ATTACHMENT C

Findings of Fact and Statement of Overriding Considerations for Unavoidable Significant Environmental Impacts Identified in the Final Environmental Impact Report (EIR) for the Clean Water Act section 401 Water Quality Certification of Eagle Crest Energy Company's Eagle Mountain Pumped Storage Project (State Clearinghouse #2009011010) State Water Resources Control Board July 2013

Section 1

Introduction:

- These Findings of Fact (Findings) are made pursuant to Pubic Resources Code section 21000 et seq. (the California Environmental Quality Act or "CEQA"), and California Code of Regulations, title 14, section 15000 et seq. (CEQA Guidelines) by the State Water Resources Control Board (State Water Board or Board) in connection with the EIR prepared for the Clean Water Act section 401 Water Quality Certification (Certification) of the Eagle Mountain Pumped Storage Project (Project).
- **2.** These Findings accompany the Certification as Attachment C and are attached thereto and incorporated therein by reference.
- **3.** These Findings are based on substantial evidence in light of the entire administrative record, including specific reports, supporting documents, and the contents of the environmental documents produced for the Project. References to specific reports and pages of certain documents are not intended to identify those sources as the exclusive basis for the findings.

Overview of Project and Project Description:

4. The Project, as described in the Final EIR, is Eagle Crest Energy Company's (Applicant or Licensee) planned construction and operation of the Project. The Project is located near the largely abandoned town of Eagle Mountain located in the extreme eastern portion of Riverside County, California. The Project is adjacent to Joshua Tree National Park (JTNP). The Project footprint is up to 2,364 acres. The Project is a pumped storage hydroelectric project that will be designed to provide 1,300 megawatts (MW) of generating capacity to southwestern electric utilities. The Project will primarily use off-peak energy to pump water from a lower reservoir (capacity of 21,900 acre-feet [AF]) to an upper reservoir (capacity of 20,000 AF) and generate energy during periods of high energy demand by transferring the water from the upper reservoir to the lower reservoir through four reversible turbines. Two former iron ore pits that are part of the Eagle Mountain Mine form the reservoirs. A 500-kilovolt transmission line will convey power to and from the Project to an interconnection substation located south of Highway 10. The Project also includes: inlet/outlet structures, water conveyance tunnels, underground

powerhouse, surge control facilities, water supply facilities, water treatment facilities, access roads, and appurtenant facilities. The Applicant filed with the Federal Energy Regulatory Commission (FERC or Commission) a License Application to construct and operate the Project.

- 5. The Project water supply will be sourced from the Chuckwalla Valley Groundwater Basin Aquifer. The Aquifer underlies the Chuckwalla Valley and is estimated to contain between 9 million and 15 million AF of water.
- 6. Due to potential water quality impacts, the Applicant has applied to the State Water Board for Certification (33 U.S.C. § 1341) prior to FERC's issuance of a license for the Project. The State Water Board's Certification will be included as part of the FERC license if a license is issued. The State Water Board is lead agency under CEQA for the issuance of the Certification for the Project.
- 7. Due to site access restrictions, detailed investigations necessary to meet defined performance standards in the Final EIR will be undertaken in two phases. During Phase I, reservoir site conditions, Project components and structures, seepage potential, seismic conditions and water quality issues related to the reservoirs will be evaluated. Phase II will entail a detailed investigation based on the information gained in Phase I.

Administrative Record:

- **8.** The record, upon which all findings and determinations related to the approval of the Project are based, includes the following:
 - i. The EIR and all documents referenced in or relied upon by the EIR.
 - ii. All information and reports provided to the State Water Board by the environmental consultants who prepared the EIR for the Project in consultation with State Water Board staff.
 - iii. All information presented to the State Water Board from other public agencies that relates to the EIR.
 - iv. The Mitigation Monitoring and Reporting Plan for the Project.
 - v. All public comments received on the Draft EIR, Draft Water Quality Certification, Draft Final Water Quality Certification, and Draft Final EIR and responses by the State Water Board to comments received on the Draft EIR.
 - vi. These Findings and Statement of Overriding Considerations
 - vii. All other documents composing the record pursuant to Public Resources Code section 21167.6 (e).

Section 2

Certification of the EIR:

- **9.** State Water Board regulations provide for the issuance of a Certification by the State Water Board's Executive Director. (Cal. Code Regs., tit.23, §3859 (a).)
- 10. In accordance with CEQA, the Executive Director, on behalf of the State Water Board, certifies that the Final EIR has been completed in compliance with CEQA. (CEQA Guidelines § 15025.) The State Water Board Executive Director, as the individual

delegated with the decision making authority for this Project has independently reviewed the record and the Final EIR prior to certifying the Final EIR and approving the Project.

- **11.** By these Findings the State Water Board through the Executive Director confirms, ratifies, and adopts findings and conclusions of the Final EIR as supplemented and modified by these Findings. The Final EIR and these Findings represent the independent judgment of the State Water Board.
- **12.** The Final EIR may contain clerical errors but the State Water Board has reviewed the entire document and bases its determination on the substance of the information it contains.
- **13.** The State Water Board through the Executive Director certifies that the Final EIR is adequate to support approval of the Project, and minor modifications to the Project or minor variants described in the Final EIR.
- 14. Section 15092 of the CEQA Guidelines states that after consideration of the EIR and in conjunction with findings made pursuant to section 15091, the lead agency may decide whether or how to approve or carry out the project. The lead agency may approve a project with unavoidable adverse environmental effects only when it finds that specific economic, legal, social, technological, or other benefits of the proposed project outweigh those effects. Section 15093 requires the lead agency to document and substantiate any such determination in a "statement of overriding considerations" as part of the record. The State Water Board's Statement of Overriding Considerations is presented in Section 8 of these Findings.

Absence of Significant New Information:

15. The State Water Board recognizes that the Final EIR incorporates information obtained and produced after the Draft EIR was completed and the Final EIR contains additions, modifications and clarifications. Many of these modifications and clarifications were added in response to comments received by interested parties. The State Water Board has reviewed and considered the Final EIR and determines that the Final EIR does not contain or add significant new information to the Draft EIR that would require recirculation as specified in Public Resources Code section 21092.1 and CEQA Guidelines section 15088.5.

The new information added to the Final EIR does not involve a new significant environmental impact, a substantial increase in the severity of an environmental impact, or a feasible mitigation measure or alternative considerably different from the others previously analyzed that would clearly lessen the significant impacts of the Project while meeting the Project objectives that the Applicant has declined to implement.

16. The State Water Board provided initial notice of the Applicant's application though the State Water Board's website on September 26, 2008. The Board released a Draft EIR for the Project on July 23, 2010, and accepted comments until October 7, 2010. On June 27, 2012, the State Water Board released a Draft Certification on its website and provided notice to interested parties. The State Water Board has also posted additional information describing the Project on the State Water Board's website.

- **17.** The public was provided 30 days to comment on the Draft Certification released by the State Water Board on June 27, 2012.
- **18.** The Board released responses to comments received on the Draft EIR on January 25, 2013.
- **19.** The State Water Board posted a "Draft Final Environmental Impact Report" document on the State Water Board website on January 28, 2013.
- **20.** The State Water Board posted a "Draft Final Water Quality Certification" on March 26, 2013, and accepted written comments on the document until April 10, 2013.
- 21. The Board finds that the responses to comments received on the Draft EIR, comments received during the comment period on the Draft and Draft Final Certification, and additional public comments received prior to the issuance of the Certification, do not individually or collectively constitute significant new information within the meaning of section 21092.1 or CEQA Guidelines section 15088.5. Recirculation of the Final EIR is not required.

Mitigation Measures, Conditions of Approval, and Mitigation Monitoring and Reporting Plan:

- 22. Public Resources Code section 21081.6, and CEQA Guidelines section 15097 require the State Water Board to adopt a monitoring or reporting program to ensure that mitigation measures and revisions to the Project identified in the Final EIR are implemented. The Mitigation Monitoring and Reporting Plan (MMRP) is included and incorporated by reference in the Final EIR and as Attachment B to the Certification. Implementation of the MMRP is a condition of approval for Certification and the Applicant has provided written documentation to the State Water Board stating it commits to implement the mitigation measures for the Project, described in the Final EIR and the MMRP, at the appropriate times during final engineering, construction, and throughout the life of Project operations.
- **23.** The mitigation measures, as set forth in the MMRP, are specific and enforceable and can be fully implemented by the State Water Board, Licensee, or other identified agencies with responsibility for resources affected by the Project. As appropriate, some mitigation measures require meeting certain performance standards to ensure no adverse significant environmental effects will occur. The MMRP and Certification adequately describe the implementation procedures, monitoring responsibility, reporting actions, compliance schedule, non-compliance sanctions, and verification of compliance to ensure the Project complies with the mitigation measures.
- **24.** The State Water Board will adopt and impose the feasible mitigation measures as set forth in the MMRP as enforceable conditions in the Certification.
- **25.** The mitigation measures will not have new environmental impacts that were not analyzed in the Final EIR. In the event that a mitigation measure recommended in the Final EIR has been inadvertently omitted from the MMRP, that mitigation measure is adopted and incorporated from the Final EIR into the MMRP and Certification by reference and adopted as a condition of approval.

Findings Regarding Impacts:

26. These Findings do not repeat the full discussions of environmental impacts and mitigation measures set forth in the Final EIR, Certification and MMRP. The State Water Board adopts and incorporates as though fully set forth herein, the analysis, explanation, findings, responses to comments, and conclusions of the Final EIR.

