

MITIGATION ACTION PLAN
FOR THE
BLYTHE ENERGY POWER PLANT PROJECT

Prepared to Accompany DOE/EA-1349

Prepared by:
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Introduction

Western Area Power Administration (Western) was approached by Blythe Energy, LLC (Applicant) to interconnect the Blythe Energy Project (Project) to Western's transmission system. The Project as proposed is a 520-megawatt (MW) natural gas-fired thermal power plant that is intended to serve competitive regional markets in southern California and Arizona. The Project is intended as a "merchant plant." That means the Project would be independent of other generators and the power generated would serve the open market rather than any particular utility or load. All financial responsibility for the Project would be borne by Blythe Energy, LLC.

The proposed Project would occupy approximately 15 acres of a 76-acre parcel of private land located just east of the Blythe Airport. Water for cooling and steam generation would be obtained from groundwater wells at approximately 2,200 gallons per minute. The plant would be a "zero discharge" facility, meaning that there would be no wastewater discharge from the plant; wastewater will be handled by evaporation ponds on site. Natural gas would be fed to the plant by new pipelines that would tap existing major interstate gas pipelines in the vicinity. One option is to pipe gas from the Arizona side of the Colorado River through a new 11.5-mile pipeline. The other option is to tap an existing pipeline within one mile of the Project. Price of gas would be one determining factor on the choice of options.

The proposed Project would interconnect with Western's transmission system by reconfiguring two 161-kilovolt (kV) transmission lines that terminate in Western's Blythe Substation, located approximately 600 feet east of the proposed project site. These two lines, the Parker-Blythe #1 and #2 transmission lines, as well as Western's Blythe-Knob 161-kV line, a line belonging to the Imperial Irrigation District, and a line belonging to Southern California Edison Company, all interconnect at the Blythe Substation. New transmission construction would be limited to short tie sections to each of Western's two lines; these tie sections would generally involve one or two spans of new construction at most.

Environmental Review

Western prepared an Environmental Assessment (EA) for the project, pursuant to regulations of the Council on Environmental Quality (40 CFR Part 1500) and the Implementing Procedures of the Department of Energy (10 CFR Part 1021). The EA was prepared jointly with the California Energy Commission (CEC) and their environmental and engineering review of the proposal presented by the Applicant. The joint document,

referred to as the Final Staff Assessment and EA, was released to the public on November 13, 2000 and hearings were held in Blythe, California on November 27 and 28, 2000. Once the document was reviewed and finalized through the CEC process, the EA was accepted and approved by Western's Administrator on December 21, 2000 (DOE/EA 1349). Western released a preliminary Finding of No Significant Impact (FONSI) for comment on December 29, 2000. This Mitigation Action Plan (Plan) is intended to accompany the EA and the final FONSI.

Scope of the Mitigation Action Plan

The EA identified impacts that would occur as a result of the proposed project and detailed a series of conditions placed upon the actions of the Applicant that will mitigate those impacts. These conditions, referred to in the EA as Conditions of Certification, are actions that must be taken by the Applicant to reduce the severity of the project impacts, conformance with existing regulations and standards of construction, or simply perform under the best environmental business practices. The purpose of this Plan is to discuss those mitigation actions that must be performed where there were adverse impacts identified and the mitigation was designed to reduce those impacts to a level less than significant. As indicated, not all of the conditions contained in the EA are measures that reduce impacts to less than significant. These specific conditions are presented in Appendix A.

Western has no responsibilities for constructing or operating the proposed Project beyond the interconnection with Western's transmission system. This means that Western will only be responsible for the development of the electrical substation and other related activities. Western has no other ties to the project. Western has standard construction mitigation measures that are applied to all projects that Western designs and constructs. These specific measures are presented in Appendix B.

Monitoring of the conditions described in this Plan and in the EA will be accomplished by the compliance representative of the CEC, referred to in the EA as the Compliance Project Manager (CPM). Because the state of California has siting responsibilities for this Project, it assumes the responsibility to ensure that all conditions that led to the certification of the project are carried out. Western, however, will monitor the construction progress through contact with the CPM to ensure that the conditions are met by the Applicant.

