

TABLE OF CONTENTS

EXECUTIVE SUMMARY

| | <u>Page No.</u> |
|---|-----------------|
| 0.0 EXECUTIVE SUMMARY..... | ES-1 |
| 0.1 Introduction..... | ES-1 |
| 0.2 Project Summary..... | ES-1 |
| 0.3 Purpose and Use of the Draft SEIR | ES-1 |
| 0.4 Proposed Project Characteristics..... | ES-3 |
| 0.5 Regional Setting..... | ES-4 |
| 0.6 Project Location | ES-4 |
| 0.7 Project Objectives | ES-5 |
| 0.8 Environmental Impacts | ES-6 |
| 0.8.1 Impacts Not Further Considered in this SEIR | ES-6 |
| 0.8.2 Impacts of the Proposed Project | ES-7 |
| 0.9 Alternatives to the Proposed Project..... | ES-9 |
| 0.9.1 Alternatives Eliminated from Further Consideration | ES-9 |
| 0.9.2 Alternatives Selected for Analysis..... | ES-12 |
| 0.10 Areas of Controversy | ES-18 |
| 0.11 Issues to be Resolved..... | ES-19 |
| 0.12 Summary of Environmental Impacts and Mitigation Measures | ES-19 |

| | |
|--|------------|
| 1.0 INTRODUCTION..... | 1-1 |
| 1.1 Purpose and Use of the Draft SEIR | 1-1 |
| 1.2 Terminology..... | 1-2 |
| 1.3 Review and Certification Process | 1-4 |
| 1.3.1 Initial Study and Notice of Preparation..... | 1-4 |
| 1.3.2 Scoping Meeting | 1-4 |
| 1.3.3 Availability of the Draft SEIR | 1-10 |
| 1.3.4 Format and Content..... | 1-11 |
| 1.4 Required Draft SEIR Contents and Organization..... | 1-12 |
| 1.5 Responsible and Trustee Agencies | 1-13 |
| 1.5.1 State Agencies..... | 1-14 |
| 1.5.2 Local Agencies..... | 1-14 |
| 1.6 Incorporation by Reference..... | 1-15 |
| 1.6.1 2011 Final Environmental Impact Report..... | 1-15 |
| 1.6.2 Imperial County General Plan | 1-16 |
| 1.6.3 Imperial County Zoning Ordinance | 1-16 |
| 1.6.4 Sources | 1-16 |

| | |
|--|------------|
| 2.0 PROJECT DESCRIPTION | 2-1 |
| 2.1 Introduction..... | 2-1 |
| 2.1.1 Overview of Battery Energy Storage Technology..... | 2-1 |
| 2.1.2 Project Background..... | 2-2 |

| | | |
|------------|--|--------------|
| 2.2 | Proposed Project Overview..... | 2-4 |
| 2.3 | Project Objectives | 2-4 |
| 2.4 | Project Location | 2-6 |
| 2.5 | Environmental Setting | 2-6 |
| 2.6 | Project Characteristics | 2-10 |
| 2.6.1 | Security | 2-11 |
| 2.6.2 | Lighting..... | 2-11 |
| 2.6.3 | Construction..... | 2-11 |
| 2.6.4 | Operation and Maintenance | 2-15 |
| 2.7 | Decommissioning | 2-17 |
| 2.8 | Alternatives | 2-17 |
| 2.8.1 | Alternative 1 – No Project Alternative | 2-18 |
| 2.8.2 | Alternative 2 – West Alternative | 2-18 |
| 2.8.3 | Alternative 3 – East Alternative..... | 2-21 |
| 2.9 | Intended Uses of the SEIR/Authorizing Actions | 2-21 |
| 2.9.1 | Discretionary Actions and Approvals..... | 2-21 |
| 2.9.2 | Entitlements to Implement the Proposed Project..... | 2-24 |
| 2.9.3 | Other Responsible and Trustee Agencies | 2-25 |
| 3.0 | ENVIRONMENTAL SETTING, IMPACTS, & MITIGATION MEASURES | 3.1-1 |
| 3.1 | Air Quality/Greenhouse Gas Emissions | 3.1-1 |
| 3.1.1 | Introduction..... | 3.1-1 |
| 3.1.2 | Environmental Setting | 3.1-1 |
| 3.1.3 | Air Quality | 3.1-1 |
| 3.1.4 | Greenhouse Gas Emissions..... | 3.1-5 |
| 3.1.5 | Regulatory Setting | 3.1-6 |
| 3.1.6 | Environmental Consequences..... | 3.1-10 |
| 3.1.7 | Project Impacts..... | 3.1-17 |
| 3.2 | Biological Resources | 3.2-1 |
| 3.2.1 | Introduction..... | 3.2-1 |
| 3.2.2 | Environmental Setting | 3.2-1 |
| 3.2.3 | Topography, Soils, and Drainage..... | 3.2-1 |
| 3.2.4 | General Vegetation | 3.2-2 |
| 3.2.5 | General Wildlife..... | 3.2-2 |
| 3.2.6 | Sensitive Biological Resources..... | 3.2-7 |
| 3.2.7 | Habitat Connectivity and Wildlife Corridors..... | 3.2-19 |
| 3.2.8 | Regulatory Setting | 3.2-19 |
| 3.2.9 | Federal Plans, Policies, Regulations, and Laws..... | 3.2-19 |
| 3.2.10 | State Plans, Policies, Regulations, and Laws..... | 3.2-21 |
| 3.2.11 | Regional and Local Plans, Policies, Regulations, and Laws | 3.2-23 |
| 3.2.12 | Environmental Consequences..... | 3.2-24 |
| 3.2.13 | Thresholds of Significance | 3.2-24 |
| 3.2.14 | Analysis Methodology | 3.2-25 |
| 3.2.15 | Issues Scoped Out | 3.2-29 |
| 3.2.16 | Project Impacts..... | 3.2-29 |
| 3.3 | Cultural Resources | 3.3-1 |

