

DEPARTMENT OF ENERGY

Western Area Power Administration

Record of Decision and Floodplain and Wetland Statement of Findings for the Sacramento Area Voltage Support Project (DOE/EIS-0323S1)

AGENCY: Western Area Power Administration, DOE.

ACTION: Record of Decision.

SUMMARY: Western Area Power Administration (Western) plans to construct a new double-circuit, 230-kilovolt (kV) transmission line, approximately 31 miles long, between Western's O'Banion Substation and the area just south of the Sacramento Municipal Utility District's (SMUD) Elverta Substation and reconstruct SMUD's existing 230-kV/115-kV transmission line between SMUD's Elverta and Natomas substations. The Sacramento Area Voltage Support (SVS) Project (Project) would be located in Sutter, Placer, and Sacramento counties in California. Western proposes to build the Project to provide needed transmission system additions and upgrades to maintain system voltage stability, reliability, and security. Western evaluated seven action alternatives and the No Action Alternative in its supplemental environmental impact statement (SEIS). Of these, Alternative B was selected as both the Preferred Alternative and the Environmentally Preferred Action Alternative.

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SEIS are available from Mr. Tuggle. For information about the Department of Energy (DOE) National Environmental Policy Act (NEPA) process, contact Ms. Carol M. Borgstrom, Director, Office of NEPA Policy and Compliance, GC-20, U.S. Department of Energy, 1000 Independence Avenue SW., Washington, DC 20585; telephone (800) 472-2756.

SUPPLEMENTARY INFORMATION: Western issued the SVS draft and final environmental impact statement (EIS) In November 2002 and September 2003 respectively. Western issued a record of decision (ROD) on January 12, 2004. In 2005, SMUD and the City of Roseville agreed to provide funding for Western to proceed with additional environmental review of the SVS Project and prepare an SEIS and environmental impact report (EIR).

Western markets and transmits electricity from multi-use, Federal water projects. Western sells wholesale electricity to more than 70 preference customers in central and northern California and Nevada. Western's Sierra Nevada Region (SNR) includes the greater Sacramento, California, area. SNR maintains and operates numerous substations and more than 1,200 miles of transmission lines. These transmission lines are interconnected to other greater Sacramento-area transmission system owners, Load Serving Entities, and utilities, including the Sacramento Municipal Utility District (SMUD) and the City of Roseville (Roseville). Western's system contributes to and is affected by voltage stability, reliability, and security of the greater Sacramento area transmission system. Transmission system studies in 2001/2002 and 2006/2007 showed that the existing transmission lines in the greater Sacramento area have reached their maximum power transfer limits for serving the area's energy needs, particularly in the northern portion of the greater Sacramento area. Load Serving Entities and utilities in the area have taken

interim measures to avoid potential uncontrolled system-wide outages. As a last resort, operators may be required to implement post-contingency load shedding and/or rotating blackouts. These measures provide limited voltage stability improvement and are not always available or preferred. In addition, load shedding and rotating blackouts can have a significant negative impact on utility customers. The transmission system studies showed that additions and upgrades are needed to maintain system voltage stability, reliability, and security in accordance with NERC and WECC Planning/Operations Reliability Standards, and for Western to continue to meet its legislative and contractual requirements. The resulting system additions and upgrades would provide additional power-importing capabilities to the greater Sacramento area.

Western, in coordination with SMUD and the City of Roseville, prepared an SEIS and EIR, in compliance with NEPA, the Council on Environmental Quality regulations for implementing NEPA (40 Code of Federal Regulations [CFR] Parts 1500–1508), California Environmental Quality Act (CEQA) (Cal. Pub. Res. Code §§ 21000, *et seq.*), and California CEQA Guidelines (Cal. Code Reg. Tit. 14 §§ 15000, *et seq.*).

Project

The Project consists of (1) constructing a new, double-circuit, 230-kV transmission line between O'Banion Substation and the area just south of Elverta Substation and (2) reconstructing the existing, double-circuit, 230-kV/115-kV transmission line between Elverta Substation and Natomas Substation into a double-circuit 230-kV transmission line.