Section 3

Summary of Potential Environmental Impacts:

- 27. The State Water Board identified the following potential environmental resource issues during its review of the Project application and supporting materials through input received during the scoping process, comment letters received in response to the Notice of Preparation, additional background research conducted by staff for the proposed Project, comments received on the Draft EIR and Certification, and comments received by interested agencies to the Federal Environmental Impact Statement prepared by FERC for the Project.
 - i. **Geology and Soils** Ongoing Project operations, and construction activities associated with the dams and reservoirs and occurring along the water conveyance corridor or transmission line corridor may have the potential to impact the geological resources on-site.
 - **ii. Surface Water** Construction activities at the Central Project Area (where the reservoirs and powerhouse will be located) and along the water conveyance corridor or transmission line corridor, and planned Project operations may impact ephemeral desert streams, desert dry washes, springs, and aqueducts. The new surface water reservoirs may impact other resources in the area.
 - iii. Groundwater Construction and operation will affect groundwater. The Final EIR discusses groundwater quality and supply data for the Chuckwalla Valley Groundwater Basin and effects on springs/wells, water bearing formations, and hydraulic characteristics of the groundwater basin.
 - iv. Agricultural Resources The Final EIR discusses the Project's compatibility with existing agricultural and forestry land uses.
 - v. Biological Resources Project operation and construction activities along the water conveyance corridor or transmission line corridor may impact plant communities and wildlife.
 - vi. Threatened & Endangered Species Project implementation may impact stateand federally-listed threatened and/or endangered species that have the potential to occur on-site, or may have suitable habitat on-site or in the Project vicinity.
 - vii. Aesthetic Resources The physical character of the Project site will be modified and aesthetic features of the landscape will be affected by the Project and its ancillary features.

- viii. Cultural Resources Construction and operational activities proposed at the Project location or along the water conveyance corridor or transmission line corridor may have the ability to impact archeological, paleontological, or historical resources within the Area of Potential Effect (APE).
- ix. Land Use/Public Services Construction and operational activities proposed at the Project location, and along the water conveyance corridor and transmission line corridor will change the existing land use on-site, and have the potential to affect public services times and utility capacities. The existing land use is an iron ore mine that has been inactive as a large scale iron mine since at least the early 1980s. At present, gravel mining, training exercises and limited commercial use are reportedly conducted on the site
- **x. Recreation** Project construction and operational activities may impact surrounding recreational areas, including JTNP and Wilderness Area.
- **xi. Population/Housing** Project construction and operational activities may increase population and/or housing demands within the region.
- **xii. Transportation** Construction activities have the potential to temporarily increase traffic and decrease the level of service on local roadways.
- **xiii. Air Quality** Construction activities, and truck and automotive traffic associated with the Project will generate emissions and dust that will have an effect on local or regional air quality.
- **xiv. Noise** Project construction activities could generate increased noise levels adversely affecting surrounding sensitive receptors.
- xv. Greenhouse Gas (GHG) Emissions Operational activities are projected to displace energy demand for simple-cycle natural gas power plants. The Project as proposed is anticipated to reduce overall GHG emissions and assist California in meeting energy demands and future targets for a larger portfolio of renewable power generation sources.
- xvi. Hazards & Hazardous Materials Project construction and operation activities may impact public health and environmental factors related to hazards and the use of hazardous materials associated.
- xvii. Environmental Justice Although not required under CEQA, the Final EIR provides a discussion of relevant and applicable regulations and policies regarding environmental justice and addresses the question of whether the Project and alternatives may disproportionately affect minority populations and low-income populations or Native American communities. The State Water Board concludes the Project as proposed does not pose any substantial effects relative to environmental justice.

Mitigation Summary and Monitoring and Reporting Plan:

28. Section 6 of the Final EIR contains a mitigation summary. For a more complete description and discussion of mitigation measures and required monitoring and reporting measures, refer to Sections 3.1 through 3.17 of the Final EIR. The following findings in Sections 4 through 6 are broken into categories of: 1) Findings of no significant impact (Section 4); 2) Findings that an impact is potentially significant but will be reduced to a less than significant level with mitigation (Section 5); and 3) Findings that impacts are significant and immitigable because mitigation was determined to be infeasible (Section 6).

Section 4

Findings of No Significant Impact:

For the following categories, the foreseeable impacts were assessed and were found not to be significant. No mitigation is proposed to address the following impacts:

Geology and Soils

- **29. Earthquakes and Faults, Impact 3.1-1:** On-site faults were evaluated and found to be not active. The risk of surface rupture at the site caused by faulting is very low (GeoSyntec 1993, 1996)¹ and is determined to be less than significant. No mitigation is required.
- **30. Ground Subsidence, Impact 3.1-2**: Ground subsidence is not considered to be a potential hazard associated with the Project. The impact is considered less than significant and no mitigation is required. (Subsidence and hydrocompaction risk in the Chuckwalla Valley Groundwater Basin Aquifer can be found in the "Groundwater" section of the Final EIR and in Item 66 in Section 5 of these Findings.)

Groundwater

- **31.** Perennial Yield and Regional Groundwater Level Effects, Impact 3.3-1: By itself, Project pumping will exceed recharge for approximately four years of the 50-year Project life. During the remaining years, recharge is expected to exceed Project pumping demands. By the end of a 50-year FERC Project license period, the aquifer storage is projected to increase by about 74,000 AF. This will not result in a significant depletion of groundwater supplies in the region. The impact is considered less than significant and no mitigation is required.
- **32. Groundwater Flow Direction Effects, Impact 3.3-3**. The short and long term pumping effects will not significantly change groundwater flow directions. The groundwater flow is generally from the west and north and flows towards the south and east. (DWR, 1979). The modeling and groundwater levels show existing pumping near Desert Center has created a localized pumping depression. Project pumping will temporarily deepen the pumping depression during the initial fill of the reservoirs (first four years of pumping), and thereafter will create a cone of depression drawdown of about 14 feet at the Project supply wells. Due to the size of the Chuckwalla Valley Groundwater Basin (more than

¹ All references included in these Findings can be found in Section 7 of the Final EIR.

45 miles across), the total volume of water in storage (9.1 to 15 million AF), and the volume of water to be pumped in the first four years (approximately 32,000 AF), it is concluded that Project pumping does not have potential to substantially alter flow throughout the Chuckwalla Valley Groundwater Basin, and this potential impact is considered to be less than significant. No mitigation is required.

33. Colorado River Effects, Impact 3.3-6. The Colorado River "accounting surface" policy contemplated by the United States Bureau of Reclamation would apply to groundwater in the Chuckwalla Valley below 240 feet above mean seal level (msl). The Project will have no impact on the Colorado River or this potential future policy because groundwater levels in the area are approximately 500 feet above msl, and the Project will not deplete groundwater levels in a manner that could encounter the proposed accounting surface elevations.

Agricultural and Forestry Resources

34. Impacts to Agricultural Lands or Forestry Lands, Impact 3.4-1. None of the facilities or structures of the Project are anticipated to have a significant adverse effect on existing agricultural lands or forest; therefore this impact is less than significant and no mitigation is required. No currently active farmland or forest is proposed to be crossed by the water pipeline or transmission line corridor. The Central Project Area, where the Project reservoirs and powerhouse will be located, is within extensively disturbed mining pits and therefore does not have the ability to impact active farmland or forestry resources.

Biological Resources

- **35. Indirect Impacts of Operation and Maintenance, Impact 3.5-5:** Neither the Central Project Area nor the transmission or pipeline corridors will experience greater disturbance than currently exists. The Project will not affect the normal movements of wildlife. It is not likely that there would be a measurable change in the density of predators, or, as a result, a significant change in impacts to local fauna. Therefore, this impact is less than significant.
- **36. Wetlands, Seeps, and Springs, Impact 3.5-8:** Since there are no wetlands in the Project vicinity, there will be no impacts to wetlands. There will be no impact on seeps and springs in the Eagle Mountains. Available information indicates that these springs are not hydrologically connected to the Pinto or Chuckwalla Valley Basin aquifers as they are located in the mountains above the Pinto and Chuckwalla Valley Groundwater basins. Rather, the springs appear to be fed by local groundwater systems that would be unaffected by pumping for the proposed Project (NPS, 1994); also see Section 3.3 Groundwater Resources. Since flow from the springs is unlikely to be affected by the Project, the vegetation and functions supported by these springs is also unlikely to be affected by the Project. The impact is considered less than significant and no mitigation is required.
- **37. Operational Effects to Fish Species, Impact 3.5-10:** Project lands include no streams or ponds that could support any species of fish, and there will be no impacts to fish resources. No mitigation is required.

Aesthetic Resources

38. Operation of Transmission Line from the Project Site to Metropolitan Water District's Eagle Mountain Pumping Plant, Impact 3.7-3: Visual impacts would be less than significant for this segment of the transmission line.

