

## **4.4 ENERGY**

This section of the Draft EIR describes the source and consumption of energy resources associated with the Project. This section provides further information on applicable regulation, policies, and potential impacts of the Project. The energy consumption modeling output is included in this EIR as Appendix H.

### **4.4.1 Background**

According to the CEQA Guidelines, the goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:

- Decreasing overall per capita energy consumption
- Decreasing reliance on fossil fuels such as coal, natural gas and oil
- Increasing reliance on renewable energy sources

Energy conservation implies that a Project's cost effectiveness be reviewed not only in dollars but also in terms of energy requirements. For many Projects, cost effectiveness may be determined more by energy efficiency than by initial dollar costs. A lead agency may consider the extent to which an energy source serving the Project has already undergone environmental review that adequately analyzed and mitigated the effects of energy production.

The Project will process geothermal brine from the neighboring HR1, which is a renewable energy plant, in order to produce lithium hydroxide as well as zinc and manganese products that are raw chemicals utilized in the production of batteries as well as other commercial uses. It should be noted that, due to the sporadic nature of many renewable energy sources, lithium batteries are becoming an integral component of the electrical grid within the state. As such, implementation of the Project would help the state meet its goals for reducing reliance on fossil fuels and increasing use, production, and reliance on alternative renewable energy sources.

### **4.4.2 Regulatory Setting**

#### **Federal**

##### Public Utility Regulatory Policies Act of 1978

Public Utility Regulatory Policies Act of 1978 (PURPA) was passed in response to the unstable energy climate of the late 1970s. PURPA sought to promote conservation of electric energy. Additionally, PURPA created a new class of nonutility generators, small power producers from which, along with qualified co-generators, utilities are required to buy power. PURPA was in part intended to augment electric utility generation with more efficiently produced electricity and to provide equitable rates to electric consumers. Utility companies are required to buy all electricity from qualifying facilities (QFs) at avoided cost (avoided costs are the incremental savings associated with not having to produce additional units of electricity). PURPA expanded participation of nonutility generators in the electricity market and requires utilities to buy whatever power is produced by QFs (usually cogeneration or renewable energy). Utilities want these provisions repealed; critics argue that it will decrease competition and impede development of the renewable energy industry. The Fuel Use Act (FUA) of 1978 (repealed in 1987) also helped QFs become established. Under FUA, utilities were not allowed to use natural gas to fuel new generating technologies; but QFs, which were by definition not utilities, were able to take advantage of abundant natural gas and abundant new technologies (such as combined-cycle). The technologies lowered the financial threshold

for entrance into the electricity generation business as well as shortened the lead time for constructing new plants.

### Energy Policy Act of 2005

On August 8, 2005, President George W. Bush signed the National Energy Policy Act of 2005 into law. This comprehensive energy legislation contains several electricity-related provisions that aim to:

- Help ensure that consumers receive electricity over a dependable, modern infrastructure
- Remove outdated obstacles to investment in electricity transmission lines
- Make electric reliability standards mandatory instead of optional
- Give federal officials the authority to site new power lines in Department of Energy-designated national corridors in certain limited circumstances

### **State**

Energy conservation management in the State was initiated by the 1974 Warren-Alquist State Energy Resources Conservation and Development Act that created the California Energy Resource Conservation and Development Commission (currently named California Energy Commission [CEC]), which was originally tasked with certifying new electric generating plants based on the need for the plant and the suitability of the site of the plant. In 1976 the Warren-Alquist Act was expanded to include new restrictions on nuclear generating plants, which effectively resulted in a moratorium on any new nuclear generating plants in the state. The following details specific regulations adopted by the State in order to reduce the consumption of energy.

### California Code of Regulations Title 20

On November 3, 1976, the CEC adopted the Regulations for Appliance Efficiency Standards Relating to Refrigerators, Refrigerator-Freezers, and Freezers and Air Conditioners, which were the first energy-efficiency standards for appliances. The appliance efficiency regulations have been updated several times by the Commission; and the most current version is the 2016 Appliance Efficiency Regulations, adopted January 2017, which now includes almost all types of appliances and lamps that use electricity and natural gas as well as plumbing fixtures. The authority for the CEC to control the energy efficiency of appliances is detailed in CCR, Title 20, Division 2, Chapter 4, Article 4, Sections 1601-1609.

### California Code of Regulations Title 24, Part 6

The CEC is also responsible for implementing CCR Title 24, Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24) that were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. In 2008 the State set an energy-use reduction goal of zero-net-energy use of all new homes by 2020, and the CEC was mandated to meet this goal through revisions to the Title 24, Part 6 regulations.

The Title 24 standards are updated on a three-year schedule, and since 2008 the standards have been incrementally moving to the 2020 goal of the zero-net-energy use. Currently the 2016 Title 24 standards are in effect; and, on January 1, 2020, the 2019 standards will go into effect. These standards have been

designed so that the average new home built in California will now use zero-net-energy and nonresidential buildings will use about 30 percent less energy than the 2016 standards due mainly to lighting upgrades. The 2019 standards also encourage the use of battery storage and heat pump water heaters and require the more widespread use of LED lighting as well as improve the building's thermal envelope through high-performance attics, walls, and windows. The 2019 standards also require improvements to ventilation systems by requiring highly efficient air filters to trap hazardous air particulates as well as requiring improvements to kitchen ventilation systems.

#### California Code of Regulations Title 24, Part 11

CCR Title 24, Part 11: California Green Building Standards (Title 24) was developed in response to continued efforts to reduce greenhouse gas (GHG) emissions associated with energy consumption. The California Green Building Standards Code (CALGreen) are also updated every three years, and the current version is the 2016 CALGreen Code, which became effective on January 1, 2017. The 2019 CALGreen Code will become effective on January 1, 2020.

The CALGreen Code contains requirements for construction site selection; stormwater control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency.

The CALGreen Code provides standards for bicycle parking, carpool/vanpool/electric vehicle spaces, light and glare reduction, grading and paving, energy efficient appliances, renewable energy, graywater systems, water-efficient plumbing fixtures, recycling and recycled materials, pollutant controls (including moisture control and indoor air quality), acoustical controls, stormwater management, building design, insulation, flooring, and framing, among others. Implementation of the CALGreen Code measures reduces energy consumption and vehicle trips and encourages the use of alternative-fuel vehicles, which reduces pollutant emissions.

Some of the notable changes in the 2019 CALGreen Code over the current 2016 CALGreen Code include: an alignment of building code engineering requirements with the national standards that include anchorage requirements for solar panels, provides design requirements for buildings in tsunami zones, increases Minimum Efficiency Reporting Value (MERV) for air filters from 8 to 13, increases electric vehicle charging requirements in parking areas, and sets minimum requirements for use of shade trees.

#### Senate Bill 100

Senate Bill 100 (SB 100) was adopted September 2018 and requires that 100 percent of retail sales of electricity be generated from renewable or zero-carbon emission sources of electricity by December 1, 2045. SB 100 supersedes the renewable energy requirements set by SB 350, SB 1078, SB 107, and SB X1-2. However, the interim renewable energy thresholds from the prior Bills of 44 percent by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030, will remain in effect.

### Executive Order B-48-18 and Assembly Bill 2127

The California Governor issued Executive Order B-48-18 on January 26, 2018, that orders all State entities to work with the private sector to put at least five million zero-emission vehicles on California roads by 2030 and to install 200 hydrogen fueling stations and 250,000 electric vehicle chargers by 2025. Currently approximately 350,000 electric vehicles are operating in California, which represents approximately 1.5 percent of the 24 million vehicles total currently operating in California. Implementation of Executive Order B-48-18 would result in approximately 20 percent of all vehicles in California be zero emission electric vehicles. Assembly Bill 2127 (AB 2127) was codified into statute on September 13, 2018, and requires that the CEC work with the CARB to prepare biannual assessments of the statewide electric vehicle charging infrastructure needed to support the levels of zero emission vehicle adoption required for the State to meet its goals of putting at least 5 million zero-emission vehicles on California roads by 2030.

### Assembly Bill 1109

California Assembly Bill 1109 (AB 1109), also known as the Lighting Efficiency and Toxics Reduction Act, was adopted October 2007 and prohibits the manufacturing of lights after January 1, 2010, that contain levels of hazardous substances prohibited by the European Union pursuant to the RoHS Directive. AB 1109 also requires reductions in energy usage for lighting and is structured to reduce lighting electrical consumption by: (1) at least 50-percent reduction from 2007 levels for indoor residential lighting; and (2) at least 25-percent reduction from 2007 levels for indoor commercial and all outdoor lighting by 2018. AB 1109 would reduce GHG emissions through reducing the amount of electricity required to be generated by fossil fuels in California.

### Assembly Bill 1493

California Assembly Bill 1493 (also known as the Pavley Bill, in reference to its author Fran Pavley) was enacted on July 22, 2002, and required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks. In 2004, CARB approved the “Pavley I” regulations limiting the amount of GHGs that may be released from new passenger automobiles that are being phased in between model years 2009 through 2016. These regulations will reduce GHG emissions by 30 percent from 2002 levels by 2016. In June 2009, the USEPA granted California the authority to implement GHG emission reduction standards for light-duty vehicles; in September 2009, amendments to the Pavley I regulations were adopted by CARB, and implementation of the “Pavley I” regulations started in 2009.

The second set of regulations, “Pavley II,” was developed in 2010 and is being phased in between model years 2017 through 2025 with the goal of reducing GHG emissions by 45 percent by the year 2020 as compared to the 2002 fleet. The Pavley II standards were developed by linking the GHG emissions and formerly separate toxic tailpipe emissions standards previously known as the “LEV III” (third stage of the Low Emission Vehicle standards) into a single regulatory framework. The new rules reduce emissions from gasoline-powered cars as well as promote zero-emissions auto technologies such as electricity and hydrogen and increase the infrastructure for fueling hydrogen vehicles. In 2009, the USEPA granted California the authority to implement the GHG standards for passenger cars, pickup trucks, and sport utility vehicles; and these GHG emissions standards are currently being implemented nationwide. However, USEPA has performed a midterm evaluation of the longer-term standards for model years 2022 through 2025; and, based on the findings of this midterm evaluation, the USEPA has proposed to amend the corporate average fuel economy (CAFE) and GHG emissions standards for light vehicles for model

years 2021 through 2026. The USEPA’s proposed amendments do not include any extension of the legal waiver granted to California by the 1970 Clean Air Act which has allowed the State to set tighter standards for vehicle pipe emissions than the USEPA standards. On September 20, 2019, California filed suit over the USEPA decision to revoke California’s legal waiver; that suit has been joined by 22 other states.

Local

Relevant Imperial County General Plan policies related to energy are provided below. Table 4.4-1 discusses the Project’s consistency with the County’s General Plan policies. While this EIR analyzes the Project’s consistency with the General Plan pursuant to CEQA Guidelines Section 151250, the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

**Table 4.4-1: General Plan Consistency**

| General Plan Polices   | Consistency with General Plan | Analysis   |
|--|-------------------------------|--|
| <b>Renewable Energy and Transmission Element</b>   |                               |  |
| Goal 1 – Support the safe and orderly development of renewable energy while providing for the protection of environmental resources.   | Consistent                    | The Proposed Project provides protection to environmental resources while helping to produce renewable energy.                                     |
| Objective 1.2 – Lessen impacts of site and design production facilities on agricultural, natural, and cultural resources.  | Consistent                    | This EIR has analyzed the potential impacts related to these subjects.   |
| Objective 1.3 – Require the use of directional geothermal drilling and “islands” when technically advisable in irrigated agricultural soils and sensitive or unique biological areas.  | Consistent                    | The Proposed Project is adjacent to geothermal drilling, which helps remove “islands.”   |
| Objective 1.4 – Analyze potential impacts on agricultural, natural, and cultural resources, as appropriate.  | Consistent                    | This EIR has analyzed the potential impacts related to these subjects.   |
| Objective 1.5 – Require appropriate mitigation and monitoring for environmental issues associated with developing renewable energy facilities.   | Consistent                    | The Proposed Project provides a mitigation monitoring program.   |
| Objective 1.6 – Encourage the efficient use of water resources required in the operation of renewable energy generation facilities.  | Consistent                    | The Proposed Project will be designed to meet Title 24 Part 11 requirements that require implementation of water-efficiency measures.              |
| Objective 1.7 – Assure that development of renewable energy facilities and transmission lines comply with Imperial County Air Pollution Control District’s regulations and mitigation measures.  | Consistent                    | The Proposed Project will be required to obtain all required air permits from the ICAPCD and to adhere to all of the ICAPCD rules and regulations. |
| Goal 2 – Encourage development of electrical transmission lines along routes which minimize potential environmental effects.   | Consistent                    | Any required improvements or extensions of existing IID electrical transmission lines will occur adjacent to existing routes.                      |
| Objective 2.1 – To the extent practicable, maximize utilization of IID’s transmission capacity in existing easements or rights-of-way. Encourage the location of all major transmission lines within designated corridors, easements, and rights-of-way. | Consistent                    | Any required improvements or extensions of IID electrical transmission lines will occur within existing easements or rights-of-way.                |

**Table 4.4-1: General Plan Consistency**

| General Plan Polices  | Consistency with General Plan | Analysis   |
|---|-------------------------------|--|
| Objective 2.2 – Where practicable and cost-effective, design transmission lines to minimize impacts on agricultural, natural, and cultural resources, urban areas, military operation areas, and recreational activities. | Consistent                    | Any required improvements or extensions of IID electrical transmission lines will occur within existing easements or rights-of-way.  |
| Goal 3 – Support development of renewable energy resources that will contribute to and enhance the economic vitality of Imperial County.  | Consistent                    | The Proposed Project will provide additional employment opportunities as well as contribute to the tax base of the County, which will enhance the economic vitality of the County.                 |
| Objective 3.2 – Encourage the continued development of the mineral extraction/production industry for job development using geothermal brines from the existing and future geothermal flash power plants.                 | Consistent                    | The Proposed Project implements this Objective.  |
| Objective 3.3 – Encourage the development of services and industries associated with renewable energy facilities.   | Consistent                    | The Proposed Project implements this Objective.  |
| Objective 3.4 – Assure that revenues Projected from proposed renewable energy facility developments are sufficient to offset operational costs to the County from that particular development.                            | Consistent                    | The Proposed Project would generate more revenue for the County than any costs incurred by the County.   |
| Objective 3.5 – Encourage employment of County residents by the renewable energy industries wherever and whenever possible.   | Consistent                    | The Proposed Project will provide additional employment opportunities to residents in the County.  |
| Objective 3.7 – Evaluate environmental justice issues associated with job creation and displacement when considering the approval of renewable energy Projects.   | Consistent                    | The nearest home to the Proposed Project is located over a mile to the north of the Project site. No impacts to disadvantaged communities would occur from implementation of the Proposed Project. |
| Goal 4 – Support development of renewable energy resources that will contribute to the restoration efforts of the Salton Sea.   | Consistent                    | The Proposed Project is being designed to minimize impacts to the Salton Sea restoration areas.  |
| Objective 4.1 – Prioritize the Salton Sea exposed seabed (playa) for renewable energy Development.  | Consistent                    | The Proposed Project will be located in the Salton Sea exposed seabed area.  |
| Objective 4.4 – Encourage the development of renewable energy facilities that will contribute to the reduction or elimination of airborne pollutants created by exposure of the seabed of the Salton Sea as it recedes.   | Consistent                    | The Proposed Project will be located in the Salton Sea exposed seabed area and will be required to provide adequate landscaping and hardscaping to minimize airborne pollutants.                   |
| Objective 4.3 – Develop mitigation measures and monitoring programs to minimize impacts to avian species and other species that may be affected by renewable energy facilities constructed near the Salton Sea.           | Consistent                    | This EIR has analyzed the biological impacts, including impacts to avian species.  |

**Table 4.4-1: General Plan Consistency**

| General Plan Polices  | Consistency with General Plan | Analysis   |
|---|-------------------------------|--|
| Goal 5 – Encourage development of innovative renewable energy technologies that will diversify Imperial County’s energy portfolio.  | Consistent                    | The Proposed Project will produce lithium hydroxide as well as zinc and manganese products that are raw chemicals utilized in the production of batteries as well as other commercial uses that will diversify the County’s energy portfolio.                            |
| Objective 5.1 – Support the implementation of pilot Projects intended to test or demonstrate new and innovative renewable energy production technologies.   | Consistent                    | Although the Proposed Project is for full production and is not a pilot project, it will demonstrate new and innovative renewable energy production technologies.  |
| Goal 6 – Support development of renewable energy while providing for the protection of military aviation and operations.  | Consistent                    | The Proposed Project will be designed to meet all aviation requirements.   |
| Goal 7 – Actively minimize the potential for land subsidence to occur as a result of renewable energy operations.   | Consistent                    | The Proposed Project will be designed to minimize land subsidence.   |
| Objective 7.1 – Require that all renewable energy facilities, where deemed appropriate, include design features that will prevent subsidence and other surface conditions from impacting existing land uses.  | Consistent                    | The Proposed Project will be designed to minimize land subsidence.   |
| Objective 7.2 – For geothermal energy development facilities, establish injection standards consistent with the requirements of the California Division of Oil, Gas, and Geothermal Resources (CDOGGR). Request a CDOGGR subsidence review, if necessary, for consideration prior to setting injection standards. | Consistent                    | The Proposed Project will process geothermal brine from the neighboring HR1, which is a renewable energy plant. The Proposed Project will meet all California Division of Oil, Gas, and Geothermal Resources (CDOGGR) requirements for handling of the geothermal brine. |
| Objective 7.10 – Require operators of geothermal facilities to establish a notification system to warn or notify surrounding residents of the accidental release of potentially harmful emissions as part of an emergency response plan.  | Consistent                    | The Proposed Project will be required to establish a system to notify nearby residents of the accidental release of potentially harmful emissions.   |

**4.4.3 Thresholds of Significance**

In order to assist in determining whether a project would have a significant effect on the environment, the County utilizes the State CEQA Guidelines Appendix G Guidelines. Appendix G states that a project may be deemed to have an energy impact if it would:

**Threshold a)                      Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

**Threshold b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

**4.4.4 Project Impact Analysis**

**Threshold a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

The Project would impact energy resources during construction and operation. Energy resources that would potentially be impacted include electricity and petroleum-based fuel supplies and distribution systems. It should be noted that no natural gas lines are in the vicinity of the Project; as such, the Project is being designed not to use natural gas. This analysis includes a discussion of the potential energy impacts of the Project, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. A general definition of each of these energy resources is provided below.

Electricity, a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves a number of system components, including substations and transformers that lower transmission line power (voltage) to a level appropriate for onsite distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid. Conveyance of electricity through transmission lines is typically responsive to market demands. In 2019, IID, which provides electricity to the Project vicinity, provided 3,322 gigawatt-hours (GWh) per year of electricity (CEC 2019).