Alternatives

Western analyzed seven action alternatives and the No Action alternative in the SEIS and

EIR. Western proposes to build the Project following three route segments. Segments 1 and 3 are common to each action alternative. Segment 1 consists of constructing a new transmission line from O'Banion Substation to an area near Cross Canal in a new right-of-way (ROW). Segment 3 consists of rebuilding the existing SMUD double-circuit, 115/230-kV Elverta-North City and Elverta-Natomas transmission lines within a ROW between Elverta and Natomas substations.

Segment 2 connects Segments 1 and 3. Seven routes were identified for Segment 2. Each of the 2A segments (i.e., segments 2A1, 2A2, 2A3, 2A4, and 2A5) include an option to be located along either the west or east side of Highway 99. The Segment 2 routes differentiate the seven action alternatives (Alternatives A1, A2, A3, A4, A5, B, and C) as described below:

Alternative A1 is composed of Segments 1, 2A1, and 3. It would involve construction of a new, double-circuit, 230-kV transmission line approximately 33.6 to 33.8 miles long (depending on whether it is located on the east or west side of Highway 99) and rebuilding approximately 4.8 miles of existing Elverta-North City and Elverta-Natomas transmission lines.

Alternative A2 is composed of Segments 1, 2A2, and 3. It would involve construction of a new, double-circuit, 230-kV transmission line approximately 33.5 to 33.7 miles long (depending on whether it is located on the east or west side of Highway 99) and rebuilding approximately 4.8 miles of existing Elverta-North City and Elverta-Natomas transmission lines.

Alternative A3 is composed of Segments 1, 2A3, and 3. It would involve construction of a new, double-circuit, 230-kV transmission line approximately 33.8 to 34.0 miles long (depending on whether it is located on the east or west side of Highway 99) and rebuilding approximately 4.8

miles of existing Elverta-North City and Elverta-Natomas transmission lines.

Alternative A4 is composed of Segments 1, 2A4, and 3. It would involve construction of a new, double-circuit, 230-kV transmission line approximately 35.2 to 35.4 miles long (depending on whether it is located on the east or west side of Highway 99) and rebuilding approximately 4.8 miles of existing Elverta-North City and Elverta-Natomas transmission lines.

Alternative A5 is composed of Segments 1, 2A5, and 3. It would involve construction of a new, double-circuit, 230-kV transmission line approximately 33.7 to 33.9 miles long (depending on whether it is located on the east or west side of Highway 99) and rebuilding approximately 4.8 miles of existing Elverta-North City and Elverta-Natomas transmission lines.

Alternative B is composed of Segments 1, 2B, and 3. It would involve construction of a new, double-circuit, 230-kV transmission line approximately 31.3 miles long and rebuilding approximately 4.8 miles of existing Elverta-North City and Elverta-Natomas transmission lines.

Alternative C is composed of Segments 1, 2C1, 2C2, and 3. It would involve construction of a new, double-circuit, 230-kV transmission line approximately 37.6 miles long and rebuilding approximately 4.8 miles of existing Elverta-North City and Elverta-Natomas transmission lines. This alternative would abandon 8.6 miles of existing Cottonwood-Roseville transmission line.

The No Action Alternative would include operation and maintenance of the existing transmission lines. Western would not build any of the new transmission line segments presented in the SEIS and EIR. Implementing this alternative would preclude most short-term environmental impacts associated with construction activities. This alternative would not meet the Project's purpose and need. The No Action Alternative would not alleviate the greater

Sacramento area power system voltage stability, reliability, and security problems. While Western and interconnected transmission system owners, Load Serving Entities, and area utilities would continue to take appropriate measures to manage power system reliability, they may be unable to meet system reliability standards and contractual obligations under the No Action Alternative.

Western has proactively developed Environmental Protection Measures (EPMs) to protect sensitive resources in the field. These EPMs would be implemented as part of the Project.

