# ANNUAL SITE ENVIRONMENTAL REPORT

# FOR CALENDAR YEAR 2003


United States Department of Energy
Western Area Power Administration
Environment
12155 W. Alameda Parkway
Lakewood, Colorado 80228

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# 2003 ANNUAL SITE ENVIRONMENTAL REPORT
# WESTERN AREA POWER ADMINISTRATION

## EXECUTIVE SUMMARY

This document outlines the accomplishments and status of the environmental program of the Western Area Power Administration (Western) for calendar year 2003.

In 2003, Western submitted 179 reports to state and local emergency response personnel under the Emergency Planning and Community Right-to-Know Act. These reports identify the hazardous substances contained at these sites. At sites where potential oil spills could harm surrounding ecosystems and waterways, Western prepares Spill Prevention Control and Countermeasure (SPCC) plans. These plans identify measures to prevent spills from harming the environment, such as identifying the need for secondary containment at facilities. Western currently has SPCC plans for 154 facilities in 13 states. In 2003, Western updated 31 SPCC plans and prepared one new plan.

Western evaluates the impact of its planned actions on the environment by preparing National Environmental Policy Act documents. In 2003, Western completed 102 categorical exclusions, five environmental assessments, two environmental impact statements and issued one record of decision, four findings of no significant impact, two notices of floodplain/ wetland involvement and one notice of wetland involvement. Western held several public workshops/meetings and consulted with more than 48 American Indian Tribes for various projects. In 2003, Western was working on or had completed 15 Section 7 consultations under the Endangered Species Act.

In 2003, Western recycled over 3,200 metric tons of electrical equipment, mineral oil dielectric fluid, asphalt, fluorescent and metal halide light bulbs, wood poles and crossarms, and other items as well as office waste. Western made $665,474 worth of purchases containing recovered content materials.

Western continues to make progress in documenting its Environmental Management System and completed its third annual report under the Environmental Protection Agency's National Environmental Performance Track program.

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# List of Acronyms and Abbreviations

| | |
|---|---|
| APLIC | Avian Power Line Interaction Committee |
| CAA | Clean Air Act (42 U.S.C. s/s 7401 et seq. (1970)) |
| CEC | California Energy Commission |
| CEQ | Council on Environmental Quality |
| CERCLA | Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. s/s 9601 et seq. (1980)) |
| COTP | California-Oregon Transmission Project |
| CRSP | Colorado River Storage Project |
| CWA | Clean Water Act (33 U.S.C. ss/1251 et seq. (1977)) |
| CX | Categorical Exclusion |
| CY | Calendar Year |
| Docket | Hazardous Waste Compliance Docket |
| DOE | U.S. Department of Energy |
| DOT | U.S. Department of Transportation |
| EA | Environmental Assessments |
| EIS | Environmental Impact Statement |
| EMS | Environmental Management System |
| EO | Executive Order |
| EPA | Environmental Protection Agency |
| EPCRA | Emergency Planning and Community Right-to-Know Act (42 U.S.C. 11011 et seq. (1986)) |
| EPRI | Electric Power Research Institute |
| ESA | Endangered Species Act (7 U.S.C. 136; 16 U.S.C. 460 et seq. (1973)) |
| FEMP | Federal Energy Management Program |
| FHWA | Federal Highway Administration |
| FIFRA | Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. s/s 135 et seq. (1972)) |
| GIS | Geographical Information System |
| HMTA | Hazardous Material Transportation Act (49 U.S.C. s/s 5101 et seq. (1994)) |
| HSWA | Hazardous and Solid Waste Amendments of 1984 [see RCRA] |
| IVM | Integrated Vegetation Management |
| kV | Kilovolt |
| MAP | Mitigation Action Plan |
| MOSES | Mineral Oil Spill Evaluation System |
| MW | Megawatt |

| | |
|---|---|
| NAGPRA | Native American Graves Protection and Repatriation Act (25 USC 3001-13 (1990)) |
| NEPA | National Environmental Policy Act (42 U.S.C. 4321-4347 (1969)) |
| NHPA | National Historic Preservation Act (16 U.S.C. 470a, et seq. (1966)) |
| NOA | Notice of Availability |
| NOV | Notice of Violation |
| PCB | Polychlorinated biphenyls |
| PRP | Potentially Responsible Party |
| Reclamation | U.S. Bureau of Reclamation |
| RCRA | Resource Conservation and Recovery Act (42 U.S.C. s/s 321 et seq. (1976)) |
| ROD | Record of Decision |
| ROW | Right-of-Way |
| RUS | Rural Utility Service |
| SARA | Superfund Amendments and Reauthorization Act (42 U.S.C.9601 et seq. (1986)) |
| SDWA | Safe Drinking Water Act (42 U.S.C. s/s 300f et seq. (1974)) |
| SHPO | State Historic Preservation Officer |
| $SF_6$ | Sulfur hexafluoride gas |
| SPCC | Spill Prevention, Control and Countermeasures |
| TRC | Tradable Renewable Certificate |
| TSCA | Toxic Substances Control Act (15 U.S.C. s/s 2601 et seq. (1976)) |
| USACE | U.S. Army Corps of Engineers |
| USFWS | U.S. Fish and Wildlife Service |
| UST | Underground Storage Tank |
| Western | Western Area Power Administration |

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# 1.0 Introduction

Western Area Power Administration (Western) was established December 21, 1977, under the Department of Energy (DOE) Organization Act (Section 302 of Public Law 95-91). Western markets Federal electric power in 15 western states, encompassing a 1.3 million-square-mile geographic area (Figure 1).

Western operates and maintains more than 17,400 miles of transmission, 268 substations, and various other power facilities in its service territory. Western markets about 10,000 megawatts of power generated at 55 hydroelectric power-generating plants in the Western United States that are operated by the U.S. Bureau of Reclamation (Reclamation), the U.S. Army Corps of Engineers (USACE), and the U.S. Section of the International Boundary and Water Commission. Western also markets the United States government entitlement from the Navajo coal-fired power plant near Page, Arizona.

In Fiscal Year 2003, Western sold about 40 billion kilowatt-hours of electricity and generated more than $785 million in power revenues. Western sells power to 683 wholesale power customers, who, in turn, provide service to millions of retail consumers. Western's customers include rural cooperatives, municipalities, public utility districts, Federal and State agencies, irrigation districts, Native American tribes, and project use customers. Customers are located in Arizona, California, Colorado, Iowa, Kansas, Minnesota, Montana, Nebraska, Nevada, New Mexico, North Dakota, South Dakota, Texas, Utah, and Wyoming.

Western's organization is managed from a Corporate Services Office in Lakewood, Colorado; four regional Customer Service Offices located in Billings, Montana (Upper Great Plains Region); Phoenix, Arizona (Desert Southwest Region); Loveland, Colorado (Rocky Mountain Region); and Folsom, California (Sierra Nevada Region); and the Colorado River Storage Project (CRSP) Management Center, in Salt Lake City, Utah, as shown in Figure 1. Through its power marketing and transmission program, Western secures revenues to recover operating, maintenance, and purchase power

expenses to repay the Federal government's investment in the generation and transmission facilities.

Western's environmental program spans a broad range of environmental concerns due to the varied geographical locations and types of activities routinely performed. Western falls within the jurisdiction of six Environmental Protection Agency (EPA) regions, as well as the 15 state and numerous local jurisdictions where Western's facilities are located.

Western's facilities generate hazardous and non-hazardous waste as a byproduct of maintaining electrical equipment, warehouses, and maintenance and office facilities. Western's substations and maintenance facilities house equipment containing dielectric oil, hazardous gasses, petroleum, and other pollutants that may affect water, soil, and air resources. Western's transmission lines cross a variety of ecosystems such as forests, wetlands, grasslands, and deserts. Maintenance of these transmission lines could affect sensitive biological and cultural resources. Western's Environmental Policy Statement directs employees to prevent, control, and abate environmental pollution at their facilities, and when possible, enhance the environment.

This Annual Site Environmental Report meets the requirements of DOE Order 231.1, Environment, Safety and Health Reporting.

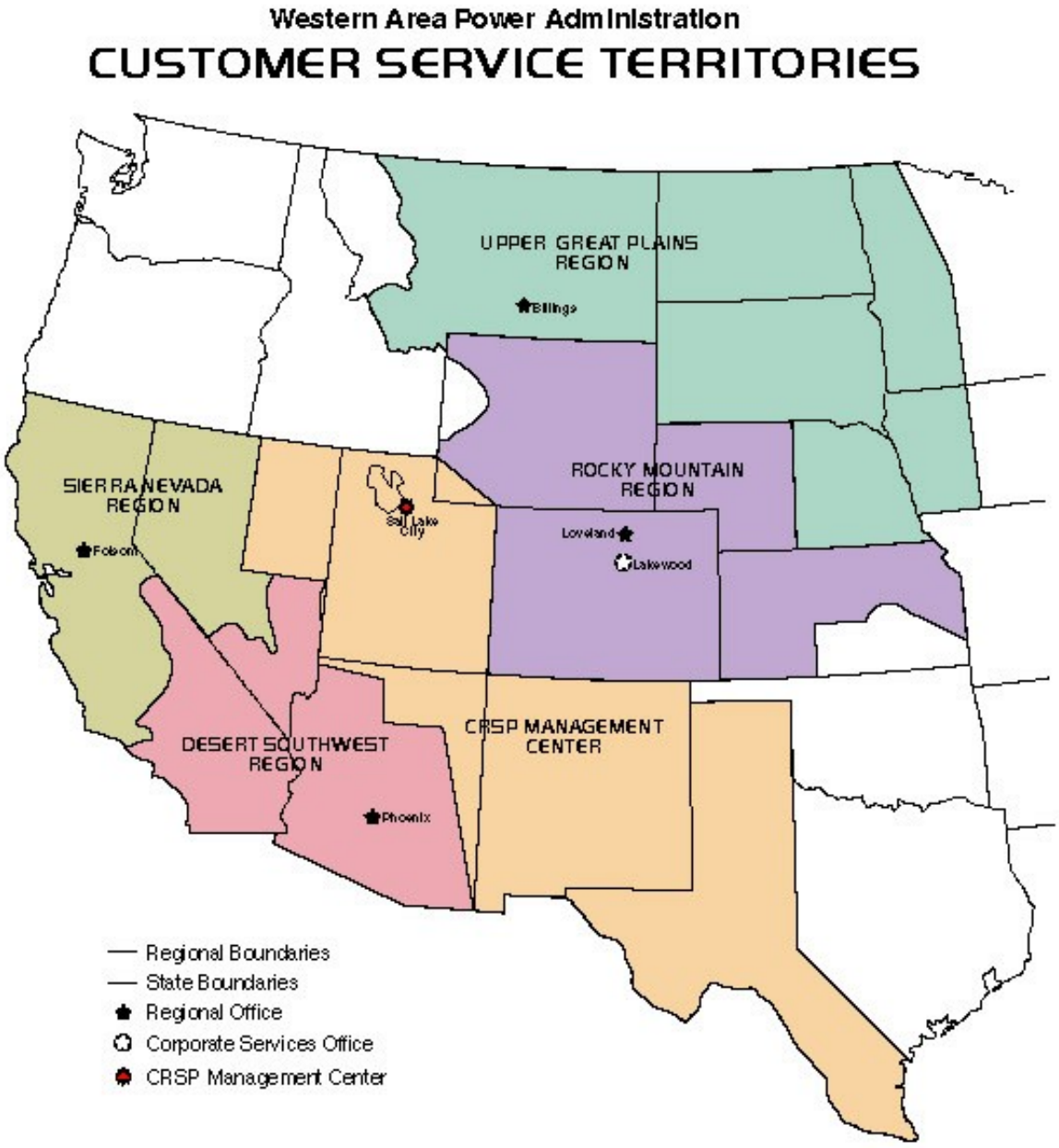


**Figure 1: Western's Territory and Regional Office Locations.**

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# 2.0 Compliance Summary

## *2.1 Introduction*

Many Federal and State environmental protection laws and regulations apply to Western's activities. Western's Environmental Policy directs employees on environmental matters to assure that we conform to all regulatory requirements, and to achieve our pollution prevention goals and objectives. To better achieve our environmental goals, Western is formalizing its environmental program by developing an Environmental Management System (EMS).

## *2.2 Environmental Policy Statement*

In 2002, Western revised its Environmental Policy. The policy states that:

> Western will conduct its business of marketing and delivering reliable, cost-based hydroelectric power and related services in an environmentally sound manner, efficiently and effectively complying with the letter, spirit, and intent of applicable environmental statutes, regulations, and standards. We believe protecting the environment is a sound business practices. Western is committed to pollution prevention and waste minimization.
>
> Western will use effective planning to mitigate the environmental impacts of its actions. Western is committed to continual improvement of its environmental performance by monitoring and reviewing its policies, programs and services.
>
> Environmental protection is everyone's responsibility.

The new Environmental Policy became effective on December 12, 2002. No changes were implemented in 2003.

## *2.3 Major Environmental Regulations*

Environmental regulations that require the greatest expenditure of resources are summarized here:

Comprehensive Environmental Response, Compensation and Liability Act

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) provides guidelines and procedures to respond to releases and threatened releases of

hazardous substances, pollutants, or contaminants, as well as to cleanup closed and abandoned hazardous waste sites. CERCLA was reauthorized in 1986 with the Superfund Amendments and Reauthorization Act (SARA). Title III of SARA includes the Emergency Planning and Community Right-to-Know Act (EPCRA), which was designated to help local communities protect public health, safety, and the environment from chemical hazards. As part of its compliance with EPCRA requirements, Western facilities submit EPCRA Sections 311 and 312 information (Tier I and Tier II reports) annually to state and local response entities. These reports notify state and local agencies of the inventory of hazardous chemicals at each reported facility, as well as emergency response information.

Resource Conservation and Recovery Act

Western produces hazardous and non-hazardous waste as a byproduct of our operations. These wastes are managed following applicable waste management laws and regulations, such as those outlined in the Resource Conservation and Recovery Act (RCRA), Hazardous and Solid Waste Amendments of 1984 (HSWA), hazardous waste transportation, and state hazardous waste and transportation programs.

Under RCRA, Western prepares an annual Waste Minimization/Pollution Prevention report and Affirmative Procurement report. This report includes Western's effort to reduce land fill mass by recycling materials as much as possible and purchasing recycled-content materials.

EPA amended RCRA in 1995 with the Universal Waste Rule. This Rule is designed to reduce the amount of hazardous waste items in the municipal solid waste stream, encourage recycling and proper disposal of certain common hazardous wastes, and reduce the regulatory burden on businesses that generate these wastes. In 1999, EPA added used fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps that contain mercury and lead to the rule. Western applies this new rule to used battery, lamp disposals and other waste products.

Clean Air Act

The Clean Air Act (CAA) provides the principal framework for national, state, and local efforts to protect air quality. Western's primary concern is reducing air pollutants from construction activities, including dust suppression and asbestos removal. Because of the age of many of our facilities, asbestos surveys are conducted annually as part of Western's facility maintenance program. Emergency generators and above ground petroleum/diesel tanks may require county or state air permits.

Clean Water Act

The primary responsibility of the Clean Water Act (CWA) is protecting the Nation's water supply from pollutants, including planned discharges, runoff and prevention of accidental contamination. Within the CWA requirements, Western evaluates the potential for discharges to water sources from construction and routine maintenance activities. When required, Western prepares Spill Prevention Control and Countermeasures (SPCC) plans for new facilities and evaluates and updates SPCC plans every three years for existing facilities. In 2002, the requirements for preparing SPCC plans were revised. In response, Western revised many of its SPCC plans for its facilities in 2003. Western also prepares California Hazardous Waste Business Plans annually, which include SPCC plans for facilities operating in California.

Section 404 of the CWA governs disposal of dredged or fill material in waters of the United States. Western applies to the USACE for a permit for activities that would impact waters of the United States. In 2003, the Federal Phase II Storm Water Regulations went into effect to reduce the impact to small municipal storm sewer systems and construction sites that disturb one to five acres of land. Construction and maintenance activities that are subject to this regulation are required to prepare storm water pollution prevention plans as part of a National Pollutant Discharge Elimination System (NPDES) permit.

Toxic Substances Control Act

A significant act affecting Western continues to be the Toxic Substances Control Act (TSCA), which regulates polychlorinated biphenyls (PCB). PCBs have historically been a

component of dielectric oil used in electrical equipment. Western's policy since 1979 has been to eliminate PCBs from its system wherever economically and operationally possible. This lessens the impact of PCB regulations on operations and the potential impact of PCBs on the environment. In April 2001, EPA issued a final rule for reclassification of PCB and PCB-contaminated electrical equipment. This new rule requires Western to reevaluate, test, and re-label our electrical equipment that contains PCBs.

National Environmental Policy Act

Western follows the Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 CFR parts 1500-1508) and DOE Procedures for Implementing NEPA (10 CFR part 1021). DOE has delegated Western the authority to approve its own environmental assessments (EA) and many environmental impact statements (EIS). In September 1998, Western was delegated cooperating agency determination authority, which allows Western to adopt other agency EISs where Western is a cooperating agency. Three regional managers and the CRSP manager have been delegated the authority to approve their own EAs. These authority delegations have shortened the environmental process and provided for project decisions to be made closer to the project level. Most of Western's routine activities are covered by Categorical Exclusions (CX).

Western prepares NEPA documents for contracts, rate changes, construction activities, routine maintenance, interconnections, and other activities. Western's environmental planning process includes early public and agency involvement in proposed projects. This, along with early internal scoping of environmental issues, helps to identify potentially significant impacts. The National Historic Preservation Act (NHPA), Endangered Species Act (ESA), and Migratory Bird Treaty Act are addressed when a NEPA document is prepared for a project, where appropriate.

### *2.4 Executive Orders*

As a Federal agency, Western is required to comply with Executive Orders (EO) issued by the President of the United States. A summary of some of the significant orders impacting Western is presented here:

EO 11988, Floodplain Management and 11990, Protection of Wetlands, require Federal agencies to conserve wetlands and manage floodplains where they are encountered in proposed actions. The DOE requirement of publishing Floodplain/Wetland involvement notices are dealt with on all appropriate projects, usually as part of the NEPA process.

EO 12088, Federal Compliance with Pollution Control Standards, requires Federal agencies to comply with EPA and state and local environmental regulations. Examples of the regulations enforced at state and local levels include RCRA, community right-to-know, pesticide application, and storage tank regulations.

EO 12843, Procurement Requirements and Policies for Federal Agencies for Ozone-Depleting Substances, requires Federal agencies to phase out the use, where practicable, of ozone-depleting substances. This is to be accomplished through cost-effective procurement practices, and through the substitution of safe alternative substances.

EO 12856, Federal Compliance with Right-To-Know Laws and Pollution Prevention Requirements, requires Federal agencies to comply with EPCRA and keep communities surrounding Federal facilities informed of an agency's hazardous materials management and emergency management procedures. Western's regional offices implemented programs to notify state and local emergency response entities under Sections 311 and 312 (Tier I and II reports) of EPCRA. Chemical inventories indicate that Western does not manufacture, process, or otherwise use reportable quantities of EPCRA Section 313 chemicals, so Toxic Release reports were not required.

EO 12873, Federal Acquisition, Recycling and Waste Prevention, requires that Federal agencies develop and maintain acquisition, recycling, and waste prevention programs. Purchase of certain goods containing recycled materials is mandated and waste prevention and recycling goals have been developed.

EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, is designed to focus Federal attention on the environmental and human health conditions in minority and low-income communities with the goal of

achieving environmental justice. Western addresses this EO in NEPA actions where appropriate.

EO 13101, Greening the Government through Waste Prevention, Recycling and Federal Acquisition, mandates that Federal agencies establish systems, schedules, plans, and goals for waste prevention, recycling, and acquisition. Western's pollution prevention plans, reports, and affirmative procurement actions are mainly in response to this order.

EO 13123, Greening the Government through Efficient Energy Management, requires Federal agencies to efficiently manage energy to minimize impacts to the environment. Western has established goals and procedures to minimize internal use of energy, maximize the use of green energy, and evaluate various sources of energy to determine relative environmental impact.

EO 13148, Greening the Government through Leadership in Environmental Management, requires Federal agencies to improve environmental performance through the use of management systems and aggressive pollution prevention initiatives. Western began development of a formal EMS in 1995, and has formal pollution prevention plans. The order also requires the 50-percent reduction of certain chemicals at Federal agencies by December 31, 2006. The Department of Energy is working with a multi-federal agency task force to finalize the list of chemicals.

EO 13149, Greening the Government through Federal Fleet and Transportation Efficiency, requires Federal agencies to exercise leadership to reduce petroleum consumption through fuel efficiencies, alternative fueled vehicles, and transportation strategies. Western is leasing alternative fueled vehicles and stocking renewable-based fuels at some locations.

EO 13175, Consultation and Coordination with Indian Tribal Governments, requires Federal agencies to establish regular and meaningful consultation and collaboration with tribal officials in developing Federal policies that have tribal implications. Western has many facilities on tribal lands and coordinates with numerous Native American tribes on projects on tribal lands, or where tribal cultures may be impacted.

EO 13212, Actions to Expedite Energy Projects, requires Federal agencies to expedite their review of permits or take other actions to speed up such projects, while maintaining safety, public health, and environmental protections. This EO applies to Western's interconnection projects, where private proponents request to connect to the energy grid through Western's transmission system. Western has worked with the California Energy Commission and other Federal agencies to coordinate and streamline the environmental process for interconnections in California.

### *2.5 Department Of Energy Requirements*

Western complies with DOE Orders and Guidelines. Applicable environmental Orders include the following:

DOE Order 231.1A, Environment, Safety, and Health Reporting, sets forth the requirements and responsibilities for DOE elements to prepare annual summary reports to the Secretary of Energy on the results of environment, safety, and health assessments conducted in the previous year. These activities include NEPA planning summaries and progress on mitigation measures, as well as an Annual Site Environmental Report. Western has also developed environmental incident reporting procedures as required by the order.

DOE Order 450.1, Environmental Protection Program, requires Western to implement sound environmental stewardship practices that are protective of the air, water, land, and other natural and cultural resources, which cost effectively meets or exceeds compliance with applicable environmental, public health, and resource protection laws, regulations and DOE requirements. This is accomplished through implementation of an EMS.

DOE Order 451.1B, National Environmental Policy Act Compliance Program, establishes DOE internal requirements and responsibilities for implementing NEPA, the CEQ Regulations Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500-1508), and the DOE NEPA Implementing Procedures (10 CFR Part 1021).

DOE Order 5480.4, Environmental Protection, Safety, and Health Protection Standards, specifies the requirements for environmental protection, safety, and health standards.

### *2.6 Western Requirements*

WAPA Order 450.1A, Environmental Considerations in the Planning, Design, Construction, and Maintenance of Power Facilities and Activities, establishes policy, assigns responsibilities, and delegates authority to ensure that marketing and rate-setting activities and activities associated with planning, design, construction, operation, and maintenance of power facilities by Western comply with Federal, state, and local environmental laws and regulations.

### *2.7 Compliance Cleanup Agreements*

Western did not operate under any Compliance Cleanup Agreements in 2003.

### *2.8 Environmental Violations*

Western did not receive any Notices of Violation (NOV) at any facility in 2003. Western received a NOV from EPA Region VIII on October 25, 2002, citing failure to prepare and implement a SPCC Plan under oil pollution prevention regulations at a substation in South Dakota. In 2003, Western completed all actions requested by EPA, including updating the SPCC Plan, installing secondary containment, testing of above ground storage tanks and conducting employee training. Additionally, Western reviewed and updated all SPCC plans in South Dakota. No further action is required.

### *2.9 Reportable Occurrences*

In 2003, there were five reportable occurrences of releases of regulated materials. Three were located in North Dakota, one in Montana, and one in Colorado. Additional information on these spills is located in Section 3.2.

### *2.10 Self-Assessments or Audits*

During the last several years, Western has undertaken an effort to complete self-assessments of all the elements that comprise our environmental management program. In 2003, Western continued to implement corrective actions by preparing EMS documentation.

Western also conducts facility inspections to ensure compliance with Federal and state environmental laws and regulations. Western inspected 154 facilities in 2003.

### *2.11 Existing Permits*

Information on existing permits is provided in Section 4.0. Forty-seven permits were obtained in 2003.

### *2.12 Voluntary Actions to Control Greenhouse Gases*

The Intergovernmental Panel on Climate Change has identified $SF_6$ as an extremely potent greenhouse gas. EPA believes that reducing emissions of this gas will help to address global climate change and has developed a voluntary program that Western is participating in. Western is taking voluntary action to reduce the amount of sulfur hexaflouride gas ($SF_6$) lost to the atmosphere from system operation and maintenance. Western contracts for the detection of $SF_6$ leaks by using a special laser camera to make leaks visible. An annual $SF_6$ emissions reduction report is prepared and distributed internally and externally, including EPA.

### *2.13 State and Local Environmental Requirements*

Western has facilities in 15 western states. EO 12088, Federal Compliance with Pollution Control Standards, requires Federal agencies to comply with EPA and state and local environmental regulations. Examples of the regulations enforced at state and local levels include RCRA, community right-to-know, pesticide application, and storage tank regulations. Most of the states in Western's service area regulate generation, transportation, treatment, storage, and disposal of hazardous and toxic materials. Community right-to-know legislation and hazardous waste clean-up laws, enacted by numerous states, are increasing the control of tracking hazardous and toxic materials.

Western cooperates with state and local environmental regulators to help ensure compliance with applicable laws, statutes, regulations, and ordinances. Environmental audits of Western facilities address applicable state and local requirements in addition to those imposed by the Federal government. Additionally, Western's regional environmental

staff has developed annual chemical inventory programs and provides CERCLA Section 311 and 312 reports to local emergency response entities.

# 3.0 Compliance Status

This section provides an overview of Western's compliance status for calendar year 2003.

## *3.1 Comprehensive Environmental Response, Compensation, and Liability Act*

Superfund Amendments and Re-authorization Act

The Federal Agency Hazardous Waste Compliance Docket (Docket) is a list of facilities under Federal control that have the potential for environmental releases that could adversely affect human health or the environment. In 2003, three sites (Montrose Operations Center, Watertown Substation, Casper Field Branch [Office]) were removed from the Docket based on information from preliminary assessment and site investigations. In 2004, Western discovered that an additional site previously thought to have been removed from the Docket is still listed. The Liberty Substation in Arizona has undergone a preliminary assessments and site investigation and poses no risk to human health or the environment. Western is working with EPA to resolve this discrepancy.

Western conducted two facility evaluations under Section 120(h) of CERCLA. The North Cottonwood Microwave Site in Colorado was tested for asbestos, lead paint, and other environmental issues before its transfer from the U.S. Forest Service. The property met environmental requirements for transfer. The Monarch Microwave Site in Colorado was tested for lead paint and asbestos. No contaminants were found. The site was not transferred as planned.

Emergency Planning, Community Right-to-Know Act

Western conducts annual inventories of chemicals at facilities throughout its service area. The information gathered is used to prepare the Sections 311 and/or 312 (Tier I and II) reports to state and local emergency response entities. In 2003, Western submitted Tier II reports for 179 facilities, as listed in Appendix A. These inventories are also used to verify that Western does not manufacture, process, or otherwise use

threshold quantities of any of the chemicals identified in Section 313 of EPCRA (Tier III) and does not report under that section.

### *3.2 Resource Conservation and Recovery Act*

Under RCRA, Western is required to manage hazardous and non-hazardous materials and waste to protect human health and the environment.

Hazardous and Solid Waste Amendments of 1984 (HSWA)

HSWA-based regulations impact most Western facilities, which are classified as conditionally exempt small quantity generators of hazardous waste. HSWA also impacts Western operations by prohibiting the land disposal of hazardous wastes and by setting standards for used oil management, underground storage tanks, and recycling hazardous wastes. Western has increased recycling of these types of wastes, and continues to look for opportunities to recycle. A full report of Western's recycling activities is included in Section 5 of this report.

Universal Waste

In 2003, Western continued recycling materials from its facilities under the Universal Waste Rule. Items such as fluorescent lamps, metal halide lamps, vapor mercury lamps, small rechargeable batteries, lead/acid batteries, aerosol cans, mercury containing devices, and electronic devices are recycled. See Section 5 for further discussion of Western's recycling program.

Underground Storage Tanks

Western has two Underground Storage Tanks (USTs) in Arizona and one in Colorado that require annual permits to comply with state regulations. Western complies with the EPA's UST upgrade and monitoring requirements.

Hazardous Material Spills

Western responded to five spills of hazardous materials in 2003 as listed in Table 3-1. Western takes immediate action to clean up spills and notifies the appropriate state and

Federal agencies for spills above reportable limits. Western also routinely cleans up small leaks and drips around oil-filled equipment on an as-needed basis.

**Table 3-1: 2003 Hazardous Material Spills**

| Date | Contaminant/ Amount | Location | Status | Notifications |
|---|---|---|---|---|
| March | Approximately 15 gallons non-PCB oil | Fargo Substation, North Dakota | Cleaned up | North Dakota State Division of Emergency Management |
| April | About three to five gallons hydraulic fluid | Bismark-Jamestown Transmission Line, North Dakota | Treatment in place | North Dakota State Department of Health, Division of Water Quality |
| April | Less than one gallon non-PCB oil | Fort Peck Storage Yard, Montana | Cleaned up | None (below reportable quantities) |
| May | Approximately 20 gallons non-PCB oil from transformer | Ault Substation, Colorado | Cleaned up | None (below reportable quantities) |
| August | About ten gallons non-PCB oil | Leeds, North Dakota | Cleaned up | North Dakota State Division of Emergency Management |

## *3.3 Clean Air Act*

Emissions

Several potential sources of air emissions exist at Western facilities that are regulated under the CAA. These emissions include dust during construction activities, friable asbestos during building renovation or demolition, and volatile organic compound emissions from gasoline dispensing facilities. Western's construction specifications require practical methods and devices to control, prevent, and minimize emissions or discharges of air contaminants during construction activities. Particulate emissions from construction activities along access and haul roads are controlled by periodic watering of disturbed soils, where required.

Asbestos

Regulatory requirements applicable to the disposal of asbestos and asbestos-containing material affect Western when activities are planned to modify or demolish existing buildings or equipment. Western personnel notify all appropriate regulatory agencies when planning any renovation and demolition project that might include asbestos and obtain appropriate permits for asbestos removal. In addition to Federal regulations, state and local laws and regulations are followed to assure proper disposal of asbestos containing material. In 2003, Western sampled for asbestos at eight sites. Two of the sites were below regulatory limits and no asbestos was found at five sites. One site requires abatement, which will be completed in 2004.

Ozone-Depleting Substances

EO 12843, Procurement Requirements and Policies for Federal Agencies for Ozone-Depleting Substances, and implementing DOE guidance (Guidance on the DOE Facility Phase out of Ozone-Depleting Substances) requires Western to phase out the use, where practicable, of ozone-depleting substances. This is to be accomplished through cost-effective procurement practices and substitution of safe alternative substances.

The phase out of ozone-depleting substances affects Western's operations associated with refrigeration and air conditioning, solvent usage, and fire protection. As equipment is replaced, ozone-depleting substances are recovered in air conditioning, refrigeration systems and fire suppression systems before final disposal or dismantling. Older appliances containing icemakers using R-12 gas are replaced with chlorofluorocarbon (CFC) free units. Technician certification is required for all individuals who maintain, service, repair, or dispose of appliances, equipment, and motor vehicle air conditioners containing Class I or Class II refrigerants. The use of ozone–depleting solvents has been eliminated, with past inventories used and not replaced, or sent for safe disposal.

The Corporate Services Office and most of the Regional Offices have phased out halon-containing hand held fire extinguishing equipment for all but a few uses. Several of the Regions have also phased out halon-based large fire suppression systems. These fire suppression systems and equipment were replaced with carbon dioxide, dry chemical extinguishers, and other approved chemical replacements.

Greenhouse Gases

Western has approximately 750 $SF_6$ gas-filled circuit breakers in use. In 2000, EPA invited Western, along with other electric utilities, to take part in a voluntary program for reduction of $SF_6$ gas emissions. Western determined the best way to participate was to develop an alternative plan that is proactive in finding and stopping $SF_6$ leaks rather than just reporting $SF_6$ emissions as is outlined in the EPA program. In 2003, Western continued evaluation of equipment, locating several leaks, and either immediately repairing them, or scheduling repairs or replacement. A tracking system has been developed to track the amount of $SF_6$ gas leaking to the atmosphere from Western's equipment and a data base is being developed to improve the ease of tracking. An annual $SF_6$ emissions reduction report is prepared and distributed internally and externally, including to EPA.

### *3.4 Clean Water Act*

Spill Prevention, Control, and Countermeasures Plans

Western continues to evaluate facilities to meet SPCC requirements under the CWA. In 2003, Western had 154 SPCC plans in 13 states, as listed in Appendix A. SPCC plans are periodically reviewed for necessary revisions based on new site-specific information, construction or other modifications to the sites, or revised inventories of oil-filled equipment. In 2003, Western updated 31 SPCC plans and prepared one new plan. Many of these revisions were to meet new SPCC regulations. The Sierra Nevada and Desert Southwest regions are combining SPCC plans with their Hazardous Waste Business Plans for California.

Mineral Oil Spill Evaluation System

The Mineral Oil Spill Evaluation System (MOSES) software developed by the Electric Power Research Institute (EPRI) assists in determining the need for secondary containment and SPCC plans at Western's facilities.

In 2003, Western analyzed 42 facilities using the MOSES model. Twelve facilities were identified as requiring secondary containment. Three sites had adequate secondary containment already installed. Design and installation of secondary containment is incorporated into regional facility maintenance programs.

Erosion Control

Western evaluates sites for erosion control and erects berms, water flow diversions, matting, and other control devices to control or direct water flow at substations, rights-of-way (ROW), and access roads. These measures are taken during construction projects and are also part of the routine maintenance program. Occasionally these activities require a CWA Section 404 permit from the USACE for fill of waters of the United States. In 2003, one construction project (Path 15) in California required a Section 404 permit.

### *3.5 Safe Drinking Water Act*

Underground Injection Control

Western continues to cooperate with EPA regions and states to obtain permission to permanently close and abandon all Class V underground injection control wells as they are discovered. Western installed six dewatering wells at the office in Bismark, North Dakota in 2003 to resolve high groundwater issues beneath the building. No permits were required for this activity.

Groundwater Monitoring

In 2003, the Sierra Nevada Region continued monitoring groundwater at the Elverta Maintenance Facility for methyl tertiary-butyl ether, commonly known as MTBE. The groundwater was contaminated from a spill of gasoline during removal of a UST in

1997. Sampling results indicate that the MBTE levels continue to be elevated. In 2003, four additional monitoring wells were sited for installation in early 2004. Western continues to work with Sacramento County to determine the extent of the contamination.

### *3.6 Toxic Substances Control Act*

Western continued the removal and proper disposal of mineral oil, dielectric fluid, soil, and equipment containing PCBs from facilities during 2003. A Western-wide PCB Management Plan was completed that provides guidance to the regional offices on PCB issues. Each regional office manages its own PCB transportation and disposal contracts and waste transporters and treatment, storage, and disposal facilities are audited prior to contract award. Contractors are required to transport and dispose of the PCBs and prepare all necessary paperwork, including certificates of destruction or disposal.

Western disposed of 44 metric tons of TSCA wastes (equipment, debris, and soil) in 2003. Low-level PCB contaminated oils were burned for energy recovery at EPA-permitted facilities or were chemically treated and recycled. Higher concentration PCBs were disposed of at EPA-certified incinerators. Contaminated equipment carcasses were decontaminated and sold as scrap when possible. Items too heavily contaminated for recycling as scrap were disposed of at permitted PCB waste landfills or incinerators.

Western's Rocky Mountain Region reviewed all spare equipment in storage for compliance the PCB 5-year Storage for Reuse rule and disposed of, or arranged compliant storage for equipment subject to the rule.

### *3.7 Federal Insecticide, Fungicide, and Rodenticide Act*

Western is required to comply with the pesticide use, storage, and disposal regulations contained in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), state regulations, and some tribal pesticide management regulations. Pesticides are used by Western to control plant and animal pests, and for wood preservation. Western has two manuals for implementation of FIFRA, the "Integrated Vegetation Management (IVM)

Environmental Guidance Manual" and the "Pest Control Manual." Western's IVM program promotes the use of combined methods to control unwanted vegetation. IVM combines biological, cultural, physical, and chemical tools to minimize economic, health, and environmental risks. IVM de-emphasizes the exclusive use of chemical control.

Three FIFRA inspections were conducted by state regulatory agencies in 2003, one in Montana, and two in North Dakota. No violations were noted.

### *3.8 Hazardous Materials Transportation Act*

Almost all of the hazardous and toxic material transported for Western is shipped by audited and permitted commercial hazardous materials haulers. However, trained and qualified Western employees occasionally transport hazardous materials. Western's environmental staff provides training on Federal and state hazardous material transportation.

Hazardous materials transportation requirements for the California Department of Toxic Substances Control, North Dakota Department of Health, and Minnesota Pollution Control Agency are more extensive than those of the U.S. Department of Transportation (DOT). Sierra Nevada and Desert Southwest regional offices must have California waste haulers' permits to transport PCBs. The Upper Great Plains Region maintains permits for hauling all solid waste.

### *3.9 National Environmental Policy Act*

Western continued to review activities for environmental impacts under NEPA. Environmental planning activities fall under three categories: (1) Western projects, including maintenance and upgrades of Western's transmission lines and facilities, power marketing actions, and rate changes; (2) cooperating agency projects, where Western acts as a cooperating agency to review other Federal agency actions; and (3) work requested by public or private parties, such as power plant interconnections and use of Western's transmission towers for telecommunication systems.

Western's NEPA activities have been reported in our 2003 Annual NEPA Planning Summary (Appendix B and http://www.eh.doe.gov/nepa/2004aps/wapa_aps.pdf). Table 3-2 summarizes Western's 2003 activities.

**Table 3-2: Summary of NEPA Actions**

| NEPA Action | Western Projects | Cooperating Agency Projects | Private Proponent Projects | Total |
|---|---|---|---|---|
| CX completed | 98 | | 4 | 102 |
| EAs completed | 2 | | 3 | 5 |
| EAs in progress | 3 | | 1 | 4 |
| EISs completed | 1 | | 1 | 2 |
| EISs in progress | | 4 | 1 | 5 |
| RODs issued | | | 1 | 1 |
| FONSIs issued | 2 | | 2 | 4 |
| EIS/EAs suspended or on hold | 3 | | 1 | 4 |
| EA's cancelled | 1 | | | 1 |

### *3.10 National Historic Preservation Act*

Western complies with the NHPA by performing cultural and historical resource inventories for construction, maintenance and interconnection activities. These inventories include record searches for previously identified resources and, where necessary, on-site surveys. In 2003, Western initiated or continued previous cultural resource compliance efforts for a number of projects in eight states. In accordance with Section 106 of the NHPA, as amended, Western consults on findings from these inventories with the appropriate land-managing agencies, State Historic Preservation Officers (SHPO), Native American Tribal Historic Preservation Officers and tribes. Western engaged in consultations and coordination with 48 Tribes during the conduct of preservation and cultural compliance and government-to-government consultations. In areas where significant cultural resources are identified, monitors assure that cultural and/or historical resources are not disturbed. Native American monitors worked with Western staff on several projects.

In California, Arizona, Wyoming, Nebraska, Colorado and Wyoming, Western and the SHPOs have agreed on section 106 measures for routine maintenance activities through Programmatic Agreements. These agreements streamline the consultation process for projects with a no effect determination. On large projects, Western and other affected parties, along with the SHPOs and Native American tribes enter into Programmatic Agreements. These agreements outline actions to be taken during construction activities to comply with cultural and historical resource preservation laws. In 2003, Western signed a programmatic agreement for the Harry Allen-Mead Project and worked on a programmatic agreement for a project in Arizona.

In 2001, Western received a claim for damages to cultural resources from the Quechan Indian Tribe. This issue has yet to be resolved.

### *3.11 Native American Graves Protection and Repatriation Act*

The Native American Graves Protection and Repatriation Act (NAGPRA) requires consultation with Indian tribes on repatriation issues. In 2003, Western had no projects on Western fee-owned lands that required NAGPRA consultations.

### *3.12 Government-to-Government Relations with Indian Tribes*

Western seeks to fully comply with the spirit and letter of DOE's American Indian and Alaska Native Tribal Government Policy. This policy sets forth the principles to be followed by departmental officials, staff, and contractors regarding fulfillment of trust obligations and other responsibilities that are based on the U.S. Constitution, treaties, Supreme Court decisions, Executive Orders, statutes, existing Federal policies, tribal laws, and the dynamic political relationship between Indian nations and the Federal government. Western is actively working to establish and maintain positive and mutually beneficial working relationships with Federally-recognized tribes within its service territory. A full-time Native American Liaison position was established in 2002 to support tribes and Western staff in pursuit of these goals. Western actively consulted with 48 American Indian Tribes in 14 States in 2003. Consultations will continue into 2004.

### *3.13 Endangered Species Act*

Consultation

Western consults on Federal, Tribal, and state species of concern with the appropriate agencies for all listed, proposed or candidate wildlife and plants. This consultation includes actions ranging from routine maintenance activities to major construction projects. Most of these projects are done in conjunction with a NEPA document and under informal consultation with the USFWS. In 2003, Western was working on or had completed 15 Section 7 consultations under the Endangered Species Act, including formal consultations for the Path 15 and Sacramento Valley ROW maintenance projects in California and for the Headgate Rock-Blythe Transmission Line rebuild project in southwestern Arizona and southeastern California.

Monitoring for the Valley Elderberry Longhorn Beetle for the Sierra Nevada Region's office complex in California was completed with distribution of the project's monitoring report in 2003.

Programmatic Biological Opinion for Routine Maintenance Activities

The Sierra Nevada Region has a programmatic biological opinion for routine maintenance activities which streamlines the consultation process for activities that have no effect on endangered species. In 2002, it was amended to allow herbicide application under certain conditions. In 2003, the Desert Southwest Region continued to work with the USFWS on a similar programmatic agreement for the State of Arizona.

### *3.14 Migratory Bird Treaty Act*

Avian Workshops

Western worked with the Rural Utility Service (RUS), U.S. Forest Service, USFWS, Bureau of Land Management, Reclamation, EPRI, the Avian Power Line Interaction Committee (APLIC), and several private electric utilities to sponsor workshops on minimizing electrocutions and collisions on electric utility structures. Workshops have

been conducted in Alaska (2000), Arizona (1999), Colorado (1999), Montana (2001), and North Dakota (2001) Utah (2002), and South Dakota (2003).

Bird Studies

Western, in conjunction with Bonneville Power Administration, APLIC, EPRI, USFWS, RUS, U.S. Department of Agriculture Wildlife Services, several state agencies, and numerous other electric utilities began a multi-year study of bird collisions along the Snake Creek Embankment in central North Dakota in April 2001. A Technical Advisory Group was established that includes environmental organizations, all the above entities, and electric utilities on five continents. The study will identify the spans where collisions are most common. Using this information, those spans will be fixed with a bird strike indicator to identify collisions on the line. The Bird Strike Indicator Study is scheduled for field testing in summer 2005. Following the attachment and testing of the bird strike indicators, marking devices will be attached to the line to "warn" the birds of the line. These marking devices and the bird strike indicators will be monitored using a multimedia monitoring device, a Bird Activity Monitoring System, to determine which marking methods are most effective in reducing collisions. The monitoring system should be useful to the wind generation and communication industries, as well as the rest of the electric utility industry, in siting and minimizing bird collisions.

In 2003, Western joined the National Wind Coordinating Committee's Wildlife Working Group to help resolve bird collisions on wind turbines. This group meets at least twice a year. The group has started to include bat collisions as a problem that needs attention.

Line Marking Devices

Western is working with various vendors to test transmission line marking devices designed to minimize bird collisions. These tests are to determine the efficiency of installing the devices, weathering characteristics, and longevity.

Removal and Relocation of Bird Nests

Western received four permits from the USFWS to remove and/or relocate bird nests from electrical equipment and transmission line structures. One was to remove raptor and raven nests from the Bears Ears-Bonanza 345-kV line and three were to remove nuisance birds from substations and/or storage areas at maintenance facilities in Arizona and California. These permits were for one year only.

Western partnered with the Arizona Chapter of Partners in Flight to provide artificial burrows for burrowing owls that had been displaced by residential development. The owls were relocated to the Desert Southwest Regional office complex in Phoenix. Western also partnered with the California Central Valley Chapter of Partners in Flight to relocate burrowing owls from a substation in California.

### *3.15 Floodplain and Wetland Assessments*

Under DOE's Floodplain and Wetland Regulations (10 CFR Part 1022), EO 11988, Floodplain Management and EO 11990, Protection of Wetlands, Western evaluates the impact of its action on floodplains and wetlands. These evaluations are usually performed with the appropriate NEPA impact analysis.

In 2003, Western issued three notices of floodplain and/or wetland evaluations:

- Notice of Floodplain Involvement, May 12, 2003; Headgate Rock to Blythe Transmission Line, Bernardino County, CA.
- Notice of Floodplain/Wetland Involvement, April 28, 2003; Cheyenne-Miracle Mile 115-Kilovolt Transmission Line Rebuild Project, Laramie, Albany, and Carbon Counties, WY.
- Notice of Wetlands Involvement, July 8, 2003; Exira Station Project in Audubon County, Iowa.

### *3.16 Mitigation*

Western has compiled a list of standard mitigation measures (Appendix C) and construction standards (Appendix D) to assure compliance with environmental laws

and regulations. These measures are based on Western's experience with impacts associated with transmission line construction, operation, and maintenance. Along with site specific cultural resource information, programmatic agreements, and biological opinions, they are used to develop Mitigation Action Plans (MAPs), mitigation requirements for CXs, and contractor requirements.

In 2003, Western issued Mitigation Action Plans for the Path 15 Transmission Line Upgrade Project in California (Appendix E), the Transmission Line Modifications for the Hoover Dam ByPass Project in Nevada (Appendix F), the Exira Station Project in Iowa (Appendix G), and the Wolf Point-Williston Transmission Line Rebuild Project in Montana and North Dakota (Appendix H). The 2003 status of these mitigation plans is reported in the 2003 NEPA planning summary report founding Appendix B.

## 4.0 Summary of Permits

Western is required to obtain a variety of permits, including those for above-ground and underground storage tanks, PCB transportation and storage, hazardous waste storage, gasoline dispensing, and pollution discharge elimination system permits for point source and stormwater discharge. A full list of permits obtained is listed in Appendix I. Table 4-1 summarizes the list by type and number.

**Table 4-1: Summary of Permits by Type**

| Type of Permit | Number |
|---|---|
| 404 Permit (Clean Water Act) | 2 |
| Migratory Bird Treaty Act/Eagle Protection Act | 3 |
| Hazardous Waste Transportation | 3 |
| Operation | 2 |
| Hazardous Materials | 25 |
| Water Quality | 3 |
| Air Quality | 3 |
| Fuel Dispensing | 6 |
| **Total** | **47** |

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# 5.0 Environmental Program Information

## *5.1 Environmental Management System*

In 2003, Western continued preparing our EMS and completed the EMS Handbook. The EMS Handbook outlines a systematic process that ensures Western is implementing environmental requirements and seeking continuous improvement. Western's senior management team approved the EMS Handbook in April 2004.

Western prepared a procedure to identify the environmental aspects and impacts of operations. The procedure identifies Western's significant environmental aspects. A procedure was also completed to describe a systematic process to improve Western's environmental performance. This procedure identifies environmental objectives and targets, and implements actions to achieve desired performance. Additional EMS processes and procedures were drafted in 2003 with the goal of having all EMS processes and procedures completed by December 2004.

To further demonstrate and publicize our commitment to the environment, Western applied for and was honored to receive charter membership in the EPA's National Environmental Performance Track program in 2000. The program recognizes and encourages top environmental performers - those who go beyond compliance with regulatory requirements to attain levels of environmental performance and management that benefit people, communities, and the environment. It recognizes facilities that consistently meet their legal requirements and implement high-quality environmental management systems. It also encourages them to achieve more by continuously improving environmental performance and informing and involving the public in its environmental program. Membership is for a three year period, and the third report, Western's 2003 Annual Performance Track Report is included in Appendix J.

## *5.2 Environmental Auditing Program*

Western established an environmental auditing/inspection program in 1980. The major purposes of the auditing program are:

- Discover noncompliance with applicable local, state, and Federal regulations.
- Reduce environmental risks.
- Improve communication with facility staff.
- Improve overall environmental performance.
- Provide assistance and discuss compliance alternatives for problem areas.
- Accelerate development of good environmental management practices.
- Ensure worker safety when working with hazardous materials.
- Provide management with a tool for evaluating the priority of compliance issues.

In 2003, environmental staff conducted 154 facility inspections. Additionally, Western's Environment staff also conducted audits of three disposal contractors to verifying compliance with Federal, state, and local environmental laws and regulations.

### *5.3 Environmental Protection Training*

In 2003, Western continued to provide craft workers, new employees and management with guidance and training on environmental protection and compliance. Information and summaries of specific regulations, statutes, and compliance issues are covered in non-legal terms, to enhance understanding. Training subjects included environmental responsibilities and management systems, environmental standard operating procedures, transportation of hazardous materials, PCBs, SPCC, waste minimization, affirmative procurement, first responder, NEPA planning, cultural resources awareness, vegetation management, threatened and endangered species, wildlife resources awareness, and others.

### *5.4 Geographical Information Systems*

Western continues to develop and implement a Geographical Information System (GIS) to aid in ROW management and construction activities. The GIS is being used to provide data for environmental staff and maintenance crews to manage cultural, biological, water and other issues within the ROW and access roads. It is also being used to prepare NEPA

and cultural resource documents for new construction projects. In 2003, cultural resources information for the Rocky Mountain Region was entered into the database and is available to environmental staff. Processes for mapping in support of environmental surveying were completed and the GIS supported mapping on the Path 15 Project. GIS data is shared with Federal, state and local government agencies as the need arises.

### *5.5 Waste Minimization, Pollution Prevention and Affirmative Procurement*

In complying with DOE Order 450.1, and WAPA Order 450.1A, Western developed a Waste Minimization/Pollution Prevention Program Plan. This plan provides guidance to develop and implement a facility-wide, multimedia pollution prevention program within Western.

Specific activities required to meet the plan goals include:

- Conducting pollution prevention opportunity assessments on facilities and operations.
- Incorporating pollution prevention considerations into the acquisition process (e.g. affirmative procurement of recovered content products).
- Developing a workplace ethic to support pollution prevention and increasing awareness of pollution prevention.
- Annual reporting to DOE on the status of Western's Waste Minimization/ Pollution Prevention Program, and evaluation of progress toward the Plan goals.

Pollution prevention is incorporated into existing training so that goals, projects, and ideas are part of training curriculum or meeting agendas. As a major supplier of electric power, the agency's work results in the production of some potentially toxic byproducts and generation of several types of wastes. Western's construction, demolition, and replacement activities generate waste electrical equipment and scrap metal. Western reduces the generation of contaminants, wastes, and other regulated materials through source reduction and recycling programs.

Since 1977 Western has reduced the use of PCBs and minimized waste generation through retro-filling equipment and processing to remove PCBs and reusing the oil. Although PCBs have not been completely eliminated, Western continues PCB removal as opportunities are found and budget considerations permit. In 2003, 44 metric tons of PCB-contaminated waste was disposed of. Changes in EPCRA Section 313 regulations, regarding persistent bio-accumulative toxics, have added impetus to this removal.

$SF_6$ breakers have replaced oil-filled circuit breakers at several sites. The oil and metal from these replacements have been recycled as regulations allow. Quantities of hazardous waste and recycled and reused waste was collected and reported in Western's 2003 Annual Report on Waste Generation and Pollution Prevention Progress (Appendix K).

EO 13101, Greening the Government through Waste Prevention, Recycling and Federal Acquisition, requires Federal agencies to purchase products listed by the EPA that contain post consumer recycled content materials. These affirmative procurement categories include paper products, construction materials, and non-paper office supplies.

An annual report is submitted to DOE for all listed non-GSA purchased products. GSA reports Western's purchases directly. A summary report is included in Appendix K. In 2003, Western reported $665,474 worth of purchases containing recovered content materials.

### *5.6 Environmental Risk Assessment and Management*

Western completed evaluation of all environmental program elements during the EMS self-assessment process. Part of each self-assessment included an analysis of risk and liability for each recommendation identified. Western used this to evaluate and prioritize recommendations, which will be included in EMS documentation.

### *5.7 Renewable Energy Purchasing - Western's Green Tag Program*

In a speech to the United States Energy Association on June 12, 2002, Secretary of Energy Spencer Abraham directed Western to institute a Green Tags program. The Green Tags program is a renewable resource marketing program that enables customers to either

purchase renewable energy or purchase the environment attributes of renewable energy generation. Western's program includes three parts: 1) acquire renewable resources for Federal agencies upon request; 2) acquire renewable energy to supplement Western's firm power deliveries, upon request and as allowed in applicable marketing plans; and 3) facilitate development of renewable energy sources by Western's customers.

In 2002, Western began developing and implementing its program that now encompasses two independent program efforts. The first two parts of the proposal are now referred to as: Renewable Resources for Federal Agencies; the third part of the proposal is referred to as the Public Renewables Partnership Tradable Renewable Certificate (TRC) Certification, Trading, Tracking and Marketing Program.

Under the Renewable Resources for Federal Agencies Program effort, Western is working collaboratively with the Federal Energy Management Program (FEMP) in offering renewable resources opportunities to Federal agencies. Two renewable resource options are offered. They are: renewable energy certificates and renewable energy.

Presently, Western and FEMP have performed marketing and outreach activities to help Federal agencies understand these opportunities and to make decisions regarding their interest. Western and FEMP continue to market the program to Federal agencies, including the Department of Defense, and expect to issue more requests for proposals to acquire renewable resources in the future. All costs associated with renewable resource purchases are passed on to the Federal agencies participating in the program.

Under the Public Renewables Partnership TRC Certification, Trading, Tracking and Marketing Program effort, Western has established a consumer-owned utility working group that includes representatives from the National Rural Electric Cooperative Association, the American Public Power Association, the Bonneville Power Administration, and several consumer-owned utilities across the United States. The goal of the program is to develop a consumer-owned utility TRC Certification, Trading, Tracking and Marketing approach in which all of the nation's 3000 consumer-owned utilities can participate and benefit. Western believes this program will encourage a national market for wholesale TRCs from consumer-owned power sources to be developed. The partners

supporting this program anticipate that TRCs from existing and potentially new renewable energy projects may be available for trading as soon as summer 2004.

## LIST OF APPENDICES



Note: Where appendices are extracted from other documents, the page numbers retain their original numbering sequence and not the appendix numbering of this document.

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# APPENDIX A

# SPILL PREVENTION CONTROL AND COUNTERMEASURE PLANS AND CERCLA TIER II REPORTS

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# SPILL PREVENTION CONTROL AND COUNTERMEASURE PLANS AND EPCRA TIER II REPORTINGOF THE WESTERN AREA POWER ADMINISTRATION CALENDAR YEAR 2003

| Facility Name | County | Tier II | SPCC | Revised 2003? | New SPCC |
|---|---|---|---|---|---|
| **Arizona** | | | | | |
| Davis Dam Substation | Mohave | | Yes | Yes | |
| Glenn Canyon Substation | Coconino | | Yes | Yes | |
| Liberty Substation | Maricopa | Yes | | | |
| Parker Dam Substation | La Paz | | Yes | Yes | |
| Phoenix Operations and Maintenance Facility | Maricopa | Yes | | | |
| Pinnacle Peak Substation | Maricopa | Yes | | | |
| Spook Hill Substation | Maricopa | | Yes | Yes | |
| **California**[1] | | | | | |
| Airport Substation | Shasta | | Yes | Yes | |
| Contra Costa # 1 Substation | Contra Costa | | Yes | Yes | |
| Contra Costa # 4 Substation | Contra Costa | | Yes | Yes | |
| Corning Substation | Tehama | | Yes | | |
| Elverta Maintenance Facility | Sacramento | | Yes | Yes | |
| Elverta Substation | Sacramento | | Yes | | |
| Folsom Substation | Sacramento | | Yes | Yes | |
| Keswick Substation | Shasta | | Yes | Yes | |
| Pleasant Valley Substation | Fresno | | Yes | | |
| Redding Maintenance Facility | Shasta | | Yes | Yes | |
| Roseville Substation | Placer | | Yes | Yes | |
| San Luis Gianelli Pumping Plant | Merced | | Yes | | |
| Shasta Substation | Shasta | | Yes | | |
| Tracy Substation & Maintenance Facility | Alameda | | Yes | Yes | |
| Wintu Substation | Shasta | | Yes | | |
| **Colorado** | | | | | |
| Ault Substation | Weld | Yes | | | |
| Bears Ears Substation | Moffat | Yes | | | |
| Blue Mesa Substation | Gunnison | Yes | Yes | | |
| Brighton Substation | Weld | Yes | | | |
| Brush Maintenance Office and Beaver Creek Substation | Morgan | Yes | | | |
| Brush Substation | Morgan | Yes | | | |
| Curecanti Substation | Montrose | Yes | Yes | | |
| Derby Hill Substation | Larimer | Yes | | | |
| Dove Creek Pumping Plant Substation | Dolores | Yes | | | |
| Estes Substation | Larimer | Yes | Yes | Yes | |
| Flatiron Substation | Larimer | Yes | Yes | Yes | |
| Fleming Substation | Logan | Yes | Yes | Yes | |
| Fort Morgan West Substation | Morgan | Yes | | | |
| Frenchman Creek Substation | Phillips | Yes | Yes | Yes | |

[1] SPCC Plans are included in Business Plans required by the State of California.

| Facility Name | County | Tier II | SPCC | Revised 2003? | New SPCC |
|---|---|---|---|---|---|
| Granby (Farr) Pumping Plant Switchyard | Grand | Yes | Yes | Yes | |
| Granby Substation | Grand | Yes | | | |
| Great Cut Pumping Plant Substation | Montezuma | Yes | Yes | | |
| Gunnison (City of Gunnison) Substation | Gunnison | Site transferred to City of Gunnison in 2003 | | | |
| Haxtun Substation | Phillips | Yes | | | |
| Hayden Substation | Routt | Yes | | | |
| Holyoke Substation | Phillips | Yes | | | |
| Hoyt Substation | Morgan | Yes | | | |
| Hygiene Substation | Boulder | Yes | | | |
| Julesburg Substation | Sedgwick | Yes | | | |
| Kiowa Creek Substation | Morgan | Yes | | | |
| Kremmling Substation | Grand | Yes | | | |
| Limon Substation | Lincoln | Yes | | | |
| Mary's Lake Substation | Larimer | Yes | | | |
| Midway Substation | El Paso | Yes | | | |
| Montrose Craft Training Center | Montrose | Yes | Yes | | |
| Montrose Maintenance Office | Montrose | Yes | Yes | Yes | |
| Nunn Substation | Weld | Yes | | | |
| Pole Hill Substation | Larimer | Yes | Yes | Yes | |
| Poncha Springs Substation | Chaffee | Yes | Yes | | |
| Poudre Substation | Larimer | Yes | Yes | | |
| Prospect Valley Substation | Weld | Yes | | | |
| Rifle Substation | Garfield | Yes | Yes | | |
| Rocky Mountain Region Power Marketing and Control Center | Larimer | Yes | Yes | Yes | |
| Salida Substation | Chaffee | Yes | | | |
| Sterling Substation | Logan | Yes | Yes | | |
| Wauneta Substation | Yuma | Yes | | | |
| Weld Substation | Weld | Yes | Yes | | |
| Wiggins Substation | Morgan | Yes | | | |
| Willow Creek Pumping Plant Switchyard | Grand | Yes | Yes | Yes | |
| Woodrow Substation | Washington | Yes | | | |
| Wray Substation | Yuma | Yes | | | |
| **Iowa** | | | | | |
| Dennison Substation | Crawford | Yes | Yes | | |
| Sioux City (230 kV yard) Substation | Plymouth | Yes | Yes | | |
| Sioux City (345 kV yard) Substation | Plymouth | Yes | Yes | | |
| Spencer Substation | Clay | Yes | Yes | | |
| **Minnesota** | | | | | |
| Granite Falls Substation | Chippewa | Yes | Yes | | |
| Morris Substation | Stevens | Yes | Yes | | |

| Facility Name | County | Tier II | SPCC | Revised 2003? | New SPCC |
|---|---|---|---|---|---|
| **Montana** | | | | | |
| Bole Substation | Teton | Yes | Yes | | |
| Circle Substation | McCone | Yes | Yes | | |
| Conrad Substation | Ponder | Yes | Yes | | |
| Crossover Substation | Big Horn | Yes | Yes | | |
| Custer Substation | Yellowstone | Yes | Yes | | |
| Dawson County Substation | Dawson | Yes | Yes | | |
| Fallon Pump | Prairie | | Yes | | |
| Fallon Relift | Prairie | | Yes | | |
| Frazer Substation | Valley | | Yes | | |
| Glendive Substation | Dawson | Yes | Yes | | |
| Glendive Pump 1 | Prairie | Yes | Yes | | |
| Glendive Pump 2 | Prairie | | Yes | | |
| Havre Substation | Hill | Yes | Yes | | |
| Miles City 1 Substation | Custer | Yes | Yes | | |
| Miles City 2 Substation | Custer | Yes | Yes | | |
| Miles City 4 Substation (Miles City Converter) | Custer | Yes | Yes | | |
| O'Fallon Creek Substation | Prairie | Yes | Yes | | |
| Rainbow Substation | Cascade | Yes | Yes | | |
| Richland Substation | Richland | Yes | Yes | | |
| Rudyard Substation | Hill | Yes | Yes | | |
| Savage Substation | Richland | | Yes | | |
| Savage Pump | Richland | | Yes | | |
| Shelby Substation | Toole | Yes | Yes | | |
| Shelby Substation #2 | Toole | Yes | Yes | | |
| Shirley Substation | Custer | Yes | Yes | | |
| Terry Pump | Prairie | | Yes | | |
| Terry Tap | Prairie | | Yes | | |
| Tiber Dam Substation | Liberty | Yes | Yes | | |
| Valley Pump Substation | Valley | | Yes | | |
| Whately Substation | Valley | Yes | Yes | | |
| Wolf Point Substation | Roosevelt | Yes | Yes | | |
| Yellowtail Substation | Big Horn | Yes | Yes | Yes | |
| **Nebraska** | | | | | |
| Alliance Substation | Box Butte | Yes | | | |
| Bridgeport Substation | Morrill | Yes | Yes | | |
| Chadron Substation | Dawes | Yes | | | |
| Chappell Substation | Deuel | Yes | | | |
| Dunlap Substation | Dawes | Yes | | | |
| Gering Substation and Maintenance Facility | Scotts Bluff | Yes | Yes | | |
| Grand Island Substation | Merrick | Yes | Yes | | |
| Kimball Substation | Kimball | Yes | | | |
| Ogallala Substation | Keith | Yes | | | |

| Facility Name | County | Tier II | SPCC | Revised 2003? | New SPCC |
|---|---|---|---|---|---|
| Sidney Substation | Cheyenne | Yes | | | |
| Stegall Substation | Scotts Bluff | Yes | | | |
| Virginia Smith Converter Station | Cheyenne | Yes | | | |
| **New Mexico** | | | | | |
| Shiprock Substation | San Juan | Yes | | | Yes |
| Waterflow Substation | San Juan | Yes | Yes | | |
| **Nevada** | | | | | |
| Amargosa Substation | Clark | | Yes | Yes | |
| Mead Substation | Clark | Yes | | | |
| **North Dakota** | | | | | |
| Belfield Substation | Stark | Yes | Yes | | |
| Bisbee Substation | Towner | Yes | Yes | | |
| Bismarck Substation | Burleigh | Yes | Yes | | |
| Buford-Trenton Substation | Williams | Yes | Yes | | |
| Carrington Substation | Foster | Yes | Yes | | |
| Custer Trail Substation | Morton | Yes | Yes | | |
| DeVaul Substation | Grant | Yes | Yes | | |
| Devil's Lake Substation | Ramsey | Yes | Yes | | |
| Edgeley Substation | LaMoure | Yes | Yes | | |
| Fargo Substation | Cass | Yes | Yes | | |
| Foreman Substation | Sargent | Yes | Yes | | |
| Killdeer Substation | Dunn | Yes | Yes | | |
| Jamestown Substation | Stutsman | Yes | Yes | | |
| Lakota Substation | Nelson | Yes | Yes | | |
| Leeds Substation | Benson | Yes | Yes | | |
| Rolla Substation | Rolette | Yes | Yes | | |
| Rugby Substation | Pierce | Yes | Yes | | |
| Snake Creek Substation | McLean | Yes | Yes | | |
| Valley City Substation | Barnes | Yes | Yes | | |
| Washburn Substation | McLean | Yes | Yes | | |
| Watford Substation | McKenzie | Yes | Yes | | |
| Williston Substation | Williams | Yes | Yes | | |
| **South Dakota** | | | | | |
| Armour Substation | Charles-Mix | Yes | Yes | | |
| Beresford Substation | Union | Yes | Yes | | |
| Bonesteel Substation | Gregory | Yes | Yes | | |
| Brookings Substation | Brookings | Yes | Yes | | |
| Creston Substation | Union | Yes | Yes | | |
| Eagle Butte Substation | Ziebach | Yes | Yes | | |
| Ellsworth Air Force Base Substation | Rapid City | Yes | Yes | | |
| Faith Substation | Meade | Yes | Yes | | |
| Flandreau Substation | Moody | Yes | Yes | | |
| Fort Thompson Substation | Buffalo | Yes | Yes | | |
| Gregory Substation | Gregory | Yes | Yes | | |
| Groton Substation | Brown | Yes | Yes | | |

| Facility Name | County | Tier II | SPCC | Revised 2003? | New SPCC |
|---|---|---|---|---|---|
| Huron Substation | Beadle | Yes | Yes | | |
| Irv Simmons Substation | Stanley | | Yes | | |
| Martin Substation | Bennett | Yes | Yes | | |
| Maurine Substation | Meade | Yes | Yes | | |
| Midland Substation | Haakon | Yes | Yes | | |
| Mission Substation | Todd | Yes | Yes | | |
| Mount Vernon Substation | Davison | Yes | Yes | | |
| Newell Substation | Meade | Yes | Yes | | |
| New Underwood Substation | Pennington | Yes | Yes | | |
| Philip Substation | Haakon | Yes | Yes | | |
| Pierre Substation | Hughes | Yes | Yes | | |
| Rapid City Substation | Pennington | Yes | Yes | | |
| Sioux Falls Substation | Minnehaha | Yes | Yes | | |
| Summit Substation | Roberts | Yes | Yes | | |
| Tyndall Substation | Bon Homme | Yes | Yes | | |
| Wall Substation | Pennington | Yes | Yes | | |
| Watertown Maintenance Facility | Codington | Yes | Yes | | |
| Watertown PCB Storage | Codington | | Yes | | |
| Watertown Substation | Codington | Yes | Yes | | |
| Watertown Substation (Static Variance) | Codington | | Yes | | |
| White Substation | Brookings | Yes | Yes | | |
| Wicksville Substation | Pennington | Yes | Yes | | |
| Winner Substation | Tripp | Yes | Yes | | |
| Witten Substation | Tripp | Yes | Yes | | |
| Woonsocket Substation | Jerauld | Yes | Yes | | |
| Yankton Substation | Yankton | Yes | Yes | | |
| **Utah** | | | | | |
| Flaming Gorge Switchyard | Daggett | Yes | Yes | | |
| Tyzack Substation | Uintah | Yes | Yes | | |
| Vernal Substation | Uintah | Yes | Yes | | |
| **Wyoming** | | | | | |
| Alcova Switchyard | Natrona | Yes | Yes | Yes | |
| Archer Substation | Laramie | Yes | | | |
| Badwater Substation | Fremont | Yes | Yes | Yes | |
| Basin Substation | Big Horn | Yes | | | |
| Boysen Substation | Fremont | Yes | | | |
| Casper Substation | Natrona | Yes | Yes | | |
| Cheyenne Substation | Laramie | Yes | | | |
| Copper Mountain Substation | Fremont | Yes | Yes | | |
| Garland Substation | Park | Yes | | | |
| Glendale Substation | Park | Yes | Yes | Yes | |
| Glendo Substation | Platte | Yes | Yes | | |
| Heart Mountain Substation | Park | Yes | Yes | Yes | |
| Lovell Substation | Big Horn | Yes | | | |

| Facility Name | County | Tier II | SPCC | Revised 2003? | New SPCC |
|---|---|---|---|---|---|
| Lingle Substation | Goshen | | Yes | Yes | |
| Limestone Substation | Platte | | Yes | | |
| Lusk Rural Substation | Niobrara | Yes | | | |
| Lusk Substation | Niobrara | Yes | Yes | Yes | |
| Medicine Bow Substation | Carbon | Yes | | | |
| Meeteetse Substation | Park | Yes | | | |
| Miracle Mile Substation | Carbon | Yes | | | |
| Muddy Ridge Substation | Fremont | Yes | | | |
| North Cody Substation | Park | Yes | | | |
| Pilot Butte Substation | Fremont | Yes | Yes | Yes | |
| Pinebluffs Substation | Laramie | Yes | | | |
| Raderville Substation | Natrona | Yes | | | |
| Ralston Substation | Park | Yes | | | |
| Spence Substation | Natrona | Yes | | | |
| Thermopolis Substation | Hot Springs | Yes | | | |
| Warren Air Force Substation | Laramie | Yes | | | |
| TOTAL | | 179 | 154 | 31 | 1 |

# APPENDIX B

# NATIONAL ENVIRONMENTAL POLICY ACT PLANNING SUMMARY FOR CALENDAR YEAR 2003

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# *Western Area Power Administration*

# *Annual National Environmental Policy Act Planning Summary for CY2003*

## 1.0 Status of Ongoing NEPA Compliance Activities

Western Area Power Administration (Western) continued to review activities for environmental impacts under the National Environmental Policy Act (NEPA) in 2003. Environmental planning activities fall under three categories: (1) Western projects, including maintenance and upgrades of Western's transmission lines and facilities, power marketing actions, and rate changes, (2) cooperating agency projects, where Western acts as a cooperating agency to review other Federal agency actions, and (3) work requested by public or private parties, such as power plant interconnections and use of Western's transmission towers for telecommunication systems.

As summarized in Table 1, Western completed 102 categorical exclusions (CX), five environmental assessments (EA), two environmental impact statements (EIS), and issued one record of decision (ROD) and four findings of no significant impact (FONSI). Western also had in progress an additional four EAs and five EISs. Four projects were placed on hold or suspended and one EA was cancelled.

**TABLE 1: SUMMARY OF NEPA ACTIONS**

| NEPA Action | Western Projects | Cooperating Agency Projects | Public or Private Proponent Projects | Total |
|---|---|---|---|---|
| CXs completed | 98 | | 4 | 102 |
| EAs completed | 2 | | 3 | 5 |
| EAs in progress | 3 | | 1 | 4 |
| EISs completed | 1 | | 1 | 2 |
| EISs in progress | | 4 | 1 | 5 |
| RODs issued | | | 1 | 1 |
| FONSIs issued | 2 | | 2 | 4 |
| EIS/EAs suspended or on hold | 3 | | 1 | 4 |
| EAs cancelled | 1 | | | 1 |

### *1.1 Western Activities*

Western conducts reviews for potential impact of its business activities on the environment. The majority of activities reviewed were categorically excluded from further NEPA documentation based on Subpart D of the Department of Energy NEPA Implementing Procedures (10 CFR 1021). The status of the EAs and EISs are listed here. A list of completed CXs is compiled in Attachment 1.

**Environmental Assessments:**

*Creek Crossing for Captain Jack-Olinda 500-kV Transmission Line (California-Oregon Transmission Project (COTP)) EA (DOE/EA-1353)*

- EA Determination signed November 2000.
- The EA placed on hold pending receipt of new information on alternate routing options (May 2001).
- The project was cancelled in 2003.

*Charlie Creek-Williston Fiber Optic Project, Overhead Ground Wire Installation (DOE/EA-1389) - $25,000 to complete*

- EA Determination signed March 20, 2001.
- Draft EA expected winter 2004.

*Sacramento Valley Right-of-Way Maintenance (DOE/EA-1395) - $45,000 to complete*

- EA Determination signed January 18, 2001.
- EA is on hold pending receipt of the Biological Opinion from the Fish and Wildlife Service.

*Wolf Point-Williston Transmission Line Project (DOE/EA-1401)*

- EA Determination signed July 24, 2001.
- Draft EA released January 22, 2003.
- EA approved August 25, 2003.
- FONSI and Floodplain Statement of Findings approved August 25, 2003.

*Havre-Rainbow Transmission Project (DOE/EA-1424) - $350,000 to complete*

- EA Determination signed December 2001.
- Draft EA suspended until alternate routes are determined.

*Headgate Rock-Blythe (formerly named Parker-Blythe No. 1), 161-kV Transmission Line Pole Replacement Project (DOE/EA-1427) - $15,000 to complete*

- EA Determination signed March 7, 2002.
- Draft EA released November 15, 2002.
- Notice of Floodplain Involvement issued May 12, 2003.
- EA completion pending.

*Cheyenne-Miracle Mile 115-kV Transmission Line Rebuild Project (DOE/EA-1456) - $300,000 to complete*

- EA Determination signed September 30, 2002.
- Notice of Floodplain/Wetland Involvement issued April 28, 2003.
- EA on hold pending review of a project technical approach.

*Phase II Modifications and Construction of Transmission Lines for the Hoover Dam Bypass Project (DOE/EA-1478)*

- EA Determination signed March 4, 2003.
- Draft EA released June 10, 2003.
- EA and FONSI approved October 27, 2003.

*Parker-Gila 161-kV Transmission Line Relocation (Quartzsite) (DOE/EA-1487) - $75,000 to complete*

- BLM and Town of Quartzsite are cooperating agencies.
- EA Determination approved November 20, 2003.
- Public scoping meeting held December 16, 2003, in Quartzsite, Arizona.
- EA draft expected summer 2004.

**Environmental Impact Statements:**

*Sacramento Voltage Support (DOE/EIS-0323)*

- EIS Determination approved August 8, 2000.
- Notice of Intent to Prepare an EIS published August 8, 2000.
- Public scoping meetings held September 12-21, 2000, in Folsom, Lodi, and Marysville, California.
- Public workshops held March 22 and September 19, 2001, in Folsom, California.
- Draft EIS Notice of Availability published November 15, 2002.

- Public Hearings held December 9-12, 2002, in Lodi, Folsom, and Marysville, California.
- Final EIS Notice of Availability published September 19, 2003.
- Record of Decision published January 12, 2004.

### *1.2 Cooperating Agency Projects*

Western routinely participates in other agency EAs and EISs that address proposals with the potential to affect hydropower generation or Western's transmission system. Western's participation in these projects helps to ensure that the effects on hydropower generation or Western's transmission system are adequately reviewed and presented in these documents. In 2003, Western participated in the following EISs as cooperating agencies:

*Platte River Cooperative Agreement on Endangered Species Programmatic EIS (DOE/EIS-0295)*

The U.S. Fish and Wildlife Service (USFWS) and the Bureau of Reclamation are preparing an EIS on the Platte River Cooperative Agreement on Endangered Species with the states of Colorado, Wyoming, and Nebraska. Western's Rocky Mountain Region is a cooperating agency. The Draft Programmatic EIS is scheduled for public distribution in late January 2004.

*Flaming Gorge Dam Operations EIS (DOE/EIS-0351)*

Western's Colorado River Storage Project Management Center is a cooperating agency in the Bureau of Reclamation EIS on operating the Flaming Gorge Dam to achieve the flows recommended by the Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin. Western was invited to be a cooperating agency, along with eight other Federal and state agencies. The project has been delayed by several months for data collection needs and hydrological modeling. The Draft EIS is scheduled for public review in March 2004.

*Missouri River Master Manual EIS*

Western's Upper Great Plains Region was named by the U.S. Army Corps of Engineers as a cooperating agency for an EIS for operation of the dams on the Missouri River. The Revised Draft EIS was published in 2001. Western has participated in public meetings

held throughout the Missouri River Basin. The Final EIS is now scheduled to be published in March 2004. The USFWS re-issued its 2000 Biological Opinion with a 2003 Amendment on December 16, 2003.

*Boulder City Bypass*

The Federal Highway Administration (FHWA) is preparing an EIS (FHWA-NV-EIS-00-02-D) for rerouting of U.S. Highway 95 around Boulder City, Nevada. Western's Desert Southwest Region was named by the FHWA as a cooperating agency. The project would require modifications to Western's system. The Draft EIS was released on March 15, 2002. The Final EIS is expected to be released in February 2004.

### *1.3 Public/Private Proponent Projects*

Western has been approached by both public and private entities (applicants) for use of Western's transmission system, primarily for the interconnection of new power plants. Western worked on eight of these projects in 2003, completing three EAs and one EIS and issuing one ROD and two FONSIs. All the projects listed here were funded by the applicants. The status of these projects is listed below.

**Environmental Assessments:**

*East Altamont Energy Center (DOE/EA-1411)*

- Joint review with the California Energy Commission (CEC).
- EA Determination signed September 20, 2001.
- Public scoping meeting held November 14, 2001, in Tracy, California.
- EA approved September 19, 2002.
- EA errata issued on March 7, 2003, due to changes in the project as a result of the CEC process.
- Draft FONSI issued March 7, 2003. Issuance of the Final FONSI is anticipated for February 2004.

*Edgeley Wind Energy Project (DOE/EA-1465)*

- EA Determination signed December 5, 2002.
- Draft EA released March 3, 2003.
- EA approval April 15, 2003.
- FONSI signed April 15, 2003.

*Harry Allen-Mead 50-kV Transmission Line Project (DOE/EA-1470)*

- Bureau of Land Management (BLM) is the lead agency; Western is a cooperating agency.
- EA Determination signed January 22, 2002.
- Public scoping meeting held April 2, 2003.
- EA draft expected spring 2004.

*Exira Station Project (DOE/EA-1474)*

- EA Determination signed April 15, 2003.
- Draft EA released June 9, 2003.
- EA approved July 18, 2003.
- FONSI signed July 18, 2003.

**Environmental Impact Statements:**

*Big Sandy Energy Project EIS (DOE/EIS-0315)*

- EIS Determination signed March 3, 2000.
- Notice of Intent to Prepare an EIS published April 18, 2000.
- Public scoping held May 3, 2000.
- Additional public information meeting held August 29, 2000.
- Draft EIS Notice of Availability published June 22, 2001.
- SA Determination signed October 31, 2001.
- Supplemental Draft EIS Determination signed December 28, 2001.
- Project is on hold pending further project review.

*Ivanpah Energy Center EIS (230-kV Transmission Line Interconnection into Mead Substation) (DOE/EIS-0354)*

- BLM is the lead agency; a cooperating agency agreement was signed October 11, 2002.
- Notice of Intent to Prepare an EIS published February 15, 2002.
- EIS Determination signed February 15, 2002.
- Public scoping held March 5-7, 2002, in Good Springs, Las Vegas, and Sandy Valley, Nevada.
- Draft EIS Notice of Availability published November 22, 2002.

- Public Hearings held December 10-12, 2002, in Good Springs, Las Vegas, and Sandy Valley, Nevada.
- Final EIS Notice of Availability published May 16, 2003.
- Western adopted the BLM EIS on May 28, 2003.
- BLM ROD signed October 23, 2003.
- Western's ROD signed November 18, 2003, and published November 26, 2003.
- Mitigation Action Plan expected to be issued in spring 2004.

*Wellton Mohawk Generating Facility Project (Power Plant) (DOE/EIS-0358)*

- Western is the lead agency; BLM and the Bureau of Reclamation are cooperating agencies.
- EIS Determination signed April 2, 2003.
- Notice of Intent to Prepare an EIS published May 19, 2003.
- Public scoping meetings held June 3-4, 2003, in Welton and Yuma, Arizona, respectively.
- Draft EIS expected in April, 2004.

## 2.0 Mitigation Action Plan Report

In 2003, Western issued Mitigation Action Plans for the Path 15 Transmission Line Upgrade Project in California, the Transmission Line Modifications for the Hoover Dam ByPass Project in Nevada, the Exira Station Project in Iowa, and the Wolf Point-Williston Transmission Line Rebuild Project in Montana and North Dakota.

All mitigation actions scheduled for implementation in 2003 for the Path 15 Upgrade Project have been implemented. A construction contract for the Path 15 Upgrade Project was awarded on May 27, 2003. Mitigation action monitoring will continue into 2004 and beyond as construction continues on Path 15.

Twenty-four (or 92 percent) out of 26 mitigation actions related to construction activities for the Hoover Dam ByPass project have been implemented. The construction contractor did not provide air quality and pollution discharge permits to Western's environmental office before the start of construction as stipulated in the Mitigation Action Plan. The construction contractor did secure the permits, as required by Western's Construction Standard on Environmental

Protection, Section 13, but no requirement was added to the construction contract to require that copies be provided to Western's environmental office. Future cross checking of the mitigation actions and construction contract specifications will help ensure that all mitigation actions are implemented.

Two mitigation measures were defined for the Exira Station Project Mitigation Action Plan. Each measure defined actions that needed to be implemented to avoid potentially significant impacts. All actions applicable to the construction of the Exira Project in 2003 have been implemented. Other mitigation actions will be monitored in 2004 as construction of the Exira Station continues.

Three mitigation measures were defined for the Wolf Point-Williston Transmission Line Rebuild to minimize impacts to water, biological, and cultural resources. A 10-mile segment of the transmission line was rebuilt in 2003. However, no sensitive water, biological, or cultural resources were present that required implementation of the mitigation actions defined for the project. The transmission line will be rebuilt by segment over several years. Prior to initiating construction activities for each segment, a review will be done to determine the mitigation actions that are applicable for each segment.

## 3.0 Future NEPA Actions

Table 2 summarizes Western's planned NEPA projects for 2004. In addition to the projects listed below, Western is currently reviewing the proposals from several private proponents for interconnection to its transmission system. These projects are not included in this list but may require environmental documentation in the near future if interconnections are determined feasible.

**TABLE 2: NEPA PROJECTS PLANNED FOR CALENDAR YEAR 2004**

| PROJECT | EIS | EA | NEPA COSTS |
|---|---|---|---|
| Durango Substation and 115-kV Transmission Line Project, Durango, Colorado. (A support facility for the Bureau of Reclamation's Anamas-La Plata Project.) | | ✓ | In preliminary design. Environmental costs are not estimated at this time. |
| Estes Park-Lyons 115-kV Transmission Line Reroute, Larimer County, Colorado. (A connected action to the Bureau of Reclamation's Windy Gap Firming Project, Western is cooperating agency.) | ✓ | | Cooperating Agency with the Bureau of Reclamation. |
| Windy Gap-Granby Pumping Plant Transmission Line Rebuild Project, Granby, Colorado. | | ✓ | $165,000 |
| Teneradora del Desierto Power Plant (Mexico) 500-kV Interconnection to North Gila Substation | ✓ | | $750,000 (applicant funded) |
| Redding Area Right-of-Way Management (California) | | ✓ | $500,000 |

## 4.0 Evaluation for Site-Wide EIS

Western owns, operates and maintains more than 17,000 miles of transmission lines, 52 manned facilities, and more than 260 electrical substations, and serves customers within a 1.3 million square mile area within 15 western states. Western's programs encompass power purchasing and wheeling, power marketing, and transmission system operation, maintenance, and construction. These programs are managed by four Regional Offices (Billings, Montana; Loveland, Colorado; Phoenix, Arizona; and Folsom, California) and the Colorado River Storage Project Management Center in Salt Lake City, Utah, and supported by Western's Corporate Services Office in Lakewood, Colorado. Because Western's programs are dispersed across such a wide geographical area, Western has determined that it is not practical to prepare one EIS addressing all of Western's programs and business practices.

## ATTACHMENT 1

## CATEGORICAL EXCLUSIONS COMPLETED IN CALENDAR YEAR 2003

| CATEGORICAL EXCLUSIONS | DATE |
|---|---|
| ***Colorado River Storage Project Management Center*** | |
| *No CX's were prepared for this office* | |
| ***Desert Southwest Region*** | |
| North Havasu Substation Project (Additional Facilities Associated with Citizens Communication Company's Proposed Kingman-Havasu Transmission Line Project) | 01/03 |
| Emergency Replacement of Structure 10/6 Tucson-Apache 115-kilovolt (kV) Transmission Line | 01/03 |
| Table Mesa Cell Point | 01/03 |
| Amargosa Substation Replacement of Electrical Equipment | 04/03 |
| Phoenix Substation Upgrade as Part of the South of Phoenix Project | 04/03 |
| Generator Building Replacement at the Hualapai Communication Site Hayden Peak in the Hualapai Mountains | 05/03 |
| Emergency Repair of 500-kV Conductor from Mead-Market Place | 07/03 |
| Siphon Drop Substation Installation of Communication and Metering Equipment | 08/03 |
| Harcuvar-Little Harquahala Hazard Saguaro Cacti Topping | 08/03 |
| Henderson-Mead #1 and #2 230-kV Transmission Line Southwest Gas Corporation Easement Outgrant | 09/03 |
| Glen Canyon Substation Vehicle Awning Cover Project | 09/03 |
| Upgrade of Water Transmission Line to Mead Sub to Improve Water Flow for the Fire Prevention System | 09/03 |
| Oracle-Tucson 115-kV Transmission Line Pole Relocation to Accommodate the Town of Oro Valley | 10/03 |
| Emergency Repair to 3-Pole Turning Structure, Saguaro–Tucson 115-kV Transmission Line | 11/03 |
| ***Rocky Mountain Region*** | |
| Kiowa Creek-Fort Morgan West Transmission Line Rebuild | 01/03 |
| Troublesome Substation Access Road Repairs | 01/03 |
| Beaver Creek to Brush Transmission Line Reconductoring | 02/03 |
| Curecanti-Rifle Repairs to Structure 58/1 | 03/03 |
| Bald Mountain to Flatiron Substation Digital Microwave Installation | 05/03 |
| Loveland Area Projects Transmission and Ancillary Services Rate Adjustment | 05/03 |
| Loveland Area Projects Firm Electric Rate Increase | 05/03 |
| Wray Substation Equipment Replacements | 06/03 |
| Julesburg Substation Control Building Replacement | 07/03 |
| Whiterock Substation Construction | 08/03 |
| Medicine Bow Automated Meter Reading Installations | 08/03 |
| Brush Tap to Fort Morgan Tap Transmission Line Reconductoring | 08/03 |
| Alcova-Miracle Mile East and West Transmission Line Pole Replacements | 08/03 |
| Shiprock-Four Corners 345-kV Terminations | 09/03 |
| Curecanti-Lost Canyon and Hesperus-Montrose Hydro-Ax Tree Removal | 10/03 |
| Richards Lake-Cobb Lake Fiber Optics Installation | 10/03 |
| Archer-Cheyenne Fiber Optics Installation Underground Portion Addition | 11/03 |
| Flatiron-Valley Structure 5/5 Replacement | 12/03 |
| Town of Lyons Interconnection | 12/03 |
| Estes-Pole Hill Structure 5/7 Replacement | 12/03 |
| Archer-Cheyenne Fiber Optics Installation | 12/03 |
| Curecanti-Crystal; Curecanti-Rifle & Blue Mesa-Skito Structure and Road Maintenance | 12/03 |

| CATEGORICAL EXCLUSIONS | DATE |
|---|---|
| ***Sierra Nevada Region*** (all actions on California) | |
| Cottonwood-Roseville 230-kV Transmission Line Tower(s) 157/5-159/3 & Roseville-Elverta, Roseville-Fiddyment Tower(s) 2/2-0/5 Updated Vegetation Management | 01/03 |
| Keswick-O'Banion, Olinda-O'Banion Towers 28/3-29/4 Vegetation Management | 02/03 |
| Shasta-Cottonwood #1 & #2 Towers 11/2-12/1 Vegetation Management | 02/03 |
| Keswick-O'Banion, Keswick -Olinda Towers 4/1-5/1 Vegetation Management | 02/03 |
| Keswick-O'Banion, Olinda-O'Banion Towers 17/2-17/3 & Olinda-Maxwell Towers 0/3-0/4 Vegetation Management | 02/03 |
| Sacramento Operations Center Vegetation Management | 02/03 |
| Elverta-Hurley #1 & #2 Towers 7/4-8/3 Vegetation Management | 02/03 |
| Folsom Substation Stage 03 KV9A Transformer Replacement | 02/03 |
| Access Road Maintenance at the Elverta Maintenance Facility and Substation | 3/03 |
| Collocate Sprint PCS Cellular Phone Transmitter on Structure 7/3 of the Elverta-Hurley 230-kV Transmission Line | 03/03 |
| Bureau of Reclamation Generator to Folsom Substation Vegetation Management | 04/03 |
| Olinda-Tracy (Transmission Agency of Northern California) Towers 11/3-12/4 Vegetation Management | 04/03 |
| Cottonwood-Roseville Towers 116/2-116/5 and 117/1-117/4 Vegetation Management | 04/03 |
| Elverta-Hurley, Hurley-Tracy #1 & #2 Towers 8/3: Hurley Substation Vegetation Management | 04/03 |
| Keswick-O'Banion, Olinda-O'Banion Towers 20/1-21/1 & Olinda-Maxwell Towers 3/2-4/1 Vegetation Management | 05/03 |
| Flynt Substation to PCWA Pump 12-kV Distribution Line Vegetation Management | 05/03 |
| Revised Vegetation and Access Road Management Captain Jack-Olinda 500-kV Transmission Line | 06/03 |
| Shasta-Cottonwood #1 & #2, Towers 20/1 - 20/4, Keswick-O'Banion, Keswick-Olinda Towers 13/1 - 13/4 Vegetation Management | 06/03 |
| Tracy 69-kV Transmission Line Replacement & Relocation | 07/03 |
| Captain Jack-Olinda Towers 287-294, 180-195, 325-236, 335-337, 447-459, and 531-535 Vegetation and Access Road Management | 08/03 |
| Vegetation Management on Keswick-Elverta-Olinda-Elverta 230-kV Transmission Line Towers 17/2-17/3 and Olinda-Tracy 500-kV Transmission Line Towers 0/3-0/4 | 08/03 |
| Hurley-Tracy #1 & #2 Towers 29/3-30/2 Vegetation Management | 09/03 |
| Hurley-Tracy Towers 11/2-11/4 Vegetation Management | 09/03 |
| Elverta-Hurley, Hurley-Tracy Towers 7/4-12/1 Vegetation Managemetn | 09/03 |
| Access Road to Captain Jack-Olinda Tower 428 Vegetation Management | 10/03 |
| Installation of Iron Perimeter Fence Sierra Nevada Folsom Facility | 09/03 |
| Clatrans-Highway Relocation/Improvement Project | 10/03 |
| Folsom-Nimbus Fiber Optics Installation | 11/03 |
| Keswick-Elverta, Olinda-Elverta 230-kV Transmission Line Towers 4/1-5/1 and Shasta-Cottonwood #1 and #2 230-kV Transmission Line Towers 11/1-12/1 | 11/04 |
| Cottonwood-Roseville Towers 157/5-159/3 & Roseville-Elverta, Roseville-Fiddyment Towers 0/5-2/1 Diamond Oaks Blvd., Roseville | 12/03 |
| Keswick-O'Banion, Olinda-O'Banion 230-kV Transmission Line Towers 28/3-30/1 and Olinda-Tracy 500-kV Transmission Line Towers 11/2-13/1 Vegetation Management | 12/03 |

| CATEGORICAL EXCLUSIONS | DATE |
|---|---|
| ***Upper Great Plains Region*** | |
| Moorehead Substation Public Service Project | 01/03 |
| Fargo Substation Foundation Replacement | 01/03 |
| Fargo-Moorehead 230-kV Fiber Optic Installation | 01/03 |
| Orchard Communication Site Road Expansion | 03/03 |
| Forman Substation Stage 04 Installation of Concrete Foundation and Grounding Systems | 03/03 |
| Bismarck Substation Stage 08 Foundation Replacement and Expansion of Grounding System | 03/03 |
| Groton Substation Stage 11 Foundation Replacement | 03/03 |
| West Fargo Maintenance Facility and Fargo Substation Drainage Repair and Asphalt Surfacing | 03/03 |
| Sioux City Substation and Maintenance Buildings Heating, Ventilating and Air Conditioning Replacement | 04/03 |
| Huron, Watertown and Sioux City Substations Asphalt Repair | 04/03 |
| Philip Substation Oil Containment Installation | 05/03 |
| Pick-Sloan Rate Increase for 2004 - Wholesale Power and Transmission | 05/03 |
| Oil Storage Tank Secondary Containment Installation in North Dakota, South Dakota and Iowa | 05/03 |
| Otumwa Regeneration Station Construction | 05/03 |
| Phase 4 (North Dakota and Minnesota) Over Head Ground Wire Fiber Optic Installation | 05/03 |
| Wicksville-Wall Fiber Optic Installation | 05/03 |
| Philip Substation Foundations Replacement | 05/03 |
| Aurora Substation Stage Addition | 06/03 |
| Transmission Tower Structure Protection North and South Dakota | 06/03 |
| Beresford Substation Stage 08 Construction | 07/03 |
| Valley City Substation Stage 07 Construction | 07/03 |
| Pierre Service Center Roof Repairs | 07/03 |
| Pierre Service Center Water and Sewer Line Upgrades | 07/03 |
| Pierre Service Center Fire Alarm System Upgrades | 07/03 |
| Creston and Spencer Equipment and Structure Painting | 07/03 |
| Whatley and Frazer Pump Substations Oil Containment Installation | 07/03 |
| Huron-Watertown 230-kV Over Head Ground Wire Fiber Optic Installation | 09/03 |
| Tiber Substation Construction | 09/03 |
| Devils Lake Maintenance Building and Substation Remodel | 09/03 |
| Armour Substation Foundation Replacement | 09/03 |
| Rapid City Service Center Remodel | 09/03 |
| Custer Substation Oil Containment Installation | 09/03 |
| Snake Creek Substation Oil Containment Installation | 09/03 |
| Creston and Sioux City Substations Foundation Replacement | 10/03 |
| Fort Thompson and Mount Vernon Substations Building Foundation Replacement | 10/03 |

# APPENDIX C

# STANDARD MITIGATIVE MEASURES FOR CONSTRUCTION, OPERATION, AND MAINTENANCE OF WESTERN FACILITIES

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## WESTERN AREA POWER ADMINISTRATION
## STANDARD MITIGATIVE PRACTICES

Mitigation Measures:

1. The contractor shall limit the movement of its crews and equipment to the right-of-way (ROW), including access routes. The contractor shall limit movement on the ROW so as to minimize damage to grazing land, crops, or property, and shall avoid marring the land.

2. When weather and ground conditions permit, the contractor shall obliterate all contractor-caused deep ruts that are hazardous to farming operations and to movement of equipment. Such ruts shall be leveled, filled, and graded, or otherwise eliminated in an approved manner. In hay meadows, alfalfa fields, pastures, and cultivated productive lands, ruts, scars, and compacted soils shall have the soil loosened and leveled by scarifying, harrowing, discing, or other approved methods. Damage to ditches, tile drains, terraces, roads, and other features of the land shall be corrected. Before final acceptance of the work in these agricultural areas, all ruts shall be obliterated, and all trails and areas that are hard-packed as a result of contractor operations shall be loosened, leveled, and reseeded. The land and facilities shall be restored as nearly as practicable to their original conditions.

3. Water bars or small terraces shall be constructed across all ROW and access roads on hillsides to prevent water erosion and to facilitate natural revegetation.

4. The contractor shall comply with all Federal, State, and local environmental laws, orders, and regulations. Prior to construction, all supervisory construction personnel and heavy equipment operators will be instructed on the protection of cultural and ecological resources.

5. The contractor shall exercise care to preserve the natural landscape and shall conduct its construction operations so as to prevent any unnecessary destruction, scarring, or

defacing of the natural surroundings in the vicinity of the work. Except where clearing is required for permanent works, approved construction roads, or excavation operations, all trees, native shrubbery, and vegetation shall be preserved and shall be protected from damage by the contractor's construction operations and equipment. The edges of clearings and cuts through tree, shrubbery, or other vegetation shall be irregularly shaped to soften the undesirable visual impact of straight lines. Where such clearing occurs in the Lake Mead National Recreation Area, the contractor shall consult with the on-site Park Representative.

6. On completion of the work, all work areas except access roads shall be scarified or left in a condition which will facilitate natural revegetation, provide for proper drainage, and prevent erosion. All destruction, scarring, damage, or defacing of the landscape resulting from the contractor's operations shall be repaired by the contractor.

7. Construction staging areas shall be located and arranged in a manner to preserve trees and vegetation to the maximum practicable extent. On abandonment, all storage and construction buildings, including concrete footings and slabs, and all construction materials and debris shall be removed from the site. The area shall be regraded as required so that all surfaces drain naturally, blend with the natural terrain, and are left in a condition that will facilitate natural revegetation, provide for proper drainage, and prevent erosion.

8. Borrow pits shall be excavated so that water will not collect and stand therein. Before being abandoned, the sides of borrow pits shall be brought to stable slopes, with slope intersections shaped to carry the natural contour of adjacent undisturbed terrain into the pit or borrow area giving a natural appearance. Waste piles shall be shaped to provide a natural appearance.

9. Construction activities shall be performed by methods that will prevent entrance, or accidental spillage, of solid matter contaminants, debris, any other objectionable pollutants and wastes into streams, flowing or dry watercourses, lakes, and underground water sources. Such pollutants and waste include, but are not restricted to refuse,

garbage, cement, concrete, sanitary waste, industrial waste, radioactive substances, oil and other petroleum products, aggregate processing tailing, mineral salts, and thermal pollution.

10. Dewatering work for structure foundations or earthwork operations adjacent to, or encroaching on, streams or watercourses, shall be conducted in a manner to prevent muddy water and eroded materials from entering the streams or watercourses by construction of intercepting ditches, bypass channels, barriers, settling ponds, or by other approved means.

11. Excavated material or other construction materials shall not be stockpiled or deposited near or on stream banks, lake shorelines, or other watercourse perimeters where they can be wasted away by high water or storm runoff or can in any way encroach upon the actual watercourse itself.

12. Waste waters from concrete batching, or other construction operations shall not enter streams, watercourses, or other surface waters without the use of such turbidity control methods as settling ponds, gravel-filter entrapment dikes, approved flocculating processes that are not harmful to fish, recirculation systems for washing of aggregates, or other approved methods. Any such waste waters discharged into surface waters shall be essentially free of settleable material. For the purpose of these specifications, settleable material as defined as that material which will settle from the water by gravity during a 1-hour quiescent detention period.

13. The contractor shall utilize such practicable methods and devices as are reasonably available to control, present, and otherwise minimize atmospheric emissions or discharges of air contaminants.

14. The emission of dust into the atmosphere will not be permitted during the manufacture, handling, and storage of concrete aggregate, and the contractor shall use such methods and equipment as necessary for the collection and disposal, or prevention, of dust during

these operations. The contractor's methods of storing and handling cement and pozzolans shall also include means of eliminating atmospheric discharges of dust.

15. Equipment and vehicles that show excessive emissions of exhaust gases due to poor engine adjustments, or other inefficient operating conditions, shall not be operated until repairs or adjustments are made.

16. The contractor shall prevent any nuisance to persons or damage to crops, cultivated fields, and dwellings from dust originating from his operations. Oil and other petroleum derivatives shall not be used for dust control. Speed limits shall be enforced, based on road conditions, to reduce dust problems.

17. To avoid nuisance conditions due to construction noise, all internal combustion engines used in connection with construction activity shall be fitted with an approved muffler and spark arrester.

18. Burning or burying waste materials on the ROW or at the construction site will be permitted if allowed by local regulations. The contractor shall remove all other waste materials from the construction area. All materials resulting from the contractor's clearing operations shall be removed from the ROW.

19. The contractor shall make all necessary provisions in conformance with safety requirements for maintaining the flow of public traffic and shall conduct its construction operations to offer the least possible obstruction and inconvenience to public traffic.

20. Western will apply necessary mitigation to eliminate problems of induced currents and voltages onto conductive objects sharing a ROW, to the mutual satisfaction to the parties involved.

21. Structures will be carefully located to avoid sensitive vegetative conditions, including wetlands, where practical.

22. ROW will be located to avoid sensitive vegetation conditions including wetlands where practical, or, if they are linear to cross them at the least sensitive feasible point.

23. Removal of vegetation will be minimized to avoid creating a swath along the ROW.

24. Topsoil will be removed, stockpiled, and respread at all heavily disturbed areas not needed for maintenance access.

25. All disturbed areas not needed for maintenance access will be reseeded using mixes approved by the landowner or land management agency.

26. Erosion control measures will be implemented on disturbed areas, including areas that must be used for maintenance operations (access ways and areas around structures).

27. The minimum area will be used for access ways (12 feet to 15 feet wide, except where roadless construction is used).

28. Structures will be located and designed to conform with the terrain. Leveling and benching of the structure sites will be the minimum necessary to allow structure assembly and erection.

29. ROW will be located to utilize the least steep terrain and, therefore, to disturb the smallest area feasible.

30. Careful structure location will ensure spanning of narrow flood prone areas.

31. Structures will not be sited on any potentially active faults.

32. Structure sites and other disturbed areas will be located at least 300 feet, where practical, from rivers, streams (including ephemeral streams), ponds, lakes, and reservoirs.

33. New access ways will be located at least 300 feet, where practical, from rivers, ponds, lakes, and reservoirs.

34. At crossings of perennial streams by new access ways, culverts of adequate size to accommodate the estimated peak flow of the stream will be installed. Construction areas will minimize disturbance of the stream banks and beds during construction. The mitigation measures listed for soil/vegetation resources will be performed on areas disturbed during culvert construction.

35. If the banks of ephemeral stream crossings are sufficiently high and steep that breaking them down for a crossing would cause excessive disturbance, culverts will be installed using the same measures as for culverts on perennial streams.

36. Blasting will not be allowed.

37. Power line structures will be located, where practical, to span small occurrences of sensitive land uses, such as cultivated areas. Where practicable, construction access ways will be located to avoid sensitive conditions.

38. ROW will be purchased at fair market value and payment will be made of full value for crop damages or other property damage during construction or maintenance.

39. The Power line will be designed to minimize noise and other effects from energized conductors.

40. The precise location of all structure sites, ROW, and other disturbed areas will be determined in cooperation with landowners or land management agencies.

41. Crossing of operating railroads by construction vehicles or equipment in a manner that would cause delays to railroad operations will be avoided. Construction will be coordinated with railroad operators. Conductors and overhead wire string operations would use guard structures to eliminate delays.

42. Before construction, Western will perform a Class III (100 percent of surface) cultural survey on all areas to be disturbed, including structure sites and new access ways. These surveys will be coordinated with the appropriate land owner or land management

agency. A product of the survey will be a Cultural Resources Report recording findings and suggesting mitigation measures. These findings will be reviewed with the State Historic Preservation Offices and other appropriate agencies, and specific mitigation measures necessary for each site or resource will be determined. Mitigation may include careful relocation of access ways, structure sites, and other disturbed areas to avoid cultural sites that should not be disturbed, or data recovery.

43. The contractor will be informed of the need to cease work in the location if cultural resource items are discovered.

44. Construction activities will be monitored or sites flagged to prevent inadvertent destruction of any cultural resource for which the agreed mitigation was avoidance.

45. Construction crews will be monitored to the extent possible to prevent vandalism or unauthorized removal or disturbance of cultural artifacts or materials from sites where the agreed mitigation was avoidance.

46. Should any cultural resources that were not discovered during the Class III Survey be encountered during construction, ground disturbance activities at that location will be suspended until the provisions of the National Historic Preservation Act and enabling legislation have been carried out.

47. Construction activities will be monitored or significant locations flagged to prevent inadvertent destruction of any paleontological resource for which the agreed mitigation was avoidance.

48. Clearing for the access road will be limited to only those trees necessary to permit the passage of equipment.

49. The access road will follow the lay of the land rather than a straight line along the ROW where steep features would result in a higher disturbance.

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# APPENDIX D

# ENVIRONMENTAL CONSTRUCTION STANDARDS

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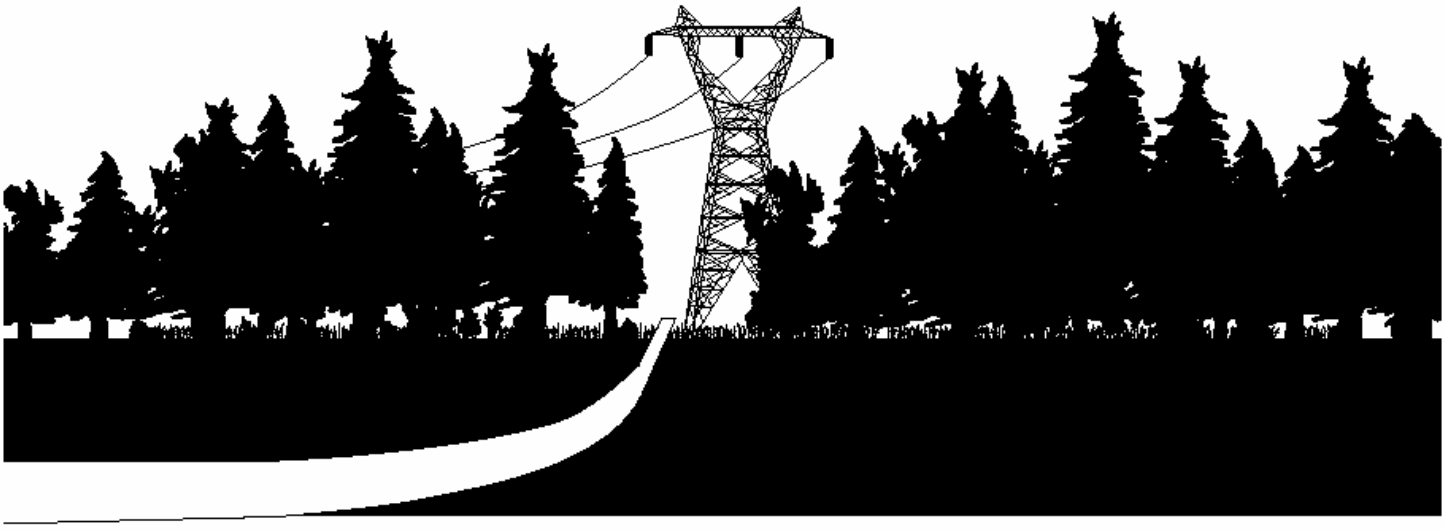
Western
AREA POWER
ADMINISTRATION

# CONSTRUCTION STANDARDS

## STANDARD 13

## ENVIRONMENTAL QUALITY PROTECTION



**June 2003**

SAFETY
A HABIT TO LIVE BY

**STANDARD 13 - ENVIRONMENTAL QUALITY PROTECTION**

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**STANDARD 13 - ENVIRONMENTAL QUALITY PROTECTION**

## STANDARD 13 - ENVIRONMENTAL QUALITY PROTECTION

### SECTION 13.1--CONTRACTOR FURNISHED DATA

1. RECYCLED MATERIAL QUANTITY REPORT: Submit quantities for recycled material listed in Section 13.6, "Recycled Material Quantities", to the COR after completion and prior to submittal of final invoice.

2. PRODUCTS CONTAINING RECOVERED MATERIAL REPORT: Provide the COR the following information for purchases of items listed in Section 13.7, "Use of Products Containing Recovered Material":

   (1) Quantity and cost of listed items with recovered material content and quantity and cost of listed items without recovered material content after completion and prior to submittal of final invoice.

   (2) Written justification 7 days prior to purchase of listed items if recovered material content products are not available: 1) competitively within a reasonable time frame; 2) that meet performance criteria defined in the Standards or Project Specifications; or 3) at a reasonable price.

3. RECLAIMED REFRIGERANT RECEIPT: A receipt from the reclaimer stating that the refrigerant was reclaimed, the amount and type of refrigerant, and the date shall be submitted to the COR after completion and prior to submittal of final invoice in accordance with Section 13.8.5, “Refrigerants And Receipts”.

4. WASTE MATERIAL QUANTITY REPORT: Submit quantities of total project waste material disposal as listed below to the COR after completion and prior to submittal of final invoice in accordance with Section 13.8.8, “Waste Material Quantity Report”.

   (1) Sanitary Wastes: Volume in cubic yards or weight in pounds.

   (2) Hazardous or Universal Wastes: Weight in pounds.

   (3) PCB Wastes: Weight in pounds.

   (4) Other regulated wastes (e.g., lead-based paint or asbestos): Weight in pounds (specify type of waste in report).

5. SPILL PREVENTION NOTIFICATION AND CLEANUP PLAN (Plan): Submit the Plan as described in Section 13.10.2, "Spill Prevention Notification and Cleanup Plan”, to the COR for approval 14 days prior to start of work. Approval of the Plan is for the purpose of determining compliance with the specifications only and shall not relieve the Contractor of the responsibility for compliance with all Federal, State, and Local regulations.

6. TANKER OIL SPILL PREVENTION AND RESPONSE PLAN: Submit the Plan as described in Section 13.10.3, "Tanker Oil Spill Prevention and Response Plan”, to the COR for approval 14 days prior to start of work. Approval of the Plan is for the purpose of determining compliance with the specifications only and shall not relieve the Contractor of the responsibility for compliance with all Federal, State, and Local regulations.

7. PESTICIDE USE PLAN: Submit one copy of a pesticide use plan as described in Section 13.11.3, “Pesticide Use Plan”, to the COR for approval 14 days prior to use. Approval of the plan is for the purpose of determining compliance with the specifications only and shall not relieve the Contractor of the responsibility for compliance with all Federal, State, and Local regulations. Within seven days

after application, submit a written report in accordance with Standard 2 – Sitework, Section 2.1.1.5, "Soil-Applied Herbicide".

8. TREATED WOOD POLE AND MEMBERS RECYCLING CONSUMER INFORMATION RECEIPT: Submit treated wood pole and members consumer receipt forms to the COR after completion and prior to submittal of final invoice (see 13.12, "Treated Wood Poles and Members Recycling or Disposal").

9. PREVENTION OF AIR POLLUTION: Submit a copy of permits, if required, from Federal, State, or local agencies to the COR 14 days prior to the start of work.

10. ASBESTOS LICENSES OR CERTIFICATIONS: Submit a copy of licenses and/or certifications for asbestos work as described in 13.14, "Handling and Management of Asbestos Containing Material" paragraph a., to the COR prior to work. Submit copies of certificates of disposal and/or receipts for waste to the COR after completion and prior to submittal of final invoice.

11. LEAD PAINT NOTICES: Submit a copy of lead paint notices as described in 13.15, "Material with Lead-based Paint" paragraph b., to the COR upon completion and prior to submittal of final invoice. Submit copies of certificates of disposal and/or receipts for waste to the COR after completion and prior to submittal of final invoice.

12. WATER POLLUTION PERMITS: Submit copies of any water pollution permits as described in 13.16, "Prevention of Water Pollution" paragraph b., to the COR prior to work.

13. PCB TEST REPORT: Submit a PCB test report as described in 13.17, "Testing, Draining, Removal, and Disposal of Oil-filled Electrical Equipment" paragraph b., prior to draining, removal, or disposal of oil or oil-filled equipment that is designated for disposal.

14. OIL AND OIL-FILLED ELECTRICAL EQUIPMENT RECEIPT: Obtain and submit a receipt for oil and oil-filled equipment transported and disposed, recycled, or reprocessed as described in 13.17, "Testing, Draining, Removal, and Disposal of Oil-filled Electrical Equipment", to the COR upon completion and prior to submittal of final invoice.

15. OSHA PCB TRAINING RECORDS: Submit employee training documentation records to the COR 14 days prior to the start of work as described in 13.18.1.

16. CLEANUP WORK MANAGEMENT PLAN: Submit a Cleanup Work Management Plan as described in 13.18, "Removal of Oil-contaminated Material" paragraph b., to the COR for approval 14 days prior to the start of work. Approval of the plan is for the purpose of determining compliance with the specifications only and shall not relieve the Contractor of the responsibility for compliance with all Federal, State, and Local regulations.

17. POST CLEANUP REPORT: Submit a Post-Cleanup Report as described in 13.18, "Removal of Oil-contaminated Material" paragraph g., to the COR upon completion and prior to submittal of final invoice.

**SECTION 13.2--ENVIRONMENTAL REQUIREMENTS**

Comply with Federal, State, and local environmental laws and regulations. The sections in this Standard further specify the requirements.

## SECTION 13.3--LANDSCAPE PRESERVATION

1. GENERAL: Preserve landscape features in accordance with the contract clause titled “Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements.”

2. CONSTRUCTION ROADS: Location, alignment, and grade of construction roads shall be subject to the COR's approval. When no longer required, construction roads shall be restored to their original condition. Surfaces of construction roads shall be scarified to facilitate natural revegetation, provide for proper drainage, and prevent erosion. If revegetation is required, then use regionally native plants.

3. CONSTRUCTION FACILITIES: Shop, office, and yard areas shall be located and arranged in a manner to preserve trees and vegetation to the maximum practicable extent and prevent impact on sensitive riparian areas and flood plains. Storage and construction buildings, including concrete footings and slabs, shall be removed from the site prior to contract completion. The area shall be regraded as required so that all surfaces drain naturally, blend with the natural terrain, and are left in a condition that will facilitate natural revegetation, provide for proper drainage, and prevent erosion. If revegetation is required, then use regionally native plants.

## SECTION 13.4--PRESERVATION OF CULTURAL AND PALEONTOLOGICAL RESOURCES

1. GENERAL: Do not remove or alter cultural artifacts or paleontological resources (fossils). Cultural artifacts are of potential scientific or cultural importance and include bones, tools, historic buildings, and features. Paleontological resources can be of scientific importance and include mineralized animals and plants or trace fossils such as footprints. Both cultural and paleontological resources are protected by Federal Regulations during Federal construction projects.

2. KNOWN CULTURAL OR PALEONTOLOGICAL SITES: Following issuance of notice to proceed, Western will provide two sets of plan and profile drawings showing sensitive areas located on or immediately adjacent to the transmission line right-of-way and/or facility. These areas shall be considered avoidance areas. Prior to any construction activity, the avoidance areas shall be marked on the ground in a manner approved by the COR. Instruct employees, subcontractors, and others that vehicular or equipment access to these areas is prohibited. If access is absolutely necessary, first obtain approval from the COR. Ground markings shall be maintained throughout the duration of the contract. Western will remove the markings during or following final cleanup. For some project work, Western will require an archaeological, paleontological or tribal monitor at or near cultural or paleontological site locations. The contractor will work with the monitor to identify avoidance areas.

3. UNKNOWN CULTURAL OR PALEONTOLOGICAL SITES: On rare occasions cultural or paleontological sites may be discovered during excavation or other earth-moving activities.

   (1) Reporting: If evidence of a cultural or paleontological site is discovered, immediately notify the COR and give the location and nature of the findings. Stop all activities within a 50-foot radius of the discovery and do not proceed with work within that radius until directed to do so by the COR.

   (2) Care of Evidence: Do not damage artifacts or fossils uncovered during construction.

4. CONTRACT ADJUSTMENTS: Where appropriate by reason of delays caused by a discovery, the Contracting Officer may make adjustments to contract requirements.

## STANDARD 13 - ENVIRONMENTAL QUALITY PROTECTION

### SECTION 13.5--NOXIOUS WEED CONTROL

1. GENERAL: Comply with Federal, state, and local noxious weed control regulations. Provide a "clean vehicle policy" while entering and leaving construction areas to prevent transport of noxious weed plants and/or seed. Transport only construction vehicles that are free of mud and vegetation debris to staging areas and the project right-of-way.

### SECTION 13.6--RECYCLED MATERIAL QUANTITIES

1. GENERAL: Record quantities of the following material by category that is salvaged, recycled, reused, or reprocessed:

   (1) Transformers, Breakers: Weight without oil.

   (2) Electrical Conductors: Length in feet and Type (for example, ACSR, Copper, and gauge).

   (3) Structural Steel: Weight in pounds or tons.

   (4) Aluminum Buswork: Weight in pounds or tons.

   (5) Other Metals: Weight in pounds or tons.

   (6) Oil: Gallons (separate by type - less than 2 ppm PCB, 2 to 50 ppm PCB, and 50 or greater ppm PCB).

   (7) Gravel, Asphalt, Or Concrete: Weight in pounds or tons.

   (8) Batteries: Weight in pounds.

   (9) Wood Poles and Crossarms: Weight in pounds.

2. RECYCLED MATERIAL QUANTITY REPORT: Submit quantities for recycled material listed above to the COR after completion and prior to submittal of final invoice.

### SECTION 13.7--USE OF PRODUCTS CONTAINING RECOVERED MATERIAL

1. GENERAL: If the products listed below are obtained as part of this project, purchase the items with the highest recovered material content possible unless recovered material content products are not available: 1) competitively within a reasonable time frame; 2) that meet performance criteria defined in the Standards or Project Specifications; or 3) at a reasonable price.

   (1) Construction Products:

   - Building Insulation Products
   - Carpet
   - Carpet cushion
   - Cement and concrete containing coal fly ash or ground granulated blast furnace slag
   - Consolidated and reprocessed latex paint
   - Floor Tiles
   - Flowable fill
   - Laminated Paperboard
   - Patio Blocks
   - Railroad grade crossing surfaces
   - Shower and restroom dividers/partitions

- Structural Fiberboard

(2) Landscaping Products:

- Compost made from yard trimmings or food waste
- Garden and soaker hoses
- Hydraulic Mulch
- Lawn and garden edging
- Plastic lumber landscaping timbers and posts

(3) Non-paper Office Products:

- Binders, clipboards, file folders, clip portfolios, and presentation folders
- Office recycling containers
- Office waste receptacles
- Plastic desktop accessories
- Plastic envelopes
- Plastic trash bags
- Printer ribbons
- Toner cartridges

(4) Paper and Paper Products:

- Commercial/industrial sanitary tissue products
- Miscellaneous papers
- Newsprint
- Paperboard and packaging products
- Printing and writing papers

(5) Park and Recreation Products:

- Park benches and picnic tables
- Plastic fencing
- Playground equipment
- Playground surfaces
- Running tracks

(6) Transportation Products:

- Channelizers
- Delineators
- Flexible delineators
- Parking stops
- Traffic barricades
- Traffic cones

(7) Vehicular Products:

- Engine coolants
- Re-refined lubricating oils
- Retread tires

(8) Miscellaneous Products:

- Awards and plaques
- Industrial drums
- Manual-grade strapping
- Mats
- Pallets
- Signage
- Sorbents

(9) For a complete listing of products and recommendations for recovered content, see http://www.epa.gov/cpg/products.htm

2. PRODUCTS CONTAINING RECOVERED MATERIAL REPORT: Provide the COR the following information for purchases of those items listed above:

(1) Quantity and cost of listed items with recovered material content and quantity and cost of listed items without recovered material content after completion and prior to submittal of final invoice.

(2) Written justification 7 days prior to purchase of listed items if recovered material content products are not available: 1) competitively within a reasonable time frame; 2) that meet performance criteria defined in the Standards or Project Specifications; or 3) at a reasonable price.

**SECTION 13.8--DISPOSAL OF WASTE MATERIAL**

1. GENERAL: Dispose or recycle waste material in accordance with applicable Federal, State and Local regulations and ordinances. In addition to the requirements of the Contract Clause “Cleaning Up”, remove all waste material from the construction site. No waste shall be left on Western property, right-of-way, or easement. Burning or burying of waste material is not permitted.

2. HAZARDOUS, UNIVERSAL, AND NON-HAZARDOUS WASTES: Manage hazardous, universal, and non-hazardous wastes in accordance with State and Federal regulations.

3. USED OIL: Used oil generated from the Contractor activities shall be managed in accordance with used oil regulations.

4. RECYCLABLE MATERIAL: Reduce wastes, including excess Western material, by recycling, reusing, or reprocessing. Examples of recycling, reusing, or reprocessing include reprocessing of solvents; recycling cardboard; and salvaging scrap metals.

5. REFRIGERANTS AND RECEIPTS: Refrigerants from air conditioners, water coolers, refrigerators, ice machines and vehicles shall be reclaimed with certified equipment operated by certified technicians if the item is to be disposed. Refrigerants shall be reclaimed and not vented to the atmosphere. A receipt from the reclaimer stating that the refrigerant was reclaimed, the amount and type of refrigerant, and the date shall be submitted to the COR after completion and prior to submittal of final invoice.

6. HALONS: Equipment containing halons that must be tested, maintained, serviced, repaired, or disposed must be handled according to EPA requirements and by technicians trained according to those requirements.

7. SULFUR HEXAFLOURIDE (SF6): SF6 shall be reclaimed and not vented to the atmosphere.

8. WASTE MATERIAL QUANTITY REPORT: Submit quantities of total project waste material disposal as listed below to the COR after completion and prior to submittal of final invoice.

   (1) Sanitary Wastes: Volume in cubic yards or weight in pounds.

   (2) Hazardous or Universal Wastes: Weight in pounds.

   (3) PCB Wastes: Weight in pounds.

   (4) Other regulated wastes (e.g., lead-based paint or asbestos): Weight in pounds (specify type of waste in report).

**SECTION 13.9--CONTRACTOR'S LIABILITY FOR REGULATED MATERIAL INCIDENTS**

1. GENERAL: The Contractor is solely liable for all expenses related to spills, mishandling, or incidents of regulated material attributable to his actions or the actions of his subcontractors. This includes all response, investigation, cleanup, disposal, permitting, reporting, and requirements from applicable environmental regulation agencies.

2. SUPERVISION: The actions of the Contractor employees, agents, and subcontractors shall be properly managed at all times on Western property or while transporting Western's (or previously owned by Western) regulated material and equipment.

**SECTION 13.10--POLLUTANT SPILL PREVENTION, NOTIFICATION, AND CLEANUP**

1. GENERAL: Provide measures to prevent spills of pollutants and respond appropriately if a spill occurs. A pollutant includes any hazardous or non-hazardous substance that when spilled, will contaminate soil, surface water, or ground water. This includes any solvent, fuel, oil, paint, pesticide, engine coolants, and similar substances.

2. SPILL PREVENTION NOTIFICATION AND CLEANUP PLAN (Plan): Provide the Plan to the COR for approval 14 days prior to start of work. Approval of the plan is for the purpose of determining compliance with the specifications only and shall not relieve the Contractor of the responsibility for compliance with all Federal, State, and Local regulations. Include the following in the Plan:

   (1) Spill Prevention measures. Describe the work practices or precautions that will be used at the job site to prevent spills. These may include engineered or manufactured techniques such as installation of berms around fuel and oil tanks; Storage of fuels, paints, and other substances in spill proof containers; and management techniques such as requiring workers to handle material in certain ways.

   (2) Notification. Most States and the Environmental Protection Agency require by regulation, that anyone who spills certain types of pollutants in certain quantities notify them of the spill within a specific time period. Some of these agencies require written follow up reports and cleanup reports. Include in the Plan, the types of spills for which notification would be made, the agencies notified, the information the agency requires during the notification, and the telephone numbers for notification.

   (3) Employee Awareness Training. Describe employee awareness training procedures that will be implemented to ensure personnel are knowledgeable about the contents of the Plan and the need for notification.

   (4) Commitment of Manpower, Equipment and Material. Identify the arrangements made to respond to spills, including the commitment of manpower, equipment and material.

(5) If applicable, address all requirements of 40CFR112 pertaining to Spill Prevention, Control and Countermeasures Plans.

3. TANKER OIL SPILL PREVENTION AND RESPONSE PLAN: Provide a Tanker Oil Spill Prevention and Response Plan as required by the Department of Transportation if oil tankers with volume of 3,500 gallons or more are used as part of the project. Submit the Tanker Oil Spill Prevention and Response Plan to the COR for approval 14 days prior to start of work. Approval of the plan is for the purpose of determining compliance with the specifications only and shall not relieve the Contractor of the responsibility for compliance with all Federal, State, and Local regulations.

**SECTION 13.11--PESTICIDES**

1. GENERAL: The term "pesticide" includes herbicides, insecticides, rodenticides and fungicides. Pesticides shall only be used in accordance with their labeling.

2. ENVIRONMENTAL PROTECTION AGENCY REGISTRATION: Use EPA registered pesticides.

3. PESTICIDE USE PLAN: The plan shall contain: 1) a description of the pesticide to be used, 2) where it is to be applied, 3) the application rate, 4) a copy of the label, and 5) a copy of required applicator certifications. Submit two copies of the pesticide use plan to the COR for approval 30 days prior to the date of intended application. Approval of the plan is for the purpose of determining compliance with the specifications only and shall not relieve the Contractor of the responsibility for compliance with all Federal, State, and Local regulations. Within seven days after application, submit a written report in accordance with Standard 2 – Sitework, Section 2.1.1.5, "Soil-Applied Herbicide".

**SECTION 13.12--TREATED WOOD POLES AND MEMBERS RECYCLING OR DISPOSAL**

Whenever practicable, treated wood poles and members removed during the project shall be recycled or transferred to the public for some uses. Treated wood poles and members transferred to a recycler, landfill, or the public shall be accompanied by a written consumer information sheet on treated wood as provided by Western. Obtain a receipt form, part of the consumer information sheet, from the recipient indicating that they have received, read, and understand the consumer information sheet. Treated wood products transferred to right-of-way landowners shall be moved off the right-of-way. Treated wood product scrap or poles and members that cannot be donated or reused shall be properly disposed in a landfill that accepts treated wood and has signed Western's consumer information sheet receipt. Submit treated wood pole and members consumer receipt forms to the COR after completion and prior to submittal of final invoice.

**SECTION 13.13--PREVENTION OF AIR POLLUTION**

1. GENERAL: Ensure that construction activities and the operation of equipment are undertaken to reduce the emission of air pollutants. Submit a copy of permits, if required, from Federal, State, or local agencies to the COR 14 days prior to the start of work.

2. MACHINERY AIR EMISSIONS: The Contractor and subcontractor machinery shall have, and shall use the air emissions control devices required by Federal, State or Local Regulation or ordinance.

3. DUST ABATEMENT: Dust shall be controlled. Oil shall not be used as a dust suppressant. Dust suppressants shall be approved by the COR prior to use.

## SECTION 13.14--HANDLING AND MANAGEMENT OF ASBESTOS CONTAINING MATERIAL

1. GENERAL: Obtain the appropriate Federal, State or local licenses or certifications prior to disturbing any regulated asbestos-containing material. Submit a copy of licenses and/or certifications for asbestos work to the COR prior to work. Ensure: 1) worker and public safety requirements are fully implemented and 2) proper handling, transportation, and disposal of asbestos containing material.

2. TRANSPORTATION OF ASBESTOS WASTE: Comply with Department of Transportation, Environmental Protection Agency, and State and Local requirements when transporting asbestos wastes.

3. CERTIFICATES OF DISPOSAL AND RECEIPTS: Obtain certificate of disposals for waste if the waste is a hazardous waste or receipts if the waste is a non-hazardous waste. Submit copies to the COR after completion and prior to submittal of final invoice.

## SECTION 13.15--MATERIAL WITH LEAD-BASED PAINT

1. GENERAL: Comply with all applicable Federal, State and local regulations concerning work with lead-based paint, disposal of material painted with lead-based paint, and management of these material. OSHA and General Industry Standards apply to worker safety and right-to-know issues. Federal EPA and State agencies regulate waste disposal and air quality issues.

2. TRANSFER OF PROPERTY: If lead-based paint containing equipment or material is to be given away or sold for reuse, scrap, or reclaiming, a written notice shall be provided to the recipient of the material stating that the material contains lead-based paint and the Hazardous Waste regulations may apply to the waste or the paint in some circumstances. The new owner must also be notified that they may be responsible for compliance with OSHA requirements if the material is to be cut, sanded, abraded, or stripped of paint. Submit a copy of lead paint notices to the COR upon completion and prior to submittal of final invoice.

3. CERTIFICATES OF DISPOSAL AND RECEIPTS: Obtain certificate of disposals for waste if the waste is a hazardous waste or receipts if the waste is a non-hazardous waste. Submit copies to the COR after completion and prior to submittal of final invoice.

## SECTION 13.16--PREVENTION OF WATER POLLUTION

1. GENERAL: Ensure that surface and ground water is protected from pollution caused by construction activities and comply with applicable regulations and requirements.

2. PERMITS: Ensure that:

   (1) Streams, and other waterways or courses are not obstructed or impaired, unless the appropriate Federal, State or local permits have been obtained;

   (2) A National Pollutant Discharge Elimination System (NPDES) Permit for the Prevention of Stormwater Pollution from Construction Projects is obtained if required by State or Federal regulation; and

   (3) A dewatering permit is obtained from the appropriate agency if required for construction dewatering activities.

   (4) Submit copies of any water pollution permits to the COR prior to work.

3. EXCAVATED MATERIAL AND OTHER CONTAMINANT SOURCES: Control runoff from excavated areas and piles of excavated material, construction material or wastes (to include truck washing and concrete wastes), and chemical products such as oil, grease, solvents, fuels, pesticides, and pole treatment compounds. Excavated material or other construction material shall not be stockpiled or deposited near or on streambanks, lake shorelines, ditches, irrigation canals, or other areas where run-off could impact the environment.

4. MANAGEMENT OF WASTE CEMENT OR WASHING OF CEMENT TRUCKS: Do not permit the washing of cement trucks or disposal of excess cement in any ditch, canal, stream, or other surface water. Cement wastes shall be disposed in accordance with all Federal, State, and local regulations. Cement wastes shall not be disposed on any Western property, right-of-way, or easement; nor on any streets, roads, or property without the owner's consent.

5. STREAM CROSSINGS: Crossing of any stream or other waterway shall be done in compliance with Federal, State, and local regulations. Crossing of some waterways may be prohibited by landowners, State or Federal agencies or require permits.

**SECTION 13.17--TESTING, DRAINING, REMOVAL, AND DISPOSAL OF OIL-FILLED ELECTRICAL EQUIPMENT**

1. SAMPLING AND TESTING OF INSULATING OIL FOR PCB CONTENT: Sample and analyze the oil of electrical equipment for PCB's. Use analytical methods approved by EPA and applicable State regulations. Decontaminate sampling equipment according to documented good laboratory practices (these can be contractor developed or EPA standards). Use only laboratories approved by Western. The COR will furnish a list of approved laboratories.

2. PCB TEST REPORT: Provide PCB test reports that contain the information below for disposing of oil-filled electrical equipment. Submit the PCB test report prior to draining, removal, or disposal of oil or oil-filled equipment that is designated for disposal.

   - Name and address of the laboratory
   - Description of the electrical equipment (e.g. transformer, breaker)
   - Serial number for the electrical equipment.
   - Date sampled
   - Date tested
   - PCB contents in parts per million (ppm)
   - Unique identification number of container into which the oil was drained (i.e., number of drum, tank, tanker, etc.)

3. OIL CONTAINING PCB: Comply with the Federal regulations pertaining to PCBs found at Title 40, Part 761 of the U.S. Code of Federal Regulations (40 CFR 761).

4. REMOVAL AND DISPOSAL OF INSULATING OIL AND OIL-FILLED ELECTRICAL EQUIPMENT: Once the PCB content of the oil has been identified from laboratory results, the oil shall be transported and disposed, recycled, or reprocessed according to 40 CFR 761 (if applicable), Resource Conservation and Recovery Act (RCRA) "used oil", and other applicable regulations. Used oil may be transported only by EPA-registered used oil transporters. The oil must be stored in containers that are labeled "Used Oil." Use only U.S. transporters and disposal sites approved by Western.

5. OIL AND OIL-FILLED ELECTRICAL EQUIPMENT RECEIPT: Obtain and submit a receipt for oil and oil-filled equipment transported and disposed, recycled, or reprocessed to the COR upon completion and prior to submittal of final invoice.

## SECTION 13.18--REMOVAL OF OIL-CONTAMINATED MATERIAL

1. GENERAL: Removing oil-contaminated material includes excavating, stockpiling, testing, transporting, cleaning, and disposing of these material. Personnel working with PCBs shall be trained in accordance with OSHA requirements. Submit employee training documentation records to the COR 14 days prior to the start of work.

2. CLEANUP WORK MANAGEMENT PLAN: Provide a Cleanup Work Management Plan that has been approved by applicable Federal, State, or Local environmental regulation agencies. Submit the plan to the COR for approval 14 days prior to the start of work. Approval of the plan is for the purpose of determining compliance with the specifications only and shall not relieve the Contractor of the responsibility for compliance with all Federal, State, and Local regulations. The plan shall address on-site excavation of contaminated soil and debris and include the following:

   - Identification of contaminants and areas to be excavated
   - Method of excavation
   - Level of personnel/subcontractor training
   - Safety and health provisions
   - Sampling requirements including quality control, laboratory to be used
   - Management of excavated soils and debris
   - Disposal methods, including transportation to disposal

3. EXCAVATION AND CLEANUP: Comply with the requirements of Title 40, Part 761 of the U.S. Code of Federal Regulations (40 CFR 761).

4. TEMPORARY STOCKPILING: Excavated material, temporarily stockpiled on site, shall be stored on heavy plastic and covered to prevent wind and rain erosion at a location designated by the COR.

5. SAMPLING AND TESTING: Sample contaminated debris and areas of excavation to ensure that contamination is removed. Use personnel with experience in sampling and, in particular, with experience in PCB cleanup if PCBs are involved. Use analytical methods approved by EPA and applicable State regulations.

6. TRANSPORTION AND DISPOSAL OF CONTAMINATED MATERIAL: The Contractor shall be responsible and liable for the proper loading, transportation, and disposal of contaminated material according to Federal, State, and local requirements. Use only U.S. transporters and disposal sites approved by Western.

7. POST CLEANUP REPORT: Provide a Post-Cleanup Report that describes the cleanup of contaminated soils and debris. Submit the report to the COR upon completion and prior to submittal of final invoice. The report shall contain the following information:

   - Site map showing the areas cleaned
   - Description of the operations involved in excavating, storing, sampling, and testing, and disposal
   - Sampling and analysis results including 1) Name and address of the laboratory, 2) sample locations, 3) sample dates, 4) analysis dates, 5) contents of contaminant (e.g. PCB or total petroleum hydrocarbons) in parts per million (ppm)
   - Certification by the Contractor that the cleanup requirements were met
   - Copies of any manifests, bills of lading, and disposal certificates
   - Copies of correspondence with regulatory agencies that support completion of the cleanup

## STANDARD 13 - ENVIRONMENTAL QUALITY PROTECTION

### SECTION 13.19—CONSERVATION OF NATURAL RESOURCES

1. GENERAL: Federal law prohibits the taking of endangered, threatened, proposed or candidate wildlife and plants, and destruction or adverse modification of designated Critical Habitat. Federal law also prohibits the taking of birds protected by the Migratory Bird Treaty Act. "Take" means to pursue, hunt, shoot, wound, kill, trap, capture or collect a protected animal or any part thereof, or attempt to do any of those things.

2. KNOWN OCCURRENCE OF PROTECTED SPECIES OR HABITAT: Following issuance of the notice to proceed, and prior to the start of construction, Western will provide training to all contractor and subcontractor personnel involved in the construction activity. Untrained personnel shall not be allowed in the construction area. Western shall provide two sets of plan and profile drawings showing sensitive areas located on or immediately adjacent to the transmission line right-of-way and/or facility. These areas shall be considered avoidance areas. Prior to any construction activity, the avoidance areas shall be marked on the ground in a manner approved by the COR. If access is absolutely necessary, first obtain permission from the COR, noting that a Western and/or other government or tribal agency biologist may be required to accompany personnel and equipment. Ground markings shall be maintained through the duration of the contract. Western will remove the markings during or following final inspection of the project.

3. UNKNOWN OCCURRENCE OF PROTECTED SPECIES OR HABITAT: If evidence of a protected species is found in the project area, the contractor shall immediately notify the COR and provide the location and nature of the findings. The contractor shall stop all activity in the vicinity of the protected species or habitat and not proceed until directed to do so by the COR.

4. CONTRACT ADJUSTMENTS: Where appropriate by reason of delays caused by a discovery, the Contracting Officer may make adjustments to contract requirements.

# APPENDIX E

# MITIGATION ACTION PLAN
# LOS BANOS – GATES (PATH 15) TRANSMISSION PROJECT

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# Western Area Power Administration

# Mitigation Action Plan
## for the
## Los Banos – Gates (Path 15) Transmission Project

## 1.0 INTRODUCTION

### 1.1 HISTORY AND BACKGROUND

In May 2001, Secretary of Energy Spencer Abraham directed the Western Area Power Administration (Western) to take the first steps, including the preparation of environmental studies, toward developing the Los Banos - Gates Transmission Project, also known as the Path 15 Project. This directive was issued to carry out a recommendation in the May 2001 National Energy Policy. Western is a power marketing administration within the Department of Energy (DOE) whose role is to market and transmit electricity from multi-use water projects in the western United States, including California. The Path 15 Project, located in California's western San Joaquin Valley, would relieve a bottleneck (Path 15) in the interstate power transmission system.

Path 15 is not a single transmission line, but rather a group of interconnected lines that allow power to flow between northern and southern California. Transmission restrictions on Path 15 can also affect power flows in other western states. The Path 15 Project would upgrade the current transfer capacity of Path 15, currently rated at 3,750 megawatts (MW) south-to-north, to 5,000 MW or more, and would increase transfer capacity to meet California's energy needs. The proposed Path 15 Project would consist of building a new 84-mile long, 500-kilovolt (kV) transmission line between Los Banos Substation in Merced County, California, and Gates Substation near Coalinga in Fresno County, California. Pacific Gas and Electric Company (PG&E) would make related improvements at both substations, and in the underlying 230-kV transmission system. Trans Elect, Inc. is a major participant in the Path 15 Project, providing private funding for the construction of the transmission line.

The Project, as proposed, is the same as the preferred alternative described and analyzed in the environmental documents for the original Los Banos – Gates Transmission Project, which was prepared in conjunction with the California - Oregon Transmission Project (COTP) in 1988. These two projects were the subject of a single set of documents prepared in 1988 that served as the Final Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA) and the Environmental Impact Report (EIR) under the California Environmental Quality Act (CEQA). The EIS is entitled *"Final Environmental Impact Statement for the California – Oregon Transmission Project (DOE/EIS-0128)."*

Since the Final EIS was prepared in 1988, Western elected to prepare a Supplement Analysis to determine the revived Path 15 Project presented substantial changes in the proposed action relevant to environmental concerns, or if there were significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts

(10 Code of Federal Regulations [CFR] 1021.314 (c) and 40 CFR 1502.9 (c) (1) (i)). The Supplement Analysis was prepared by reviewing the 1988 Final EIS environmental analysis and supporting documents and the most current information available on the Project. It was issued in August 2001.

The Supplement Analysis addressed resource and regulatory changes that had occurred since 1988, but did not identify any substantial changes to the significant environmental impacts identified in the 1988 Final EIS, or any new significant impacts. Based on the findings of the Supplement Analysis, Western determined that a Supplemental EIS was not required and issued a Record of Decision (ROD) on December 20, 2001 (66 FR 65703).

As planning for the transmission line progressed, it became necessary to relocate portions of the line from the tentative centerline studied in the original EIS. Western prepared a second Supplement Analysis on these relocations, as some of them were outside of the corridor established for the original studies. The purpose of this second Supplement Analysis was to assess the relocations, and determine if they were significant enough to warrant the preparation of a Supplemental EIS. This Supplement Analysis demonstrated that no substantial changes or significant new circumstances were associated with the relocations. The level of expected environmental impact from the Project was actually reduced by the relocations, primarily because the original locations were on very steep terrain and would require longer access roads on steeper slopes to reach them. The relocations are closer to existing access and are on milder terrain. The Supplement Analysis, along with a determination that a Supplemental EIS was not necessary, was issued on May 9, 2003.

## 2.0 FUNCTION AND ORGANIZATION OF THE MITIGATION ACTION PLAN

The DOE requirements for preparing a Mitigation Action Plan (MAP) are specified in 10 CFR 1021 (Section 331(a), National Environmental Policy Act Implementing Procedures). These regulations state that following the completion of each EIS and its associated ROD, DOE shall prepare a MAP that addresses mitigation commitments expressed in the ROD. The MAP shall explain how the corresponding mitigation measures, designed to mitigate adverse environmental impacts associated with the course of action directed by the ROD, will be planned and implemented.

This MAP addresses the construction, operation, and maintenance of the new 84-mile long 500-kV transmission line. Necessary work conducted by PG&E at their substations will occur primarily within the previously disturbed area inside the substation boundaries. At Los Banos, the substation will be expanded to the east to incorporate approximately four acres immediately adjacent to the substation. This area is outside of the fence around the substation proper, but within PG&E's fenced property. Western or Trans Elect, Inc. will also not have a role in upgrading the various existing PG&E 230-kV system components.

Mitigation measures were identified in the 1986 draft EIS, the Final EIS, and in the 2001 Supplement Analysis. The mitigation measures in the original EIS were the basis for those adopted in the 2001 Supplement Analysis. Since the original Los Banos – Gates Transmission Project was envisioned as a joint participation project with State-regulated participants, the EIS

was written to satisfy both NEPA and CEQA requirements. The Project is now a Federal undertaking. As such, some of the original mitigation measures that applied to the State-regulated participants were not carried forward from the EIS into the Supplement Analysis. The California Public Utility Commission's (CPUC) October 2001 *"Los Banos – Gates 500-kV Transmission Project: Draft and Final Supplemental Environmental Impact Report (SCH #850-40914)"* identifies extensive mitigation and reporting/monitoring requirements which would be imposed on PG&E if they were responsible for the Path 15 Project. Western is familiar with these mitigation measures, and its identified mitigation addresses many of the same concerns. However, Western, as a Federal agency and not a State-regulated utility, is not subject to CPUC authority or the mitigation provisions of that agency's EIR.

The following sections describe the plans and actions Western will implement and verify mitigation action commitments expressed in the 2001 Supplement Analysis and the ROD. The second Supplement Analysis issued in 2003 did not contain additional mitigation commitments that need to be addressed in this MAP.

Section 3.0 describes the monitoring and verification of mitigation actions and the reporting requirements. Section 4.0 describes the mitigation commitments and action plans for the Path 15 Project. The mitigation commitment and action plan, as specified in the 2001 Supplement Analysis and ROD, is composed of the tasks, responsible parties, and action target completion dates for the mitigation.

## 3.0 MITIGATION ACTION PLAN MONITORING AND REPORTING SYSTEM

Section 5.d.(11)(f) of DOE Order 451.1B, National Environmental Policy Act Compliance Program, requires Western to report MAP activities in its Annual Site Environmental Report, published by January 31 of each year. This annual report reflects new information or changed circumstances. If major changes to mitigation included in this MAP are necessary, these changes will be incorporated in an updated MAP and described in the annual report. The revised MAP and annual report will be available to the public and posted on Western's web site. The original MAP, Revision 1 was issued on January 28, 2003. This version, Revision 2, was issued on the date below to show the progress on the mitigation commitments and action plan provisions, and update the schedule dates on those commitments and provisions. It also serves to incorporate the terms and conditions contained in the U.S. Fish and Wildlife Service's Biological Opinion, the U.S. Army Corps of Engineers' Section 404 Clean Water Act permit, and the California State Regional Water Quality Control Board's Section 401 Water Quality Certification.

A member of Western's environmental staff will verify mitigation results and determine if the mitigation action achieved its intended purpose. Western will use existing organizational and administrative controls to gather information regarding implementation and status of mitigation actions. Such controls include applicable reporting systems, inspection, and verification. Western will report inspection and verification results in its Annual Site Environmental Report on the anniversary of the MAP. When mitigation actions are completed and verified, the information will be included in the Annual Site Environmental Report.

Mitigation also may be monitored in accordance with Western's Mitigation Monitoring Policy (Attachment 1).

The construction contractor shall secure all necessary permits required by applicable Federal, State, and local environmental laws, orders, and regulations. Western will obtain the Section 401 and Section 404 permits referenced above. The construction contractor shall comply with any mitigation conditions set in permits issued for the Path 15 Project. Some of those conditions are not known at this time, so they are not addressed in this MAP. In addition to the project area, all applicable mitigation measures shall also be implemented on any lands obtained directly by the construction contractor for materials storage/staging, work offices, parking, etc. The contractor shall also hire, subject to Western approval, independent qualified biological and cultural resources monitors. The monitors shall ensure the protection of the resources through adherence to all specified mitigation measures, permit stipulations, Biological Opinion conditions, and cultural resources Programmatic Agreement requirements.

## 4.0 MITIGATION COMMITMENTS AND ACTION PLANS

Generic, general mitigation practices are part of Western's construction standard specifications (Standard 13, Environmental Quality Protection). More detailed mitigation measures, or those not covered in Standard 13, are included in Divisions 2a and 13 of the construction specifications package. All are made binding on the construction contractor as terms of the contract. Applicable generic mitigation measures were defined for the new transmission line, and are included in Table 4.1 below, along with the parties responsible for their application, specific actions needed to ensure effectiveness, and target dates for completion. The generic mitigation practices are determined by the type of construction project being considered and its environmental impacts. In some instances, environmental impacts are reduced with the employment of these mitigation measures. Western adopted the generic mitigation measures as Appendix E of the 2001 Supplement Analysis. The MAP ensures the generic mitigation practices are implemented. The short-term mitigation commitments and action plan identified in the 2001 Supplement Analysis are presented in Table 4.2. Table 4.3 presents the long-term mitigation commitments and action plan that Western committed to in Appendix E of the Path 15 2001 Supplement Analysis.

In addition to the mitigation in the tables below, Western also committed in its ROD to the completion of the Endangered Species Act Section 7 consultation, the National Historic Preservation Act Section 106 consultation, and the consultation with interested Native American tribes. Formal consultation under Section 7 was completed with the issuance of a Biological Opinion on June 10, 2003. However, Western will continue provide information to the USFWS under the terms and conditions in the Biological Opinion for the duration of the construction period. Formal consultation with the SHPO was also concluded under the terms of a Programmatic Agreement signed by affected agencies and parties. Consultation and coordination with interested Native American tribes is ongoing, and will continue for the duration of the Project. These processes were all under way as the initial mitigation action plan was finalized. The mitigation action plan is a living document and will be updated periodically as tasks are completed, as demonstrated by the issuance of this Revision 2.

Some of the mitigation measures below still reference PG&E actions or obsolete transmission line segments. This is partly due to the fact that the original mitigation measures are from the 1988 EIS. Also, when the 2001 Supplement Analysis was completed, PG&E was still involved in a parallel CPUC applicant process. It was thought at that time that if the project were to come under a Federal lead, it would remain a joint participation project; this is no longer the case. For these reasons, some of the mitigation measures below are no longer applicable and are followed by notes in brackets to reflect the current situation.

**Table 4.1: Applicable Generic Mitigation Measures and Action Plan for Path 15 Transmission Line Project.**

| Generic Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 1. Avoid active oil wells and water extraction wells and critical facilities. Cross non-critical facilities if resources cannot be avoided. [Note: Since the FEIS was completed, most of the oil/gas facilities at the south end of the project have been abandoned, and some removed.] | A7900 | Task a: Incorporate requirement into structure locations. | Complete |
| | G5600 | Task b: Completed through centerline selection. | Complete |
| | G5600/A7400/ Contractor | Task c: Monitor site work. | 12/04 |
| 2. PG&E will work with California Department of Water Resources (CDWR) to site towers compatible with the existing facilities at Little Panoche Reservoir (West-5) or the proposed facilities at the Los Banos Grandes Offstream Storage project (West-3 and East). [Western will assume this responsibility for the proposed route.] | G5600 | Task a**:** Determine structure locations. | Complete |
| | A7400/N1600 | Task b: Coordinate with CDWR. | Complete |
| | G5600/A7400/ Contractor | Task c: Monitor site work. | 12/04 |
| 3. Conduct site specific scoping sessions as required under Section 7 (Endangered Species Act, 1973, as amended) consultation procedures to focus field studies, impact analysis, and potential mitigation assessments. [The above 1988 mitigation measure is poorly written and somewhat redundant with those below. Western will coordinate with Federal, State and Tribal resource agencies to identify sensitive species and develop appropriate field surveys for those species.] | A7400 | Task a: Obtain species list for project area. | Complete |
| | A7400/N5800 | Task b: Prepare Statement of Work (SOW) for contractor to conduct field surveys for listed species. | Complete |
| | N5800 | Task c: Procure contractor services. | Complete |
| Conduct pre-construction surveys for listed and special-status animal species 14-30 days in advance of ground-disturbing activities per Biological Opinion and USFWS survey protocols. This will require a rolling schedule to ensure the 14-30-day window is maintained. | Contractor | Task d: Determine areas of active work at least 30 days out. | Rolling schedule |
| | Contractor's Monitors | Task e: Conduct surveys in accordance with Biological Opinion. | Rolling schedule |
| | Contractor's Monitors | Task f: Prepare and deliver weekly reports to Western. | 12/04 |
| | A7400 | Task g: Coordination with USFWS and CA DFG as required. | 12/04 |

| Generic Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 4. Conduct ground surveys of potential sensitive plant habitat during the appropriate period, prior to selection of final alignments. | Contractor | Task a: Contractor to conduct field surveys per SOW. | Complete |
| | Contractor/ A7400 | Task b: Field maps available. | Complete |
| | Contractor | Task c: Contractor prepares biological report in Biological Assessment format. | Complete |
| Conduct pre-construction surveys for listed and special-status animal species 14-30 days in advance of ground-disturbing activities per Biological Opinion and USFWS survey protocols. This will require a rolling schedule to ensure the 14-30-day window is maintained. | Contractor | Task d: Determine areas of active work at least 30 days out. | Rolling schedule |
| | Contractor's Monitors | Task e: Conduct surveys in accordance with Biological Opinion. | Rolling schedule |
| | Contractor's Monitors | Task f: Prepare and deliver weekly reports to Western. | 12/04 |
| | A7400 | Task g: Coordination with USFWS and CA DFG as required. | 12/04 |

| Generic Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 5. Detailed mitigation plans would be developed that define the extent and types of additional field studies, and how the results of these studies could be coordinated with detailed engineering surveys. As part of the siting process, numerous construction and siting details will be developed and presented to the regulatory agencies for review and comment. Where mitigation measures are specified in the plan, field monitoring schedules and progress reports will be prepared and submitted to the agencies. Biologists and archaeologists could accompany crews during the site selection and construction phases to ensure sensitive resources are identified and avoided. The results of the siting and mitigation efforts for the Los Banos-Gates project would also be presented in a report of findings to the CPUC and other appropriate agencies. [This measure is written to accommodate a joint participation project. Western has developed this Mitigation Action Plan, and has (and will) utilize biological and cultural resources information in siting structures and identifying exclusion areas. Reporting and coordination appropriate for a Federal project will be accomplished.] | A7400 | Task a: Prepare and finalize Mitigation Action Plan. | Complete |
| | Contractor/ A7400 | Task b: Complete cultural resources and paleontological field surveys. | Complete |
| | A7400 | Task c: Complete Biological Assessment and submit to FWS. | Complete |
| | Contractor/ A7400 | Task d: Conduct spring biological surveys on access road locations and centerline relocations. | Complete |
| | G5600 | Task e: Adjust structure and access road locations to avoid sensitive resources where necessary/possible. | Complete |
| | A7400/G5600 | Task f: Ensure compliance with Biological Opinion (BO); stake exclusion areas in the field. | Rolling schedule |
| | G5600/A7400/ Contractor | Task g: Monitor site work for compliance with BO. | 12/04 |
| | G5600/A7400/ Contractor | Task h: Monitor site work for undiscovered cultural resources; stop work and notify if any are found. | 12/04 |
| | G5600/A7400/ Contractor | Task i: Monitor site work for paleontological resources in designated areas. | 12/04 |
| Mitigation Action Plan Revision 2 | A7400 | Task j: Revise MAP with new provisions from BO, etc. and correct/update target completion dates. | 11/15/03 |
| | A7400/FWS | Task k: Obtain FWS review and approval of revised MAP. | No comments |
| | A7400/ N6220 | