5.0 PROJECT ALTERNATIVES

This section describes the Project alternatives screening process and evaluates the comparative effects of the alternative relative to the Project. As required under CEQA Guidelines Section 15126.6(e), the environmentally superior alternative is identified at the end of this section.

5.1 Overview of Project Alternatives Under CEQA

The purpose of the alternatives evaluation in an EIR, as stated in CEQA Guidelines Section 15126.6(c), is to ensure that "[t]he range of potential alternatives to the proposed project would include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects" identified under the Project. Pursuant to CEQA Guidelines Section 15126.6, one alternative, the No Project Alternative, is presented in this DEIR to provide the public and decision makers with possible alternatives to the Project to consider. An overview of the No Project Alternative is included in Section 5.5.

The CEQA Guidelines state that an EIR would describe a reasonable range of alternatives that would avoid or substantially lessen any significant effects of a project but need not consider every conceivable alternative. The CEQA Guidelines further state that "the discussion of alternatives would focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly" (CEQA Guidelines Section 15126.6(b)). Therefore, an EIR must describe a range of reasonable alternatives to the Project (or to its location) that could feasibly attain most of the basic objectives of the Project. The feasibility of an alternative may be determined based on a variety of factors, including, but not limited to, site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and site accessibility and control (CEQA Guidelines Section 15126.6(f)(1)).

Alternatives in an EIR must be potentially feasible (CEQA Guidelines Section 15126.6(a)). Agency decision makers ultimately decide what is "actually feasible." (*California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal. App. 4th 957, 981 (CNPS.) Under CEQA, "feasible" is defined as capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors (CEQA Guidelines Section 15364). The concept of "feasibility" also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project (*Sierra Club v. County of Napa* (2004) 121 Cal.App.4th 1490, 1506-1509; CNPS, supra, 177 Cal. App. 4th at p. 1001; In re Bay-Delta

Programmatic Environmental Impact Report Coordinated Proceedings (2008) 43 Cal.4th 1143, 1165, 1166). Moreover, "'feasibility' under CEQA encompasses "'desirability' to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, legal, and technological factors." (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417).

An EIR need not evaluate the environmental effects of alternatives in the same level of detail as the proposed project, but must include enough information to allow meaningful evaluation, analysis, and comparison with the project. The lead agency's decision-making body, in this case the County, has the discretion to select a project alternative in lieu of the Project.

5.2 Project Objectives

The primary purpose of the Project is to reliably and economically receive, store and return up to 125 MW of electric energy to the electric grid. Charging energy will be provided from the electric grid which will include solar energy currently produced in Imperial County, including at the CSE site. The Project will electrically connect to the adjacent San Diego Gas & Electric (SDG&E) Drew Switchyard which is directly connected to the Imperial Valley substation. Moreover, the Project is consistent with the goals and policies of the County General Plan and is consistent with the purpose of the zone in which it will be sited. The County General Plan's goals include:

"...support[ing] the safe and orderly development of renewable energy while providing for the protection of environmental resources" and "support[ing] development of renewable energy resources that will contribute to and enhance the economic vitality of Imperial County[.]" (Imperial County Renewable Energy Transmission Element, 2015)

The Project will help achieve these goals by making renewable energy projects more efficient by capturing and transmitting energy that might otherwise go unused. The following objectives have been identified for the proposed Project:

- Assist the State in achieving the Renewable Portfolio Standard (RPS) and greenhouse gas (GHG) emissions reduction objectives by constructing a solar powered BESS;
- Provide a new economic and reliable means of capturing, storing and managing renewable energy (up to 125 MW) that would otherwise be lost;
- Provide benefits to Imperial County, the region and the State of California including construction jobs, property and sales taxes, and increased energy efficiency;

- Receive solar-generated electricity during times of excess generation or times of low energy demand and store that power for release when the customer deems it to be more valuable thus increasing the effectiveness of Imperial County renewable energy projects; and
- Locate the Project on available land previously disturbed during construction of the CSE project, therefore minimizing environmental and land impacts.

5.3 Proposed Project Summary

On June 22, 2018, the Applicant submitted an application for a CUP to ICPDS to allow installation and operation of: an approximately 85,000 square foot building to contain electrochemical batteries, racks and related building and electrical control systems; inverters, an on-site substation and an overhead 230 kilovolt (kV) electric line; all located within the existing CSE site.

The proposed Project consists of the construction and operation of a BESS with up to 125 MW of electrical storage capacity to receive and store excess energy and to return this electricity to the grid at a later time, when needed. The Project will be situated on approximately three to five acres within the fence line of the existing CSE site, located at 319 Brockman Road, Calexico, CA. Construction activities are expected to take approximately 12 months. Major Project components include the following: up to two buildings totaling 85,000 square feet in size (batteries and enclosures; power conversion systems; substation and overhead electric tie line; ancillary systems. Major Project components include:

- *Batteries and Enclosures:* Banks of electrochemical batteries connected in series and parallel to provide the total energy storage capacity including associated electronics for monitoring and managing the batteries to ensure safety and the design life of the system.
- *Power Conversion Systems (PCS):* Each PCS will consist of bi-directional inverters with 480V AC output, and a medium voltage (MV) transformer which steps the voltage up to 34.5kV.
- *Substation:* AC energy from the MV transformers are aggregated at the Project substation and stepped up to 230-kV by high-voltage transformer(s) and then delivered to the Drew Switchyard.
- *Ancillary Systems:* The plant ancillary systems control, protect and support the Project and its operation. They include fencing; security; lighting; fire protection; and heating, venting, and air conditioning (HVAC).

Access to the site will be off Highway 98 via the existing encroachment and road used by CSE and SDG&E to access the Drew Substation. The design life of the Project is 25 years.

5.4 Alternatives Eliminated from Further Consideration

Alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce any significant environmental effects (*CEQA Guidelines*, Section 15126.6[c]). Alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, also do not need to be considered (*CEQA Guidelines*, Section 15126[f][2]). Imperial County considered alternatives to reduce Project impacts on air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, noise and transportation (please refer to Chapter 3 of this Draft SEIR for more information on these issue areas). Per CEQA, the lead agency may make an initial determination as to which alternatives are feasible and warrant further consideration and which are infeasible. The following alternatives were initially considered but were eliminated from further consideration in this EIR because the alternatives do not meet project objectives or were infeasible.