Land Use Public Services

- **39.** Operational Impact from Transmission Line and Interconnection to Substation, Impact 3.9-2: This impact is considered less than significant. Long-term land use-related impacts associated with the transmission line/substation construction will be the permanent change from undeveloped desert to lands reserved for utilities. Except for the tower locations, land within the Right-of-Way (ROW) will remain undeveloped after construction. The transmission line will be in excess of 500 feet from any school, day care, or other sensitive receptor, so no health impacts from electromagnetic fields are anticipated.
- **40. Local Land Use Policies, Impact 3.9-5:** The proposed Project would not conflict with any land use plan of an agency having jurisdiction over the Project. This impact is considered less than significant and no mitigation is required.
- **41. California Desert Conservation Area (CDCA) Plan Amendment for Utility Right-of-Way, Impact 3.9-6:** Based upon review of the Bureau of Land Management (BLM) CDCA plan amendment criteria and required determinations, it appears that the Project is consistent with all criteria, and that a determination in favor of adopting a plan amendment can be made, if a plan amendment is needed. Therefore, this potential impact is determined to be less than significant and no mitigation is required.
- **42. Landfill Construction Timing, Impact 3.9-8:** The Project is likely to be built and operational prior to initiation of landfill construction at the Eagle Mountain site. Construction periods for the two projects are not likely to overlap or create any conflicts. Therefore, this impact is determined to be less than significant and no mitigation is required.
- **43. Landfill Operations, Impact 3.9-9:** The proposed Project will use the Central and East Pits to store water. These areas are not proposed to be used during Phases 1 through 4 of the landfill. The powerhouse and water conveyance tunnels will be underground and will not affect landfill construction or operations. Therefore, this impact is determined to be less than significant and no mitigation is required.
- **44. Landfill Use of the East Pit, Impact 3.9-10:** The Project's use of the East Pit does not exclude the East Pit's use as a landfill in perpetuity. In the event that, at some future date, decision-makers determine that the landfill's use of the East Pit has greater social or economic value than the proposed Project's use of the East Pit, the water could be drained and the East Pit used as a component of the landfill. Therefore, this impact is determined to be less than significant and no mitigation is required.
- **45.** Potential Conflicts with Other Landfill Facilities and Rock Resources, Impact **3.9-13:** The proposed Project does not significantly conflict with construction roads, other operational components, or result in any environmental impacts due to the use, or loss of use of rock and fine-tailings resources at the mine site. Therefore, this impact is determined to be less than significant and no mitigation is required.

46. Methane Gas from Eagle Mountain Landfill, Impact 3.9-14: Based upon the analysis in the EIR, it is concluded that methane gas produced by the proposed landfill will not be affected in any way by the proposed Project. Therefore, this potential impact is determined to be less than significant and no mitigation is required.

Recreation

47. Recreational Use, Impact 3.10-1: This impact is less than significant and no mitigation is required. The proposed transmission line and water pipeline corridors cross lands, in part, managed by the BLM, which are available for dispersed recreational use. Access to some off-highway vehicle trails may be impeded temporarily during construction of the linear facilities.

Access to the JTNP and recreational destinations will not be altered by Project construction or operation. The major southern access to JTNP is from I-10 at the Cottonwood Road exit located several miles to the west of the Eagle Mountain and Desert Center exits, which will be used for Project access. Traffic will increase along Kaiser Road and Eagle Mountain Road during construction. Additional traffic should not hinder access to recreational areas, or noticeably affect dispersed recreational activities, which is of relatively low intensity (USDI, FWS, Biological Opinion, January 8, 2004).

48. Wilderness Area, Impact 3.10-2: This impact is less than significant and no mitigation is required. The Project would not directly or indirectly disrupt activities in an established federal, state, or local recreation and/or wilderness area. The Project area is not located in a designated federal wilderness area. Project construction and operation will not restrict recreation use in the nearby JTNP and Wilderness Area. The Project site is currently an existing open pit mine site, and many Project features are planned to be underground. Therefore, impacts to the visual character of the Project site will be insignificant. In addition, the proposed Project will be visible from very few locations from within the JTNP and Wilderness Area.

Population and Housing

- **49. Residential or Business Displacement during Construction, Impact 3.11-1:** Implementation of the Project will not displace a significant number of people, affect existing housing or business establishments, or require replacement housing elsewhere. Therefore, this impact is considered less than significant and no mitigation is required.
- **50. Impacts on Community Infrastructure and Services, Impact 3.11-2:** Due to the available infrastructure capacity in the region, the Project would not require construction of significant additional infrastructure. Therefore, this impact is considered less than significant and no mitigation is required.

Transportation and Traffic

51. Operational Traffic, Impact 3.12-2: This impact would be considered less than significant and no mitigation is required. Daily traffic, including service and delivery trucks, is estimated to be 64 one-way trips.

Air Quality

- **52.** Annual Emissions during Construction, Impact 3.13-1: The proposed Project represents less than 0.07 percent of the forecasted annual NOx (oxides of nitrogen) emissions within the Mojave Desert Air Basin. This impact is less than significant and no mitigation is required.
- **53. Emissions during Operation, Impact 3.13-3:** Air pollutant emissions associated with operations and maintenance activities (employee, delivery vehicle trips, and miscellaneous area sources) would be minimal and would not exceed South Coast Air Quality Management District (SCAQMD) significance thresholds for operation. This impact is less than significant and no mitigation is required.

Noise

- **54.** Construction Noise, Central Project Site, Impact 3.14-1: The maximum construction noise coming from the Central Project Area would likely not be audible at the school or nearby residences. The same construction activities would generate noise levels at the boundary of JTNP that would be up to 43 A-weighted decibels (dBA) temporarily, resulting in a less than significant impact. No mitigation is required.
- **55. Operational Noise, Impact 3.14-3:** The operation of the proposed Project would result in a minimal increase in road traffic and would not substantially increase ambient noise levels along Kaiser Road. The proposed powerhouse would be located underground and would not affect noise levels aboveground. Noise from operation of the transmission line (low level hissing or crackling), could be adverse but would only be noticeable in wet weather conditions in close proximity to the line, and is a less than significant effect. No mitigation is required.

Greenhouse Gas Emissions

- **56.** Generation of GHG emissions, either directly or indirectly, Impact 3.15-1: This impact is less than significant and no mitigation is required. The proposed Project would offset carbon dioxide (CO₂) production from "peaker" plants which are primarily simple-cycle gas fired plants. The Project would also enhance integration of reliable wind and solar power to meet the state's renewable portfolio standard, thus having a beneficial impact on GHG production. Although the impact is determined to be less than significant, the proposed Project includes Project Design Feature (PDF) GHG-1 which addresses the potential effect of sulfur hexafluoride (SF₆) from the components of the transmission line and interconnection substation.
- 57. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs, Impact 3.15-2: Impacts would be less than significant. The State Water Board currently does not have an adopted climate action plan, or general plan policies related to evaluating GHG emissions. The proposed Project, however, would not conflict with the state's ability to reach the overall goals of the Global Warming Solutions Act (Assembly Bill 32; Statutes 2006, Chapter 488) and its goal to reduce the State's GHG emissions to 1990 levels by 2020. The proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the GHG emissions. Based upon the analysis in the Final EIR (Table 3.15-2) and all supporting documents in the record, it is concluded that the

proposed Project would not contribute to an increase in GHG emissions, and no mitigation for GHG emissions is required.

The most likely future scenario is that power generation from the proposed Project will displace simple-cycle power plants (natural gas-fired "peaker" plants). Pump-back power needs would result in the dispatch of power from natural gas-fired combined cycle power plants. Under this scenario there would be a beneficial effect from each cycle of water through the proposed Project. Table 3.15-2 uses CO₂ emission factors for simple cycle and combined cycle power plants recommended by the California Energy Commission (CEC) (CEC, 2010). This analysis is based upon existing generation sources and conditions in California, and does not assume that lower carbon generation sources (i.e., wind, solar) would be available for the proposed Project's pump-back power in the future. Although it is not possible to accurately predict the energy generation mix in California over the next 50 years, it can be reasonably assumed that sources of generation will become cleaner (i.e., lower GHG emissions) over decades to come. The total emissions associated with pump-back power would likely decrease over the proposed 50-year life of the proposed Project, potentially resulting in a greater level of emissions offset than the amounts presented in Table 3.15-2.

Hazardous Materials

- **58. Hazardous Materials during Operation, Impact 3.16-2:** Hazardous material usage in the vicinity will be limited to the Project site. This includes the brine ponds, which will be used as a component of the water treatment facility. The Project site is not located within ¼ mile of a school. This impact is therefore considered to be less than significant and no mitigation is required.
- **59.** Located on a Hazardous Materials Site per Government Code Section 65962.5, Impact 3.16-3: The site is not on a list of hazardous materials sites pursuant to Government Code Section 65962.5. This impact is therefore considered to be less than significant and no mitigation is required.

Section 5

Significant But Mitigable Impacts:

Under Public Resources Code section 21081 (a) (1) and CEQA Guidelines sections 15091 (a) (1) and 15092 (b) and as reflected in the Final EIR, MMRP and Certification, the State Water Board finds that changes or alterations have been required in, or incorporated into the components of the Project that mitigate or avoid potentially significant effects on the environment. The following potentially significant impacts will be reduced to a less than significant level through implementation of PDFs, mitigation measures (MM), or as standard conditions of approval in the Certification.

60. Soil Erosion, Impact 3.1-4: There will be potential increases in soil erosion resulting from construction of this Project. This impact is potentially significant and subject to the mitigation program (MM GEO-1). The effects of soil erosion would be minimized to the extent possible by limiting surface disturbance to only those areas necessary for construction. Where natural topsoil occurs, it would be salvaged and stockpiled, and the soil piles would be stabilized. Following construction, all areas where natural topsoils were removed that are not occupied by permanent Project facilities would be re-graded,

have the topsoils replaced, and be seeded with native vegetation to reduce erosion potential. Additional soil stabilization best management practices (BMPs) will be undertaken for effective temporary and final soil stabilization during construction. These measures would be required by storm water regulations, which require preparation and implementation of a Storm Water Pollution Prevention Plan. The Applicant will also comply with the National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit; Order No. 2009-0009-DWQ and NPDES No. CAS000002, as amended by Order No. 2010-0014-DWQ, as amended by Order No. 2012-0006-DWQ). Adherence to MM GEO-1 will reduce soil erosion impacts to a less than significant level.

61. Landslides and Mass Movements, Impact 3.1-5: Slope raveling, surficial slope failures, and/or rock falls are expected in localized areas where mining has exposed adversely oriented fracture sets on the pit walls. This impact is potentially significant and subject to the mitigation program (PDF GEO-1 and PDF GEO-2). Adherence to PDF GEO-1 and PDF GEO-2 will reduce landslide/mass movement impacts to a less than significant level.