Preferred Alternatives

Determining the preferred alternatives requires that Western balance many factors with the Project's purpose and need. Western identified the No Action Alternative as the Environmentally Preferred Alternative because it would have no additional impacts to environmental resources. However, the No Action Alternative would not meet the Project's purpose and need. Therefore, Western selected Alternative B as the Environmentally Preferred *Action* Alternative. With the implementation of the EPMs, Alternative B would not result in a significant adverse environmental effect on any resource and would be the shortest route, requiring the least amount of disturbance for the transmission line and access roads. In comparison to the other action alternatives, Alternative B would have greater effects on wetlands, including vernal pools and existing residences; however, these impacts could be minimized through proper design. Also, Alternative B would generally have less impact on other resources, including air quality, giant garter snake habitat, existing and planned habitat conservation plan areas, prime and unique farmland, and planned transportation projects.

Western considered its determination of the Environmentally Preferred Action Alternative, consistency with the Project's purpose and need, and economic and engineering factors to select Alternative B as the overall Preferred Alternative. Alternative B is partially within an established north-south transmission line corridor and in or immediately adjacent to an abandoned railroad ROW. It is the shortest of the action alternatives, which would result in preferable economics and less-than-significant environmental impacts.

Public Involvement

Notices of availability of the draft SEIS and EIR were published in several local newspapers and the *Federal Register*. Agencies, Tribes, property owners within 500 feet of the Project ROW, and those expressing interest were notified by direct mailings. Two public forums were held during the public comment period: one on August 7, 2007, in Roseville, California, and one on August 8, 2007, in Sacramento, California. Western received oral comments from ten people and written comments from two people at the public forums. Additionally, Western received written comments from about 40 commenters via mail, e-mail, and facsimile. The public comment period closed on August 27, 2007. Along with findings in the draft SEIS and EIR, Western used public and agency comments to guide its selection of the Preferred and Environmentally Preferred Alternatives. Western responded to public comments and made minor modifications, addenda, and corrections in its final SEIS and EIR. Notices of availability of the final SEIS and EIR were published in several local newspapers and the *Federal Register*. Upon identifying that it had overlooked some comment letters, Western evaluated the missed comments but made no significant corrections or changes to the Final SEIS and EIR. Western

responded to the additional comments and included them in the Final SEIS and EIR, which was reissued. Notices of availability of the Final SEIS and EIR were re-issued by direct mail and republished in the local newspapers and the *Federal Register*.

Environmental Impacts

The SEIS and EIR provides a detailed impact analysis of the 17 resource areas analyzed. For cultural resources, electric and magnetic fields, environmental justice, floodplains, geology, health and safety, noise, paleontological resources, socioeconomics, soils, and water resources impacts would not appreciably differ among action alternatives. With the implementation of the EPMs, none of the alternatives would result in significant direct, indirect, or cumulative impacts for any of these resource areas. The remaining resource areas are discussed below.

With regard to air quality, the area is in non-attainment for ozone, nitrogen oxides, volatile organic compounds, reactive organic gases, and particulate matter less than 10 micrometers in diameter. Differences among alternatives would be small and contributions of the above-mentioned pollutants would be in direct correlation to the length of each alternative and time needed to complete construction. Because Alternative C involves the most distance and time for construction, it would have the most impact on air resources. Alternative B would have the least impact on air resources because it involves the least distance and time for construction. Impacts from the Project would be short-term, occurring only during construction. All recommended mitigation measures from applicable air districts would be applied to the Project. Therefore, no significant direct, indirect, or cumulative effects would result from any of the alternatives.

The differences in impacts to biological and wetland resources among action alternatives

would be small and vary by species and habitat. In particular, the alternatives would affect varying amounts of rice fields (habitat for the giant garter snake), wetlands, including vernal pools and existing or proposed conservation areas. The A alternatives would have the greatest impact on rice fields and would pass through and/or adjacent to the Natomas Basin Conservancy, an area managed under the Natomas Basin Habitat Conservation Plan. Alternative B would have the least impact on rice fields and habitat conservation plan areas. Conversely, Alternative B would have the greatest impact on wetlands and the A alternatives would have the least impact on wetlands. In addition to EPMs already developed, Western would incorporate mitigation measures identified during consultation with appropriate agencies. Therefore, no significant direct, indirect, or cumulative effects would result from any of the alternatives.

