

## TABLE OF CONTENTS

COVER SHEET .....	iii
LIST OF FIGURES .....	xi
LIST OF TABLES.....	xiii
ACRONYMS AND ABBREVIATIONS.....	xv
EXECUTIVE SUMMARY .....	xix
<b>1.0 INTRODUCTION.....</b>	<b>1</b>
1.1 APPLICATION.....	1
1.2 PURPOSE OF ACTION AND NEED FOR POWER.....	3
1.2.1 Purpose of Action .....	3
1.2.2 Need for Power.....	3
1.3 STATUTORY AND REGULATORY REQUIREMENTS .....	5
1.3.1 Federal Power Act.....	7
1.3.1.1 Section 18 Fishway Prescriptions.....	7
1.3.1.2 Section 4(e) Conditions .....	7
1.3.1.3 Section 10(j) Recommendations.....	8
1.3.2 Clean Water Act.....	8
1.3.2.1 Water Quality Certification .....	8
1.3.2.2 California Environmental Quality Act.....	8
1.3.3 Endangered Species Act.....	9
1.3.4 Coastal Zone Management Act .....	12
1.3.5 National Historic Preservation Act.....	12
1.4 PUBLIC REVIEW AND CONSULTATION.....	13
1.4.1 Scoping.....	13
1.4.2 Interventions.....	14
1.4.3 Comments on the License Application .....	14
1.4.4 Comments on the Draft Environmental Impact Statement .....	15
<b>2.0 PROPOSED ACTION AND ALTERNATIVES.....</b>	<b>17</b>
2.1 NO-ACTION ALTERNATIVE.....	17
2.2 APPLICANT’S PROPOSAL.....	17
2.2.1 Project Facilities .....	17
2.2.2 Project Safety.....	21
2.2.3 Project Operation.....	21
2.2.4 Proposed Environmental Measures.....	23
2.3 STAFF ALTERNATIVE .....	29

2.4	ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER ANALYSIS .....	40
2.4.1	Eagle Crest Energy Company .....	40
2.4.2	Kaiser Eagle Mountain, LLC .....	41
3.0	ENVIRONMENTAL ANALYSIS.....	43
3.1	GENERAL DESCRIPTION OF THE PROJECT AREA .....	43
3.2	SCOPE OF CUMULATIVE EFFECTS ANALYSIS .....	44
3.2.1	Geographic Scope.....	45
3.2.2	Temporal Scope.....	45
3.3	PROPOSED ACTION AND ACTION ALTERNATIVES .....	45
3.3.1	Geologic and Soil Resources.....	46
3.3.1.1	Affected Environment.....	46
3.3.1.2	Environmental Effects .....	55
3.3.2	Water Resources.....	64
3.3.2.1	Affected Environment.....	64
3.3.2.2	Environmental Effects .....	83
3.3.2.3	Cumulative Effects .....	110
3.3.3	Terrestrial Resources.....	115
3.3.3.1	Affected Environment.....	115
3.3.3.2	Environmental Effects .....	144
3.3.3.3	Cumulative Effects .....	169
3.3.4	Threatened and Endangered Species.....	171
3.3.4.1	Affected Environment.....	171
3.3.4.2	Environmental Effects .....	177
3.3.4.3	Cumulative Effects .....	187
3.3.5	Recreation, Land Use, and Aesthetics.....	189
3.3.5.1	Affected Environment.....	189
3.3.5.2	Environmental Effects .....	204
3.3.5.3	Cumulative Effects .....	228
3.3.6	Cultural Resources.....	229
3.3.6.1	Affected Environment.....	229
3.3.6.2	Environmental Effects .....	240
3.3.7	Socioeconomics.....	245
3.3.7.1	Affected Environment.....	245
3.3.7.2	Environmental Effects .....	250
3.3.8	Air Quality and Noise.....	253
3.3.8.1	Affected Environment.....	253
3.3.8.2	Environmental Effects .....	261
3.3.8.3	Cumulative Effects .....	270
3.4	NO-ACTION ALTERNATIVE.....	270

4.0	DEVELOPMENTAL ANALYSIS .....	271
4.1	POWER AND DEVELOPMENTAL BENEFITS OF THE PROJECT...	271
4.2	COMPARISON OF ALTERNATIVES.....	276
4.2.1	No-action Alternative .....	276
4.2.2	Eagle Crest’s Proposal.....	276
4.2.3	Staff Alternative .....	277
4.3	COST OF ENVIRONMENTAL MEASURES .....	277
5.0	CONCLUSIONS AND RECOMMENDATIONS.....	299
5.1	COMPARISON OF ALTERNATIVES.....	299
5.2	COMPREHENSIVE DEVELOPMENT AND RECOMMENDED ALTERNATIVE .....	310
5.3	UNAVOIDABLE ADVERSE EFFECTS.....	334
5.4	CONSISTENCY WITH COMPREHENSIVE PLANS.....	335
6.0	LITERATURE CITED.....	337
7.0	LIST OF PREPARERS .....	351
8.0	LIST OF RECIPIENTS.....	353
APPENDIX A—Comments on the Draft Environmental Impact Statement for the Eagle Mountain Pumped Storage Hydroelectric Project (Project No. 13123-002)		