5.4.1 Off-Site Location

This alternative would involve the development of the proposed Project on another site located within Imperial County. Although undetermined at this time, due to the solar resources, existing and planned electricity transmission infrastructure and limited topography, the alternative project site would likely remain in the desert region of Imperial County, similar to the proposed Project site. Under this alternative, is it assumed that the Project would still involve construction of an up to 125 MW BESS and up to two buildings totaling 85,000 square feet in size (batteries and enclosures; power conversion systems; substation and overhead electric tie line; ancillary systems approximately) on three to five acres. Similar to the proposed Project, it is also assumed that this alternative would require CUP approvals to allow installation and operation of: an approximately 85,000 square foot building to contain electrochemical batteries, racks and related building and electrical control systems; inverters, an on-site substation and an overhead 230 kV electric line.

Based on the known general conditions in the Imperial County area and Project as proposed (being located within the boundary of an existing solar development), an off-site location in the area is likely to have more significant impacts after mitigation than the Project in the areas of : agriculture and forestry resources, air quality, biological resources, Hydrology/Water Quality, Cultural Resources, and Land Use/Planning. In addition, an alternative site for the Project is not considered to be “potentially feasible,” as there is no suitable site within the control of the Applicant. Further, it is unknown at this time if another point of interconnection to the utility power grid would be available for this Project if it were relocated. Given the size of the BESS facility, the project objectives, and the need co-locate the BESS in proximity to existing electric infrastructure, it is impractical and infeasible to propose the Project on an

off-site location, and still proceed within a reasonably similar timeframe. Therefore, the off-site location alternative has been eliminated from further consideration in this draft SEIR.

5.4.2 Flow Battery Alternative

This alternative would involve the use of flow battery technology at the proposed Project development site in place of lithium-ion battery technology. A flow battery is a type of electrochemical cell where chemical energy is provided by two chemical components dissolved in liquids contained within the system and separated by a membrane. A flow battery can be used like a fuel cell where the spent fuel is extracted, and new fuel is added to the system or like a rechargeable battery where an electric power source drives regeneration of the fuel. While it has technical advantages over conventional rechargeable batteries, such as potentially separable liquid tanks and near unlimited longevity, current implementations are comparatively less powerful and require more sophisticated electronics (Energy Storage Association, 2019).

Similar to the proposed Project, this battery technology would receive, store and return electric energy to the electric grid. Charging energy will be provided from the electric grid which will include solar energy currently produced at the CSE site. The batteries would be housed in a battery energy storage facility within the existing CSE solar development. Flow battery technology could require additional facility equipment to operate which could increase the potential for impacts during the short-term construction phase, to air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, noise and transportation due to a possibly larger required facility footprint. In addition, flow batteries include expensive fluids that are also corrosive or toxic.

As noted above, alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce any significant environmental effects. Therefore, the flow battery alternative was eliminated from further consideration because:

- It would not substantially reduce the significant environmental impacts associated with aesthetics, agriculture resources, air quality and biological resources;
- It would fail to meet the applicant's objectives for the proposed project; and
- It is infeasible because this technology is unproven in commercial operation with uncertain performance.

5.4.3 Lead-Acid Battery Alternative

This alternative would involve the use of lead-acid batteries at the proposed Project development site in place of lithium-ion battery technology. Lead-acid battery technology is the earliest and most widely used type of rechargeable battery and are the common technology used for automotive (starting, lighting, ignition) applications due to costs and high durability. The proposed Project will use lithium-ion battery technology because it offers the best mix of performance specifications, such as high charge and discharge efficiency, low self-discharge, high energy density, and long cycle life. In contrast, the use of lead-acid batteries for higher power applications with intermittent loads are less common due to a shorter life cycle and also due to size and weight of the battery. Additionally, lead-acid batteries are composed of a Lead-dioxide cathode, a sponge metallic Lead anode and a Sulphuric acid solution electrolyte. This heavy metal element makes them toxic and improper disposal can be hazardous to the environment.

Similar to the proposed Project, this battery technology would receive, store and return electric energy to the electric grid. Charging energy will be provided from the electric grid which will include solar energy currently produced at the CSE site. The batteries would be housed in a battery energy storage facility within the existing CSE solar development. The potential for increased impacts during the short-term construction phase, however, could occur to air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, noise and transportation. Lithium-ion battery technology has a higher comparative energy density in comparison to lead-acid batteries, thus more energy can be stored in a lithium-ion battery using the same physical space. As such, in order to obtain the same storage capacity as the proposed Project, a lead-acid battery storage facility would likely require a larger building footprint, which could increase associated environmental impacts during construction. In addition, the capacity and efficiency of lithium-ion batteries would be greater than that of a lead-acid battery facility making this alternative infeasible due to performance limitations.

As noted above, alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce any significant environmental effects. Therefore, the lead acid battery alternative was eliminated from further consideration because:

- It would not substantially reduce the significant environmental impacts associated with aesthetics, agriculture resources, air quality and biological resources;
- It would fail to meet the applicant's objectives for the proposed project; and
- It is infeasible because lead-acid battery performance is not consistent with the anticipated market operations of the Project.

5.5 Alternatives Selected for Analysis

In accordance with the provisions of CEQA Guidelines Section 15126.6, the Draft SEIR considers three alternatives (Table 5-1) in addition to the proposed Project. The existing CSE facility allows for flexibility in siting the Project's physical components described above (enclosure(s), substation and tie line) within the existing CSE site. Accordingly, the following (mutually exclusive) alternative site plans are included as described below. Tables 5-2 provides a comparison of the alternatives and relative impacts of each alternative. Figure 2-2 (Chapter 2) illustrates the overall location of each alternative location for the proposed Project. Figures 2-7 and Figure 2-9 (Chapter 2) illustrate the West Alterative and East Alternative, respectively.

