3.15 PUBLIC SERVICES AND UTILITIES

This section addresses the effects on public services and utility systems that could be caused by the proposed Tule Wind Project. The following discussion describes the existing environmental setting in the surrounding area, the applicable service ratios, response times, or other performance objectives for public services and utilities within the area, and an analysis of the potential impacts of the proposed project and alternatives.

3.15.1 Affected Environment/Environmental Setting

The proposed project is served by a variety of regional and local purveyors in the area that provide and maintain public services and utility systems associated with fire and police protection, schools, natural gas, electricity, water, and solid waste collectors and facilities. Regional facilities are identified in **Figure 3.15-1**.

Public Services

Police

The project area is serviced by the County of San Diego Sheriff Department for police protection. The Boulevard/Jacumba Sheriff office is located at 39919 Highway 94, approximately 2 miles west of the project area.

Fire

The San Diego Local Agency Formation Commission (LAFCO) formed a regional protection district for the unincorporated areas of San Diego. The community of Boulevard is located within the County Service Area (CSA) No. 111 (Boulevard). This CSA provides fire service from the California Department of Forestry and Fire Protection (CAL FIRE), volunteer fire stations, and mutual aid agreements with area Indian Tribes. The Boulevard area is serviced by a volunteer fire station, located on SR-94 and Old Highway 80 approximately 2.5 miles south of the project area.

The unincorporated area of the County of San Diego has a Cooperative Fire Protection Agreement with CAL FIRE for the provision of fire and emergency services in the San Diego Fire Protection District. CAL FIRE responds to wildland fires, structure fires, floods, hazardous material spills, swift water rescues, civil disturbances, earthquakes, and medical emergencies. The CAL FIRE McCain Valley Camp Station is located at 2550 McCain Valley Road, and is located within the project area. The CAL FIRE White Star station is located 3.5 miles west of the project area at 1684 Tierra Del Sol Road.

The San Diego Rural Fire Protection District has jurisdiction over the project area. Additionally, the area has a mutual aid agreement with the Campo and Manzanita Indian Tribes for additional fire resources. The Campo Reservation Fire station is located at 36190 Highway 94 and the Manzanita Indian Tribe is located adjacent to the project area.

Schools

The project area is located within the Mountain Empire Unified School District. The Clover Flat Elementary school is located approximately 1.5 miles south of the project entrance area at Ribbonwood Road, or 3,500 feet from the Ribbonwood/I-8 intersection at 39639 Old Highway 80.

Libraries

Libraries in the project area are administered by the County of San Diego. There are two libraries that service the project area: the Jacumba Branch located at 44605 Old Highway 80 in Jacumba, and the Campo-Morena Village Branch located at 31466 Highway 94 in Campo.

Medical Facilities

There are no San Diego County Health and Human Service Agency facilities within the project area or region.

Utilities

Water

The San Diego County Water Authority (SDCWA) delivers imported water from the Metropolitan Water District of Southern California. All SDCWA facilities are located west of the project site. The community of Boulevard is completely dependent on groundwater resources with no viable alternative or replacement source of water. The groundwater in the area is located in sedimentary aquifers which is dependant on the rainfall cycle. There are two main drainages or watersheds in the Boulevard area. The Tecate Divide separates the two watersheds. The Tecate Divide (western drainage) was federally designated in 1993 as the Campo-Cottonwood Sole Source Aquifer and is under the jurisdiction of the San Diego Regional Water Quality Control Board. The drainage to the east of the Tecate Divide ultimately flows into the Salton Trough and the Sea of Cortez, and is under the jurisdiction of the Colorado River Water Quality Control Board (RWQCB).

