ENERGIA SIERRA JUAREZ (ESJ) U.S. TRANSMISSION GEN-TIE PROJECT LAND USE/COMMUNITY CHARACTER ANALYSIS PROJECT NUMBER: MUP 09-008 / ENV LOG NUMBER: 09-22-001

BACKGROUND

County Land Use Designations

The Energia Sierra Juarez U.S. Gen-Tie (proposed project) site is located in an unincorporated area in Eastern San Diego County approximately 3.75 miles (6.04 km) east of the community of Jacumba In August of 2009, SDG&E submitted a Proponents Environmental Assessment (PEA) with the proposed "ECO Substation" location. Subsequently, SDG&E proposed an "ECO Substation Alternative" that was located approximately 100 meters to the northeast. The proposed ESJ Gen-Tie Project proposes two sets of gen-tie routes based upon the East County Substation (ECO Substation) location and the ECO Substation Alternative location. The "ESJ Gen-Tie" route consists of Routes A1 and A2. The "ESJ Gen-Tie Alternative" route consists of Routes D1 and D2. Each set consists of a single circuit 500 kV line (Route A1 or Route D1) or double-circuit 230 kV line (Route A2 or Route D2).. Figures 1a and 1b show both sets of gen-tie routes and the surrounding land uses that exist in the area. Access to the project site is provided by Old Highway 80.

The project site is used extensively by the U.S. Border Patrol officers, who have created roads to monitor activity near the border fence. The project site and surrounding land is located in a desert setting that is currently undeveloped, except for Old Highway 80, access roads, the border fence, and existing power lines and other electric utility infrastructure. The project site is subject to General Plan Regional Category 1.4 Rural Development Area (RDA) and the Non-Urban Residential Land Use Designation of Multiple Rural Use (18). Zoning for the proposed project site is General Rural (S-92). The project site is located in the County of San Diego's Mountain Empire Community Planning Area.

Uses currently allowed in General Plan Regional Category 1.4 RDA and the Non-Urban Residential Land Use Designation of Multiple Rural Use (18) include single-family homes on existing lots, and other proposed developments that have been "carefully examined to assure that there will be no significant adverse environmental impacts, erosion and fire problems will be minimal, and no urban levels of service will be required (County of San Diego 2003)." County of San Diego zoning classifications that are consistent with the Multiple Rural Use (18) Land Use

Designation include Transportation and Utility Corridor (S94), Rural Residential (RR), Limited Agriculture (A70), General Agriculture (A72), Open Space (S80), Specific Plan (S88), Holding Area (S90), and General Rural Use (S92). The proposed project site is currently zoned for General Rural (S92). Uses currently allowed within the General Rural Zone include family residential, fire protection services, law enforcement services, horticulture, tree crops, row and field crops, and packing and processing. Utility uses are allowed within the General Rural Zone subject to a minor or major use permit, such as the Major Use Permit for Major Impact Services and Utilities that is being requested by Energia Sierra Juarez. The project site is within the Study Area boundaries of the County's draft ECMSCP, a Natural Community Conservation Planning (NCCP) area for which a subarea plan has not yet been approved. However, based on a December 10, 2008 map of the Working Draft Focused Conservation Areas (FCAs) for the ECMSCP, the project site appears to be outside of the ECMSCP Plan Area. Until the ECMSCP and associated Biological Mitigation Ordinance (BMO) are approved, and an Implementation Agreement between the County and Wildlife Agencies specific to this area is signed, projects continue to be subject to the conditions of the County's Resource Protection Ordinance (RPO).

Federal Land Use Designations

The Project is located within a federally designated National Interest Electric Transmission Corridor. San Diego County, along with six other counties in California and three counties in Arizona were designated as part of the Southwest Area National Corridor by the U.S. Department of Energy (DOE) on October 2, 2007. National Interest Electric Transmission Corridors identify areas where congestion or constraint problems are adversely affecting energy consumers, and under certain circumstances, could provide the Federal Energy Regulatory Commission (FERC) with limited siting authority (DOE 2009a). The National Interest Electric Transmission corridors do not allow the federal government to dictate how states, regions, transmission providers, or electric utilities should meet their energy challenges, but rather focus attention on the areas of the country that are most congested and where consumers stand to benefit most from alleviation of this energy congestion (DOE 2009b).