The differences in impacts to land uses among action alternatives would be small and vary by use. In particular, the action alternatives demonstrate comparative differences for existing residences, prime and unique farmland, and planned development. Segment 2B of Alternative B would be constructed near 16 existing residences located adjacent to the Project alignment. The A alternatives have the greatest impacts on prime and unique farmland. Alternative C would cross or be located adjacent to the greatest number of planned developments in the area. While these impacts exist among alternatives, none would result in significant direct, indirect, or cumulative effects for any alternative.

The main difference in traffic and transportation impacts among alternatives is that, for the A alternatives west of Highway 99, the Project would have to cross Highway 99 three times compared with one time for all other action alternatives. These impacts would be limited to the

construction period. No significant direct, indirect, or cumulative effects would result from any of the alternatives.

The effects on visual resources from the Project are similar for all action alternatives. The City of Roseville, however, has a specific, approved visual policy with which Alternative C would conflict. Therefore, Alternative C would result in a significant indirect and cumulative impact. No other alternatives would result in significant direct, indirect, or cumulative effects.

Agency Consultations

Western will complete consultations and obtain applicable permits and approvals as appropriate, prior to construction. Western is currently developing a Programmatic Agreement to satisfy requirements under the National Historic Preservation Act. Western will consult with the U.S. Fish and Wildlife Service to comply with the Endangered Species Act 16 (U.S.C. § 1536). Western will obtain permits from the U.S. Army Corps of Engineers (USACE) in compliance with Rivers and Harbors Act Section 10 and Clean Water Act Section 404 (33 U.S.C. § 1344.). Western will obtain a water quality certification from the Regional Water Quality Control Board in compliance with the Clean Water Act Section 401 (33 U. S. C. § 1341.).

Mitigation

Western developed 104 EPMs to reduce environmental consequences associated with construction and operation activities. Western determined environmental consequences in the SEIS and EIR, based on the assumption that all EPMs would be fully implemented. These EPMs ensure that Western will avoid or minimize environmental harm from building the Project. During ongoing consultations and coordination with agencies and prior to construction,

additional mitigation measures may be developed. Western will incorporate these measures, as appropriate, to further avoid and mitigate impacts. Western will include these additional measures in a Mitigation Action Plan (MAP). Western will develop a MAP in accordance with 10 CFR 1021.331 that addresses mitigation commitments. It will explain how the mitigation will be planned and implemented. The MAP will be available upon request. With implementation of the EPMs and MAP, Western will adopt all practical means to avoid or minimize environmental harm for the Project.

Floodplain and Wetland Statement of Findings

In accordance with 10 CFR 1022, Western considered the potential impacts of the Project on floodplains and wetlands. The Project and surrounding area are dominated by 100- and 500-year floodplain zones and a network of flood control levees and canals. A map of Project and floodplain zone information is available in the Draft SEIS and EIR on page 4-46. There is no practical means of avoiding floodplains. Because of the nature of transmission line construction and its relative small amount of disturbance and implementation of the EPMs, such as erosion control, surface restoration, the Project would not substantially alter the normal drainage patterns or affect runoff rates. Western would maximize use of existing roads. Structures located in the floodplains, would not contribute to the impedance of flood flows.


Western evaluated alternatives for the Project and found there was no practical means of avoiding wetlands entirely. Western estimates that approximately 2.4 acres of wetlands would be permanently affected by the construction of the Project Preferred Alternative (Alternative B). Western will design the Project to avoid wetlands where possible.

Western will coordinate with agencies to ensure compliance with all applicable floodplain and wetland requirements. Western will mitigate the project for wetlands as deemed appropriate by the USACE.

Decision

Western's decision is to build the Preferred Alternative (Alternative B), as described above and in the SEIS and EIR. This decision is based on the information contained in the "Sacramento Area Voltage Support Project Supplemental Environmental Impact Statement and Environmental Impact Report (DOE/EIS-0323S1)"; (Draft SEIS and EIR issued July 2007 and Final reissued March 2008). This ROD has been prepared in accordance with Council on Environmental Quality regulations for implementing NEPA (40 CFR Parts 1500-1508) and DOE Procedures for Implementing NEPA (10 CFR Part 1021). Full implementation of this decision is contingent upon the implementation of the EPMs for the Preferred Alternative and Project obtaining all applicable permits and approvals.

Dated: **APR 29 2008**


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Administrator