilities including overhead transmission line would increase the probability of a wildfire.	With partial mitigation, the possibility that a transmission line fault will occur and start a fire remains an adverse impact and under CEQA significant and unavoidable (Class I).
ESJ-FF-3	Presence of the overhead transmission line/facilities would reduce the effectiveness of firefighting.	With mitigation, the presence of the overhead transmission line will reduce aerial and ground firefighter effectiveness, and the impact would remain adverse and under CEQA significant and unavoidable (Class I).

G.4 Short-Term Use Versus Long-Term Productivity of the Environment

NEPA requires consideration of the relationship between short-term uses of the environment and long-term productivity associated with the Proposed Action (42 U.S.C. § 4332(C)(iv)). This involves the consideration of whether the Proposed Action would sacrifice a resource value that might benefit the environment in the long-term for some short-term value to the Applicant or the public. The Proposed PROJECT does not propose short-term uses, outside of necessary temporary impacts that would occur within the 2 year construction period. Once built the Proposed PROJECT would alter the use and the productivity of the 832 acre PROJECT site over the length of the Proposed PROJECT, which is currently projected to be a minimum of 30 years. Some flora and fauna specimens in the area would be lost along with some visual quality from the introduction of wind turbines and associated transmission and distribution infrastructure. However this loss would be offset by the delivery of renewable energy to the energy grid, thereby assisting the State and Federal government in achieving their renewable energy goals. Therefore, there would be no permanent loss of the overall productivity of the environmental from the proposed action.

G.5 Compliance with Applicable Federal Environmental Regulations and Policies

Table G-2 lists applicable Federal Environmental Regulations and Policies, and brief description of how these are addressed, and where in the document a full discussion can be found.

Table G-2 Compliance with Applicable Federal Environmental Regulation and Policies

Federal Environmental Regulatiohn or Policy	Brief Discussion	EIR/EIS Section of Detailed Discussion
Endangered Species Act (16 U.S.C. §§ 1531 to 1534)	The Proposed Tule Wind Project will be required to obtain a Section 404 permit from the ACOE due to proposed permanent impacts to 2.85 acres of Quino checkerspot butterfly critical habitat as designated by the USFWS.	D.2 Biological Resources
Migratory Bird Treaty Act and Executive Order 13186	Construction of the Proposed PROJECT would result in the removal of vegetation potentially supporting nesting birds protected by the Migratory Bird Treaty Act. Direct and indirect impacts to nesting birds resulting from the Proposed PROJECT would be adverse, but mitigated.	D.2 Biological Resources
Clean Air Act	The Project components would be in general conformity with de minimis thresholds for VOC and NO _x .	D.11 Air Quality
Clean Water Act	The Project would be in compliance with the Clean Water Act. The Project will obtain all applicable Clean Water Act permits and/or certifications prior to construction.	D.2 Biological Resources, and D. 12 Water Resources
Executive Order 11990 – Protection of Wetlands	Impacts to wetlands are avoided to the greatest extent possible. Unavoidable impacts would be mitigated.	D.2 Biological Resources
National Historic Preservation Act	The project will avoid to the extent possible and mitigate any unavoidable impacts to cultural resources.	D.7 Cultural and Paleontological Resources
Farmland Protection Policy Act	The Proposed PROJECT would impact less than 10 acres of active farmland, and would be in compliance with the Farmland Protection Policy Act.	D.6 Agriculture
Executive Order 13045 – Protection of Children from Environmental Risks	Environmental safety and health risks to the general public (including children) associated with the Proposed PROJECT would not be adverse with mitigation.	D. 10 Public Health and Safety
Executive Order 12898 – Environmental Justice	Disproportionately high or adverse effects on minority or low-income populations are not expected to occur as a result of construction and operation of the Proposed PROJECT.	D.17 Environmental Justice
Environmental Consequences of a Terrorist Attack (San Luis Obispo Mothers for Peace, et. al v. Nuclear Regulatory Commission, 2006)	The risk of impacts as a result of a terrorist attack on Project facilities is considered less than significant.	D.10 Public Health and Safety

G.6 References

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

40 CFR 1500-1518. Protection of Environment. Chapter V: Council on Environmental Quality.