Although the Project is not located within federal lands, the private lands in the Project vicinity are surrounded on the east and west by lands administered by the Bureau of Land Management (BLM). BLM-administered lands are also north of the project site and north of the Interstate 8 corridor. These lands are under the jurisdiction of the BLM's El Centro Field Office (ECFO). The lands west and north of the project site are within San Diego County and managed under the guidelines of the Eastern San Diego County Resource Management Plan (ESDC RMP).



ESJ Gen-Tie Project Land Use/ Community Character Analysis Path: P:\2009\09080001 ESJ Gen-Tie\6.0 GIS\6.3 Layout\LUCCA\Figure1_Land_Use0515.mxd, 03/15/10, SorensenJ

ESJ Gen-Tie Route A1 and A2

This page intentionally left blank.



ESJ Gen-Tie Project Land Use/ Community Character Analysis Path: P:\2009\09080001 ESJ Gen-Tie\6.0 GIS\6.3 Layout\LUCCA\Figure1_Land_Use0515.mxd, 03/15/10, SorensenJ

ESJ Gen-Tie alternative Route D1 and D2

This page intentionally left blank.

West of the project site is the Airport Mesa Resource Management Area, which is part of the Descanso/Jacumba Special Recreation Management Area. The ESDC RMP identifies the area north of the international border as Utility Corridor. The Visual Resource Management (VRM) Classification for these federal lands is Class III. The objectives for VRM Class III are to "…partially retain the existing character of the landscape." A moderate change in the landscape character is allowed but should not dominate the view.

Physical Landscape Character

The Project is located in the eastern portion of the California Peninsular Ranges. The Project would be sited on a southwestward sloping pediment west of the Jacumba Mountains. North of the project site, the In-Ko-Pah Mountains rise above the surrounding landscape. Grey and Table Mountains are two promontories in the northern viewshed. The area west of the project site is Jacumba Valley, which contains several large isolated conical landforms.

The project site is located in the Jacumba Valley physiographic unit and is bordered by the rugged topography of the Peninsular Mountain Range in the high Colorado Desert environment. The Jacumba Valley is surrounded on the west, north, and east by mountainous topography rising up to 1,000 feet above the valley floor. The Jacumba and In-Ko-Pah Mountains enclose the landscape and define the limits of the viewshed from the valley. The Jacumba Valley viewshed encompasses approximately 7.75 square miles or 5,000 acres on the U.S. side of the international border with Mexico. The viewshed is linearly interrupted by the recently constructed border fence, but the valley and its viewshed extends for miles into the La Rumorosa area of Mexico. The unincorporated community of Jacumba occupies the southwest corner of the viewshed and is adjacent to the international border. The project is proposed to be located in the southeast quadrant of the viewshed.

Disturbed areas or cultural modifications within the LCU are more pronounced in the western portion of the LCU and include the community of Jacumba, the Jacumba Airfield, agricultural land, and rural residential uses. In the eastern portion are Old Highway 80 and Interstate 8, the 500 kV EHV Southwest Powerlink Transmission Line, and many dirt roads. The Southwest Powerlink Transmission Line and south of Interstate 8 in this area.

Interstate 8, Southwest Powerlink, and the border fence are the most dominant cultural modifications in the LCU. The 16 existing steel lattice towers associated with Southwest Powerlink located within the LCU vary in height from 40 feet to 160 feet due to topography and engineering design. The towers support a double-circuited electrical transmission configuration

with six conduits. In the southern portion of the LCU, the border fence runs discontinuously parallel to the international border. The border fence is a prominent dark-brown horizontal line that contrasts strongly with the native vegetation. The native vegetation patterns are broken by numerous dirt roads that intersect with, and are north and south of, Old Highway 80; some of these roads are heavily used by the Border Patrol. A residential land use exists west of the project site. The property is located approximately 0.25 mile north of the international border and the structures on site appear to be recreational vehicles or trailers.