Surface Water

- **62.** Existing Surface Water, Impact 3.2-1: There are no perennial streams in the Project area. Several springs are located outside of the Project area but are not hydrologically connected to groundwater in the Chuckwalla Valley Aquifer. Eagle Creek and other unnamed washes are ephemeral streams which could be affected by erosion from Project construction. This is a potentially significant impact and subject to mitigation. Erosion from construction areas will be controlled through the implementation of an Erosion Control Plan (MM GEO-1).
- **63. Eutrophication, Impact 3.2-2:** This impact is considered less than significant, as the Project will not add nutrients to the environment. In addition, although not specifically related to eutrophication, the reverse osmosis (RO) water treatment facility employed as PDF GW-2 will maintain water quality in the reservoirs at the level of existing groundwater quality.
- **64.** Water Quality Impacts as a Result of Created Surface Waters, Impact 3.2-3: This impact is potentially significant and subject to mitigation. Potential impacts include sedimentation from erosion as a result of land disturbing activities during construction and increased metal and total dissolved solids (TDS) content as a result of former mining activities on the Project site. A RO water treatment facility (PDF GW-2) and groundwater quality monitoring (MM GW-6) has been incorporated into the PDFs and MMs. An Erosion Control Plan (MM GEO-1) has been developed to reduce erosion and sedimentation to a level that is less than significant. A field and laboratory evaluation of acid production potential will be conducted prior to construction (MM SW-1). In addition, seepage control measures are required and the Project must meet the performance standard of maintaining water in the reservoirs at source groundwater quality, and the reservoirs must not cause or contribute to degradation of background water quality in the reservoirs vicinity. Through employment of these PDFs, MMs, and Condition 6 in the Certification, impacts will be reduced to a less than significant level.

Eagle Mountain Pumped Storage Hydroelectric Project Findings of Fact and Statement of Overriding Considerations

Groundwater

- 65. Local Groundwater Level Effects, Impact 3.3-2: Although not significant basin-wide, the modeling predicts initial Project water supply pumping will cause drawdown of the groundwater levels in the vicinity of the Project's wells. During the initial fill, about 50 feet of drawdown will be created at the cone of depression of the pumping wells for about four years; thereafter the drawdown will be reduced to about 14 feet. At distances of 1 mile from the pumping wells the drawdown will be about 6 feet. The greatest drawdown will occur following the first four years of pumping. The drawdown created solely by Project pumping will be approximately 3.6 to 4.3 feet near the Colorado River Aqueduct in the Upper Chuckwalla and Orocopia Valleys. Project pumping by itself is not expected to exceed the maximum historic drawdown, and this impact is not considered to result in a substantial decrease of the local groundwater level. Local drawdown effects have the potential to interfere with pumping costs and yields from nearby neighboring wells. Groundwater wells will be monitored to assess impacts. Local groundwater impacts are considered potentially significant and subject to mitigation (MM GW-1 and MM GW-2). With full implementation of the mitigation measures identified in the Final EIR (MM GW-1 and MM GW-2), potentially significant adverse effects on local groundwater levels will be reduced to a level that is less than significant.
- **66.** Subsidence and Hydrocompaction Potential, Impact 3.3-4: Lowering of groundwater levels below historic lows could cause subsidence and potential impacts to the Colorado River Aqueduct (CRA). It is unlikely that lowering of water levels up to an additional 5 feet below historic lows at the CRA will cause subsidence. Although unlikely, the impact is deemed potentially significant and subject to mitigation (MM GW-3, MM GW-4, and MM GW-5). Because of the small amount of drawdown and the coarse-grained sediments in the Pinto Groundwater Basin, the potential for subsidence in the Pinto Groundwater Basin is low to non-existent as a result of Project pumping. The potential for drawdown in the Chuckwalla Valley Groundwater Basin under the cumulative effects scenario (including Kaiser's water use for the proposed landfill, water use for the proposed solar projects, and water use for the prisons) is larger than the drawdown for Project pumping alone (estimated total of 9 feet). Subsidence potential remains low, relative to these cumulative effects.

Increases of groundwater levels could result in hydrocompaction and result in impacts to the CRA. Direct contact of seepage water with the CRA is unlikely because groundwater levels are about 135 feet below ground surface at the CRA. In the vicinity of the CRA groundwater levels could increase by 3 to 6 feet if not controlled by pumping and recovery wells to minimize seepage losses. Therefore, no direct impact to Metropolitan Water District's (MWD) infrastructure is anticipated. The results of MODFLOW modeling for the Lower Reservoir area indicate that groundwater levels beneath the reservoir would rise by about 4 to 12 feet if not controlled by pumping. Seepage from the Upper Reservoir will be controlled through a separate set of seepage recovery wells. Ongoing monitoring and testing for the final design may indicate that additional recovery wells are needed. This impact is considered potentially significant and subject to mitigation (MM GW-3, MM GW-4, and MM GW-5). With full implementation of the MMs identified (MM GW-3, MM GW-4, and MM GW-5), potentially significant adverse effects of subsidence and hydrocompaction will be reduced to a level that is less than significant.

Eagle Mountain Pumped Storage Hydroelectric Project Findings of Fact and Statement of Overriding Considerations

67. Groundwater Quality, Impact 3.3-5: Seepage water could migrate into the Chuckwalla Valley Groundwater Basin and could affect water quality in the aquifer. This impact is potentially significant and subject to mitigation (MM GW-6, PDF GW-1 and PDF GW-2 and Condition 7 in Certification). Metals in the bedrock are not likely to be mobilized or produce acid leachate, but it is possible that contaminants could be transported into the groundwater basin. Without water quality treatment, the water in the reservoirs would change over time due to evaporation, resulting in increasing levels of TDS. In order to maintain TDS at a level consistent with existing groundwater quality, a water treatment plant using RO is proposed as a part of the Project. This consists primarily of an RO desalination facility and brine disposal ponds to remove salts and metals from reservoir water and maintain TDS concentrations equivalent to the source water quality (PDF GW-2). In addition, a groundwater quality monitoring program will be implemented to collect the data necessary to assess and maintain groundwater effects at less than significant levels. As a performance standard, the Project must not cause or contribute to the degradation of background water quality in the vicinity of the Project and reservoir water quality must be maintained equal to or better than source water quality. Water quality sampling will be done within the reservoirs, production wells, and in wells upgradient and downgradient of the reservoirs and brine disposal lagoon consistent with applicable portions of California Code of Regulations Title 27 (MM GW-6). Monitoring will be done on a quarterly basis for the first four years and may be reduced to biannually thereafter based on initial results. Compliance with state Title 27 requirements will prevent salt and metal-laden water from seeping through the brine disposal ponds, preventing degradation of groundwater quality from this source. With full implementation of the mitigation measures identified (MM GW-6, PDF GW-1 and PDF GW-2) potentially significant adverse effects on groundwater guality will be reduced to a level that is less than significant.

Biological Resources

- **68.** Construction Impacts on Plants, Impact 3.5-1: This impact is potentially significant and subject to the mitigation program (MM BIO-1 through MM BIO-9, and PDF BIO-1 through PDF BIO-2). Pre-construction surveys and construction controls will be implemented. Concurrent with final engineering design, a comprehensive site specific program will be verified and implemented by a Biological Technical Advisory Team. An authorized Project Biologist, approved of by the United States Fish and Wildlife Service (USFWS), the State Water Board and the California Department of Fish and Wildlife (CDFW), will be responsible for implementing and overseeing the biological compliance program. MMs require minimizing surface disturbances, revegetation programs, complying with the California Desert Native Plants Act, employing a revegetation plan, and controlling invasive species. These measures will reduce impacts to a less than significant level. Adherence to the mitigation program (MM BIO-1 through MM BIO-8, and PDF BIO-1 through PDF BIO-2) will result in less than significant impacts.
- **69. Construction Impacts on Wildlife Species, Impact 3.5-2:** Within the Central Project Area, the baseline condition of the habitat is highly disturbed, with limited wildlife use. The transmission line and water pipeline will cross higher quality habitat areas and may have a greater likelihood of impacting species occupying those areas. Construction impacts are potentially significant and subject to the mitigation program (MM BIO-1 through MM BIO-4, MM BIO-9 through MM BIO-20, MM BIO-22, PDF BIO-1, and PDF BIO-3). Pre-construction surveys and construction controls such as an employee awareness program, on-site Project Biologist, employing restricted hours and areas,

habitat compensation, and minimal surface disturbance plans will be used to minimize or eliminate these impacts. Adherence to the mitigation program (MM BIO-1 through MM BIO-4, MM BIO-9 through MM BIO-20, MM BIO-22, PDF BIO-1, and PDF BIO-3) will result in less than significant impacts.

