

SECTION 1 PROJECT STATUS

1.0 Status of EIS Process To-Date

Preparation of the Ivanpah Energy Center (IEC) Environmental Impact Statement (EIS) was initiated by the Bureau of Land Management (BLM) with a Notice of Intent (NOI) that was published on February 15, 2002 in the 2002 *Federal Register*, Vol. 67, Number 32. The NOI included a summary of the proposed project; the locations, dates, and times of public scoping meetings; and BLM contact information. A Legal Notice providing the same information as the NOI was published weekly in the *Las Vegas Review-Journal* during three consecutive weeks on February 18, 2002, February 25, 2002, and March 4, 2002. The process of notification also included distribution of the NOI to numerous federal, state, and county agencies, city officials, and various interested parties. Copies of the NOI and the NOI distribution list can be found in the IEC Public Scoping Document that has been prepared as part of the EIS process.

Following publication of the NOI, the scoping process began. Public scoping allowed the public and interested parties the opportunity to express their concerns about the proposed action and to identify issues to be addressed in the EIS. Comments were compiled in the Public Scoping Document as part of the official Administrative Record, which is available to the public. Once the environmental analysis was complete, the Draft EIS was prepared and released on November 22, 2002 for public review and comment. During a 60-day public review period, formal hearings were conducted to receive public comment on the draft EIS. Public comments were compiled, evaluated, and responses were prepared and incorporated into this Final EIS.

1.1 Overview of DEIS Findings

The Draft EIS evaluated two plant site alternatives, four transmission line routes, and four alternative transmission line and water supply access options to the Goodsprings Plant Site were evaluated in detail. Results of the evaluation determined the Primm Plant Site and corresponding transmission line routes consisting of Segments 25, 10, 30, 50, 60, 60/65, 90, 110, 130, and 140 (Alternative C) to be the agency-preferred alternative.

Should the Goodsprings Plant Site be developed, the preferred transmission line route would consist of Segments 10, 30, 50, 60, 60/65, 90, 110, 130, and 140. Plant site access Option 2, which would route all transmission lines and the water line across the toe of the mountain west of the plant site and enter the plant site from the south would be considered the preferred plant access option.

1.2 Unresolved Issues and How They Were Resolved

The Draft EIS was released for public review with several unresolved issues that were identified in text. Those issues included:

- Confirmation from the project proponent (Diamond Generating Company) that the Primm Plant Site Alternative was commercially available through an agreement with Reliant Energy. Although verbal assurances were provided on several occasions, written confirmation was not received. On February 6, 2003, the project proponent received a letter from Reliant Energy stating that the site was not available due to overriding financial reasons. Records of conversations regarding the viability of the Primm Plant Site are available for public review as part of the Administrative Record for this EIS.
- Specific information regarding the availability of process water for the Ivanpah Energy Center was not available for inclusion in the Draft EIS. Although requested on numerous occasions, all that has been received to date is limited to applications to the State Engineer requesting the use of wastewater (graywater) from the Southern Nevada Correctional Center (SNCC) as a primary water source. Documentation that would confirm the availability of supplemental water from a well that is owned and operated by the Las Vegas Valley Water District (LVVWD) also had been requested during the Draft EIS preparation process; however, such documentation has not been forthcoming and the issue remains unresolved. Records of conversations regarding the availability of water from SNCC and LVVWD are available for public review as part of the Administrative Record for this EIS. Additional information regarding water availability is provided in Section 2, pages 2-15 and 2-35 of this FEIS.
- The Draft EIS was issued prior to completion of archaeological and paleontological field surveys, as indicated on pages 5-43, 5-44, 5-132, and 5-133. Field surveys and related analyses have been completed and are now part of this Final EIS.

1.3 Mitigation Measures Unique to the IEC Project

Several development options for the Ivanpah Energy Center were identified in the DEIS as a means to reduce the severity of impacts. Those development options that are unique to the proposed project and are not necessarily included in BLM's standard stipulations include:

- routing of transmission lines entering the Goodsprings Plant Site,
- routing of water supply pipeline entering the Goodsprings Plant Site,
- routing of the Ivanpah – Mead #2 Transmission Line through Eldorado Valley,
- structure placement, configuration, and color; use of non-specular conductor,
- construction of the northern (permanent) access road to the plant site,
- use of colors to minimize visual impacts,
- turning lane along SR 161,
- routing of the water supply pipeline east of I-15,

bussing of construction workers to the Goodsprings Plant Site,
surety bond to cover plant site restoration following the life of the project,
restrictions on transmission line construction dates through the McCullough Range,
avoidance of helicopter overflights within the McCullough Range,
water source and purchase agreements must be in place prior to construction,
Category B desert tortoise mitigation measures to be implemented west of I-15,
storage and use of aqueous ammonia for plant operations,
use of graywater from Southern Nevada Correctional Center,
collection and re-seeding *Penstemon spp.*, and
co-location of Table Mountain Substation at Goodsprings Plant Site.