Principal Viewpoints

The segment of Interstate 8 from State Route 79 east to the Imperial County Line is identified as a Third Priority Scenic Route in the adopted Scenic Highway Element of the adopted San Diego County General Plan. Unobstructed views of the project site are available intermittently from Interstate 8 for approximately 0.6 mile in the vicinity of the Mica Gem Mine Undercrossing.

Views of the project site are also available from several viewpoints along approximately 1 mile of Old Highway 80 as it meanders through the Jacumba Valley. The unadopted Conservation and Open Space Element in the County's General Plan update identifies the segment of Old Highway 80 from State Route 79 (Pine Valley) to Interstate 8 (Jacumba) as a County Designated Scenic Highway.

Finally, the Table Mountain ACEC, Jacumba Mountains, and Airport Mesa located northwest and east, and west of the project site, respectively, provide recreationists (hikers, sightseers, recreational shooters, ATV users, etc.) with unobstructed views of the site.

Viewer Groups

Land uses surrounding the proposed project site consist of national forests and state parks, public and semi-public lands, agricultural uses, rural uses, and streets and roadways. These land uses support viewer groups such as motorists, recreationists, and residents. More specifically, Old Highway 80 and Interstate 8 run perpendicular to the site and provide motorists with intermittent views of the site. BLM-managed lands, including Table Mountain, Airport Mesa, and the Jacumba Mountains, offer viewing opportunities for hikers, sightseers, recreational shooters, ATV users, etc. Finally, residential receptors scattered throughout the project vicinity have views of the site.

COMMUNITY CHARACTER ANALYSIS

1. <u>Visual Impact Evaluating Compatibility of Proposed Project with the Surrounding</u> <u>Area</u>

The proposed project consists of the construction, operation and maintenance of a less than onemile electric generator-tie line from the Mexico border to a substation adjacent to the Southwest Powerlink (SWPL) 500 kV transmission line in Eastern San Diego County. The route that is ultimately selected would be supported on three to five 150-foot steel lattice towers or 150- to 170-foot steel monopoles. Currently, Routes A1 and A2 are proposed to be supported by five steel lattice towers or steel monopoles and Routes D1 and D2 are proposed to be supported by three steel lattice towers or steel monopoles. Figure 3a shows the alignments and project features for Routes A1 and A2 and Figure 3b shows the alignments and project features for Routes D1 and D2. The proposed Gen-Tie would have the capacity to interconnect up to 1250 MW of future renewable energy produced by generators located in Northern Baja California Mexico.

The following impact discussion applies to all four route alternatives. However, it should be noted that Routes D1 and D2 would be less impactful than Routes A1 and A2 due to their smaller project footprint. As discussed above, the project site is located in an area that is largely undeveloped, except for existing infrastructure uses, including the Southwest Powerlink Transmission Line, Old Highway 80, Highway 8, the border fence and border patrol roads (see Figure 1). The existing Southwest Power Link Transmission line is located at the north end of the project site. The Southwest Powerlink Transmission line is supported by steel lattice towers that are roughly similar in terms of scale, mass and earthwork to the proposed support structures. In addition, the SDG&E East County substation and associated additional power lines are proposed to be constructed adjacent to the ESJ Gen-Tie project area and the Wind Energy Facility located in Northern Baja will be located south of the ESJ Gen-Tie Project, in Mexico.

As discussed above, the project site is within a less-than-pristine desert landscape with several similar cultural modifications already present or proposed in the vicinity. The visual impacts associated with the proposed Gen-Tie and support structures are not expected to alter the community character of this designated utility corridor. The visual analysis for the proposed project simulated views for motorists from I-8 and for recreationists from the foothills of the Jacumba Mountains and Airport Mesa. The visual analysis concluded that the proposed project would not result in significant visual impacts because existing cultural modifications in the project viewshed detract from the project site's scenic quality. Additionally, the visual analysis

conducted for the proposed project concluded that the project components tend to recede into the surrounding landscape.

Any new access roads required for the Project will also be similar in terms of scale, mass and required earthwork to existing access roads in the vicinity. The Project does not include any buildings or structures other than the proposed Gen-Tie and support structures. Thus, in terms of square footage, heights, lot sizes, required earthwork and occupancy rates, the Project is compatible with surrounding land uses. Similarly, the architectural style of the proposed support structures and their site utilization is consistent with those of the Southwest Powerlink Transmission Line. Landscaping to soften the exterior appearance and relative massiveness of the proposed structures is not required, due to the relative lack of visual receptors, distance between the project site and public viewpoints, and intermittent nature of views of the project site. Moreover, the project will restore the existing landscape within disturbed areas as required.

Construction of the proposed project would not adversely affect any existing land uses surrounding the proposed Project. Other land uses near the proposed project site, including the border fence between the U.S. Mexico Border, Interstate 8, and Old Highway 80, would not be adversely affected by construction of the proposed project. The remaining land surrounding the project site is currently and will remain undeveloped.

Once constructed, the proposed project would not require any continual operational service and would require only minimal maintenance activities. Operation of the facility would require one or two people to patrol and visually inspect the Gen-Tie on a periodic basis. Vehicle traffic would consist of approximately two vehicles entering and leaving the site weekly. Additionally, road maintenance would be performed on an as-needed basis, but is anticipated to be needed only twice per year on average. Given the minimal amount of maintenance required and the undeveloped existing character of the surrounding area, operation of the proposed project would not adversely affect surrounding land uses.

Overall, the scale and mass of the Project is compatible with surrounding land uses and will not result in impacts to the community character.

2. <u>Other Physical Impacts Resulting from the Nature of the Operations</u>

The purpose of the proposed project is to enable the importation of renewable energy to California from Mexico, where the wind resource is located. The proposed Gen-Tie will be located in a remote area of Eastern San Diego County that features no residences, businesses,

schools, or other public facilities. The project is located in the vicinity of the U.S.-Mexico Border Fence to the south, and Old Highway 80 and I-8 to the North and West. The project includes installation of up to 5 lattice towers or monopoles and conductor along an approximately 0.63 mile length north of the U.S.-Mexico Border. The proposed uses are not out of scale with infrastructure facilities currently found in the surrounding area.

The proposed Gen-Tie will transmit electricity whenever wind power has been generated. These activities could occur at any time of day, any day of the week. Other than the potential for operational noise in the immediate vicinity of the Gen-Tie, operations will be imperceptible to observers. With respect to operational noise, an Audible Noise Performance analysis was prepared by Burns and McDonnell (Exhibit 15 of the major use permit application) that analyzed potential noise impacts related to the proposed project. The analysis compared the proposed project to the applicable audible noise limit in the San Diego County Noise Ordinance of a onehour average daytime sound level limit of 50 dBA in daytime and 45 dBA in nighttime at the property line. Additionally, the analysis used the edge of right-of-way in lieu of the property line as the limit for potential impacts. The analysis indicated that most of the year, in fair weather conditions, audible noise at the edge of the right-of-way will not exceed 28 dBA. During occasional foul weather conditions audible noise at the right-of-way could reach 50 dBA, but such readings would only be in the immediate vicinity of the Gen-Tie. Both 230 kV configurations are within the nighttime 45 dBA noise limit of the San Diego County Noise Ordinance, while two of the 500kV configurations being analyzed do not meet the nighttime 45 dBA noise limit at the edge of right-of-way. However, due to the distance from the edge of rightof-way to the property line, noise from the proposed project would attenuate to well less than 50dBA by the time it reached the property line, therefore, the proposed project would not exceed the nighttime 45 dBA noise limit of the San Diego County Noise Ordinance. Furthermore, the Project is located in an isolated, undeveloped area that already experiences similar noise emitted by other transmission lines in the area. Therefore any noise generated by the operations of the proposed project will not create significant impacts. With respect to air quality, the proposed project will not generate smoke, fumes, or odors during operation or emit harmful pollutants that could reduce air quality.

Due to the undeveloped nature of the project site and surrounding area, there is limited population and traffic in the project vicinity. During construction there will be 20 to 25 workers accessing the site for an approximately up to 6 month period. During operation 2 to 3 workers will access the site on a periodic basis. Thus, the traffic trips resulting from the operations of the Project are not significant.

With respect to glare and lighting, the Gen-Tie Project would not include materials that could create glare or reflect light. The lattice towers or monopoles would be neutral shades. Based on a determination by the FAA, no hazard tower lighting is required. Even if it were required, there are no sensitive receptors within the area to be affected by lighting due to the undeveloped nature of the project site and surrounding area.

For these reasons, none of the physical changes resulting from the nature of the operations are significant.

3. <u>Potential for Subsequent Changes to the Regional Environmental Setting</u>

The proposed project is not expected to alter the regional environmental setting or community character of the area surrounding the project. The Project is located within a Federally designated transmission corridor that currently features transmission line facilities and other infrastructure facilities, such as Old Highway 80, Interstate 8, and the border fence. The proposed Gen-Tie – which is less than one mile in length and includes five or fewer support structures – does not significantly alter the community character or landscape.

Nonetheless, the Project will not encourage similar requests by other property owners. The applicant does not request a Plan Amendment, Zone Change, or any other approval that would facilitate future similar requests. The Project is consistent with the General Plan designations and Zoning for the project site, but requires a Major Use Permit.

4. <u>Major Use Permit Findings</u>

As summarized below, the required findings for a Major Use Permit as set forth in Section 7358-7359 of the Zoning Ordinance can be made for the proposed project.

The location, size, design, and operating characteristics of the proposed use will be compatible with adjacent uses, residents, buildings, or structures with consideration given to:

- 1. Harmony in scale, bulk, coverage and density
- 2. The availability of public facilities, services and utilities
- 3. The harmful effect, if any, upon desirable neighborhood character
- 4. The generation of traffic and the capacity and physical character of surrounding streets

- 5. The suitability of the site for the type and intensity of use or development, which is proposed
- 6. Any other relevant impact of the proposed use.

The proposed use is compatible with adjacent uses. As discussed in this Land Use/Community Character Analysis, the project is located in a remote, relatively undisturbed area in Eastern San Diego County. The existing Southwest Powerlink Transmission Line facilities and other infrastructure uses are the main physical structures within the area. The proposed project would be consistent with the scale, bulk, coverage and density of these facilities. Due to the undeveloped nature of the project site and surrounding area, there is not an existing community with a well defined character to be altered. Overall, the presence of the existing Southwest Powerlink Transmission Line facilities and undeveloped nature of the project site and surrounding area make the project site a suitable location for the proposed project.

Introduction of the three to five lattice towers would not require the extension of sewer, water, electric, or gas lines, or require an increase in the amount of fire and police protection services needed for the area. The proposed project would not create substantial increases in traffic. During construction there will be 20 to 25 workers accessing the site for an approximately up to 6-month period. During operation 2 to 3 workers will access the site on a periodic basis. Based on the limited existing traffic in the area and the vehicles due to the proposed project, the proposed project would not create traffic congestion or adversely affect the capacity and physical character of surrounding streets.

The impacts, as described in Findings (a) above, and the location of the proposed use will be consistent with the San Diego County General Plan.