Contacts

This Plan has been prepared in accordance with DOE Implementing Procedures [10 CFR 1021.331(b)]. The information contained in the Plan has been summarized, site specific mitigation measures listed in Appendix A are fully described in the EA. The EA should be reviewed along with this Plan to better understand the mitigation measures listed in the table. Copies of the EA may be obtained by contacting either of the persons listed below.

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Reporting

Western will submit annual reports to DOE's Office of NEPA Policy and Compliance, EH-42, in accordance with DOE Order 451.1B. This reporting will begin with the first Annual Site Environmental Report prepared after the onset of construction activities and will address the status of the conditions of certification and any changes associated with them. This reporting will continue annually until all conditions have been met.

APPENDIX A

MITIGATION OF IMPACTS BY ISSUE AREA

AIR QUALITY

IMPACT	CITATION	MITIGATION	SCHEDULE
Fugitive dust control	AQ-C1 Page 55	The Applicant is required to provide a fugitive dust management plan.	Plan required 30 days prior to construction start
Air pollution by criteria pollutants	AQ-C3 Page 56	The Applicant is required to provide an initial commissioning plan that will establish the procedures for first firing, testing of equipment, and other start-up activities since there are no controls on emissions during this period.	Plan required 4 weeks prior to first firing and period not last longer than 120 days.
Air pollution by criteria pollutants	AQ-C10 Page 58	Each component must be tested to determine compliance with air quality conditions.	Testing of components required within 60 days after achieving maximum firing rate but no later than 180 days after first firing.
Air pollution by criteria pollutants	AQ-2 - 34 Pages 59-67	These measures are the mitigation actions required by the CEC, EPA and the Air Quality Board in order to meet the conditions of the Applicant's air quality permits. Different conditions apply to the different pieces of equipment in use by the Project, including the emergency generator.	These conditions must be met during the operation of the plant, including normal operation, cold startup, warm startup, hot startup, and shutdown.

BIOLOGICAL RESOURCES

IMPACT	CITATION	MITIGATION	SCHEDULE
Impacts to endangered species, wildlife and habitat	BIO-1 Page 91	Standard mitigation measures for the plant site and for the pipeline alternative as defined in Western's Biological Assessment, Appendix 1.	These measures will be implemented for all activities associated with the project.
Impacts to endangered species, wildlife and habitat	BIO-2 Page 92-93	The Applicant must have a qualified biologist available on site meeting professional qualifications as detailed in the EA.	The biologist and his/her qualifications should be submitted for review 30 days before construction start.

BIOLOGICAL RESOURCES (con't)

IMPACT	CITATION	MITIGATION	SCHEDULE
Impacts to endangered species, wildlife and habitat	BIO-5 Page 94	Worker Environmental Awareness Program will be developed for all employees, contractors and subcontractors.	The Plan will be made available 30 days prior to construction start; awareness training provided for all employees.
Impacts to birds and other wildlife	BIO-6, 7, 8 Page 95	The Applicant shall monitor the evaporation ponds for bird and wildlife losses.	Monitoring of ponds for losses conducted twice monthly for the first three years; water quality of the ponds will be monitored monthly for the first three years.
Impacts to desert tortoise	BIO-9 Page 95-96	The Applicant shall monitor exterior fencing and make repairs.	Tortoise exclusion fencing is required; monitoring is done monthly and repairs made within a week.
Impacts to desert tortoise	BIO-13 Page 96-97	The Applicant shall provide compensation for loss of habitat at the project site.	Within 30 days prior to construction start, Applicant will deliver check for acquisition or improvement of compensation acreage.
Impacts to endangered species, wildlife and habitat	BIO-16 Page 97-98	The Applicant is required to provide a Biological Resources Mitigation Implementation and Monitoring Plan.	Within 30 days prior to construction start, the Plan will be submitted for review and the provisions implemented.