Petroleum-based fuels currently account for a majority of the California's transportation energy sources and primarily consist of diesel and gasoline types of fuels. However, the state has been working on developing strategies to reduce petroleum use. Over the last decade California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHG emissions from the transportation sector, and reduce vehicle miles traveled (VMT). Accordingly, petroleum-based fuel consumption in California has declined. According to the CEC, in 2017, 83 million gallons of gasoline and 12 million gallons of diesel was sold in Imperial County (CEC 2018).

The following section calculates the potential energy consumption associated with the construction and operations of the Proposed Project and provides a determination whether any energy utilized by the Project is wasteful, inefficient, or unnecessary consumption of energy resources.

**Construction Energy**

The Project would consume energy resources during construction in three general forms:

1. Petroleum-based fuels used to power off-road construction vehicles and equipment on the Project site, construction worker travel to and from the Project site, as well as delivery and haul truck trips (e.g., hauling demolition material to offsite reuse and disposal facilities)
2. Electricity associated with the conveyance of water that would be used during Project construction for dust control (supply and conveyance) and electricity to power any necessary



lighting during construction, electronic equipment, or other construction activities necessitating electrical power

3. Energy used in the production of construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass

### **Construction-Related Electricity**

During construction the Project would consume electricity to construct the new structures and infrastructure. Electricity would be supplied to the Project site by IID and would be obtained from the existing electrical lines in the vicinity of the Project site. The use of electricity from existing power lines rather than temporary diesel or gasoline-powered generators would minimize impacts on fuel consumption. Electricity consumed during Project construction would vary throughout the construction period based on the construction activities being performed. Various construction activities include electricity associated with the conveyance of water that would be used during Project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power. Such electricity demand would be temporary and nominal and would cease upon the completion of construction. Overall, construction activities associated with the Proposed Project would require limited electricity consumption that would not be expected to have an adverse impact on available electricity supplies and infrastructure. Therefore, the use of electricity during Project construction would not be wasteful, inefficient, or unnecessary.

Since power lines currently exist in the vicinity of the Project site, it is anticipated that only nominal improvements would be required to IID distribution lines and equipment with development of the Proposed Project. Compliance with the County's guidelines and requirements would ensure that the Project fulfills its responsibilities relative to infrastructure installation, coordinates any electrical infrastructure removals or relocations, and limits any impacts associated with construction of the Project. Construction of the Project's electrical infrastructure is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

### **Construction-Related Petroleum Fuel Use**

Petroleum-based fuel usage represents the highest amount of transportation energy potentially consumed during construction, which would be utilized by both off-road equipment operating on the Project site and on-road automobiles transporting workers to and from the Project site and on-road trucks transporting equipment and supplies to the Project site.

The off-road construction equipment fuel usage was calculated through use of the off-road equipment assumptions and fuel use assumptions provided in Appendix H, which found that the off-road equipment utilized during construction of the Project would consume 561,273 gallons of fuel. The on-road construction trips fuel usage was calculated through use of the construction vehicle trip assumptions and fuel use assumptions provided in Appendix H, which found that the on-road trips generated from construction of the Project would consume 123,306 gallons of fuel. As such, the combined fuel used from off-road construction equipment and on-road construction trips for the Project would result in the consumption of 684,580 gallons of petroleum fuel. This equates to 0.72 percent of the gasoline and diesel consumed annually in Imperial County. As such, the construction-related petroleum use would be nominal, when compared to current county-wide petroleum usage rates.

Construction activities associated with the Project would be required to adhere to all State and ICAPCD regulations for off-road equipment and on-road trucks, which provide minimum fuel efficiency standards. As such, construction activities for the Proposed Project would not result in the wasteful, inefficient, and unnecessary consumption of energy resources. Impacts regarding transportation energy would be less than significant. Development of the Project would not result in the need to manufacture construction materials or create new building material facilities specifically to supply the Project. It is difficult to measure the energy used in the production of construction materials such as asphalt, steel, and concrete; therefore, it is reasonable to assume that the production of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest of minimizing the cost of doing business.

### **Operational Energy**

The ongoing operation of the Project would require the use of energy resources for multiple purposes including, but not limited to, pumps and other mechanical industrial equipment, heating/ventilating/air conditioning (HVAC), refrigeration, lighting, appliances, and electronics. Energy would also be consumed during operations related to water usage, solid waste disposal, landscape equipment, and vehicle trips.

### **Operations-Related Electricity**

Operation of the Project would result in consumption of electricity at the Project site. According to the CalEEMod model printouts in Appendix G: Greenhouse Gas Screening Letter (Ldn Consulting, Inc. 2021), the Proposed Project would consume 51,840,000 kilowatt-hours per year of electricity. This equates to 1.56 percent of the electricity consumed annually in the County of Imperial. As such, the operations-related electricity use would be nominal when compared to current electricity usage rates in the County.

Additionally, the Project would comply with all federal, State, and City requirements related to the consumption of electricity, including CCR Title 24, Part 6, Building Energy Efficiency Standards and CCR Title 24, Part 11, the CALGreen Code. The CCR Title 24, Part 6 and Part 11 standards require numerous energy efficiency measures to be incorporated into the Project, including enhanced insulation and use of energy-efficient lighting and appliances as well as requiring a variety of other energy efficiency measures to be incorporated into all of the proposed structures. Therefore, it is anticipated the Project will be designed and built to minimize electricity use and that existing and planned electricity capacity and electricity supplies would be sufficient to support the Proposed Project's electricity demand. Thus, impacts with regard to electrical supply and infrastructure capacity would be less than significant, and no mitigation measures would be required.

### **Operations-Related Transportation Energy**

Operation of the Proposed Project would result in increased consumption of petroleum-based fuels related to vehicular travel to and from the Project site. As calculated in Appendix H, the Project would consume 22,985 gallons of transportation fuel per year. This equates to 0.024 percent of the gasoline and diesel consumed in the County annually. As such, the operations-related petroleum use would be nominal when compared to current petroleum usage rates in the County.

Additionally, the Project would comply with all federal, State, and County requirements related to the consumption of transportation energy, including CCR Title 24, Part 11, the CALGreen Code, which requires all new parking lots to provide preferred parking for clean air vehicles. Therefore, it is anticipated

the Project will be designed and built to minimize transportation energy through the promotion of the use of electric-powered vehicles and that existing and planned capacity and supplies of transportation fuels would be sufficient to support the Project's demand. Thus, impacts regarding transportation energy supply and infrastructure capacity would be less than significant, and no mitigation measures would be required.

**Threshold b)                      Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

The Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. The applicable Renewable Energy and Transmission Element for the Project is included in the County's General Plan. The Proposed Project's consistency with the applicable energy-related policies in the Renewable Energy and Transmission Element of the General Plan are shown in Table 4.4-1.

**4.4.5                      Cumulative Impacts**

Cumulative impacts are defined in CEQA as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines Section 15355). Stated in another way, "a cumulative impact consists of an impact which is created as a result of the combination of the Project evaluated in the EIR together with other Projects causing relating impacts" (CEQA Guidelines Section 15130 [a][1]).

The geographic scope of cumulative energy impacts associated with the Project comprises the IID service area. Electricity is provided to end users on demand, and delivery amount is a function of use. During peak usage, more of the utility can be made available to users in order to avoid any potential outages. Average electricity consumption within the County is below the regional average of consumption and is in decline due to stricter policies for building codes and energy conservation practices. The Project, in combination with cumulative projects, would have less than significant impacts within the service area of IID.

**4.4.6                      Mitigation Measures**

No mitigation measures are required, as all Project impacts regarding energy are less than significant.

**4.4.7                      Level of Significance After Mitigation**

No mitigation measures are required; thus, impacts related to energy would remain less than significant.