Routing of Transmission Lines Entering the Goodsprings Plant Site

A total of five transmission line circuits would enter the Goodsprings Plant Site from the existing BLM utility corridor west of the plant site. Although the project proponent originally identified a 300-foot-wide corridor across a mountain that separates the plant site from the utility corridor, options were developed in the DEIS to identify alternative routes that would be environmentally preferable. Option 2 (as described in the DEIS) is considered to be preferable because the five circuits would be routed across the toe of the mountain, and outside of the Desert Tortoise Translocation Area. Option 2 would avoid construction on steep mountain slopes and therefore reduce the potential for related erosion. Option 2 also would reduce visual impacts that would be associated with land disturbance and the presence of single-pole transmission line structures on mountain slopes and crest. Option 2 was identified in Figure 3-12 of the DEIS.

Co-location of the Water Supply Pipeline Entering The Goodsprings Plant Site

The water supply pipeline would be co-located with the above referenced transmission line corridor (Option 2, as identified in the DEIS). Co-location of the pipeline across the toe of the mountain west of the proposed plant site would reduce overall land disturbance, avoid erosion and visual impacts that would be associated with construction on steep slopes. The alignment also would avoid, to the extent possible, construction within the Desert Tortoise Translocation Area and would minimize pumping requirements that otherwise would be needed for a pipeline across the mountain west of the proposed plant site.

Routing of the Ivanpah – Mead #2 Transmission Line Through Eldorado Valley

Although several alternative transmission line routes were evaluated as part of the DEIS, all but two were eliminated from further consideration due to environmental and/or engineering considerations. One of the two remaining routes would cross Eldorado Valley north and

northwest of Eldorado Lake; the other would cross the valley south and southeast of the lake. Environmental impacts and engineering constraints related to the two routes were similar. Therefore, due to a desire to parallel (to the extent practicable) the existing Valley Electric Association Pahrump – Mead Transmission Line, Alternative E (as described in the DEIS as consisting of Segments 10, 20, 30, 50, 60, 90, 110, 130, and 140) was selected as Environmentally Preferred.

Structure Placement, Configuration, and Color; Use of Non-Specular Conductor

As stated in the DEIS, transmission line structures are to be single-pole and constructed in a pole-for-pole configuration, to the extent practicable. The use of single-pole and pole-for-pole configuration reduces overall land disturbances, maximizes the use of previously disturbed land, and reduces visual impacts to the extent possible. Pole-for-pole construction also provides greater opportunities for line crossings, should they be needed as part of future projects.

As stated in the DEIS, the use of gray-painted structures and non-specular conductor reduces visual contrasts and related impacts. Paint specifications are: Carboline Company color #0729 (Medium Gray), paint #8819, and top coat #8809 (Acrylic Aliphatic Polyurethane).

Construction of the Northern (Permanent) Access Road to the Plant Site

Construction of the 7,500-foot-long, 20-foot-wide northern (permanent) access road would require permanent tortoise fencing along nearly the entire length (in accordance with Desert Tortoise Category B stipulations). Due to its proximity across desert tortoise Category B density habitat, the DEIS recommended that a series of culverts be included in the design to reduce the potential effects of habitat fragmentation. Placement of the culverts would be determined by a BLM biologist and should be included in related project stipulations and the Construction, Operations, and Maintenance Plan.

Use of Colors to Minimize Visual Impacts

As stated in the DEIS, visual impacts associated with the Ivanpah Energy Center (power plant) can be reduced through the use of colors that would blend with the surrounding landscape.

Turning Lane Along SR 161

As discussed in the DEIS, the project proponent proposed to install a turning lane at the north (permanent) entrance to the Goodsprings Plant Site to enhance traffic safety. The concept of a turning lane was responded to favorably by the Nevada Department of Transportation.

Routing of the Water Supply Pipeline East of I-15

The segment of the water supply pipeline that would parallel the west side of the Union Pacific Railroad right-of-way from the vicinity of the proposed water treatment plant sites to the BLM utility corridor was found to cross (in part) an area that could be of historical interest. Therefore, the area was avoided in favor of a modified route that would utilize the

east side of the right-of-way from the water treatment plant to the BLM utility corridor where it would cross under the UPRR. This modification should be shown in the Construction, Operations, and Management Plan for the project.