CULTURAL RESOURCES

IMPACT	CITATION	MITIGATION	SCHEDULE
Protection of cultural resources	CUL-1 Page 141	The Applicant must have a qualified cultural resources specialist available to the project.	The cultural resources specialist and his/her qualifications should be submitted for review 90 days before construction start.
Protection of cultural resources	CUL-3 Page 143	The Applicant shall prepare and implement employee training program.	Within 60 days prior to construction start, the program will be submitted for review.

CULTURAL RESOURCES (con't)

IMPACT	CITATION	MITIGATION	SCHEDULE
Protection of cultural resources	CUL-6 Page 145	The cultural resources specialist shall be responsible to investigate any discovery of significant cultural resources, prepare a research design and scope of work for data recovery.	The research design and scope of work should be submitted for review within 7 days of any discovery of significant cultural resources.
Protection of cultural resources	CUL-7 Page 146	The cultural resources specialist shall prepare a report on any discovery of significant cultural resources; the requirements of the report are given in the EA	The report on discovery will be submitted within 90 days of completion of any work done in the recovery of significant resources.

NOISE

IMPACT	CITATION	MITIGATION	SCHEDULE
Protection from noise hazards	NOISE-1 Page 255	The Applicant is required to notify local residents within one-half mile of any project activity of the commencement of construction activities. In addition, a telephone number will be available to lodge complaints.	At least 15 days prior to any ground disturbing activity, all local residents within one-half mile will be notified. The telephone number will be available for at least one year after the project is in operation.
Protection from noise hazards	NOISE-2 Page 255	The Applicant is required to document, investigate, evaluate, and attempt to resolve all noise complaints.	Within 30 days of any noise complaint, the Applicant shall document the resolution of each complaint.
Protection from noise hazards	NOISE-7 Page 258	The Applicant will conduct a survey of potential noise hazards at the facility to protect workers from excessive noise.	The survey will be conducted after the plant has been operational for 30 days.

WATER RESOURCES

IMPACT	CITATION	MITIGATION	SCHEDULE
Well Interference	SOIL & WATER-7 Page 348	Project pumping may impact local wells. The Applicant must compensate well owners for impacts according to the measures set out by the CEC.	At least 90 days prior to production pumping, the Applicant will provide the CEC a list of owners that may be impacted, and at least 30 days prior to production pumping, a report on all compensation carried out.

PALEONTOLOGICAL RESOURCES

IMPACT	CITATION	MITIGATION	SCHEDULE
Impacts to paleontological resources	PAL-1 Page 505	The Applicant must have a qualified paleontological resources specialist available to the project.	The paleontological resources specialist and his/her qualifications should be submitted for review 60 days before construction start.
Impacts to paleontological resources	PAL-2 Page 506	The Applicant must prepare a Paleontological Resources Monitoring and Mitigation Plan to plan for the discovery of important resources.	The plan will be submitted 45 days prior to construction start.
Impacts to paleontological resources	PAL-3 Page 507	The Applicant shall prepare and implement an employee training program.	Within 30 days prior to construction start, the program will be submitted for review.
Impacts to paleontological resources	PAL-5 Page 508	The paleontological resources specialist must investigate any discovery of significant resources, and provide for recovery and curation.	The Applicant must maintain signed contracts or agreements with qualified researchers for 3 years after completion of Plan (see PAL-2).
Impacts to paleontological resources	PAL-6 Page 509	The paleontological resources specialist will prepare a Paleontological Resources Report on any discovery of significant resources.	The report on discovery will be submitted within 90 days of completion of any work done in the recovery of significant resources.

APPENDIX B

WESTERN'S STANDARD MITIGATION OF IMPACTS FOR TRANSMISSION LINE CONSTRUCTION

GENERIC MITIGATION

1. All construction vehicle movement outside the right-of-way normally would be restricted to pre-designated access, contractor acquired access, or public roads.
2. The limits of construction activities will be predetermined, with activity restricted to and confined within those limits. No paint or permanent discoloring agents would be applied to rocks or vegetation to indicate limits of survey or construction activity.
3. In construction areas where recontouring is not required, vegetation would be left in place wherever possible and original contour would be maintained to avoid excessive root damage and allow for resprouting.
4. In construction areas where ground disturbance is substantial or where recontouring is required, surface restoration would occur as required by the landowner. The method of restoration normally would consist of returning disturbed areas back to their natural contour, reseeding (if required), installing cross drains for erosion control, placing water bars in the road, and filling ditches. Any instances associated with this project would be reviewed on a case-by-case basis.
5. Where applicable, roads would be at right angles to the streams and washes to the extent practicable. Culverts would be installed where needed. All construction and maintenance activities would be conducted in a manner that would minimize disturbance to vegetation, drainage channels, and intermittent or perennial streambanks. In addition, road construction would include dust-control measures during construction in sensitive areas. All existing roads would be left in a condition equal to or better than their condition prior to the construction of the transmission line.
6. Towers and/or ground wire would be marked with hi fly visible devices where required by governmental agencies (e.g., Federal Aviation Administration).
7. Prior to construction, all supervisory construction personnel would be instructed on the protection of cultural, paleontological, and ecological resources. To assist in this effort, the construction contract would address (a) Federal, state, and local policies, regulations and laws regarding antiquities, fossils, plants and wildlife, including collection and removal; and (b) the importance of these resources and the purpose and necessity of protecting them.
8. Cultural resources would continue to be considered during construction and operation phases of the project in accordance with the requirements of Federal law. Any American Indian groups may be involved to determine whether there are effective or practical ways of addressing impacts on traditional cultural places.
9. Western would respond to individual complaints of radio or television interference generated by the transmission line by investigating the complaints and implement appropriate mitigation measures (e.g., adjusting or using filtering devices on antennae). The transmission lines would be patrolled on a regular basis so that damaged insulators or other transmission line materials, which could cause interference, are repaired or replaced.
10. Western would apply mitigation needed to eliminate problems of induced currents and voltages onto conductive objects sharing a right-of-way to the mutual satisfaction of the parties involved.

GENERIC MITIGATION (con't)

<p>11. Western would continue to monitor studies performed to determine the effects of audible noise and electrostatic and electric magnetic fields in order to ascertain whether these effects are significant.</p>
<p>12. Where applicable, roads would be at right angles to the streams and washes to the extent practicable. Culverts would be installed where needed. All construction and maintenance activities would be conducted in a manner that would minimize disturbance to vegetation, drainage channels, and intermittent or perennial streambanks. In addition, road construction would include dust-control measures during construction in sensitive areas. All existing roads would be left in a condition equal to or better than their condition prior to the beginning of construction.</p>
<p>13. All requirements of those entities having jurisdiction over air quality matters would be adhered to and any permits needed for construction activities would be obtained. Open burning of construction trash would not be allowed unless permitted by appropriate authorities.</p>
<p>14. Fences and gates would be repaired or replaced to their original condition prior to project disturbance as required by the landowner if they are damaged or destroyed by construction activities. Temporary gates would be installed only with the permission of the landowner.</p>
<p>15. Transmission line materials would be designed and tested to minimize corona. Tension would be maintained on all insulator assemblies to assure positive contact between insulators, thereby avoiding sparking. Caution would be exercised during construction to avoid scratching or nicking the conductor surface, which may provide points for corona to occur.</p>
<p>16. Non-specular conductors and groundwires and structure components would be used to reduce visual impacts.</p>
<p>17. No non-biodegradable debris would be deposited in the rights-of-way. Slash and other biodegradable debris would be left in place or disposed of in accordance with the wishes of the landowner.</p>
<p>18. Hazardous materials would not be drained onto the ground or into streams or drainage areas. Totally enclosed containment would be provided for all trash. All construction waste including trash and litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials would be removed to a disposal facility authorized to accept such materials.</p>
<p>19. Near residences, the right-of-way would be aligned, to the extent practicable, to reduce impact on the residences and inhabitants.</p>
<p>20. Special status species or other species of particular concern would continue to be considered during project construction and operation in accordance with provisions set forth by the Biological Opinion of the U.S. Fish and Wildlife Service. In cases where such species are identified, appropriate action would be taken to avoid adverse impacts on the species and its habitat and may include altering the placement of roads or towers as practicable and monitoring construction activities.</p>