| | | | |
|------------|-----------------------------------|--|------------|
| 3.4 | 3.3.1 | Introduction..... | 3.3-1 |
| 3.4 | | Geology and Soils | 3.4-1 |
| 3.5 | | Hazards and Hazardous Materials | 3.5-1 |
| | 3.5.1 | Introduction..... | 3.5-1 |
| | 3.5.2 | Environmental Setting | 3.5-1 |
| | 3.5.3 | Regulatory Setting | 3.5-8 |
| | 3.5.4 | Environmental Consequences..... | 3.5-14 |
| | 3.5.5 | Project Impacts..... | 3.5-16 |
| 3.6 | | Noise | 3.6-1 |
| | 3.6.1 | Introduction..... | 3.6-1 |
| | 3.6.2 | Environmental Setting | 3.6-1 |
| | 3.6.3 | Environmental Consequences..... | 3.6-10 |
| 3.7 | | Transportation | 3.7-1 |
| | 3.7.1 | Introduction..... | 3.7-1 |
| | 3.7.2 | Environmental Setting | 3.7-1 |
| | 3.7.3 | Regulatory Setting | 3.7-7 |
| | 3.7.4 | Environmental Consequences..... | 3.7-9 |
| | 3.7.5 | Project Impacts..... | 3.7-12 |
| 4.0 | CUMULATIVE IMPACTS | | 4-1 |
| 4.1 | | Cumulative Impacts | 4-1 |
| | 4.1.1 | Cumulative Impacts Approach | 4-2 |
| | 4.1.2 | Cumulative Projects | 4-3 |
| 4.2 | | Cumulative Setting Impacts and Mitigation Measure | 10 |
| | 4.2.1 | Air Quality | 10 |
| | 4.2.2 | Biological Resources | 12 |
| | 4.2.3 | Cultural Resources | 16 |
| | 4.2.4 | Geology and Soils | 19 |
| | 4.2.5 | Hazards and Hazardous Materials | 22 |
| | 4.2.6 | Noise | 26 |
| | 4.2.7 | Transportation | 27 |
| 5.0 | PROJECT ALTERNATIVES | | 5-1 |
| 5.1 | | Overview of Project Alternatives Under CEQA..... | 5-1 |
| 5.2 | | Project Objectives | 5-2 |
| 5.3 | | Proposed Project Summary..... | 5-3 |
| 5.4 | | Alternatives Eliminated from Further Consideration | 5-4 |
| | 5.4.1 | Off-Site Location | 5-4 |
| | 5.4.2 | Flow Battery Alternative..... | 5-5 |
| | 5.4.3 | Lead-Acid Battery Alternative..... | 5-6 |
| 5.5 | | Alternatives Selected for Analysis..... | 5-7 |
| | 5.5.1 | Alternative 1 – No Project Alternative | 5-7 |
| | 5.5.2 | Alternative 2 – West Alternative | 5-10 |
| | 5.5.3 | Alternative 3 – East Alternative..... | 5-17 |
| | 5.5.4 | Environmental Superior Alternative | 5-24 |

| | |
|--|------------|
| 6.0 OTHER CEQA RELATED TOPICS | 6-1 |
| 6.1 Introduction..... | 6-1 |
| 6.2 Growth-Inducing Impacts | 6-1 |
| 6.3 Significant Irreversible Environmental Changes..... | 6-2 |
| 6.4 Environmental Effects Found to Be Less than Significant..... | 6-3 |
| 6.5 Significant and Unavoidable Environmental Impacts | 6-4 |
| 7.0 PREPARERS | 7-1 |
| 7.1 Lead Agency/Project Sponsor..... | 7-1 |
| Imperial County Planning and Development Services Department | 7-1 |
| EIR Authors and Consultants..... | 7-1 |
| KOA Corporation (Traffic Impact Analysis)..... | 7-1 |
| 8.0 REFERENCES | 8-1 |