The project is anticipated to obtain groundwater from three wells located on Rough Acres Ranch/Hamann Properties for dust suppression, roadway construction, and turbine foundation construction. Well water testing has been conducted by Geo-Logic Associates per the County of San Diego standards. According to Geo-Logic Associates, Estimate of Available Groundwater Memo, September 1, 2010 (Appendix O), two supply wells on the project site have been identified as readily available for project use with the following gallons per minute (gpm) production:

1. One well is located on Rough Acres Ranch approximately one to two miles north of Interstate 8 (I-8) between Ribbonwood Road and McCain Valley Road. Drilled in 2009, data provided on the well log for this well indicates that the estimated well yield is 60 gpm. A 72-hour constant rate aquifer pumping test was performed at this well at 50 gpm. Based on the current preliminary test data, there was very little response from pumping in the adjacent observation well, about 30 feet from the pumping well, and therefore it is reasonable to assume that sustained pumping at 50 gpm, at a minimum can be achieved from this well.
2. One well is located on the Ewiiaapaayp Reservation, about 7 miles north of I-8 on La Posta Road. A 72-hour constant rate aquifer pumping test was conducted at this well at 80 gpm. Based on the preliminary test results it is reasonable to assume that sustained pumping at 80 gpm is feasible at this well location.

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School
Sheriff
Fire Station

Turbines and Met Towers
Proposed Turbine Location
Proposed Met Station
Alternate Met Station
Proposed SODAR

Project Collector System
Proposed Overhead Collector
Proposed Underground Collector
Alternate Overhead Collector
Alternate Underground Collector

Project Transmission Line
Proposed Transmission Line
Alternate Transmission Line I
Alternate Transmission Line II
Alternate Transmission Line III

Access Roads
Proposed New Roads
Existing Roads to be Improved

O & M Building and Substation
Proposed Substation
Proposed O&M Building
Alternate Substation
Alternate O&M Building
Rebuilt Boulevard Substation

Staging Areas
P Proposed 10-acre Parking Area
L Proposed 2-acre Laydown Area
B Proposed Batch Plant
Construction Wells

Construction Well #4
Deviant Substation
PM-E-1
PM-E-2
PM-W-1
PM-W-2
SODAR
Alternate Transmission Line I
Proposed Transmission Line
O&M #1
O&M #2
Construction Well #1
Construction Well #2
Construction Well #3
CALFIRE McCain Valley Camp
Alternate Transmission Line I-I
Alternate Transmission Line I-II
Boulevard Volunteer Fire Station
Sheriff - Boulevard/Jacumba Office
Clover Flat Elementary
Rebuilt Boulevard Substation
Campo Reservation Fire Station
CALFIRE White Star
THING VALLEY RD
CANEBRAKE RD
MANZANITA COTTONWOOD RD
LOST VALLEY RD
MC CAIN VALLEY RD
RIBBONWOOD RD
CROSS RD
HUBBLE RD
CRESTWOOD RD
BLACKWOOD RD
OLD MINE RD
CRESTWOOD / BIA 12
WILLIAMS RD
MILLER VALLEY RD
CAM TRES AVES
GREAT BLUE HERON WY
STAGECOACH SPRINGS RD
HONEY BEE LN
GREAT EAGLE WY
HI PASS RD
QUAIL RUN
RED SHANK LN
LILAC LN
ANGEL DR
CHURCH RD
LIVE OAK SPRINGS RD
OLD HIGHWAY 80
JEWEL VALLEY WY
RA DEL SOL RD
SHASTA WY
SOL WOOD
WORTHINGTON RD
PINION PINE TL
94
8
N W E S
0 0.5 1 2 Miles

Public Facilities

FIGURE 3.15-1

Iberdrola Renewables | Tule Wind Project | Applicant's Environmental Document

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Based on the conservative peak water use requirements of 250,000 gallons per day (associated with road construction, concrete mixing and dust control activities), an estimated continuous supply of water (24 hours per day, 7 days per week) will be required from wells pumping at a cumulative continuous rate of 124 gpm. Based on the preliminary data from two recent pumping tests with a combined total pumping rate of 130 gpm, it is likely that the necessary water supply requirements for the project (124 gpm of continuous pumping, seven days a week) can be met from these two wells.

In addition, four potential additional water supply sources have been identified for the project. The State Correctional Facility is located about one half mile north of I-8 off McCain Road. This correctional facility maintains two wells with estimated production of 45 and 65 gpm. The Live Oak Springs Resort located south of I-8 on Old Highway 80 about ¾-mile northwest of the intersection with Highway 94 may provide a source of water supply. This resort (and water company) operates a well that pumps about 40,000 gallons per day (25 to 30 gpm) and maintains a 100,000 gallon pond, and two large tanks with an additional 50,000 gallons of storage capacity. The Jacumba Community Service District (CSD) also has indicated that they are able to provide 20,000 to 40,000 gallons of water per day, equivalent to about 14 to 28 gpm. Finally, the City of El Centro has indicated that they are willing to sell wastewater plant effluent to the project for use during the construction phase.

