7 OTHER CEQA CONSIDERATIONS

Chapter 7 includes other CEQA considerations pursuant to California PRC §21100. Sections 7.1 and 7.2 address electrical interference and public safety, and whether the effects on the environment are significant under CEQA. Section 7.3 discusses energy conservation, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy (PRC §21100(b)(3)). Section 7.4 addresses the growth inducing impact of the Proposed Project (PRC §21100(b)(5)). Significant effects on the environment that would be irreversible if the project is implemented are included in Section 7.5 (PRC §21100(b)(2)(B)). Significant effects on the environment that cannot be avoided if the project is implemented are included in Section 7.6 (PRC §21100(b)(2)(A)).

7.1 ELECTRICAL INTERFERENCE

Section 7.1 describes the environmental setting and potential for electrical interference associated with the Proposed Project, including effects from corona, gap discharges, and electromagnetic interference (EMI). Section 2.7 of Chapter 2 provides information regarding EMF associated with electric utility facilities, methods to reduce EMF, and EMF resulting from the Proposed Project.

7.1.1 Defining Electrical Interference

The potential for electrical interference from the Proposed Project is presented for the benefit of the public and decision makers. The CPUC does not consider electrical interference to be an environmental issue in the context of CEQA. In addition, CEQA does not define or adopt standards for defining potential risk for electrical interference. Effects of the Proposed Project would not be significant under CEQA and therefore are not discussed in detail in Chapter 4.

Electrical interference is associated with current-induced magnetic fields and voltage-induced electrical fields. As described in Section 2.7, electromagnetic fields are separate phenomena and occur both naturally and as a result of human activity, including electric power transmission and distribution. Electric fields are produced by stationary electric charges, and magnetic fields are produced by moving electrical charges. Current and voltage are required to transmit electrical energy over a transmission, power, or distribution line. Current (the flow of electric charge) produces the magnetic field. Voltage (the force that drives the current) is the source of the electric field. The electric field strength is directly related to the magnitude of the voltage and the magnetic field strength is directly related to the magnitude of the flowing current.

7.1.1.1 Corona

Corona is the electrical breakdown of air into charged particles caused by the electrical field at the surface of conductors, insulators, and hardware of energized transmission, power, and distribution lines. Corona is a phenomenon associated with the electrical gradient at the surface of all energized electrical materials, but is especially common with high-voltage transmission lines.

Corona discharges result from ionization of the air surrounding a conductor and form at the surface of a conductor when the electric field intensity on the conductor surface exceeds the breakdown strength of air. Corona discharges occur where the electric field has been enhanced by protrusions, such as nicks, dust, insects, or water drops. The discharges generate physical manifestations including visible light, audible noise, radio noise, heat, and chemical reaction with air components. Noise impacts of corona discharge are discussed in detail in Section 4.8 of this EIR.

Corona effects include:

- Radio noise
- Audible noise (sounds such as hissing, or cracking)
- Visible light
- Conductor vibration
- Heat and energy dissipation (primarily in the insulator)
- Ultraviolet radiation
- Ozone
- Nitric and various other acids
- Salts, sometimes seen as white powder deposits
- Other chemicals, depending on the insulator material
- Mechanical erosion of surfaces by ion bombardment
- Carbon deposits, thereby creating a path for arcing

The amount of corona produced by a transmission, power, or distribution line is a function of several factors including: line voltage, conductor diameter, conductor locations in relation to each other, line elevation above sea level, condition of conductors and hardware, and local weather conditions. Corona is less noticeable for lines that operate at lower voltages (i.e., power and distribution lines). The electric field gradient is greatest at the conductor surface. Larger-diameter conductors have lower electric field gradients at the conductor surface and, therefore, lower corona than smaller-diameter conductors. Corona effects from transmission, power, and distribution lines vary with atmospheric conditions and are more intense during wet weather.

Corona typically becomes noticeable for transmission lines that are overhead at voltages of 230-kV and higher. The corona effect would not be noticeable for underground segments, regardless of voltage level, since the energized conductors are fully enclosed in a semi-conducting layer within the insulated cables that serve to equalize the electrical gradient at the surface of the components.