- **70. Operational Effects on Plant Species, Impact 3.5-3:** Plant community structure and resulting fauna may be altered if non-native invasive species that are currently in the area spread during construction or maintenance activities. This has the potential to increase both abundance and distribution of those species. These impacts are potentially significant and subject to the mitigation program (MM BIO-1 through MM BIO-8, PDF BIO-1, and PDF BIO-2). Pre-construction surveys and operational controls such as implementing an invasive plant monitoring and control plan, revegetation plan, and minimal surface disturbance plans will be employed to minimize or eliminate this impact. Adherence to the mitigation program (MM BIO-1 through MM BIO-1, and PDF BIO-2) will result in less than significant impacts.
- 71. Operational Effects to Wildlife Species, Impact 3.5-4: Loss of wildlife due to operational effects is expected to be negligible for most species. The primary on-site impacts to species from operation of the Project are limited to potential loss of individuals that move onto the site, including during transmission line maintenance. Faunal community structure may be altered if predators are attracted to reservoirs due to available water or night lighting. These impacts are considered potentially significant and subject to the mitigation program (MM BIO-1 through MM BIO-4, MM BIO-9 through MM BIO-16, MM BIO-20, MM BIO-22, and PDF BIO-4). Pre-construction surveys and operational controls such as wildlife fencing, brine pond management, employee awareness programs, adherence to survey recommendations, minimal surface disturbance plans, and habitat compensation will be employed to minimize or eliminate these impacts. Adherence to the mitigation program (MM BIO-22 and PDF BIO-4) will result in less than significant impacts.
- 72. Impacts of Brine Ponds, Impact 3.5-6: Birds and bats may be affected by ingesting harmful elements and/or highly saline water in the brine ponds. This impact is potentially significant and subject to the mitigation program (MM BIO-11). Managing attractiveness of ponds and employing exclusion design measures in adherence to the mitigation program (MM BIO-11) will result in less than significant impacts.
- 73. Transmission Impacts to Birds, Impact 3.5-7: Birds (including golden eagles) could be affected by collision with transmission lines or electrocution. This impact is potentially significant and subject to the mitigation program (PDF BIO-4). Raptor-friendly transmission lines will need to be approved by FERC, and an aviation protection plan will be developed in consult with USFWS. Adherence to the mitigation program (PDF BIO-4) will result in less than significant impacts.
- **74. Dry Desert Washes, Impact 3.5-9:** There are many small washes crossed by the pipeline and transmission line that will be regulated by the CDFW under Section 1602 (Streambed Alteration Agreement) of the Fish and Game Code. This impact to local washes may include degradation or loss of wash habitat, which would be monitored and limited under standard terms of the Streambed Alteration Agreement. The Streambed Alteration Agreement will identify the condition and location of all state jurisdictional waters, impacts, and mitigation measures. This impact is considered potentially

significant. Adherence to the mitigation program (MM BIO-21) will result in less than significant impacts.

Threatened and Endangered Species

- **75. Coachella Valley Milkvetch, Impact 3.6-1:** Based on site reconnaissance and literature review, the Coachella Valley Milkvetch is not expected to be located on-site, or in areas that will be affected by the Project. Therefore, it is highly unlikely that there would be any Project effects on the Coachella Valley Milkvetch. However, if found on-site, this impact would be potentially significant and subject to the mitigation program. Preconstruction surveys will be conducted to ensure that no Coachella Valley Milkvetch will be disturbed (PDF BIO-2). As designed, PDF BIO-2 would result in a less than significant impact to the Coachella Valley Milkvetch.
- **76. American Peregrine Falcon, Impact 3.6-2:** Based on site reconnaissance and literature review, the American Peregrine Falcon is not expected to be located on-site or in areas affected by the Project. This species is unknown in Riverside and Imperial counties, and has not been found during previous surveys in the Project area, including the Central Project Area. Therefore it is highly unlikely that there would be any Project effects on the American Peregrine Falcon. However, if found on-site, this impact would be potentially significant and subject to the mitigation program. Pre-construction surveys will be conducted to ensure that no American Peregrine Falcon will be disturbed (PDF BIO-1). With adherence to PDF BIO-1, potential impacts to the American Peregrine Falcon will be less than significant.
- 77. Gila Woodpecker, Impact 3.6-3: Based on site reconnaissance and literature review, the Gila Woodpecker is not expected to be located on-site or in areas affected by the Project, nor residential areas. Between the small residential areas and the Project is a broad area of inhospitable habitat. However, if found on-site, this impact would be potentially significant and subject to the mitigation program. Pre-construction surveys will be conducted to confirm that no Gila Woodpecker will be disturbed (PDF BIO-1). With adherence to PDF BIO-1, potential impacts to the Gila Woodpecker will be less than significant.
- **78. Desert Tortoise, Impact 3.6-4:** Desert tortoise may be affected by Project construction, particularly along the proposed transmission corridor and at the substation location. The Project may adversely affect desert tortoise. This impact is potentially significant and subject to the mitigation program (MM TE-1 through MM TE-4, MM TE-6, MM TE-7, and MM BIO-1 through MM BIO-4). A Biological Assessment was prepared by the FERC and submitted to the USFWS. A Comprehensive Biological Mitigation Monitoring Program is incorporated as mitigation (MM BIO-1). A Biological Opinion was issued by USFWS on April 12, 2013. Adherence to MM TE-1 through MM TE-4, MM TE-6, MM TE-7, and MM BIO-1 through MM BIO-4, will result in a less than significant impact to desert tortoise.
- **79.** Increase to Raven Population, Impact 3.5-5: If raven populations were to increase in response to additional water resources at the Project, these ravens could forage in JTNP or disperse into JTNP from enhanced reproductive opportunities at the Project. Increased raven population is a potentially significant impact and subject to the mitigation program (MM TE-5). With inclusion of the Predator Monitoring and Control

Program, MM TE-5, and implementation of the program in consult with USFWS and CDFW, biological impacts due to ravens are concluded to be less than significant.

Aesthetic Resources

- **80. Central Project Area, Impact 3.7-1:** Visual impacts associated with the development of the Project's central facility are largely short-term due to construction activity and have a low potential to impact scenic vistas within the vicinity of the Project area. The Central Project Area is already highly disturbed. Most Project features will be underground. Above ground facilities will be generally blocked from view by intervening landforms. Lighting in the Central Project Area is a potentially significant impact and subject to the mitigation program (MM AES-1). MM AES-1, which requires coordination with the National Park Service, will ensure that visual impacts from Project lighting are reduced to less than significant.
- **81. Transmission Line Construction, Impact 3.7-2:** This impact is considered potentially significant and subject to the mitigation program (PDF AES-1 and MM AES-4). The Project's transmission line will create short-term visual impacts associated with construction including visibility of Project construction equipment, materials, personnel, and construction staging areas. The visual impact at Interstate-10 and the community of Desert Center is discussed in sections 6 and 8 of this document.

The new transmission line and new ROW would also increase the structural complexity and industrial character in the region, which would become more pronounced the closer the viewer is to the structures. The moderate-to-high level of visual change that would be caused by this segment of the Project would be inconsistent with the applicable Visual Resource Management (VRM) Class III management objectives. Implementation of PDF AES-1 and MM AES-4 are intended to reduce construction-related visual impacts. The mitigation program would reduce transmission line construction impacts to a less than significant level for two of the three transmission line segments, as follows: (1) from the Project Site to MWD's Eagle Mountain Pumping Plant; and (2) from MWD's Eagle Mountain Pumping Plant to Eagle Mountain Road Turnoff.

The third transmission line segment from the Eagle Mountain Road to the Interconnection Substation would result in a significant visual impact at Interstate (I)-10 and Desert Center. This is discussed in further detail in Sections 6 and 8 of this document.

- 82. Operation of Transmission Line from the Metropolitan Water District's Eagle Mountain Pumping Plant to Eagle Mountain Road Turnoff, Impact 3.7-4: Visual impacts resulting from construction of this segment of the transmission line are potentially significant and subject to the mitigation program (MM AES-3 and MM AES-4). The Project would be designed consistent with VRM Class III management objectives (regulatory laws, ordinances, regulations, and standards – LORS). MM AES-3 and MM AES-4 would reduce visual effects of this Project component to a less than significant level with incorporation of the migration program.
- **83. Construction and Operation of the Water Pipeline, Impact 3.7-6:** Short-term construction impacts would be potentially significant and subject to the mitigation program (MM AES-2). Short-term impacts from construction of the water pipeline (disturbed soil piles, vegetation impacts) would be significant. With incorporation of

MM AES-2, and where appropriate MM BIO-1 through MM BIO-9, and PDF BIO-1 through PDF BIO-9 these impacts will be reduced to less than significant.

Cultural Resources

84. Transmission Line Route from the Crossing of the CRA to the Interconnector Substation, Impact 3.8-1: This impact is considered potentially significant and subject to the mitigation program. Preservation in Place is the preferred manner to mitigate impacts to archeological sites. A Historic Properties Management Plan and Worker Awareness Program and MM CR-3 through MM CR-11 are intended to reduce impacts to a less than significant level.

Construction of the substation and transmission lines will not result in significant impacts on cultural resources related to the World War II sites in the area. Historic sites are more likely to occur within the study corridor (which extends out one mile on each side of the Project area proper). The most sensitive would be the remains of Camp Desert Center and the evacuation hospital at the southern end of Eagle Mountain Road. The transmission line route comes no closer than 0.25 miles north of the closest recorded site and the Interconnection Collector Substation is located two miles to the north and east of known historic features. Although visible, based on the distance from sites, the substation and transmission line route should not result in significant impacts to cultural resources related to the World War II sites with implementation of the MM CR-3 through MM CR-11, which are intended to ensure potential impacts will be less than significant.

- **85. Transmission Line and Water Pipeline Crossing of the CRA, Impact 3.8-2:** This impact is considered potentially significant and subject to the mitigation program. The transmission and water pipelines cross over buried portions of the CRA, which is very likely eligible for the National Registry of Historic Properties (NRHP) based on its historical and engineering significance. The CRA is not visible from the surface in this area, however, except for a road and flood control berm. Impacts to materials, feeling, setting, and association are expected to be potentially significant. Implementing MMs (MM CR-1, MM CR-3, MM CR-5, MM CR-6, and MM CR-11) would reduce these effects to less than significant levels.
- **86. Transmission Line Crossing of the Eagle Mountain Railroad, Impact 3.8-3:** This impact is considered potentially significant and subject to the mitigation program. The transmission line crosses over the Eagle Mountain Railroad in two places. A formal significance determination of the rail line remains to be undertaken by the BLM but there have been substantial previous impacts to its integrity and it is unlikely to be found NRHP eligible. In compliance with section 106 of the National Historic Preservation Act, an inventory of this area will be taken. A workplan will be developed to ensure compliance with section 106. MMs (MM CR-2 through MM CR-11) would reduce this impact to less than significant by requiring site inventory, worker education, implementation of a Historic Properties Management Plan (HPMP) and other measures. MM CR-2, through MM CR-11 will reduce the impact to less than significant.
- **87. Central Project Area, Impact 3.8-4:** This impact is potentially significant and subject to the mitigation program. Class III surveys have not been conducted on the Central Project Area because of lack of access. Because of the large degree of disturbance on the site, it is unlikely that significant pre-historic cultural resources remain on-site. However, there is the potential for historic resources. The State Historic Preservation

Officer (SHPO) commented that the previous determination that the Eagle Mountain Mine and townsite were not eligible for the National Register was primarily based on the fact that in 1996, they were not yet 50 years old and would have had to be of exceptional historical value to qualify. Today, the Eagle Mountain Mine and townsite are over 50 years old and would not have to meet this higher level of eligibility. These impacts would be potentially significant. MMs (MM CR-2 through MM CR-11) require inventory and evaluation of the site, data recovery, public participation or alternative mitigation as appropriate. Mitigation measures MM CR-2 through MM CR-11 will reduce the impact to less than significant.