**APPENDIX A – INITIAL STUDY / NOTICE OF PREPARATION OF DRAFT
SEIR / COMMENT LETTERS / MITIGATION MONITORING AND
REPORTING PROGRAM**

**APPENDIX B – AIR QUALITY AND GREENHOUSE GAS EMISSIONS
TECHNICAL ANALYSIS**

APPENDIX C – BIOLOGICAL TECHNICAL REPORT

APPENDIX D – CULTURAL RESOURCE REPORTS

APPENDIX E – GEOTECHNICAL EVALUATION REPORTS

APPENDIX F – NOISE REPORT

APPENDIX G – TRAFFIC REPORT

APPENDIX H – PHASE I ESA REPORTS

LIST OF TABLES

| | <u>Page No.</u> |
|--|-----------------|
| Table ES-1: Summary of Proposed Project Impacts - Less Than Significant or Less Than Significant with Mitigation | ES-7 |
| Table ES-2: Alternative Site Plans | ES-13 |
| Table ES-3: Comparison of Alternatives | ES-13 |
| Table ES-4: Summary of Environmental Impacts and Mitigation Measures..... | ES-20 |
| Table 1-1: Summary of IS/NOP Comments | 1-4 |
| Table 1-2: Summary of IS/NOP Comments | 1-5 |
| Table 1-3: Required EIR Contents..... | 1-12 |
| Table 2-1: Anticipated Construction Equipment During Grading Phase | 2-12 |
| Table 2-2: Alternative Site Plans | 2-18 |
| Table 2-3: Entitlement Actions & Permits | 2-24 |
| Table 3.1-1: Latest Three-Year Ambient Air Quality Data Near Project Site | 3.1-4 |
| Table 3.1-2: Global Warming Potentials and Atmospheric Lifetimes | 3.1-6 |
| Table 3.1-3: Federal De Minimis Levels | 3.1-12 |
| Table 3.1-4: ICAPCD Screening Thresholds for Criteria Pollutants..... | 3.1-13 |
| Table 3.1-5: Anticipated Construction Equipment During Grading Phase | 3.1-16 |
| Table 3.1-6: Expected Construction Emissions Summary (Pounds per Day) | 3.1-18 |
| Table 3.1-7: Anticipated Construction Emissions Summary MT/Year..... | 3.1-24 |
| Table 3.1-8: Anticipated Operational Emissions Summary MT/Year | 3.1-24 |
| Table 3.2-1: Wildlife Species Observed or Detected during CSE Wildlife Survey | 3.2-3 |
| Table 3.2-2: Imperial County General Plan Consistency Analysis | 3.2-23 |
| Table 3.3-1: Archaeological Investigations within a One-Mile Radius of the 2011 FEIR APE..... | 3.3-7 |
| Table 3.3-2: Archaeological Sites within a One-Mile Radius of the 2011 FEIR APE..... | 3.3-9 |
| Table 3.3-3: Archaeological Investigations within a One-Mile Radius of the Project Site and Alternative Sites | 3.3-15 |
| Table 3.3-4: Previously Recorded Sites within a One-Mile Radius of the Project Site and Alternative Sites | 3.3-16 |
| Table 3.3-5: Summary of Cultural Resources within the APE..... | 3.3-17 |
| Table 3.3-6: Historic Resources More Than 45 Years Old | 3.3-24 |
| Table 3.3-7: Imperial County General Plan Consistency Analysis | 3.3-36 |
| Table 3.4-1: Modified Mercalli Intensity Scale for Earthquakes | 3.4-2 |
| Table 3.4-2: Summary of Earthquake Faults and Activity in the Vicinity of the Project Site..... | 3.4-3 |
| Table 3.4-3: Summary of Project Site Soil Map Units | 3.4-9 |
| Table 3.4-4: Imperial County General Plan Consistency Analysis | 3.4-15 |
| Table 3.4-5: Summary of Liquefaction Analyses | 3.4-22 |
| Table 3.5-1: Imperial County General Plan Consistency Analysis | 3.5-12 |
| Table 3.6-1: Property Line Noise Limits | 3.6-8 |
| Table 3.6-2: Construction Equipment Assumptions | 3.6-11 |
| Table 3.6-3: Major Equipment Sound Levels..... | 3.6-12 |
| Table 3.6-4: Construction Noise Levels | 3.6-13 |

| | |
|---|--------|
| Table 3.6-5: Existing Traffic Noise Levels..... | 3.6-14 |
| Table 3.6-6: Future Traffic Noise Levels During Construction | 3.6-14 |
| Table 3.6-7: Increase in Traffic Noise Levels | 3.6-15 |
| Table 3.6-8: Battery Energy Storage System Sound Levels..... | 3.6-16 |
| Table 3.6-9: Substation Sound Levels | 3.6-16 |
| Table 3.6-10: Groundborne Vibration from Construction Activities | 3.6-18 |
| Table 3.7-1: LOS Criteria for Unsignalized and Signalized Intersections | 3.7-3 |
| Table 3.7-2: County of Imperial ADT Level of Service Volumes by Roadway Type..... | 3.7-4 |
| Table 3.7-3: Existing Year (2019) Conditions Roadway Segment Analysis..... | 3.7-7 |
| Table 3.7-4: Existing Year (2019) Conditions Peak Hour Intersection Analysis..... | 3.7-7 |
| Table 3.7-5: Imperial County General Plan Consistency Analysis | 3.7-8 |
| Table 3.7-6: Construction Trip Generation – Peak Labor Construction Phase | 3.7-16 |
| Table 3.7-7: Construction Trip Generation – Non-Peak Labor Construction Phase | 3.7-16 |
| Table 3.7-8: Existing Year (2019) with Project Conditions Roadway Segment Analysis.... | 3.7-19 |
| Table 3.7-9: Existing Year (2019) with Project Conditions Peak Hour Intersection Analysis..... | 3.7-19 |
| Table 3.7-10: Existing Year (2019) Conditions Roadway Segment Analysis..... | 3.7-21 |
| Table 3.7-11: Opening Year Peak Hour Intersection Analysis without Project..... | 3.7-21 |
| Table 3.7-12: Opening Year Peak Hour Intersection Analysis..... | 3.7-23 |
| Table 3.7-13: Opening Year with Project Peak Hour Intersection Analysis | 3.7-23 |
| Table 3.7-14: Opening Year Peak Hour Intersection Analysis..... | 3.7-25 |
| Table 3.7-15: Decommission Year Plus Project Peak Hour Intersection Analysis | 3.7-25 |
| Table 4-1: Potential Cumulative Projects | 4-5 |
| Table 4-2: Existing Year with Project Plus Cumulative Conditions Roadway Segment Analysis..... | 4-30 |
| Table 4-3: Existing Year with Project Plus Cumulative Conditions Peak Hour Intersection Analysis | 4-31 |
| Table 4-4: Opening Year with Project Plus Cumulative Conditions Roadway Segment..... | 4-34 |
| Table 4-4: Opening Year with Project Plus Cumulative Conditions Roadway Segment..... | 4-34 |
| Table 5-1: Alternative Site Plans | 5-7 |
| Table 5-2: Comparison of Alternatives..... | 5-7 |

LIST OF FIGURES

| | <u>Page No.</u> |
|---------------|-----------------|
| Figure 2-1: | 2-3 |
| Figure 2-2: | 2-5 |
| Figure 2-3: | 2-7 |
| Figure 2-4: | 2-8 |
| Figure 2-5: | 2-9 |
| Figure 2-6: | 2-14 |
| Figure 2-7: | 2-19 |
| Figure 2-8; | 2-20 |
| Figure 2-9: | 2-22 |
| Figure 2-10: | 2-23 |
| Figure 3.1-1: | 3.1-3 |
| Figure 3.4-1: | 3.4-5 |
| Figure 3.4-2: | 3.4-7 |
| Figure 3.7-1: | 3.7-6 |
| Figure 3.7-2: | 3.7-13 |
| Figure 3.7-3: | 3.7-14 |
| Figure 3.7-4: | 3.7-18 |
| Figure 3.7-5: | 3.7-20 |
| Figure 3.7-6: | 3.7-22 |
| Figure 3.7-7: | 3.7-24 |
| Figure 4-1: | 4-4 |
| Figure 4-2: | 4-29 |
| Figure 4-3: | 4-32 |
| Figure 4-4: | 4-33 |
| Figure 4-5: | 4-35 |