Bussing of Construction Workers to the Goodsprings Plant Site

Diamond Energy has committed to the bussing of construction workers from the vicinity of Jean to the plant site during plant construction. The use of busses would minimize traffic increases along SR 161.

Surety Bond to Cover Plant Site Restoration Following the Life of the Project

A surety bond is needed that would be in place during the life of the project (approximately 30 years). The bond would be retained to ensure that Public lands are cleared, free of contamination, and restored, following the life of the project.

Restrictions on Transmission Line Construction Dates Through The McCullough Range

As stated in the DEIS, transmission line construction through the McCullough Range should be scheduled to avoid the lambing and hunting seasons. Nevada Department of Wildlife commented on the restriction period and identified the optimum construction period to extend from mid-summer through late-summer.

Avoidance of Helicopter Overflights Within the McCullough Range

If helicopters are to be used during construction of the Ivanpah-Mead Transmission Line through the McCullough Range, flight paths should not deviate from the pass where construction is taking place. Helicopter flights over upland areas can result in adverse impacts to bighorn sheep.

Water Source and Purchase Agreements Must be in Place Prior to Construction

Agreements and permits for the use of Southern Nevada Correctional Center graywater and supplemental water (to be furnished by SNCC, Las Vegas Valley Water District or a different source) must be in place prior to issuance of any Notice to Proceed from the BLM. Approvals are required from the Nevada Department of Corrections (SNCC), the Nevada State Engineer.

Category B Desert Tortoise Mitigation Measures to be Implemented West of I-15

Construction and operation of the Ivanpah Energy Center at the Goodsprings Plant Site and related transmission lines, permanent and temporary access roads, the telecommunications line, and water supply pipeline west of I-15 require desert tortoise mitigation measures applicable to Category B habitat density. Activities (primarily transmission line construction, water supply pipeline, and water treatment plant construction) east of I-15 will meet requirements for Category C habitat density. Total (permanent and temporary) lands disturbed within Category B and Category C areas are 115 and 217 acres, respectively.

Storage and Use of Aqueous Ammonia for Plant Operations

Anhydrous ammonia will not be transported to, stored at, or used at the Ivanpah Energy Center. Aqueous ammonia will be used for plant operations.

Use of graywater from Southern Nevada Correctional Center

Graywater from the Southern Nevada Correctional Center will be used for plant operations. Supplemental water will be acquired, if needed, from a high TDS well that is owned and operated by the Las Vegas Valley Water District.

Collection and Re-seeding *Penstemon spp.*

The DEIS recommended seed collection and re-seeding of *Penstemon bicolor bicolor* and *P. albomarginatus* as a mitigation measure. Due to difficulties in differentiating *P. bicolor bicolor* and *P. albomarginatus* from the more common *P. palmeri*, it is preferable to flag individual plants during the flowering season for seed collection in the fall. In that manner, seeds from *P. palmeri* would not be erroneously included in the collection.

Co-location of Table Mountain Substation at Goodsprings Plant Site

A concept that would co-locate the proposed Table Mountain Substation within the Ivanpah Energy Center Goodsprings Plant site was identified following preparation of the Draft Environmental Impact Statement. The co-location would only be available as an option if the decision were to approve the Goodsprings Plant Site and if the Table Mountain Wind Energy Project were to be constructed. Co-location of the substation at the Goodsprings Plant Site would eliminate the need for the substation and related facilities that were to be constructed south of Sandy Valley Road. If implemented, the action would result in a net benefit to the environment. The proposed mitigation and related environmental impacts are addressed in Section 4.10 of the FEIS.

1.4 Project Design Refinements

Surface disturbance locations and acreages identified in the DEIS/FEIS sections are anticipated to be sufficient for the construction and operation (including maintenance) of the IEC Project and all ancillary improvements. However, due to project refinement, locations and acreages of anticipated disturbances have the potential to change. Analyses in this FEIS cover more space than would be required for the proposed facilities. For example, although the project could disturb as much as 237 acres for transmission line construction more than 485 acres were surveyed for biological and cultural resources.

The plant site and various rights-of-way were determined from a preliminary level of engineering; however, as the design is refined, the alignments may change to increase safety, minimize environmental disturbance, and provide adequate grade on steep slopes and across deep washes. These refinements could result in final alignment and slight refinement in location changes for additional workspace, staging areas, and final alignment of the linear rights-of-way.