88. Unknown/Buried Cultural Resources, Impact 3.8-5: This impact is potentially significant and subject to the mitigation program (MM CR-2 through MM CR-11). The only substantial prehistoric and historic sites identified in either the Class I inventory or Class III survey within the study corridor are located outside of the Project boundaries or APE. The Project involves grading and excavation for several Project features.

In the event that any unknown (remaining) cultural resources, including paleontological or archeological resources, are encountered during Project construction, all earthwork shall cease and a qualified paleontologist/archeologist shall be contacted to evaluate the nature and significance of any such discoveries.

In the event that any unknown human remains are discovered during Project construction, the on-site Project manager will notify the Riverside County Coroner's Bureau within 24 hours under California law (California Health and Safety Code § 7050.5) and all activities in the immediate area of the find shall cease until appropriate and lawful measures have been taken. If the Coroner determines that the remains are Native American, the Native American Heritage Commission (NAHC) shall also be contacted (California Public Resources Code § 5097.98). In accordance with Section 5097.98 of the California Public Resources Code, the NAHC shall designate a Most Likely Descendent, who may make recommendations concerning the disposition of the remains, in consultation with Riverside County and the Project Archaeologist.

MM CR-2through MM CR-11 will reduce the impact to less than significant.

Land Use/Public Services

- **89.** Short-term Construction Impact from Transmission Line and Interconnection to Substation, Impact 3.9-1: The proposed transmission line and substation will cause short-term impacts as a result of construction activity, noise, dust, and traffic. This impact would be considered potentially significant and subject to the mitigation program (PDF LU-1 and PDF LU-2). This will be most noticeable for nearby residents of Desert Center during substation construction. As such, construction access to and from the substation site will be from the Eagle Mountain Road exit and follow the Frontage Road east to the site. In addition, the hours of operation for construction will be publically noticed near the Desert Center community and along State Route 177. Noticing will commence two-weeks prior to the initiation of construction activities. PDF LU-1 and PDF LU-2 will reduce the impact to less than significant.
- **90. Short-term Construction Impacts from the Water Pipeline Corridor, Impact 3.9-3:** Construction of the water pipeline will cause short-term impacts as a result of construction activity, noise, dust, and traffic. This impact would be considered potentially significant and

subject to the mitigation program (PDF LU-1 through PDF LU-3), which will reduce the impacts to less than significant.

- **91. Existing and Proposed Land Uses in the Central Project Site, Impact 3.9-7:** Coordination with adjacent projects is planned. Implementation of the proposed Project will result in a change in the use of land within the Central Project Area from a former large-scale iron mine to a pumped storage hydroelectric facility. Additionally, this Project could be operating in conjunction with the proposed Eagle Mountain Landfill and near the CRA. The Project layout has been modified to eliminate conflicts with existing and proposed land uses. Public outreach and ongoing coordination with MWD, the Eagle Mountain Mine owner or operator, the proposed Landfill's owner or operator, and any other proposed projects adjacent to the Project, will further mitigate impacts. This impact is potentially significant and subject to the mitigation program (PDF LU-4, PDF LU-5 and MM LU-2) and Conditions 1, 5, and 7 of Certification, which will reduce impacts to less than significant.
- **92.** Potential Impacts to the Landfill Liner, Impact 3.9-11: Seepage from the Upper Reservoir could potentially encounter the lining of the landfill, when and if the landfill is built. Therefore, this potential impact is determined to be potentially significant and subject to the mitigation program. MMs to address this impact are PDF GW-1 and MM GW-5, described in detail in the Final EIR in Section 3.3 "Groundwater." The seepage will be maintained so the landfill can comply with California Code of Regulations, title 27, section 20240. Mitigation measures PDF GW-1 and MM GW-5 will reduce impacts to a less than significant level.
- **93. Compatibility of Specific Features and Ancillary Facilities Interferences, Impact 3.9-12:** Design adjustments have been made to avoid interference with proposed landfill components, so that the proposed Project does not conflict with construction or longterm operation of the proposed landfill project's specific features and ancillary facilities. The impact is potentially significant and subject to the mitigation program (PDF LU-4 and PDF LU-5), which will reduce the impact to a less than significant level.
- **94. Impact to Public Services, Impact 3.9-15:** This impact is considered potentially significant and subject to the mitigation program. Because no new housing construction is anticipated, it is expected that existing regional public services will meet the Project-related demand for services. However, to ensure that there is no impact to public services, the Licensee will pay development impact fees. Payment of development impact fees is listed in the mitigation program as MM LU-1. The payment of these fees will ensure that acceptable response times and service ratios are maintained for public services. The proposed Project will cross the CRA and transmission lines owned by the MWD, used to provide power for the operation of the CRA. Therefore, the proposed Project has the potential to impact services provided by MWD. Coordination with MWD, including MWD approval of design of the transmission and CRA crossings, will ensure the proposed Project does not interfere with the operation and the service provided by MWD. MM LU-1 will reduce this potentially significant impact to a less than significant level.

Transportation and Traffic

95. Construction-related Traffic, Impact 3.12-1: The Project will cause an increase in traffic that is not substantial in relation to the existing traffic load and capacity of the

street system. The Project will not decrease a level of service standard established by Riverside County. This impact is considered potentially significant and subject to the mitigation program (MM AQ-6, PDF LU-1, and PDF LU-2). MM AQ-6 is proposed to reduce impacts to air quality and will also reduce impacts to traffic. MM AQ-6 requires the construction contractor to develop and implement a Transportation Management Plan (TMP) to control construction traffic onto the site and within the Project vicinity. The TMP includes provisions for ridesharing, use of shuttle transit for Project employees, and provision of on-site food service to reduce vehicle trips, where feasible. The TMP will also consider availability of local housing that can be secured for use by a voluntary portion of the employees throughout the construction period. In addition PDF LU-1 and PDF LU-2 will also reduce traffic impacts. These PDFs specify that construction access to and from the substation site will be from the Eagle Mountain Road exit and follow the Frontage Road east to the site. In addition, two weeks prior to beginning construction, notices shall be posted locally stating hours of operation for construction near the community of Desert Center and along State Route 177. With adherence to MM AQ-6, PDF LU-1, and PDF LU-2, potential traffic impacts would be reduced to less than significant.

Noise

96. Construction Noise, Linear Features, Impact 3.14-2: The maximum construction noise at the nearest sensitive receptors attributed to the transmission line and water pipeline would be adverse for up to several weeks during construction. However, due to the nature of linear facilities, this noise would only occur for several days at any one location. About 20 residences would be affected by noise from increased traffic along Kaiser Road during construction. This impact is potentially significant and subject to the mitigation program (MM N-1). There will be a short-term increase in noise during construction of the linear features. Implementation of MM N-1 will reduce construction noise impacts to less than significant.

Hazards and Hazardous Material

97. Hazardous Materials during Construction, Impact 3.16-1: Due to the proximity of the transmission line to the World War II-era camps, and the recent history of military training on the Central Project Area, any unexploded ordnance (UXO) found on-site could be hazardous to workers on-site. This impact is considered potentially significant and subject to the mitigation program (MM HM-1). The Project Contractor and Environmental Coordinator will implement a UXO Identification, Training, and Reporting Plan (UXO Plan) to properly train all site workers in the recognition, avoidance and reporting of military waste debris and ordnance. Hazardous materials transported, stored and/or used on-site during proposed Project construction and operation (i.e., petroleum products, lubricants, solvents) could potentially be spilled or released into the atmosphere if improperly stored and/ or handled. However, the Project will comply with federal, state, and local hazardous material LORS to ensure that construction products will not be improperly stored or handled. Hazardous materials will be transported, stored and/or used on-site during Project construction and operation in compliance with federal, state, and local LORS making the potential impacts less than significant. Risks to workers from UXO will be reduced to less than significant through the implementation of MM HM-1.

Section 6

Significant and Unavoidable Impacts:

Under Public Resources Code sections 21081 subd. (a)(3) and 21081 subd. (b) and CEQA Guidelines sections 15091 (a) (3), 15092, and 15093, and to the extent reflected in the Final EIR, MMRP and Certification, the State Water Board finds that the following impacts of the Project remain significant and unavoidable, notwithstanding the imposition of all feasible MMs as set forth below and that specific economic, legal, social, technological, or other considerations makes infeasible the MM or Project alternatives identified in the Final EIR.