Sewer

The Boulevard community does not support a wastewater district for septic and wastewater treatment. The vast majority of the community of Boulevard relies on individual septic systems that are the responsibility of property owners.

Solid Waste

Tribes

The Ewiiaapaayp Indian Reservation has their own Solid Waste Management Plan that provides for the protection of the health and safety of Tribe members by the environmentally safe collection and disposal of solid waste. The plan also provides for the utilization of recycling and composting as waste reduction techniques as well as consumer education.

County

The County of San Diego is responsible for the hazardous waste planning, implementation, monitoring, public information, budgeting and enforcement in the unincorporated areas of the county. **Table 3.15-1** identifies the permitted annual tonnage for area facilities.

Table 3.15-1. Area Solid Waste Facilities

Facility Name (Operated by)	Permitted Annual Throughput (Tons)
El Cajon Transfer Center (Waste Management)	728,000
Viejas Rural Bin Site (Allied)	38,314
Campo Rural Bin Site (Allied)	1,560
Boulevard Rural Bin Site (Allied)	780

Source: http://www.sdcdpw.org/siting/pdf/San%20Diego%20County%20Summary%20Plan%202005.pdf

Natural Gas

Natural gas operation in the project vicinity is minimal. The Mountain Empire Subregional Plan for the community of Boulevard identifies the Draft Section 368 West Wide Energy Corridor as having the potential to allow gas lines. However, the general region of the project does not support any natural gas pipelines. Any gas usage within the area is supported by private propane companies.

Electricity

The Boulevard area is served by San Diego Gas & Electric (SDG&E) and hosts SDG&E substations and wind farms in the nearby area. Some homes in the area are served by residential-scale wind and solar energy generation facilities.

Within the project region, there is one other wind power facility which is located on the Campo Reservation. This facility, the Kumeyaay Wind Power Project, went online for power production in May 2006 and generates 50 megawatts (MW) of electricity. It is within the SDG&E service area and is operated by the Campo Tribe and Babcock and Brown.

3.15.2 Regulatory Setting

The proposed project does not include a residential component and will not create a substantial increase in population; therefore, regulations applicable to schools, libraries, parks, and medical facilities would not be applicable to the proposed project. However, public safety services would be potentially impacted by the proposed project, in particular, fire protection.

State

California Department of Forestry and Fire Protection – San Diego Fire Plan

The overall goal of the Pre-Fire Management Plan is to reduce total government costs and citizen losses from wildland fires in the San Diego Unit by protecting assets at risk through focused Pre-Fire Management prescriptions and increasing initial attack success. The plan identifies prevention measures to reduce risks, informs and involves the local community or communities in the area, and provides a framework to diminish the potential loss due to wildfire.

Local

San Diego Rural Fire Protection District

The San Diego Rural Fire Protection District has jurisdiction over the project area. The County Department of Planning and Land Use has completed a preliminary review of the project design and has determined that the project may expose people or structures to a significant risk of loss, injury or death-involving wildland fires because the project is adjacent to or within wildlands that have the potential to support wildland fires.

A Fire Protection Plan (FPP) is required for the project. The plan will include prevention measures consistent with unique problems resulting from the location, topography, geology, flammable vegetation and climate of the project site. The FPP shall also address in terms of fire code requirements: water supply, access (including secondary access where required by code), building ignition and fire resistance,

fire protection systems and equipment, defensible space and vegetation management (based on site fire behavior modeling). Also, mitigation measures will be identified if necessary and as appropriate.

3.15.3 Environmental Consequences/Impact Analysis

California Environmental Quality Act Significance Criteria

According to the *California Environmental Quality Act* (*CEQA) Guidelines*, Appendix G, a significant public services impact would result if the project were to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services.

As mentioned previously, the proposed project does not include a residential component nor will the project create a substantial increase in population; therefore impacts to schools, libraries, parks, police protection, and medical facilities would not occur. The project would require a well and septic system for the operation and maintenance of the project. Water for construction would be supplied via existing groundwater wells and are discussed in Section 3.10, Hydrology and Water Quality. The project may expose people or structures to a significant risk of loss, injury or death-involving wildland fires. A significant impact to emergency response/fire protection services would occur if:

- The proposed project would be located in an area outside the Fire Department's existing or planned 5-minute emergency response time service area.

A 5-minute response time represents the Fire Department's response goal for Priority 1 emergency calls.

Proposed project would be located in an area outside the Fire Department's existing or planned 5-minute emergency response time service area

Construction, Operation and Maintenance, and Decommissioning

The project does not propose any residential units which would increase population to the area or a substantial demand on fire protection services to the project area. However, the project is in an area prone to wildland fires. The project would be subject to the requirements of the San Diego County Rural Fire Protection District. Portions of the project area have moderate to extremely rugged terrain. It is anticipated that adequate fire access would be maintained throughout the project area in the case of an emergency or fire.

Fires could be introduced from lightning or other human activity. Regular project operation, however, has a low risk of introducing fires since combustion is not a main factor in the energy generation process, and most distributional transmission lines are buried. The project proponent will develop a FPP as part of the project to minimize the potential for a human-caused fire. Due to the potential for wildfires in this area, steel transmission structures will be used for the 138 kilovolt (kV) line.

The southern portion of the project area that contains the transmission lines is within the Fire Department's existing or planned 5-minute emergency response time; however, it would take longer to access the northern portions of the project area that contains the majority of the turbines. Due to the high fire risk of the project; the majority of collector cable system and 34.5 kV transmission lines are

underground; the most fire sensitive components are within the 5-minute response time; and the preparation of a project specific FPP, the project has a less than significant impact.

Sewer

Construction, Operation and Maintenance, and Decommissioning

Portable toilets will be provided for on-site sewage handling during construction, and will be pumped and cleaned regularly by the construction contractor. No other wastewater will be generated during construction. The project proposes the construction of a septic system for the operation and maintenance (O&M) building. This system will be self-contained and use will be limited to 12 permanent full-time employees which utilize the facility during normal business hours. It is anticipated that the septic system would remain in place until all decommissioning activities are complete. No impacts are anticipated due to the proposed project.

Solid Waste

Construction

Construction wastes will consist primarily of concrete waste from turbine pad construction, wood waste from wood forms used for concrete pad construction, and scrap metal steel from turbine tower construction. Additional wastes could include erosion control materials, such as straw bales and silt fencing, and packaging materials for associated turbine parts and other electrical equipment. Construction wastewater will be generated from concrete trucks after concrete loads have been emptied. The contractor will be responsible for conducting washdown activities, as appropriate.

Construction waste will be minimized by estimating material needs in advance, and through efficient construction practices. Construction wastes will be recycled when feasible. Steel scrap will be collected and transported to a recycling facility. Wood waste will also be recycled where feasible, depending on size and quantity of scrap and leftover materials. Concrete waste will be used as on-site fill, or at another site. If there is no reuse option available for concrete waste, it will be removed to a nearby landfill. Packaging waste (such as paper and cardboard) will be separated and recycled. Any non-recyclable wastes will be collected and transported to a local landfill. Impacts are less than significant.

Operation and Maintenance

Solid waste for the operational phase of the project will be limited to the O&M building. Generated solid waste is anticipated to be minimal and will be properly disposed of through an agreement with a local waste management provider. Impacts are less than significant

Decommissioning

The project will require the removal of concrete and construction waste when the project is decommissioned. When the facility is decommissioned, the materials will be reused or sold for scrap, and concrete will be recycled to the greatest extent possible. That plan will be developed in compliance with the standards and requirements for closing a site at the time decommissioning occurs. All management plans, best management practices (BMPs), and stipulations developed for the construction phase will be applied to similar activities during the decommissioning phase. Impacts are less than significant.

Electricity

Construction, Operation and Maintenance, and Decommissioning

The proposed project would require the construction of a collector substation, an operation and maintenance facility, a 138 kV transmission line, collector cable system, access roadways and temporary staging areas. Electricity during construction will be supplied by on-site generators provided by the contractor. Electricity for the operation of the project would be minimal and supplied by an outside provider. The project has less than significant impacts to electricity.

Water

Construction and Decommissioning

The project has identified two wells to be utilized in the construction of the project as identified previously. Additionally, there are four potential additional water supply sources available for the project. The State Correctional Facility is located about one half mile north of I-8 off McCain Road. This correctional facility maintains two wells with estimated production of 45 and 65 gpm. The Live Oak Springs Resort located south of I-8 on Old Highway 80 about three-quarters of a mile northwest of the intersection with Highway 94 may provide a source of water supply. This resort (and water company) operates a well that pumps about 40,000 gallons per day (25 to 30 gpm) and maintains a 100,000-gallon pond, and two large tanks with an additional 50,000 gallons of storage capacity. The Jacumba Community Service District (CSD) also has indicated that they are able to provide 20,000 to 40,000 gallons of water per day, equivalent to about 14 to 28 gpm. Finally, the City of El Centro has indicated that they are willing to sell wastewater plant effluent to the project for use during the construction phase.

Based on the currently available well data, the project site wells are estimated to provide 130 gpm (continuously pumped 24 hours per day, 7 days per week) of the project-required peak 124 gpm water, which would be sufficient for the construction of the project. In addition, off-site water from the State Correctional Facility, Live Oak Springs Resort, and Jacumba CSD, as well as possible wastewater plant effluent provided from the City of El Centro for purchase would be available in the event that the identified wells are not sufficient. Impacts to water are considered less than significant.

It is anticipated that the decommissioning water needs would be less than the construction of the project and would require less water. Impacts to water resources for construction and decommissioning are less than significant.

Operations and Maintenance

The operations and maintenance (O&M) facility will be utilized by 12 permanent full-time employees. It is anticipated that the 2,500 gallons of water will be required per day for employee water and sewer uses. A groundwater well will be drilled for the O&M facility upon final determination of the O&M facility location. Impacts to groundwater supplies and recharge due to the operations and maintenance of the project are less than significant.

3.15.4 Cumulative Impacts

The proposed project does not include the construction of residential housing, and would not result in an increase of the population in the area; therefore the proposed project would not place additional demands on the majority of public services provided to the area beyond that which already exists. The operation and maintenance building will be staffed by 12 permanent full-time employees during normal business hours. Use of water and generation of solid waste and wastewater will be minimal. Fire protection is considered the most applicable public service as it relates to the project. The proposed project will not result in cumulative impacts to public services and utilities.

3.15.5 CEQA Levels of Significance Before Mitigation

The project is not anticipated to have significant impacts related to public services and utilities. The project will be developed in accordance with all federal, state, and local regulations and laws that are applicable to large scale wind energy developments. As the project moves forward, the approval of the FPP will be required prior to construction of the project. Impacts to public services and utilities are less than significant.

3.15.6 Mitigation Measures

All impacts are less than significant; therefore, no mitigation is required.

3.15.7 Comparison of Alternatives

In developing the alternatives to be addressed in this environmental document, the potential alternatives were evaluated in terms of their ability to meet the basic objectives of the project, while avoiding or reducing the environmental impacts of the project. The alternatives will contain all of the same components and construction corridor as the proposed project except they may vary in number and location.

No Project/No Action Alternative

Under the No Project/No Action Alternative, the proposed project would not be implemented and there would be no impacts or increase in demand on public services and utilities. Although there would be no impacts to public services or utilities by the Tule Wind Project, the Bureau of Land Management's (BLM's) determination that the area is conducive to wind and renewable energy development will still be valid, thus leaving the area available for another project. This alternative would still leave the San Diego County region dependent on electricity generated by fossil fuels and without a more reliable source of electricity. The BLM, State, and County would be forced to continue to search for renewable energy projects to contribute to their renewable energy mandates and portfolios. Additionally, the County of San Diego would not move closer to meeting air quality and attainment goals. This alternative would have no impact to public services and utilities, and would have less impact than the proposed project.

Alternate Transmission Line Alternative #1

The Alternate Transmission Line Alternative #1 (T-line Alternative #1) would include all of the same components as the proposed project except for an alternate overhead 138 kV transmission line (T-line Alternative #1), as shown in **Figure 2.0-12**. The T-line Alternative #1 would be located parallel to, but in-lieu of, the proposed transmission line. T-line Alternative #1 would be located further west and run from

either the proposed or deviant collector substation approximately 5.5 miles south to the Rough Acres Ranch (south of turbine G-19). From Rough Acres Ranch, the line would continue west to Ribbonwood Road. The line would continue south on Ribbonwood Road to Old Highway 80, and east along Old Highway 80 to the SDG&E proposed Rebuilt Boulevard Substation.

This alternative would increase the land disturbance by approximately 7.6 acres, from 772.7 acres to 780.3 acres, utilizing the deviant collector substation. The 138 kV transmission line would increase in distance from 9.7 miles to 11.7 miles and would increase the amount of transmission line poles from 116 poles to 152 poles, utilizing the deviant collector substation. The 34.5 kV overhead collector lines would remain the same distance of 9.4 miles, and would require the same amount of collector line poles (250), and the underground collector lines would also remain the same distance of 29.3 miles, utilizing the deviant collector substation.

Proposed project would be located in an area outside the Fire Department's existing or planned 5-minute emergency response time service area

Construction, Operation and Maintenance, and Decommissioning

This alternative would have similar impacts to public services and utilities as the proposed project. Impacts to fire protection and response times would be the same as the proposed project.

This alternative has the same level of impacts to public services and utilities as the proposed project.

Alternate Transmission Line #2 and Collector Substation Alternative

The Alternate Transmission Line #2 and Collector Substation Alternative would include the alternate O&M/Substation facility co-located on Rough Acres Ranch (T17S R7E Sec9), the Alternate Transmission Line #2 (138 kV), as well as an alternate overhead collector system, as shown in **Figure 2.0-13**. This alternative would consist of two 34.5 kV lines connecting the turbines to the alternate collector substation location. All other elements of the project including the turbine locations, parking and laydown areas, roadway upgrades, and batch plant would remain as described in the proposed project. The Alternate Transmission Line #2 would run from the alternate collector substation south along McCain Valley Road, and then west along Old Highway 80 until reaching the SDG&E proposed Rebuilt Boulevard Substation.

This alternative would increase the land disturbance by 1.9 acres, from 772.7 acres to 774.6 acres. The 138 kV transmission line would decrease in distance as a result of this alternative from 9.7 miles to 3.8 miles and would decrease the amount of transmission line poles from 116 poles to 44 poles. The 34.5 kV overhead collector lines would increase in distance from 9.4 miles to 17 miles, and would increase the amount of collector line poles from 250 to 452 poles. The underground collector lines would decrease in distance from 29.3 miles to 28.9 miles.

Proposed project would be located in an area outside the Fire Department's existing or planned 5-minute emergency response time service area

Construction, Operation and Maintenance, and Decommissioning

This alternative would have similar impacts to public services and utilities as the proposed project. Impacts to fire protection and response times would be the same as the proposed project.

This alternative has the same level of impacts to public services and utilities as the proposed project.

Alternate Transmission Line #3 and Collector Substation Alternative

The Alternate Transmission Line #3 and Collector Substation Alternative would include the alternate O&M/Substation facility co-located on Rough Acres Ranch (T17S R7E Sec9), the Alternate Transmission Line #3 (138 kV), as well as an alternate overhead collector system as shown in **Figure 2.0-14**. This alternative would consist of two 34.5 kV lines connecting the turbines to the alternate collector substation. All other elements including the turbine locations, parking and laydown areas, roadway upgrades, and batch plant would remain as described in the proposed project. The Alternate Transmission Line #3 would run from the alternate collector substation west to Ribbonwood Road, continue south along Ribbonwood Road, and then east along Old Highway 80 until reaching the SDG&E proposed Rebuilt Boulevard Substation.

This alternative would increase the land disturbance by 7.3 acres, from 772.7 acres to 780.0 acres. The 138 kV transmission line would decrease in distance as a result of this alternative from 9.7 miles to 5.4 miles and would decrease the amount of transmission line poles from 116 poles to 60 poles. The 34.5 kV overhead collector lines would increase in distance from 9.4 miles to 17 miles, and would increase the amount of collector line poles from 250 to 452 poles. The underground collector lines would decrease in distance from 29.3 miles to 28.9 miles.