Where work is required outside the areas evaluated in this FEIS, additional evaluation would be performed for biological and cultural resources to ensure they were not adversely affected. Location of the workspace, date, and survey results would be documented and forwarded to the BLM. In cases where no new state or federally protected species or cultural resources are found, work would proceed. In cases where new species or cultural resources are found, the applicable agencies would provide direction prior to disturbance in that area. As-built drawings would be provided to the BLM at the end of the project.

1.5 Balance of the EIS Process

The BLM will issue a Record of Decision (ROD) for the Ivanpah Energy Center project within 30 calendar days following finalization of this Final EIS. The ROD will identify the Environmentally-Preferred Alternative, provide the rationale for the selection of the alternative, and a summary of mitigation measures that were adopted.

Western, as a cooperating agency in this process, will review the Final EIS for adequacy and if approved will adopt the document as the Western Final EIS for the proposed Valley Electric Association interconnection at Mead Substation. Western plans to issue its own ROD on the proposed interconnection after the 30-day waiting period prior to issuance of the ROD.

Once BLM's ROD is issued, the public and other interested parties may appeal BLM's decision to the Interior Board of Land Appeals (IBLA) (43 CFR 4.411-4.413). The appeal must be filed within 30 calendar days following issuance of the ROD. The process for filing an appeal is outlined in Table 1-1 below:



Table 1-1 Appeals Process

Step 1	Notice of Appeal	<p>The Notice of Appeal, along with your statement of reasons must be filed in the BLM office that issued the decision:</p> <p style="padding-left: 40px;">Field Manager Bureau of Land Management Las Vegas Field Office 4701 N. Torrey Pines Drive Las Vegas, NV 89130-2301</p> <p>A copy of the Notice of Appeal must be sent to the BLM Solicitor:</p> <p style="padding-left: 40px;">Regional Solicitor Pacific Southwest Region U.S. Department of the Interior 2800 Cottage Way Room E-2753 Sacramento, CA 95825-1890</p>
Step 2	Statement of Reasons	<p>Filed within 30 days after filing Notice of Appeal, unless statement of reasons were filed with the Notice of Appeal and sent to:</p> <p style="padding-left: 40px;">U.S. Department of the Interior Office of the Secretary Board of Land Appeals 4015 Wilson Blvd. Arlington, VA 22203</p> <p>A copy sent to:</p> <p style="padding-left: 40px;">Regional Solicitor Pacific Southwest Region U.S. Department of the Interior 2800 Cottage Way Room E-2753 Sacramento, CA 95825-1890</p>
Step 3	Adverse Parties	<p>Within 15 days after each document is file, each adverse party named in the decision and the Regional and/or Field Solicitor will be served a copy of the Notice of Appeal, Statement of Reasons, and any other documents.</p>
Step 4	Proof of Service	<p>Within 15 days after documents are served, proof of service must be filed with the U.S. Department of Interior at the address below:</p> <p style="padding-left: 40px;">U.S. Department of the Interior Office of the Secretary Board of Land Appeals 4015 Wilson Blvd. Arlington, VA 22203</p>

43 CFR 4.411-4.413 and Form 1842-1



1.6 Contents of the FEIS

Lead agencies are required to respond to comments received on the Draft EIS and prepare a Final EIS (40 CFR 1502.9[b] and 40 CFR 1503.4[b]). Typically, the Final EIS is a re-issue of the Draft EIS including responses to comments submitted on the Draft EIS and any new analysis or additional information. The Bureau of Land Management and Western Area Power Administration determined that comments received on the Ivanpah Energy Center DEIS did not affect the original analysis presented in the Draft EIS, and that additional analysis was not required; therefore, the FEIS has been prepared in an abbreviated format (40 CFR 1503.4[c]). The contents of the Ivanpah Energy Center Final EIS are described below:

Section 1 includes a status of the project since issuance of the Draft EIS on November 22, 2002, unresolved issues, a description of unique mitigation measures for the Proposed Goodsprings Plant Site (should it become environmentally-preferred), and an explanation of remaining activities in the EIS process.

Section 2 summarizes the agencies' process for responding to comments and contains the BLM and Western's formal responses to comments submitted on the Draft EIS.

Section 3 includes Errata Sheets organized by sections in the Draft EIS. Minor additions, deletions, and corrections are addressed in the errata sheets.

Section 4 provides supplemental information acquired following issuance of the Draft EIS. Topics include a floodplain statement of findings, fault duty mitigation, thermal plume analysis, results on the Archaeological Class III field surveys, results on the Paleontological field surveys, an expanded analysis of the "No-Action" Alternative, and updated acreage tables.