- **98. Groundwater Resources:** By itself, the proposed Project is not expected to have a significant effect on groundwater resources. Based on the Final EIR for the Project, the groundwater elevation over the 50-year life of the project is expected to rebound. Based on the Final EIR and all information contained in the record, however, the construction of the proposed Project, along with other reasonably foreseeable projects in the region will result in a significant impact to groundwater levels in the region. Pumping in the Chuckwalla Valley Groundwater Basin will exceed recharge for approximately four years of the 50-year Project life. During the remaining years, recharge will exceed pumping. However, in combination with pumping for all reasonably foreseeable projects, overdraft of about 9 feet could occur in the Chuckwalla Valley Groundwater Basin over the life of the Project, in which case, this Project would contribute to a significant adverse cumulative effect to groundwater resources. The State Water Board finds the following:
 - i. Other foreseeable projects in the Chuckwalla Valley Groundwater Basin include solar and wind installations and agricultural uses. The potential for drawdown under the cumulative effects scenario (including Kaiser's water use for the proposed landfill, water use for multiple proposed solar projects, and water use for the prisons), is larger than the drawdown due to the Project pumping alone. Considering these foreseeable projects, operation of this Project will contribute to an overdraft of the Chuckwalla Valley Groundwater Basin of approximately 9 feet over the life of the Project. The State Water Board considers this impact to be significant.
 - ii. To help minimize the drawdown, the Licensee will limit seepage from the Project reservoirs to the extent feasible using specified grouting, seepage blankets, roller-compacted concrete or soil-cement treatments. This includes treating the Upper Reservoir and Lower Reservoirs.
 - iii. The Final EIR did not identify an alternative or feasible MM that would achieve the Project objectives and not result in a reduction of the aquifer's elevation. As discussed, several PDFs limit the amount of groundwater that must be pumped from the basin to maintain the reservoir levels. Reservoir linings, seepage control wells, reverse osmosis treatment, and use of several supply wells will help minimize the impact of groundwater pumping over the 50-year life of the Project. A series of MMs and PDFs will help reduce groundwater overdraft and lowering of the aquifer levels over the life of the Project. (MM GW-1 through MM GW-7, PDF GW-1 and PDF GW-2). Nevertheless, over the life of the Project, in conjunction with other projects in the area, groundwater levels will be reduced and the State Water Board finds there is no feasible MM or series of MMs to reduce the impact to a less than significant level.

- **99. Air Quality Impacts During Construction:** As discussed in the Final EIR, during Project construction the Project will result in significant unavoidable impacts to air quality. Specifically, the threshold of significance for NOx, as determined by SCAQMD, will be exceeded. For a Project of this scale, the Final EIR did not identify any feasible Project alternatives or MMs that will allow construction of the Project without short-term impacts to NOx levels.
 - i. As detailed in the Final EIR, MMRP and these Findings, a series of Project features have been incorporated which will reduce air quality impacts and NOx levels. (MM AQ-1 through MM AQ-6.) Construction standards include: A TMP for employees, including provisions for ridesharing, use of shuttle transit for Project employees, and provision of on-site food service to reduce vehicle trips. The TMP will also consider availability of local housing that can be secured for use by a voluntary portion of the employees throughout the construction period.
 - ii. Electrical drops should be used in place of temporary electrical generators. The Licensee should substitute low- and zero emitting construction equipment and/or alternative fueled or catalyst equipped diesel construction equipment wherever economically feasible. All electrical generators must be properly permitted with the SCAQMD. Heavy-duty diesel trucks shall be properly tuned and maintained to manufacturers' specifications to ensure minimum emissions under normal operations. At least 50 percent of the diesel fleet hours will use 2002 or later year diesel construction equipment, where feasible. Older off-road construction equipment shall be retrofitted with appropriate emission control devices prior to on-site use, where feasible.
 - iii. Despite the above-mentioned MMs, the State Water Board finds there is no feasible MM or series of MMs that will reduce the air quality (NOx) impacts to a less than significant level.
- **100. Aesthetic Impacts: Operation of Transmission Line from the Eagle Mountain Road Turnoff to the Interconnection Substation:** The transmission line segment from the Eagle Mountain Road turnoff to the interconnection substation (2.5 miles) would constitute a new utility feature within the landscape, creating high visual contrast within foreground view zones, resulting in a significant and unavoidable impact despite implementation of MM AES-3 and MM AES-4.
 - i. For design of the transmission line, road crossings shall be aligned perpendicular to the road to minimize views up and down ROW corridors. Towers are planned to be placed at the maximum distance from the road ROW. Steel lattice structures with a dull, galvanized steel finish shall be used to reduce visual contrast. Conductors shall be selected to reduce glare and visual contrast (MM ASE-3). The corridor is planned to be collocated with the existing MWD transmission corridor, and tower spacing at ridgelines will be designed so that as few towers as possible are skylighted on the ridgeline. These considerations will be balanced with engineering constraints and concerns for minimizing impacts to other resources such a desert tortoise and cultural resources. Final design will be approved by FERC.

- ii. Design features were developed to minimize view impacts. For construction of the transmission line, existing access roads and construction laydown areas will be used to the extent feasible. The transmission line disturbed zones that will not be required for long-term maintenance access will be revegetated with native vegetation immediately following completion of transmission line construction, consistent with the recommendations in the Biological Resources Revegetation Plan (see Final EIR Section 12.14, MM BIO-1 through MM BIO-8).
- iii. Of the nine key observation points (KOPs) established, two (I-10 and Desert Center) would be exposed to significant, immitigable visual changes. Although the new structures would be similar in design and height to the new Southern California Edison's Devers-Palo Verde No. 2 (DPV2) transmission line segment proposed to cross within the I-10 foreground (see Figures 3.7-7 through 3.7-10 in Final EIR for locations of existing and proposed transmission lines), the new structures would additionally block panoramic views of the Chuckwalla Valley and surrounding mountains. The new transmission line and new ROW would also increase the structural complexity and industrial character, which would become more pronounced the closer the viewer is to the structures. Viewers traveling eastbound on I-10 would be most affected by the new transmission line since unobstructed views of it would become apparent as viewers come within the foreground/middleground view zones. The new structures will be apparent to westbound travelers as well, but potentially "filtered" due to the proposed DPV2 line. The moderate-to-high level of visual change that would be caused by this segment of the Project would be inconsistent with the applicable VRM Class III management objectives. Based upon the analysis above, the Project will result in a significant adverse visual impact on the existing visual character of the Project vicinity.
- iv. Transmission lines are a feature of the proposed Project and all possible routes result in aesthetic impacts that cannot feasibly be reduced to a less than significant level. Of the several transmission line routes that were proposed, Project alternative route "1A" was determined to be the environmentally preferred route. Nevertheless, the transmission line segment from the Eagle Mountain Road turnoff to the interconnection substation (2.5 miles) will constitute a new utility feature within the landscape, creating high visual contrast within foreground view zones. This impact to the view was determined to result in a significant and unavoidable visual impact.
- v. The Project design and alternatives considered various configurations for transmission corridors. Weighing the various options, the State Water Board determined that Alternative "1A" as fully described in the Final EIR was consistent with Project objectives while minimizing aesthetic concerns.
- vi. Despite the above-mentioned MMs, the State Water Board finds it is technically and economically infeasible to reduce the impact to a less than significant level. There is no feasible MM or series of MMs that will reduce the visual aesthetic impacts for a portion of the new transmission line to a less than significant level.

Section 7

Findings Regarding Alternatives:

101. Public Resources Code section 21002 and CEQA Guidelines §15126.6 require consideration and discussion of alternatives of a proposed project in an EIR. The purpose of the alternatives analysis is to identify ways to mitigate or avoid the potentially significant adverse effects that may result from implementation of the proposed Project.

The alternative selection process involved the following sequence of steps:

- (1) Identification of proposed Project goals and objectives;
- (2) Identification of potentially significant impacts from the proposed Project;
- (3) Development of evaluation criteria;
- (4) Review of a range of alternatives that could feasibly eliminate adverse environmental effects;
- (5) Identification of those alternatives that meet the criteria and explanation of why alternatives were rejected as infeasible; and
- (6) Evaluation of alternatives based upon comparative environmental impact assessment.

The proposed Project has evolved substantially over a period of years to include a variety of features (described in more detail in Section 4.6 of the Final EIR) intended to specifically address and minimize potential environmental effects.

The alternatives analysis reflects numerous alternative design elements and configurations that have been incorporated by the Project Applicant as a result of input received during the scoping and planning processes for the proposed Project, with a goal to limit environmental impacts of the Project. Changes were made in response to comments received by public agencies, the proposed landfill project sponsors, MWD, the Eagle Mountain Mine owners, and concerned citizens and organizations. Additional alternatives were identified based upon findings and recommendations of technical studies. Design features have been incorporated into the proposed Project as design feature adjustments to the original proposal.

PDFs that avoid or reduce environmental impacts have been included as part of the Project and are more fully set forth in the Final EIR, MMRP and Certification

A number of alternative Project components were considered that were ultimately determined to be infeasible for of this Project. Based upon this determination, the following components were eliminated from detailed study:

102. Alternative Power Sources to Pumped Storage Generation:

- i. Increased wind and solar generation would meet some but not all, of the Project objectives, including the ability to: provide energy to meet peak power requirements; provide storage to integrate renewable energy; and provide for increased flexibility in grid operations.
- ii. Various distributed generation energy storage options were considered in the Project planning stage. Distributed generation generally refers to generation of

energy near the intended place of use. Technologies such as compressed air storage, batteries, flywheels, fuel cells and other sources were considered. Distributed generation, representing approximately 800 MW of generating capacity, or approximately one percent of current energy generation supplies in California is not a viable alternative to meet the objectives of the proposed Project. Pumped storage provides peaking power, energy storage, and is the largest capacity storage alternative currently available.