7.1.1.2 Gap Discharges

Gap discharges occur when an electrical arc between conductive parts forms across a gap in loose or worn hardware. The majority of radio and television interference problems for energized lines are due to gap discharges. Hardware is designed to be problem-free, but wind motion, corrosion, and other factors can create a gap discharge condition. When identified, gap discharges can be located and remedied by utilities by tightening loose fittings or replacing worn hardware.

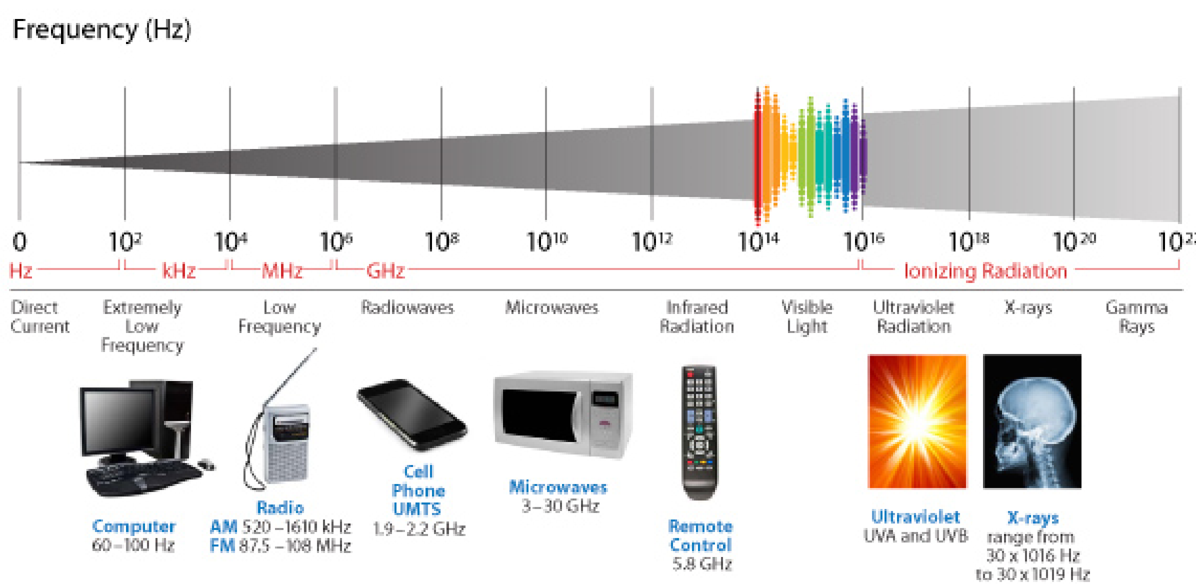
7.1.1.3 Electromagnetic Interference

EMI is the disruption of operation of any electronic equipment resulting from EMF, including radio, television, computers, and implanted medical devices. EMI from transmission, power, and distribution lines can occur from corona discharges or as a result of gap discharges resulting from aging or loosened hardware.

Electric fields from energized lines do not typically pose interference problems for electronic equipment since the equipment is shielded by buildings and walls. However, magnetic fields can penetrate buildings and walls, thereby interacting with electronic equipment. Depending upon the sensitivity of equipment, the magnetic fields can interfere with equipment operation. Electrical interference effects are generally very localized, if they occur.

Frequencies in the electromagnetic spectrum are shown in Figure 7.1-1. Frequency is determined by the rate at which electric and magnetic fields change their direction each second. For AC lines in the U.S., the frequency of change is 60 times per second and is extremely low frequency at 60 Hz.

Figure 7.1-1 Electromagnetic Spectrum



Source: NIH 2015

Radio
The degree of radio interference from corona or gap discharges is dependent upon several factors, including the quality and strength of the transmitted radio broadcast signal, the quality of the antenna system, and the distance between the receiver and the line. Radio interference is most often caused by gap discharges from loose or worn hardware. Corona-generated interference is most likely to affect the amplitude modulation (AM) radio communication, and rarely affects frequency modulation (FM) radio.

Radio communication is typically in the form of transmission broadcasts over AM and FM frequencies and operate at higher frequencies than an AC transmission line. AM radio waves carry radio signals in the frequency range from approximately 520,000-1,610,000 Hz (520-1,610 kilohertz [kHz]). Short wave and citizen band radio frequencies range from about 5.9 megahertz (MHz) to 27 MHz. FM radio is between 87,500,000 – 108,000,000 Hz (87.5-108 MHz).

Television
Television interference stemming from transmission lines is typically caused by gap discharges. Interference due to corona usually occurs during fog or rain and generally is caused by transmission lines with voltages over 345-kV. Electromagnetic waves also broadcast television transmission. However, the waves carry both visual and audio information and each channel uses a larger range of frequencies than radio transmission. Television broadcasts typically use very high to ultra-high frequencies much higher than low frequency AC transmission lines. Satellite dishes and cable transmission occurs at significantly higher frequencies, and is rapidly evolving with the use of the high-definition format.

Computers
Magnetic fields may cause distortion of the image on older computer systems that use video display terminals and monitors that employ cathode ray tubes (CRTs). Modern computer displays using flat-panel technologies, such as liquid-crystal or plasma displays, are not affected. Interference with CRT type computer monitors has been detected at magnetic field levels of 10 milliGauss (mG) and above, while large screen or high-resolution CRT monitors can be susceptible to interference at levels as low as 5 mG. Equipment that may be susceptible to very low magnetic field strength is typically installed in specialized and controlled environments, since even building wiring, lights, and other equipment can generate magnetic fields of 5 mG or higher.

Magnetic field interference results in disturbances to the image displayed on the monitor, often described as screen distortion, “jitter,” or other visual defects. In most cases it is annoying, and at its worst, it can prevent use of the monitor. Possible solutions to computer interference problems include: relocation of the monitor, use of magnetic shield enclosures, software programs, and replacement of monitors with liquid crystal displays that are not susceptible to magnetic field interference.

Implanted Medical Devices

An area of concern related to electric fields from transmission lines has been the possibility of interference with implanted medical devices such as cardiac pacemakers and defibrillators. In 2004, the Electric Power Research Institute, Inc. produced a report on electromagnetic interference with implanted medical devices in the frequency range of 1 Hz to 3,000 Hz (EPRI 2004). The report was updated in 2008 to include implantable medical devices currently in use or in development and recommendations to ensure the electromagnetic compatibility of sources and devices (EPRI 2008). The reports found that electric and magnetic fields could alter the function of cardiac pacemakers and implantable cardioverter defibrillators, but electric fields appear to be the most likely source of interference. The magnitude or intensity of the magnetic field required to alter the function of these devices varies widely with frequency and waveform.

Potential electrical interference impacts from electric and magnetic fields from various sources (including appliances, automobile ignitions, and transmission lines) are a recognized safety concern and manufacturers design implanted medical devices to be immune from such interference. However, research has shown that a few models of older pacemakers still in use could be affected by 60 Hz fields from AC transmission lines. Defibrillator sensitivity to electrical interference is similar to cardiac pacemaker sensitivity.

There are two general types of pacemakers: asynchronous and synchronous. The asynchronous pacemaker pulses at a predetermined rate. It is generally immune to interference because it has no sensing circuitry and is not exceptionally complex. The synchronous pacemaker, however, pulses only when its sensing circuitry determines that pacing is necessary. Interference from transmission line electric field may cause a spurious signal on the pacemaker's sensing circuitry. However, when these pacemakers detect a spurious signal, such as a 60 Hz signal, they are programmed to revert to an asynchronous or fixed pacing mode of operation, returning to synchronous operation within a specified time after the signal is no longer detected. Periods of operation in this mode are commonly induced by cardiologists to check pacemaker performance. Cardiovascular specialists do not consider prolonged asynchronous pacing a problem, since most pacemakers are designed to operate that way. Dual-chamber pacemakers may have inappropriate pacing before reversion to asynchronous mode.

It has been reported that synchronous pacemakers can be affected by electric fields ranging from 1.5 kilovolts per meter (kV/m) and upward, and magnetic fields of 1 to 12 gauss (EPRI 2004, 2008). A common interference threshold for sensitive pacemaker is 3.4 kV/m. As described above, when a synchronous pacemaker is in a field in this range, a few older model pacemakers may revert to an asynchronous mode.

7.1.2 Policies, Standards, and Regulations

In the U.S., electrical interference is governed by the Federal Communications Commission (FCC), which requires the operator of any device that causes "harmful interference" to take prompt steps to eliminate it (FCC regulations, Section 15.25).

The Institute of Electrical and Electronic Engineers has published a design guide that is used to limit conductor surface gradients so as to avoid corona levels which would cause electronic interference (IEEE 1971).

CPUC GO 128, *Rules for Construction of Underground Electric Supply and Communication Systems*, specifies the construction materials, clearances and depths for the proposed underground transmission line (Segment B), and CPUC GO 95, *Rules for Overhead Electric Line Construction Section 35*, covers all aspects of design, construction, operation, and maintenance of overhead electrical transmission and power lines (Segments A, C, and D).

7.1.3 Electrical Interference Data Applicable to the Proposed Project

In general, existing transmission, power, and distribution lines are already located in developed portions of the community and represent the predominant source of existing electric and magnetic fields in the Proposed Project area. Segments A, C, and D of the Proposed Project would add 14.49 miles of new 230-kV overhead transmission line in an existing transmission ROW. Those three segments contain differing combinations of existing power lines; Segments A and C have four existing power lines and Segment D has three. Although there is no existing electrical infrastructure in Segment B, the 2.19-mile 230-kV transmission line would be installed underground and would not contribute to electrical interference. Table 2.7-1 in Chapter 2: Project Description identifies line segments by milepost, structure type and any adjacent circuits and presents the estimated magnetic field along the 230-kV segments of the Proposed Project once the new lines are in operation.

Radio, Television, and Computer Interference

Potential for electrical interference during Proposed Project construction would only occur when the transmission line is energized, and during substation modifications to accommodate the new line. The potential for electrical interference would exist throughout operation of the Proposed Project. Electrical interference in undeveloped areas would be limited, primarily due to the absence of electrical equipment; however, periodic and transient uses of these areas for activities such as recreation may result in interferences with electrical equipment operation. In developed areas, the potential for electrical interference is more widespread.

Corona or gap discharges related to high frequency radio and television interference impacts are anticipated to be very localized if it occurs. Gap discharges are the primary cause of electrical interference for transmission lines, and they tend to occur at areas where gaps have formed due to broken or ill fitted hardware (such as clamps, insulators, brackets). Individual sources of adverse radio/television interference impacts can be located and corrected on the power lines and minimized through routine maintenance. Conversely, magnetic field interference with electronic equipment such as computer monitors can be corrected through the use of software, shielding, or changes at the monitor location. Implementation of the Proposed Project would not cause substantial interference with electronic devices.

Implanted Medical Devices

The electric fields associated with the Proposed Project's transmission lines may be of sufficient magnitude to impact operation of a few older model cardiac pacemakers resulting in them reverting to an asynchronous pacing. Cardiovascular specialists do not consider prolonged asynchronous pacing to be a problem; periods of operation in this mode are commonly induced by cardiologists to check pacemaker performance. While transmission line electric fields may interfere with the normal operation of some of the older model pacemakers, the result of the interference is not harmful, and is of short duration. Consequently, the proposed transmission lines would not present a substantial risk to human health by interfering with medical devices.

7.2 ENERGY CONSERVATION

Pursuant to Appendix F: Energy Conservation in the CEQA Guidelines, an EIR must address potential energy impacts of the Proposed Project, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy. Appendix F describes the goal of energy conservation as the wise and efficient use of energy. The means to achieving the goal include:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on natural gas and oil; and
- Increasing reliance on renewable energy sources.

7.2.1 Proposed Project Energy Conservation

A basic objective of the Proposed Project is to improve deliverability of renewable energy in SDG&E's RPS portfolio (CPUC Project Objective 3). This objective would be achieved by delivering energy more efficiently into the load center in San Diego, which would promote the energy conservation goals of decreasing reliance on natural gas and oil and increasing reliance on renewable energy sources.

SDG&E describes its strategy for meeting future forecasted load in a mandatory Long-Term Procurement Plan (LTPP), which the CPUC approved most recently in September 2008. The strategy includes meeting energy demands first with conservation, then with renewable sources of electricity, and finally with new fossil fuel sources to the extent necessary. The Proposed Project was designed to be consistent with the energy efficiency, demand response, and renewable energy programs outline in the LTPP.

Construction of the Proposed Project transmission line would require the manufacture of new materials requiring the use of energy. The production of these materials would result in consumption of natural resources including fossil fuels. However, SDG&E would reuse, recycle, or donate all old structures, poles, materials, and components not needed for the Proposed Project to the greatest extent feasible. The reuse and recycling of existing components would partially offset the energy needed to produce new materials. Additionally, the proposed 230-kV transmission line would assist in the delivery of a significant portion of renewable energy to SDG&E customers, offsetting the energy needed to construct the project.

Construction vehicles would minimize unnecessary idling time and would be properly tuned and maintained in accordance with manufacturer specifications (APM AIR-2). Equipment would be operated using connections to the electrical grid as opposed to on-site generations to the extent feasible (APM AIR-2). Additionally, equipment would be required to meet a minimum of EPA's Tier 2 emissions standards (APM AIR-4). These construction practices would minimize the use of fossil fuels.

Maintenance, operations, and inspection of the Proposed Project would not increase appreciably from SDG&E's existing activities in the Proposed Project area, due to the existing transmission infrastructure that occurs within the Segments A, C, and D ROW. Therefore, the Proposed Project would not cause a substantial increase in the consumption or use of non-renewable resources.

The Proposed Project would provide a connection to the Sunrise Powerlink via the Sycamore Canyon Substation. The Sunrise Powerlink delivers renewable energy from various renewable generators in the Imperial Valley. At this time the Sunrise Powerlink is constrained and additional transmission capacity is needed to transmit the renewable energy from the sources. Operation of the Proposed Project would improve the delivery of renewable energy to the San Diego metropolitan area to meet existing and projected load demands reliably and efficiently. The Proposed Project is a 230-kV transmission line and would not increase or decrease per capita energy consumption as the intent of the Proposed Project is to address the currently lacking transmission capacity.

No increases in inefficiencies or unnecessary energy consumption are expected to occur as a direct or indirect consequence of the Proposed Project. Energy impacts associated with the Proposed Project would not have any measurable effect on per capita energy consumption. The Proposed Project would minimize use of fossil fuels during construction and encourage reliance on renewable energy sources for SDG&E customers during operation.

7.2.2 Energy Conservation Alternatives

The CPUC considered potential energy conservation and efficiency, and demand response alternatives to the Proposed Project (refer to Chapter 3: Alternatives and Appendix D: Alternatives Screening Report). The energy conservation and efficiency alternative would reduce energy use, but is not feasible because it would not meet the Proposed Project objectives for reliability, efficient delivery of energy to the load center, or improved delivery or renewable energy, and is not feasible to implement at the same scale of the Proposed Project (approximately 450 MW). An energy conservation and efficiency alternative is not a technically feasible alternative to the Proposed Project to meet load growth. Demand response reduces or shifts electricity usage during peak periods, reducing the chance of overload and power failure. Demand response alternatives depend on financial incentives (such as on time-based rates) and grid modernization efforts (such as advanced metering infrastructure). Demand response alone is not a technically feasible alternative to the Proposed Project because it could not reduce loading at the scale of the Proposed Project (approximately 450 MW).

7.3 GROWTH INDUCING EFFECTS

The discussion on growth inducing effects must address "ways in which the Proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment" (CEQA Guidelines Section 15126.2(d)).

Growth inducing effects of a proposed project are considered significant if the project directly causes population growth beyond that considered in local and regional land use plans or another relevant population growth projection. Effects would also be significant if a proposed project would provide the means to allow for population growth beyond that considered in local and regional land use plans or another relevant population growth projection.

7.3.1 Growth Caused by Direct and Indirect Employment

There would not be permanent population growth in the area due to direct employment. During peak construction periods, crews may be working simultaneously along the Proposed Project alignment, with up to approximately 100 people working at one time. It is anticipated that most of the construction workers would come from the local labor pool available in San Diego County, with workers expected to commute to construction sites rather than move to the area. Thus, additional housing to accommodate these workers would not be required.

The operations and maintenance work required for the proposed transmission line would be fulfilled by the existing local SDG&E workforce, and no new permanent jobs would be created. Construction and operation of the Proposed Project would not result in direct or indirect impacts to population growth.

7.3.2 Growth Related to Provision of Additional Electric Power

SDG&E provides electrical power services to the San Diego metropolitan area, and it therefore must plan to meet electric demand needs for growth that is planned for and approved by the local planning agencies. In providing these services, SDG&E currently operates the Miguel Substation, Sycamore Canyon Substation, and Path 44 connecting the SONGS and SONGS Switchyard to San Luis Rey and Talega Substations, which are the three major energy gateways in SDG&E's bulk electric transmission system that serves electricity customer load in the San Diego metropolitan area.

According to SDG&E, their ability to operate a bulk electric transmission system reliably and efficiently has become constrained, particularly at gateway substations. Reliability has been further compromised because of the early SONGS retirement and the projected eventual retirement of the coastal once-through cooling generation units in San Diego and Los Angeles. SDG&E has further indicated that these system constraints are projected to worsen over time. As the San Diego metropolitan area load continues to increase, the imports into Miguel and Sycamore Canyon Substations will also increase. In addition, significant renewable generation is expected to be developed in the Southwestern United States, which will further increase flows into the Miguel and Sycamore Canyon Substations.

Objectives of the Proposed Project include maintaining electrical system reliability, delivering energy efficiently to the load center in San Diego, and supporting delivery of renewable energy in SDG&E's RPS portfolio. The Proposed Project is needed in the absence of population growth because additional energy is needed to offset the lost generation at SONGS and additional delivery of energy out of Sycamore Canyon is needed to deliver the renewable energy in SDG&E's RPS portfolio. In addition, the Proposed Project would not modify land use or zoning designations to permit new residential or commercial development and therefore would not foster growth, remove direct growth constraints, or add a direct stimulus to growth. The Proposed Project would provide electrical transmission to meet existing and planned growth in the San Diego metropolitan area and would not induce additional population growth beyond that which is planned for in the region.

7.4 SIGNIFICANT IRREVERSIBLE CHANGES AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Pursuant to Section 15126.2 (c) of the CEQA Guidelines, an EIR must address significant irreversible environmental changes and irretrievable commitments of resources that would be caused by the Proposed Project. These changes include uses of non-renewable resources during construction and operation, long-term or permanent access to previously inaccessible areas, and irreversible damages that may result from project-related accidents.

Implementation of the Proposed Project would require temporary and permanent loss of vegetation and habitat that could potentially support sensitive wildlife species due to construction activities. There would be approximately 9.3 acres of permanent loss of sensitive vegetation communities plus approximately 25.4 acres of additional temporary loss of sensitive vegetation communities. However, implementation of the APMs and mitigation measures for biological resources recommended in this EIR (see Section 4.1) would ensure that project-induced loss of vegetation and habitat would be less than significant. Mitigation Measure Biology-6 requires SDG&E to prepare a Habitat Restoration Plan subject to approval by the CPUC, USFWS, CDFW, and MCAS Miramar (for restoration on MCAS Miramar) prior to habitat impacts. SDG&E is required to restore temporarily impacted areas to pre-construction conditions following construction and/or shall purchase/dedicate suitable habitat for preservation to off-set permanently impacted areas with mitigation ratios by habitat type ranging from 0.5:1 to 3:1.

7.4.1 Non-Renewable Resources

The use of non-renewable resources is considered an irreversible change to the environment. Construction and operation of the Proposed Project would require the direct consumption of non-renewable fossil fuels, and indirectly fossil fuels would be used to produce construction materials that may not be recycled.

During construction, non-renewable fossil fuel consumption of energy would be needed for construction vehicles, construction equipment, and helicopter use. Additionally, construction would require the manufacture of new materials, some of which would not be recyclable at the end of the Proposed Project's lifetime, and the energy required for the production of these materials, which would also result in an irretrievable commitment of natural resources. Fossil fuel consumption associated with vehicle use during operation and maintenance would be far less than during construction. Use of non-renewable resources during operation and maintenance would chiefly result from equipment (primarily the transmission circuit breakers and voltage transformers).

SDG&E would attempt to reuse, recycle, or donate all old structures, poles, materials, and components not needed for the Proposed Project. Materials that could not be reused, recycled, or donated would be disposed of at an appropriate facility. Table 2.4-5 describes the likely end use of waste generated during the project. The Proposed Project would not cause a substantial increase in the consumption or use of non-renewable resources.

7.4.2 Long-term or Permanent Access to Previously Inaccessible Areas

The Proposed Project would be generally accessed from existing access roads within SDG&E's ROW and adjacent paved roads. Approximately 8,960 square feet (0.2 acres) of land would be permanently disturbed for three new access roads proposed along Segment A and three temporary access roads in Segment D. However, these new access roads would spur off existing access roads within existing SDG&E ROW to connect to new proposed structure locations. Public access within the Proposed Project's ROW during operation would not change from existing conditions. One of the new access roads would be located on MCAS Miramar, where public access is already restricted and would remain so during operation of the Proposed Project. The Proposed Project would not introduce long-term or permanent access to previously inaccessible areas.

7.4.3 Potential Accidents

During construction and operation of the Proposed Project, potential accidents could occur that could result in significant irreversible changes that cannot be reversed or completely mitigated. Major construction activities, such as site preparation and installation of components and equipment, would pose the greatest risks for accidents to occur that could potentially result in significant irreversible changes. As described in Section 4.11: Hazards and Hazardous Materials, impacts would be significant after implementation of APMs; however, no significant impacts would result from the Proposed Project with implementation of mitigation measures. Impacts would be less than significant with implementation of APM FIRE-1 and Mitigation Measures Fire-1 through Fire-4 (see Section 4.12). The Proposed Project would have acceptable service ratios, response times, and other performance objectives for emergency response, including fire and police protection, that would be available to service the project area in the event of an accident (see Section 4.17: Utilities and Public Service Systems).

7.5 SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED

Section 15126.2(b) of the CEQA Guidelines requires that an EIR identify significant environmental effects which cannot be avoided by the Proposed Project, even with implementation of mitigation measures. The environmental impacts of the Proposed Project are described in the environmental analysis sections in Chapter 4. Impacts that are significant and cannot be reduced to less than significant levels through the application of feasible mitigation measures have been characterized as significant and unavoidable impacts. The nine significant and unavoidable impacts resulting from the Proposed Project are summarized in Table 7.5-1 below. Complete descriptions of these impacts are presented in Chapter 4.

Although there are nine significant and unavoidable impacts related to implementation of the Proposed Project, the Proposed Project is designed to meet the CAISO requirements. The Proposed Project would increase the reliability of the electric system for existing and future customers and the connectivity to renewable resources. Additionally, the new transmission line would be constructed within existing right of ways or franchise agreement easements to deliver electricity to the San Diego metropolitan area more efficiently. As such, the Proposed Project would achieve the CAISO requirements.

Table 7.5-1 Summary of Significant and Unavoidable Impacts of the Proposed Project

Resource Area	Significant and Unavoidable Impacts
Aesthetics	**Aesthetics-3:** Substantially degrade the existing visual character or quality of the site and its surroundings.
Transportation and Traffic	**Traffic-1:** Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. **Traffic-2:** Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. **Traffic-8:** The project would result in inadequate parking capacity.
Noise	**Noise-1:** Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies. **Noise-3:** Result in a substantial permanent increase in ambient noise levels in the project vicinity above existing noise levels. **Noise-4:** Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity during construction.
Recreation	**Recreation-3:** Substantially disrupt activities in a recreational area. **Recreation-4:** Substantially reduce the recreational value of a recreational area.

7.6 REFERENCES

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