Table 5-1: Alternative Site Plans

Alternative	Project Area	Building Area	Electric Tie-Line
No Project Alternative	--	--	--
West Alternative (West of existing CSE Control Building)	3 acres + Tie Line (APN 052-190-010)	1 or 2 buildings totaling approximately 85,000 square feet	Shared with existing CSE + approximately 350 feet of new tie line
East Alternative (East of existing CSE Control Building)	3 acres + Tie Line (APN 052-190-010)	1 or 2 buildings totaling approximately 85,000 square feet	Shared with existing CSE + approximately 1,300 feet of new tie line

Table 5-2: Comparison of Alternatives

Environmental Resource	No Project Alternative	West Alternative	East Alternative
Air Quality/GHG	Fewer (short-term), Greater (long-term)	Greater	Greater
Biological Resources	Similar	Greater	Greater
Cultural Resources	Similar	Greater	Greater
Geology and Soils	Fewer	Greater	Greater
Hazards and Hazardous Materials	Fewer	Similar	Similar
Noise	Fewer	Similar	Greater
Transportation	Fewer	Similar	Similar
Meets Project Objectives?	No	Yes	Yes

5.5.1 Alternative 1 – No Project Alternative

CEQA Guidelines Section 15126.6(e)(1) requires that a No Project Alternative be analyzed in order to allow the decision-makers to compare the impacts of approving a proposed project with the impacts of not

approving the proposed project. Under this alternative, the proposed BESS will not be constructed nor will a new CUP be requested. The Project site will remain in its existing state as undeveloped land within the CSE project site to the east of the Drew Switchyard.

5.5.1.1 Impacts Compared to Project Impacts

The following compares environmental impacts associated with the No Project Alternative to those identified for the proposed Project.

Air Quality and GHG Emissions

During short-term construction, air quality emissions associated with the Project would be greater than the No Project Alternative. However, the proposed Project would contribute to a decrease in regional air pollutant emissions by helping to reduce the demand for new fossil-fuel-burning power generation facilities, as the Project would assist in storing renewable energy generated within the region. Therefore, the No Project alternative would create fewer short-term air quality impacts but greater long-term air pollution impacts than the proposed Project.

Unlike the proposed Project, the No Project Alternative would not involve construction activities or operation of a BESS facility; therefore, heavy equipment operation, truck deliveries, and construction worker commute trips would not be utilized, and increased GHG emissions would not occur as a result. However, the No Project Alternative would not assist the County in meeting AB 32 or Executive Order S-3-05 emission reduction targets, nor would it assist in offsetting emissions generated by fossil-fuel-based sources of energy. Therefore, the No Project Alternative would have fewer air emissions impacts than the proposed Project during the project's construction period but would result in greater air emissions impacts during the proposed Project's operational period. Because the construction period is anticipated to last for only 12 months, and the operational period is anticipated to last 25 years, the long-term impact of the No Project Alternative on GHG emissions is greater than the impact of the proposed Project.

Biological Resources

According to biological surveys performed at the Project site, numerous sensitive plant and animal species had been identified within the vicinity of the Project site; however, the site has been developed and is currently being used as the CSE facility. The location where the proposed Project would be developed has been graded and currently covered by compacted soils. Under the No Project Alternative, no new construction and/or operational activities would result, and impacts would generally not be increased. There would be fewer impacts to biological resources

from the No Project Alternative as compared to the proposed Project. As discussed in Chapter 3 of this EIR, the project-level impacts resulting from the proposed Project would be less than significant with mitigation. Implementation of the No Project Alternative would successfully avoid project-level impacts to biological resources since no project would be constructed.

Cultural Resources

Field surveys indicate the presence of historic and potential presence prehistoric resources within the area of potential affect. Mitigation measures are provided to reduce impacts to these resources to below a level of significance. Under the No Project Alternative, the Project site would remain as is with compacted soils, and no ground disturbing activities would occur. Therefore, unlike the proposed Project, the No Project Alternative would not have the ability to accidentally uncover potentially significant cultural, archaeological, or paleontological resources which may be located beneath the surface Project site. There would be no impact to cultural resources, and no mitigation measures would be necessary. Accordingly, there would be fewer impacts to potential cultural resources from the No Project Alternative than the proposed Project.

Geology and Soils

Implementation of the No Project Alternative would result in a continuation of existing land uses. The site is expected to continue to be used as the existing CSE facility. The proposed area of development would remain vacant with compacted soils. No change in geology or soils conditions would occur with the No Project alternative, therefore, it would have less of an impact than the proposed Project.

Hazards and Hazardous Materials

If the No Project Alternative is implemented, the proposed Project would not be implemented and the current proposed Project location on the existing CSE facility would remain undeveloped. Current operations would continue in place including weed control management as well as transport, use and storage of small quantities of hazardous materials. No change in hazards and hazardous materials would occur with this alternative, therefore, it would have less of an impact than the proposed Project.

Noise

If the No Project Alternative is implemented, short-term construction activities of the BESS facility and long-term operation of the Project would not occur and the associated noise levels would not be generated from short-term construction vehicles or the HVAC system in the long-

term operational phase. The No Project Alternative would eliminate the project-specific less than significant short-term construction and long-term HVAC operational noise impacts discussed in Chapter 3.

Transportation and Traffic

In contrast to the proposed Project, there would be no development of a BESS facility associated with the No Project Alternative. Therefore, the No Project Alternative would not have the potential to affect traffic volumes on nearby roadways as a result of either construction or operational activities. Because transportation and traffic impacts associated with construction of the proposed Project would be slightly greater than the existing CSE facility, the No Project Alternative would result in fewer impacts as compared to the proposed Project.

5.5.1.2 Conclusion

Avoid or Substantially Lesson Project Impacts

The No Project Alternative would result in fewer short-term impacts to air quality, geology and soils, hazards and hazardous materials, noise and transportation, but would result in greater long-term impacts associated with air quality and GHG emissions.

Attains Project Objectives

The No Project Alternative would not meet any of the Project objectives.

Comparative Conclusion

The No Project Alternative would avoid some impacts associated with the proposed Project's short-term, long-term, and cumulative impacts. Long-term air quality and GHG impacts would be greater with the No Project Alternative. In addition, this alternative would not meet any of the Project's objectives.

5.5.2 Alternative 2 – West Alternative

Alternative 2 is located in the area immediately west of the existing CSE Control Building or Operations and Maintenance (O&M) Building (see **Figure 2-7** in Chapter 2), which serves as both an office for the CSE facility and a maintenance shop/warehouse. This location (APN 052-190-010) will accommodate up to two BESS buildings totaling 85,000 square feet within the existing CSE site. If one building is ultimately constructed, the proposed single-story BESS footprint will measure approximately 275 feet by 375 feet. Existing gravel access roads within the CSE site will be used to access the Alternative 2 site. Wiring from the battery energy storage system will be connected to the existing CSE substation, located

immediately south of SR 98, approximately mid-way between Pulliam Road and Brockman Road, via an overhead gen-tie line approximately 350 feet in length.

5.5.2.1 Impacts Compared to Project Impacts

The following compares environmental impacts associated with the West Alternative to those identified for the proposed Project.