As stated previously, the proposed project is subject to General Plan Regional Category 1.4 Rural Development Area (RDA) and the Non-Urban Residential Land Use Designation of Multiple Rural Use (18). Zoning for the proposed project site is General Rural (S-92). The County of San Diego General Plan states that development of non-residential projects would be allowed on land designated for Multiple Rural Use if it is determined that the project would not result in significant adverse environmental impacts, if erosion and fire problems would be minimal, and no urban levels of service will be required (County of San Diego 2003). The Multiple Rural Use land use designation identifies General Rural (S-92) as a compatible zoning use. The General Rural Use zone states that Major Impact Services and Utilities, subject to a major use permit, are permissible. The proposed project is consistent with a utility project and is proposed to be processed by the County through a major use permit. A fire protection plan (Exhibit 12 of the major use permit application) has been prepared to minimize impacts related to fire and a Preliminary Grading Plan (Exhibit 3 of the major use permit application) has been prepared to prevent erosion. The environmental process to ensure consistency with CEQA has been started with preparation of an Application For Environmental Initial study (See Exhibit 4 of the major use permit application), Biological Resource Report (See Exhibit 9 of the major use permit application), and the Archeological and Historical Investigations Report (See Exhibit 10 of the major use permit application). None of these documents have identified any significant and unmitigable impacts. Based on the information contained within the major use permit application and findings of the above referenced documents, the proposed project would be consistent with the existing land use designation and zoning for the project site.

The project site is within the Study Area boundaries of the County's draft ECMSCP, a Natural Community Conservation Planning (NCCP) area for which a subarea plan has not yet been approved. However, based on a December 10, 2008 map of the Working Draft Focused Conservation Areas (FCAs) for the ECMSCP, the project site appears to be outside of the ECMSCP Plan Area. Until the ECMSCP and associated BMO are approved, and an Implementation Agreement between the County and Wildlife Agencies specific to this area is signed, projects must continue to meet the conditions of the County's RPO. Project design considerations and mitigation measures will be implemented into the project to avoid, minimize, and mitigate for unavoidable impacts to meet RPO and Draft MSCP/BMO guidelines. These mitigation measures are described in Section 3.4 of the Biological Resource Report (See Exhibit 9 of the major use permit application).

That the requirements of the California Environmental Quality Act have been complied with.

The applicant has prepared and submitted an Application For Environmental Initial Study (See Exhibit 4 of the major use permit application), Biological Resource Report (See Exhibit 9 of the major use permit application), and Archeological and Historical Investigations Report (See Exhibit 10 of the major use permit application). The County will rely on these materials to assess and disclose the potential environmental impacts within the United States associated with the proposed project. Although the project as a whole potentially may result in impacts outside of the United States, the County lacks authority to regulate or impose conditions on those portions of the project located in Mexico and furthermore, those potential impacts are beyond the scope of the County's review.

The materials submitted by the applicant have been prepared pursuant to the County of San Diego CEQA Guidelines (2007) by consultants listed in the County's approved CEQA

consultant list. Consistent with the County's CEQA Guidelines, the applicant attended a preapplication consultation meeting with County staff prior to preparing and submitting these materials to discuss the range of actions, potential alternatives, mitigation measures, and potential significant effects on the environment of the proposed project. The application materials incorporate the County's direction at the pre-application consultation as well as the March 27, 2009 Scoping Letter submitted to the applicant. No significant and unmitigable impacts have been identified to date.

The County will ensure consistency with CEQA by independently reviewing the potential environmental impacts of the proposed project prepared by the applicant and/or other agencies, including the California Public Utilities Commission, and supplementing those analyses as may be required.

REFERENCES

County of San Diego

- 1978 County of San Diego Zoning Ordinance. Adopted October 18, 1978. Effective December 19, 1978.
- 2003 San Diego County General Plan. Part II: Regional Land Use Element. Adopted January 3, 1979; amended December 10, 2003.
- U.S. Department of Energy (DOE)
 - 2009a National Electric Transmission Corridor Report and the Ordered National Corridor Designations. Available at http://nietc.anl.gov/nationalcorridor/ index.cfm. Accessed May.
 - 2009b National Electric Transmission Congestion Report and Final National Corridor Designations Frequently Asked Questions. Available at http://nietc.anl.gov/ documents/docs/FAQs_re_National_Corridors_10_02_07.pdf. Accessed May.