Proposed project would be located in an area outside the Fire Department's existing or planned 5-minute emergency response time service area

Construction, Operation and Maintenance, and Decommissioning

This alternative would have similar impacts to public services and utilities as the proposed project during the construction, operation and maintenance, and decommissioning of the project. Impacts to fire protection and response times would be the same as the proposed project.

This alternative has the same level of impacts to public services and utilities as the proposed project.

Operation and Maintenance Facility Location #1 Alternative

The O&M Facility Location #1 Alternative would be located on private property (T17S R7E Sec4), north of the alternate collector substation and located west of McCain Valley Road, as shown in **Figure 2.0-13**. This alternative would consist of separating the 5-acre O&M building site from the collector substation; however, both would remain on Rough Acres Ranch property. Alternate Transmission Line #2 would be utilized under this alternative as well as the Alternate Overhead Collector System consisting of two 34.5 kV lines connecting the turbines to the alternate collector substation. All other elements of the project including the turbine locations, parking and laydown areas, and batch plant would remain as described in the proposed project.

This alternative is estimated to have the same land disturbance impacts as the Alternate Transmission Line #2 and Collector Substation Alternative. However, by relocating the O&M building site to the northern portion of Rough Acres Ranch, this alternative would require an approximate 650-foot new access road to be constructed on the west side of McCain Valley Road, thus necessitating and approximate 0.07 acres of permanently impacted area and a temporary impact of 0.55 acres. In comparison to the proposed project, this alternative would decrease the land disturbance by approximately 2.5 acres, from 772.7 acres to 775.2 acres. The 138 kV transmission line would decrease in distance as a result of this alternative from 9.7 miles to 3.8 miles and would decrease the amount of transmission line

poles from 116 poles to 44 poles. The 34.5 kV overhead collector lines would increase in distance from 9.4 miles to 17 miles, and would increase the amount of collector line poles from 250 to 452 poles. The underground collector lines would decrease in distance from 29.3 miles to 28.9 miles.

Proposed project would be located in an area outside the Fire Department's existing or planned 5-minute emergency response time service area

Construction, Operation and Maintenance, and Decommissioning

This alternative would have similar impacts to public services and utilities as the proposed project during the construction, operation and maintenance, and decommissioning of the project. Impacts to fire protection and response times would be the same as the proposed project.

This alternative has the same level of impacts to public services and utilities as the proposed project.

Operation and Maintenance Facility Location #2 Alternative

The O&M Facility Location #2 Alternative would be located on private property (T17S R7E Sec 16), south of the alternate collector substation and located west of McCain Valley Road, as illustrated in **Figure 2.0-13**. This alternative would consist of separating the 5-acre O&M building site from the collector substation; however, both would remain on Rough Acres Ranch property. Alternate Transmission Line #2 would be utilized under this alternative as well as the Alternate Overhead Collector System consisting of two 34.5 kV lines connecting the turbines to the alternate collector substation. All other elements of the project including the turbine locations, parking and laydown areas, and batch plant would remain as described in the proposed project.

This alternative is estimated to have the same land disturbance impacts as the Alternate Transmission Line #2 and Collector Substation Alternative. However, by relocating the O&M building site to the southern portion of Rough Acres Ranch, this alternative would result in a very slight difference of 1.0 acre of permanent impacts and 0.08 acres of temporary impacts resulting from the construction of new access roads than those described in **Table 2.0-10**. In comparison to the proposed project, this alternative would increase the land disturbance by approximately 2.0 acres, from 772.7 acres to 774.7 acres. The 138 kV transmission line would decrease in distance as a result of this alternative from 9.7 miles to 3.8 miles and would decrease the amount of transmission line poles from 116 poles to 44 poles. The 34.5 kV overhead collector lines would increase in distance from 9.4 miles to 17 miles, and would increase the amount of collector line poles from 250 to 452 poles. The underground collector lines would decrease in distance from 29.3 miles to 28.9 miles.

Proposed project would be located in an area outside the Fire Department's existing or planned 5-minute emergency response time service area

Construction, Operation and Maintenance, and Decommissioning

This alternative would have similar impacts to public services and utilities as the proposed project during the construction, operation and maintenance, and decommissioning of the project. Impacts to fire protection and response times would be the same as the proposed project.

This alternative has the same level of impacts to public services and utilities as the proposed project.

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