Air Quality and GHG Emissions

During construction and decommissioning, air quality emissions associated with the West Alternative would be similar to that of the proposed Project. Similar to the proposed Project, construction of the West Alternative would continue for approximately 12 months and get decommissioned after the 25-year lifespan. Construction worker vehicle trips to and from the site of development would occur during these phases. Similar to the proposed Project, the West Alternative would utilize typical construction equipment for site preparation (including grading), digging foundations, excavating trenches, and for conduit installation. The West Alternative would require a gen-tie of approximately 350 feet in length to connect to the CSE substation. The proposed Project, in comparison would be located adjacent to the SDG&E Drew Switchyard and interconnect via an approximately 150-foot gen-tie to connect to the existing shared gen-tie line currently delivering energy from the CSE site. As such, the construction phase under the West Alternative could be extended slightly longer in comparison to the proposed Project due to the additional length in the gen-tie line, thus resulting in slightly greater construction air emissions.

Following the construction period (during project operations), development under this alternative would have similar air pollution as the proposed Project. When operating, this alternative will be unmanned, operate year-round, and available to receive or deliver energy 24 hours/day, similar to the proposed Project. Routine maintenance activities, including equipment testing, monitoring, and repair will occur as needed under this alternative. Similarly, only authorized personnel will be permitted on-site under the West Alternative. Facility maintenance will include the periodic maintenance of structures and BESS components. Regular maintenance performed will consist of equipment inspection and replacement and occur primarily during daylight hours. Emergency maintenance could occur at any time, as needed; however, maintenance and emergency service during daylight hours will be encouraged to maximize worker safety. Thus, similar to the proposed Project, there is no anticipated new trip generation for the maintenance and operations of the West Alternative. Development under this alternative as well as the proposed Project would assist in decreasing regional air pollutant emissions by reducing the demand for new fossil-

fuel-burning power generation facilities. Therefore, there would be similar long-term air pollution impacts resulting from the West Alternative and the proposed Project.

Similar to the proposed Project, this alternative would involve short-term construction activities in order to construct the BESS facility. As part of this phase, heavy equipment operation, truck deliveries, and construction worker commute trips would be utilized, and result in an increase in GHG emissions. However, development under this alternative as well as the proposed Project would assist the County in meeting AB 32 or Executive Order S-3-05 emission reduction targets and assist in offsetting emissions generated by fossil-fuel-based sources of energy. Therefore, the West Alternative would have similar impacts in comparison to the proposed Project during the short-term construction period and similar impacts during the operational period. Because the construction period is temporary and is anticipated to last for only 12 months, relative to the anticipated long-term operational period of 25 years, the long-term impact of this alternative on GHG emissions is similar when compared to the impacts of the proposed Project.

Biological Resources

Similar to the proposed Project, development of the West Alternative would have the potential to impact sensitive species; however, as this alternative is situated further from the Westside Main Canal, the potential for impacts to burrowing owls would be slightly less in comparison. Both the West Alternative and the proposed Project would implement the mitigation measures outlined in Section 3.2 to bring reduce these potential impacts to a less than significant levels. During construction, operation, and decommissioning of the West Alternative, there may be associated noise and light which could impact wildlife species that forage in the area. This potential impact may be slightly less under the West Alternative in comparison to the proposed Project, as the West Alternative would be located further away from the Westside Main Canal and have a reduced likelihood of potentially impacting wildlife species foraging in that area. Similar to the proposed Project construction, operation, and decommissioning of the West Alternative may disturb soils and could result in the introduction or increased density of non-native invasive plant species. The West Alternative would require a gen-tie of approximately 350 feet in length to connect to the CSE substation. The proposed Project, in comparison would be located adjacent to the SDG&E Drew Switchyard and interconnect via an approximately 150-foot gen-tie to connect to the existing shared gen-tie line currently delivering energy from the CSE site. As such, there would be a slightly greater risk under this alternative, in comparison to the proposed Project, to avian species with regards to collisions with the proposed BESS and its associated equipment.

As with the proposed Project, reptile species may be impacted through loss of habitat during construction of the West Alternative, or direct mortality, injury, or disturbance of species during construction, operation, and decommissioning activities. Though the proposed West Alternative site has been previously scraped and leveled, similar to the proposed Project, impacts on special status species are expected (similar to the proposed Project) to be potentially significant unless mitigation incorporated (as described in Section3.2) in association with BESS construction, operation or decommissioning.

Cultural Resources

Similar to the proposed Project, the area of the proposed West Alternative has been disturbed and leveled as part of the existing CSE facility. In addition, no historical resources as defined in §15064.5 are present at the site location and no impacts are anticipated to occur. As with the proposed Project, development under the West Alternative could damage unrecorded subsurface archaeological resources during construction. However, this potential would be slightly greater under the West Alternative due to increased ground disturbance as the West Alternative would require a gen-tie of approximately 350 feet in length to connect to the CSE substation. The proposed Project, in comparison would be located adjacent to the SDG&E Drew Switchyard and interconnect via an approximately 150-foot gen-tie to connect to the existing shared gen-tie line currently delivering energy from the CSE site. During operation and maintenance, no additional impacts to the archaeological resources are anticipated because the soil disturbance will have already occurred. As a result, impacts to archaeological resources are considered less than significant during operation, similar to the proposed Project. Decommissioning activities of the West Alternative will similarly consist of the removal of the battery cells, structures and wiring. During the decommissioning phase of the West Alternative, earth-moving activities similar to those occurring during BESS construction. However, the ground disturbance that will occur as a result of decommissioning will be in the same locations of disturbance that occurred during construction of the BESS. As such, no further disturbance of potential archaeological resources is anticipated to occur under the West Alternative, similar to the proposed Project. Subsurface human remains could be impacted during construction of the West Alternative, similar to the proposed Project. The development site has been historically disturbed by past agricultural practices and is currently vacant land within the CSE facility boundary. Although the potential for encountering subsurface human remains within the West Alternative footprint is low, there remains a possibility that human remains could be present beneath the ground surface, and that such remains could be exposed during construction, similar to the proposed Project. However,

this potential would be slightly greater under the West Alternative due to increased ground disturbance as the West Alternative would require a gen-tie of approximately 350 feet in length to connect to the CSE substation. The proposed Project, in comparison would be located adjacent to the SDG&E Drew Switchyard and interconnect via an approximately 150-foot gen-tie to connect to the existing shared gen-tie line currently delivering energy from the CSE site.