103. Alternative Locations:

- i. Because of the unique attributes of the Eagle Mountain Mine site, it was determined that no other alternative sites for pumped storage can feasibly be developed with the desired attributes and associated minimal number of environmental impacts. Some of the unique factors of the Eagle Mountain Mine site include:
 - Use of the existing mine pits in an already substantially degraded landscape, located within 14,000 feet of each other with a differential in elevation that will generate the projected power storage capacity of the Project;
 - (2) Proximity of a large groundwater supply that is projected to rebound to historical levels by Project completion;
 - (3) The site will not adversely impact surface water or fisheries;
 - (4) The site is within 13 miles of an established National transmission corridor; and
 - (5) The potential to integrate energy produced from renewable energy projects (wind, solar) planned in the same geographic region.
- ii. The Black Eagle Pits on the Eagle Mountain Mine site were considered but dismissed. Using the North and South Black Eagle Pits as alternative reservoir sites would result in a project with a capacity of 370 MW, rather than the 1,300 MW the proposed Project could deliver. This lower capacity does not meet Project objectives and would not alleviate landfill compatibility concerns raised by the current Eagle Mountain Mine owner.
- iii. A pumped storage project using North Black Eagle Pit and the proposed lower reservoir would result in a project with a capacity of 930 MW. This project would also not reduce concerns about landfill compatibility raised by the Eagle Mountain Mine owner and would result in a substantial drop in Project capacity.

104. Transmission Line and Substation Alternatives to Limit Aesthetic Impact:

i. Several alternatives to the proposed route were considered. The environmentally preferred alternative route, alternative "1A," and was selected because it meets Project objectives, consolidates existing lines, and reduces impacts on desert tortoise habitat and visual resources. The eastern substation alternative is the environmentally preferred location as it avoids impacting panoramic views in the Chuckwalla Valley.

- ii. Although the transmission lines and substation locations have potential visual impacts, the overall impact is reduced compared to other proposed locations and routes.
- iii. Although the eastern substation location is within designated critical habitat for desert tortoise, the habitat is of lesser quality and has lesser density of desert tortoise than the proposed western substation.

105. Water Supply Alternatives to Limit Impact to a Less than Significant Level:

i. Due to the dry local environment and lack of permanent surface water sources, the Project water supply must come from local groundwater or through purchasing surface water. The only locally available surface water supply would be from the CRA controlled by MWD. Purchasing water from MWD and diverting from the CRA to fill the reservoir sites was investigated.

Ultimately, MWD did not agree to provide water from the CRA and purchasing surplus water from MWD was rejected as infeasible due to unreliability in times of shortages and the cost of purchasing water that is primarily used for urban purposes. In addition, CRA water is known to contain quagga mussels. The removal of the mussels prior to use would be necessary as introduction of the mussels to the Project reservoirs would cause significant operational concerns.

ii. The following alternative water treatment processes were considered: thermal processes; conventional demineralization; and electrical demineralization. It was determined that RO was the most practical and cost-efficient means of maintaining water quality in the reservoirs. None of the alternative water treatment processes have the potential to reduce environmental impacts to an extent that cannot be achieved with the selected method. Operation of RO or other approved technologies will ensure the Project waters meet the background groundwater quality at the reservoirs.

106. Alternatives to Limit NOx Emissions to a Less than Significant Level:

- i. To limit the NOx emissions to below a significant level, the only feasible alternative is to limit the number of heavy industrial pieces of equipment that could operate on any particular day. This would extend the construction period from an estimated 3-4 years to 10-12 years. This alternative would increase other impacts, including but not limited to noise and habitat disturbance. There would also be additional costs of a markedly extended construction period that could undermine Project viability and affect Project feasibility. An extended construction period is the only known way to reduce short term NOx impacts and this alternative was rejected as infeasible.
- **107. No Project Alternative:** Under the No Project Alternative the Project would not be built and the site and surrounding area would remain in their current condition. This alternative would avoid all of the potentially significant but mitigable impacts as well as the significant and unavoidable impacts. Under CEQA Guidelines section 15126.6 (e)(2) where the No Project Alternative is identified as the environmentally superior alternative the EIR should identify the environmentally superior development alternative. As detailed above, no single alternative eliminates all significant adverse impacts.

108. Environmentally Superior Development Alternative: The Proposed Project is the environmentally superior development alternative. The proposed Project includes all feasible PDFs and MMs. It incorporates the eastern substation route and transmission line interconnection route identified as "route 1A," which is the environmentally superior alternative. The use of the existing pits, with RO water treatment, seepage recovery wells and reservoir design features will maximize the Project objectives of power generation while limiting impacts to groundwater resources in the region. A series of management practices will reduce the extent of NOx emissions to the extent feasible. A total reduction of NOx emissions to a less than significant level is not possible without extending the construction time, which would result in additional impacts and would make the Project infeasible.

Section 8

Statement of Overriding Considerations:

- **109.** CEQA requires decision-making agencies to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve a project. This must be a written finding stating the agency's specific reasons supporting its action based on the Final EIR and other information in the record. The requirements for a Statement of Overriding Considerations are established in California Code of Regulations, title 23, section 15093, and in Public Resources Code section 21081 subdivision (b).
- 110. The Final EIR for the Project Certification identified significant environmental effects of the proposed Project that cannot feasibly be mitigated to a less than significant level. The State Water Board as lead agency for the Project due to its issuance of a Certification under section 401 of the Federal Clean Water Act, has determined that the following impacts cannot feasibly be mitigated to a less than significant level but nevertheless approves the Project and adopts this statement in compliance with section 15093 of the CEQA Guidelines.
 - i. **Groundwater Resources:** Based on a thorough consideration of the record, the State Water Board determines that other specific Project benefits as further detailed below outweigh the impact to aquifer levels. The Final EIR determines the Project will allow integration of renewable energies which will assist California in reaching its target renewable standards. Additionally, by providing an energy storage system to "level" the power grid, the Project will replace the need for new fossil fuel based "peaker" plants. Balancing these issues of statewide importance against the projected 9-foot drop in the aquifer over the life of the Project, the State Water Board considers the project benefits to outweigh this impact.
 - ii. **Air Quality:** While the Project will result in a short-term exceedance of NOx levels under SCAQMD standards, the Project will result in long-term benefits to air quality through its replacement of fossil fuel fired peaker plants and will facilitate the incorporation of renewable energy sources into the energy grid. The overriding environmental benefits of the Project as further outlined below, outweigh the short-term impacts of increased NOx levels due to construction activity.

iii. **Aesthetics:** Although the transmission line segment from Eagle Mountain Road to the substation (approximately 2.5 miles) will cause significant visual changes that cannot be mitigated to a less than significant level, the line and substation have been located to avoid impacts to the extent feasible. Overriding benefits of the Project, as further outlined below outweigh the significant immitigable visual impact of a new transmission line segment.

The State Water Board has adopted and imposed all feasible MMs, considered other project alternatives and MMs and found them infeasible and balanced the effects of the proposed Project against its benefits. The State Water Board finds that the Project as analyzed in the Final EIR offers specific environmental, economic and social benefits that outweigh the unavoidable adverse environmental effects. The State Water Board adopts this Statement of Overriding Considerations for the above listed impacts to air quality, groundwater resources, and aesthetics.

- **111. Project Benefits:** The State Water Board finds that the following cumulative benefits, and in many cases, individual benefits listed below override the significant and unavoidable impacts discussed above and adopts this Statement of Overriding Considerations. The Project benefits supporting the above statement are outlined below:
 - i. The proposed Project will support California's energy policy. California's energy policy calls for maintaining a reliable, efficient, and affordable energy system that minimizes the environmental impacts of energy production and use, ensures energy reliability, enhance the state's economy and protects public health and safety. (Pub. Res. Code section 25301 (a).) It is essential that the California's energy sectors are flexible enough to respond to future fluctuations in the economy and that the state continue to develop and adopt "green" technologies that are critical for long-term reliability and economic growth.
 - ii. The proposed Project would provide energy storage benefits including: providing assistance with integration of renewable energy into the transmission grid; avoiding or deferring the need for new fossil fuel-powered peaking power plants and expansion of the transmission grid; reducing the use of electricity generated from fossil fuels to meet peak load requirements; reducing emissions; and providing ancillary services otherwise provided by fossil-fueled generating facilities thus reducing emissions of CO₂ and criteria pollutants. The proposed Project would make a significant contribution to California's energy reliability and efficiency by: providing flexibility in generation; providing energy storage for peak power demands; and providing integration of renewable energy projects into transmission grid operations.
 - iii. The proposed Project will provide energy storage for integration of renewable energy sources. By using energy storage technologies to store intermittent and off-peak renewable power, the state may: reduce GHG emissions from carbonbased electricity production; avoid the need to build more transmission and generation facilities; increase system efficiencies and reliability; and, generate economic activity through the manufacturing and operation of new technologies. The proposed Project's location in the southern California transmission grid is complimentary to support existing wind power generation in the San Gorgonio

Pass, Tehachapi, and the Salton Sea area, and thousands of MWs of proposed wind and solar power generation in the Mohave Desert, Chuckwalla Basin, and Palo Verde Valley.

- iv. The proposed Project will provide for flexible transmission grid operations. Operational flexibility provided by pumped storage systems comes from the voltage regulation, ramping and load following capabilities that allow integration of renewable resources that generate during off-peak demand periods. These renewable resources naturally fluctuate in generation output as variable wind speed and cloud cover affect wind and solar energy production. The pump storage system functions improve system reliability as well, by: maintaining a constantly charged electrical grid; providing generation to meet peak demands; and providing "Black Start" capabilities in the event of a system failure.
- v. The proposed Project will reduce GHG emissions, by displacing traditional simple-cycle natural gas peak power generation, which is currently the primary source of peak power generation.
- vi. The proposed Project will generate hydropower without causing adverse impacts to surface waters and aquatic ecosystems. By locating the proposed Project in existing mining pits in a desert environment, impacts to streams, fisheries resources, wetlands, and other aquatic ecosystems are minimized or avoided. No perennial waters supporting aquatic habitat will be affected.