Geology and Soils

Similar to the proposed Project, the location of the West Alternative with respect to the San Andreas fault and Imperial fault could expose the BESS to seismic impacts. As both the proposed Project site and West alternative would be developed within the boundary of the existing CSE facility, this potential impact would remain the same. Similarly, the West Alternative will not include full-time regular employees on-site; however, regular maintenance visits will be required where people will be exposed to potential seismic activity. Development of the West Alternative would similarly be subject to direct impacts resulting from potential swelling forces and reduction in soil strength resulting from saturation. However, mitigation measure to replace expansive soils or condition soils to minimize expansion were implemented during construction of the BESS would reduce direct impacts associated with expansive soils. Although Imperial County historically has not been known for having significant paleontological resources, development under both the West Alternative and proposed Project could result in the possibility that grading and other construction activities may uncover paleontological resources. However, this potential would be slightly greater under the West Alternative due to increased ground disturbance as the West Alternative would require a gen-tie of approximately 350 feet in length to connect to the CSE substation. The proposed Project, in comparison would be located adjacent to the SDG&E Drew Switchyard and interconnect via an approximately 150-foot gen-tie to connect to the existing shared gen-tie line currently delivering energy from the CSE site.

Hazards and Hazardous Materials

Similar to development under the proposed Project, the West Alternative will involve the transport, use, and disposal of hazardous materials in association with construction, operation and decommissioning. The proposed site of development under this alternative was historically farmed but is now part of the existing CSE facility, as with the proposed Project site. Similarly, the potential impacts resulting from construction and operation of the West Alternative may include the accidental release of certain materials such as CdTe, used biodegradable dielectric fluid, mineral oil, hydraulic oil, diesel fuel, grease, lubricants, solvents, adhesives and paints. The West Alternative would also implement a monitoring and a fire suppression system that includes

water and or a suppression with smoke detectors, control panel, alarm, piping and nozzles. As the West Alternative would be located adjacent to the O&M building the likelihood of response times to emergency situations could be reduced. However, there would be generally no increased risk of potential fire hazards at this alternative development location in comparison to the proposed Project location.

Noise

Similar to the proposed Project, the construction and operation of the West Alternative will not generate significant noise which exceeds local standards. In addition, and comparable to the proposed Project, fine grading associated with the West Alternative is unlikely to generate groundborne vibration or noise levels through blasting or other construction-related activity, as the overall CSE Project area is characterized by relatively flat topography and has already been graded for the existing CSE facility. Construction activity associated with large earth moving equipment has the highest potential for creating noise since there could be temporary increase in noise levels on and adjacent to the site during construction of both the West Alternative and proposed Project. Wiring from the battery energy storage system, under the West Alternative, will be connected to the existing CSE substation, located immediately south of SR 98, approximately mid-way between Pulliam Road and Brockman Road, via an overhead gen-tie line approximately 350 feet in length. The proposed Project, in comparison, will interconnect into the existing adjacent SDG&E Drew Switchyard by tapping into an existing shared 230 kV gen-tie line currently delivering energy from the CSE site. Based on a review of the surrounding area, the worst-case property line noise levels would occur at the property line nearest the operational noise source. For the West Alternative, this location is approximately 1,500 feet to the east along SR 98 on the south side. This would be located at a further distance in comparison to the existing residential structure (405 Drew Road) located approximately 1,000 feet northwest (between Drew Road and SR 98) of the proposed Project center, outside of CSE facility boundary and opposite SR 98. However, under the proposed Project, the site of development is separated from this property line by SR 98, the existing Drew substation and vegetation aligning the roadway. Both the West Alternative and proposed Project would be required to adhere to all applicable noise standards related to construction activities, as identified by Imperial County standards. As such, temporary noise impacts under the West Alternative would be similar to noise levels under the proposed Project. Construction of the BESS under the West Alternative will similarly result in some groundborne vibration caused by heavy equipment. However, vibration levels are not anticipated to exceed Federal Transit Administration thresholds and no residential structures are

similarly located in the vicinity of the West Alternative at a distance to suffer damage or annoyance.

Transportation and Traffic

Similar to the proposed Project, the West Alternative site would have no staff on-site on a daily basis and will be a remotely monitored facility. Routine unscheduled security rounds and maintenance trips would be made, though they would be few. Therefore, operational traffic will not be substantial and would not conflict with Imperial County standards. Development at the West Alternative location would have similar temporary traffic generation during the short-term construction phase of the BESS. Implementation of the West Alternative would add similar construction traffic to existing traffic volumes on the study area intersection and roadways as the proposed Project. However, as with the proposed Project, is anticipated that affected intersections and roadway segments will remain unchanged with the addition of construction trip generation with the development under this alternative. Similar to the proposed Project, development of the West Alternative would access to the CSE project site is via US Interstate 8 (I-8), SR 98 and local roads. From I-8, the proposed Project can be accessed via Drew Road or Brockman Road. In contrast, construction vehicles under the West Alternative would enter the construction site via Brockman Road; however, this access point would not result in a change to traffic volumes during this period.

5.5.2.2 Conclusion

Avoid or Substantially Lesson Project Impacts

The West Alternative would result in similar impacts to hazards and hazardous materials, noise and transportation. As previously described, there would be slightly greater potential for impacts to cultural resources as well as geology and soils under the West Alternative due to increased ground disturbance, as the West Alternative would require a gen-tie of approximately 350 feet in length to connect to the CSE substation. The proposed Project, in comparison would be located adjacent to the SDG&E Drew Switchyard and interconnect via an approximately 150-foot gen-tie to connect to the existing shared gen-tie line currently delivering energy from the CSE site. Additionally, the increased gen-tie length under the West Alternative has the potential to slightly extend the construction phase resulting in slightly greater short-term air quality/GHG impacts. With the increased gen-tie length under the West Alternative, in comparison to the proposed Project, there would also be a slightly greater risk to avian species with regards to collisions with the proposed BESS and its associated equipment. As such, the West Alternative would have greater impacts when compared to the proposed Project.

Attains Project Objectives

The West Alternative would meet all of the Project objectives.

Comparative Conclusion

Development of the West Alternative would result in generally similar associated impacts as compared to the proposed Project's short-term, long-term, and cumulative impacts to hazards and hazardous materials, noise, and transportation. However, the West Alternative would result in greater impacts resulting from short-term impacts to Air Quality/GHG, cultural resources, as well as geology and soils. The West Alternative would also result in slightly greater short-term and long-term biological impacts. This alternative would meet the Project's objectives.

5.5.3 Alternative 3 – East Alternative

Alternative 3 is located in the area immediately east of the existing CSE O&M Building (see **Figure 2-9** in Chapter 2). This location (APN 052-190-010) will also accommodate up to two BESS buildings totaling 85,000 square feet within the existing CSE site. If one building is ultimately constructed, the proposed single-story BESS footprint will measure approximately 230 feet by 440 feet. Existing gravel access roads within the CSE site will be used to access the Alternative 2 site. Wiring from the battery energy storage system will be connected to the existing CSE substation, via an overhead gen-tie line approximately 1,300 feet in length. The gen-tie line will parallel the existing internal gravel road in route to the substation.

5.5.3.1 Impacts Compared to Project Impacts

The following compares environmental impacts associated with the East Alternative to those identified for the proposed Project.

Air Quality and GHG Emissions

During construction and decommissioning, air quality emissions associated with the East Alternative would be similar to that of the proposed Project. Similar to the proposed Project, construction of the East Alternative would continue for approximately 12 months and get decommissioned after the 25-year operational lifespan. Construction worker vehicle trips to and from the site of development would occur during these phases. Similar to the proposed Project, the East Alternative would utilize typical construction equipment for site preparation (including grading), digging foundations, excavating trenches, and for conduit installation. The East Alternative would require a gen-tie of approximately 1,300 feet in length to connect to the CSE substation. The proposed Project, in comparison would be located adjacent to the SDG&E Drew Switchyard and interconnect via an approximately 150-foot gen-tie to connect to the existing

shared gen-tie line currently delivering energy from the CSE site. As such, the construction phase under the East Alternative could be extended slightly longer in comparison to the proposed Project due to the additional length in the gen-tie line, thus resulting in slightly greater construction air emissions.

Following the construction period (during project operations), development under this alternative would have similar air pollution as the proposed Project. When operating, this alternative will be unmanned, operate year-round, and available to receive or deliver energy 24 hours/day, similar to the proposed Project. Routine maintenance activities, including equipment testing, monitoring, and repair will occur as needed under this alternative. Similarly, only authorized personnel will be permitted on-site under the East Alternative. Facility maintenance will include the periodic maintenance of structures and BESS components. Regular maintenance performed will consist of equipment inspection and replacement and occur primarily during daylight hours. Emergency maintenance could occur at any time, as needed; however, maintenance and emergency service during daylight hours will be encouraged to maximize worker safety. Thus, similar to the proposed Project, there is no anticipated new trip generation for the maintenance and operations of the East Alternative. Development under this alternative as well as the proposed Project would assist in decreasing regional air pollutant emissions by reducing the demand for new fossil-fuel-burning power generation facilities. Therefore, there would be similar long-term air pollution impacts resulting from the East Alternative and the proposed Project.

Similar to the proposed Project, this alternative would involve short-term construction activities in order to construct the BESS facility. As part of this phase, heavy equipment operation, truck deliveries, and construction worker commute trips would be utilized, and result in an increase in GHG emissions. However, development under this alternative as well as the proposed Project would assist the County in meeting AB 32 or Executive Order S-3-05 emission reduction targets and assist in offsetting emissions generated by fossil-fuel-based sources of energy. Therefore, the East Alternative would have similar impacts in comparison to the proposed Project during the short-term construction period and similar impacts during the operational period. Because the construction period is temporary and is anticipated to last for only 12 months, relative to the anticipated long-term operational period of 25 years, the long-term impact of this alternative on GHG emissions is similar when compared to the impacts of the proposed Project.

Biological Resources

Similar to the proposed Project, development of the East Alternative would have the potential to impact sensitive species; however, as this alternative is situated further from the Westside Main Canal, the potential for impacts to burrowing owls would be slightly less in comparison. Both the East Alternative and the proposed Project would implement the mitigation measures outlined in Section 3.2 to bring reduce these potential impacts to a less than significant levels. During construction, operation, and decommissioning of the East Alternative, there may be increased noise and light which could impact wildlife species that forage in the area. This potential impact may be decreased under the East Alternative in comparison to the proposed Project, as the East Alternative would be located further away from the Westside Main Canal and have a reduced likelihood of potentially impacting wildlife species foraging in that area. Similar to the proposed Project construction, operation, and decommissioning of the East Alternative may disturb soils and could result in the introduction or increased density of non-native invasive plant species. The East Alternative would require a gen-tie of approximately 1,300 feet in length to connect to the CSE substation. The proposed Project, in comparison would be located adjacent to the SDG&E Drew Switchyard and interconnect via an approximately 150-foot gen-tie to connect to the existing shared gen-tie line currently delivering energy from the CSE site. As such, there would be a slightly greater risk under this alternative, in comparison to the proposed Project, to avian species with regards to collisions with the proposed BESS and its associated equipment. As with the proposed Project, reptile species may be impacted through loss of habitat during construction of the East Alternative, or direct mortality, injury, or disturbance of species during construction, operation, and decommissioning activities. Though the proposed East Alternative site has been previously scraped and leveled, similar to the proposed Project, impacts on special status species are expected (similar to the proposed Project) to be potentially significant unless mitigation incorporated (as described in Section3.2) in association with BESS construction, operation or decommissioning.

Cultural Resources

Similar to the proposed Project, the area of the proposed East Alternative has been disturbed and leveled as part of the existing CSE facility. In addition, no historical resources as defined in §15064.5 are present at the site location and no impacts are anticipated to occur. As with the proposed Project, development under the East Alternative could damage unrecorded subsurface archaeological resources during construction. However, this potential would be slightly greater under the East Alternative due to increased ground disturbance as the East Alternative would

require a gen-tie of approximately 350 feet in length to connect to the CSE substation. The proposed Project, in comparison would be located adjacent to the SDG&E Drew Switchyard and interconnect via an approximately 150-foot gen-tie to connect to the existing shared gen-tie line currently delivering energy from the CSE site. During operation and maintenance, no additional impacts to the archaeological resources are anticipated because the soil disturbance will have already occurred. As a result, impacts to archaeological resources are considered less than significant during operation, similar to the proposed Project. Decommissioning activities of the East Alternative will similarly consist of the removal of the battery cells, structures and wiring. During the decommissioning phase of the East Alternative, earth-moving activities similar to those occurring during BESS construction. However, the ground disturbance that will occur as a result of decommissioning will be in the same locations of disturbance that occurred during construction of the BESS. As such, no further disturbance of potential archaeological resources is anticipated to occur under the East Alternative, similar to the proposed Project. Subsurface human remains could be impacted during construction of the East Alternative, similar to the proposed Project. The development site has been historically disturbed by past agricultural practices and is currently vacant land within the CSE facility boundary. Although the potential for encountering subsurface human remains within the East Alternative footprint is low, there remains a possibility that human remains could be present beneath the ground surface, and that such remains could be exposed during construction, similar to the proposed Project. However, this potential would be slightly greater under the East Alternative due to increased ground disturbance as the East Alternative would require a gen-tie of approximately 350 feet in length to connect to the CSE substation. The proposed Project, in comparison would be located adjacent to the SDG&E Drew Switchyard and interconnect via an approximately 150-foot gen-tie to connect to the existing shared gen-tie line currently delivering energy from the CSE site.

Geology and Soils

Similar to the proposed Project, the location of the East Alternative with respect to the San Andreas fault and Imperial fault could expose the BESS to seismic impacts. As both the proposed Project site and East alternative would be developed within the boundary of the existing CSE facility, this potential impact would remain the same. Similarly, the East Alternative will not include full-time regular employees on-site; however, regular maintenance visits will be required where people will be exposed to potential seismic activity. Development of the East Alternative would similarly be subject to direct impacts resulting from potential swelling forces and reduction in soil strength resulting from saturation. However, mitigation measure to replace expansive soils

or condition soils to minimize expansion were implemented during construction of of the BESS would reduce direct impacts associated with expansive soils. Although Imperial County historically has not been known for having significant paleontological resources, development under both the East Alternative and proposed Project could result in the possibility that grading and other construction activities may uncover paleontological resources. However, this potential would be slightly greater under the East Alternative due to increased ground disturbance as the East Alternative would require a gen-tie of approximately 350 feet in length to connect to the CSE substation. The proposed Project, in comparison would be located adjacent to the SDG&E Drew Switchyard and interconnect via an approximately 150-foot gen-tie to connect to the existing shared gen-tie line currently delivering energy from the CSE site.

Hazards and Hazardous Materials

Similar to development under the proposed Project, the East Alternative will involve the transport, use, and disposal of hazardous materials in association with construction, operation and decommissioning. The proposed site of development under this alternative was historically farmed but is now part of the existing CSE facility, as with the proposed Project site. Similarly, the potential impacts resulting from construction and operation of the East Alternative may include the accidental release of certain materials such as CdTe, used biodegradable dielectric fluid, mineral oil, hydraulic oil, diesel fuel, grease, lubricants, solvents, adhesives and paints. The East Alternative would also implement a monitoring and a fire suppression system that includes water and or a suppression with smoke detectors, control panel, alarm, piping and nozzles. As the East Alternative would be located adjacent to the O&M building the likelihood of response times to emergency situations could be reduced. However, there would be generally no increased risk of potential fire hazards at this alternative development location in comparison to the proposed Project location.

Noise

Similar to the proposed Project, the construction and operation of the East Alternative will not generate significant noise which exceeds local standards. However, it may require additional mitigation to do so. In addition, and comparable to the proposed Project, fine grading associated with the East Alternative is unlikely to generate groundborne vibration or noise levels through blasting or other construction-related activity, as the overall CSE Project area is characterized by relatively flat topography and has already been graded for the existing CSE facility. Construction activity associated with large earth moving equipment has the highest potential for creating noise since there could be temporary increase in noise levels on and adjacent to the site during

construction of both the East Alternative and proposed Project. The East Alternative would require an approximate 1,300-foot gen-tie line to connect into the existing CSE substation. The proposed Project, in comparison, will interconnect into the existing adjacent SDG&E Drew Switchyard by tapping into an existing shared 230 kV gen-tie line currently delivering energy from the CSE site. Based on a review of the surrounding area, the worst-case property line noise levels would occur at the property line nearest the operational noise source. For the East Alternative, this property line is approximately 300 feet to the east, adjacent to SR 98 on the south side. This would be located at a closer distance in comparison to the property line of nearest the operational noise sources for the proposed Project, which is an existing residential structure (405 Drew Road) located approximately 1,000 feet northwest (between Drew Road and SR 98) of the proposed Project center, outside of CSE facility boundary and opposite SR 98. The east property boundary next to the East Alternative is zoned Commercial. According to the County noise limits, commercial property is limited to 55 dBA at night, whereas agricultural property is limited to 70 dBA at all times of the day and night. With the lower noise level limit and shorter distance to the property line, the East alternative has an increased chance of exceeding the County noise limits. In order to meet the limits, low-noise equipment may need to be specified and construction activities may need additional mitigation under the East Alternative. In contrast, under the proposed Project, the site of development is buffered from this property line by SR 98, the existing Drew substation and vegetation aligning the roadway. There would be no buffer between the East Alternative and the nearest property line. Both the East Alternative and proposed Project would be required to adhere to all applicable noise standards related to construction activities, as identified by Imperial County standards. However, due to the proximity of the nearest property line to the East Alternative and lack of an existing roadway or vegetation buffer, short-term construction and long-term operational noise impacts under the East Alternative would be greater to adjacent properties (without mitigation) in comparison to noise levels under the proposed Project and would likely require mitigation to meet the County noise limits.

Transportation and Traffic

Similar to the proposed Project, the East Alternative site would have no staff on-site on a daily basis and will be a remotely monitored facility. Routine unscheduled security rounds and maintenance trips would be made, though they would be few. Therefore, operational traffic will not be substantial and would not conflict with Imperial County standards. Development at the East Alternative location would have similar temporary traffic generation during the short-term

construction phase of the BESS. Implementation of the East Alternative would add similar construction traffic to existing traffic volumes on the study area intersection and roadways as the proposed Project. However, as with the proposed Project, is anticipated that affected intersections and roadway segments will remain unchanged with the addition of construction trip generation with the development under this alternative. Similar to the proposed Project, development of the East Alternative would access to the CSE project site is via US Interstate 8 (I-8), SR 98 and local roads. From I-8, the proposed Project can be accessed via Drew Road or Brockman Road. In contrast, construction vehicles under the East Alternative would enter the construction site via Brockman Road; however, this access point would not result in a change to traffic volumes during this period.

5.5.3.2 Conclusion

Avoid or Substantially Lesson Project Impacts

The East Alternative would result in similar impacts to hazards and hazardous materials and transportation. As previously described, there would be slightly greater potential for impacts to cultural resources as well as geology and soils under the East Alternative due to increased ground disturbance, as the East Alternative would require a gen-tie of approximately 1,300 feet in length to connect to the CSE substation. The proposed Project, in comparison would be located adjacent to the SDG&E Drew Switchyard and interconnect via an approximately 150-foot gen-tie to connect to the existing shared gen-tie line currently delivering energy from the CSE site. Additionally, the increased gen-tie length under the East Alternative has the potential to slightly extend the construction phase resulting in slightly greater short-term air quality/GHG impacts. With the increased gen-tie length under the East Alternative, in comparison to the proposed Project, there would also be a slightly greater risk to avian species with regards to collisions with the proposed BESS and its associated equipment. Additionally, the closest receptor property line location to the East Alternative development location is approximately 300 feet to the east along SR 98. This would be located at a closer distance in comparison to the property line of nearest the operational noise sources for the proposed Project, which is an existing residential structure (405 Drew Road) located approximately 1,000 feet northwest (between Drew Road and SR 98) of the proposed Project center, outside of CSE facility boundary and opposite SR 98. In contrast, under the proposed Project, the site of development is buffered from this property line by SR 98, the existing Drew substation and vegetation aligning the roadway. The east property boundary next to the East Alternative is zoned Commercial. According to the County noise limits, commercial property is limited to 55 dBA at night, whereas agricultural property is limited to 70 dBA at all

times of the day and night. With the lower noise level limit and shorter distance to the property line, the East alternative has an increased chance of exceeding the County noise limits. In order to meet the limits, low-noise equipment may need to be specified and construction activities may need additional mitigation under the East Alternative. In contrast, under the proposed Project, the site of development is buffered from this property line by SR 98, the existing Drew substation and vegetation aligning the roadway. There would be no buffer between the East Alternative and the nearest property line. Although both the East Alternative and proposed Project would be required to adhere to all applicable noise standards related to construction activities, as identified by Imperial County standards, noise impacts under development of the East Alternative have a greater likelihood of resulting in noise impacts.

Attains Project Objectives

The East Alternative would meet all of the Project objectives.

Comparative Conclusion

Development of the East Alternative would result in generally similar associated impacts as compared to the proposed Project's short-term, long-term, and cumulative impacts to hazards and hazardous materials as well as transportation. However, the East Alternative would result in greater impacts resulting from short-term impacts to Air Quality/GHG, cultural resources, as well as geology and soils. The East Alternative would also result in slightly greater short-term and long-term noise and biological impacts. This alternative would meet the Project's objectives.

5.5.4 Environmental Superior Alternative

As reviewed in the comparative analysis above, the Environmentally Superior Alternative for the proposed Project would be the No Project Alternative. This alternative would avoid all potentially significant impacts that would occur under the proposed Project. This alternative would also result in fewer short-term impacts to air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, noise, and transportation, as compared to the proposed Project, but the failure to construct a BESS facility to support renewable energy production results in increased impacts in the long-term to air quality and GHG emissions.

Section 15126.6 of the State CEQA Guidelines requires an EIR must identify an "environmentally superior" alternative; if the "no project" alternative is the environmentally superior alternative, then the EIR must identify which of the other alternatives is environmentally superior.

The West Alternative would result in slightly greater overall impacts compared to the proposed Project. As previously described the closest receptor property line location to the West Alternative development location is approximately 1,500 feet to the east, adjacent to the south side of SR 98. This would be located at a further distance in comparison to the existing residential structure (405 Drew Road) located approximately 1,000 feet northwest (between Drew Road and SR 98) of the proposed Project center, outside of CSE facility boundary and opposite SR 98. However, both the West Alternative and proposed Project would be required to adhere to all applicable noise standards related to construction activities, as identified by Imperial County standards. The West Alternative would require a gen-tie of approximately 350 feet in length to connect to the CSE substation. The proposed Project, in comparison would be located adjacent to the SDG&E Drew Switchyard and interconnect via an approximately 150-foot gen-tie to connect to the existing shared gen-tie line currently delivering energy from the CSE site. As such, the West Alternative would result in greater impacts resulting from short-term impacts to Air Quality/GHG due to a potentially lengthened construction schedule. Potential impacts to undiscovered cultural resources, as well as paleontological resources (geology and soils) would be greater under the West Alternative due to the longer transmission length. Due to the lengthier gen-tie line, the West Alternative would also result in slightly greater short-term and long-term biological impacts from potential impacts to avian species.

Development of the East Alternative would result in generally similar associated impacts as compared to the proposed Project's short-term, long-term, and cumulative impacts to hazards and hazardous materials as well as transportation. However, the East Alternative would result in greater impacts resulting from short-term impacts to Air Quality/GHG, cultural resources, as well as geology and soils. The East Alternative would also result in slightly greater short-term and long-term noise and biological impacts. As previously described the closest receptor property line location to the East Alternative development location is approximately 300 feet to the east along SR 98. This would be located at a further distance in comparison to the existing residential structure (405 Drew Road) located approximately 1,000 feet northwest (between Drew Road and SR 98) of the proposed Project center, outside of CSE facility boundary and opposite SR 98. In contrast, under the proposed Project, the site of development is buffered from this property line by SR 98, the existing SDG&E Drew Switchyard and vegetation aligning the roadway. There would be no buffer between the East Alternative and the nearest property line. The east property boundary next to the East Alternative is zoned Commercial. According to the County noise limits, commercial property is limited to a lower noise limit than agricultural land and would require additional mitigation on operational noise sources. Due to the East Alternative's proximity to the property line, construction activities may need additional mitigation to meet the county noise limits. In addition,

the East Alternative would require construction of an approximate 1,300-foot gen-tie line to connect into the existing CSE substation. As previously mentioned, the proposed Project, in comparison, will interconnect into the existing adjacent SDG&E Drew Switchyard by tapping into an existing shared 230 kV gen-tie line currently delivering energy from the CSE site. Although both the East Alternative and proposed Project would be required to adhere to all applicable noise standards related to construction activities, as identified by Imperial County standards, construction and operational noise impacts under development of the East Alternative have a greater likelihood of resulting in noise impacts. The East Alternative would result in greater impacts resulting from short-term impacts to Air Quality/GHG due to a potentially lengthened construction schedule. Potential impacts to undiscovered cultural resources, as well as paleontological resources (geology and soils) would be greater under the East Alternative due to the longer transmission length. Due to the lengthier gen-tie line, the East Alternative would also result in slightly greater short-term and long-term biological impacts from potential impacts to avian species

As such, the proposed Project is comparatively the environmentally superior alternative.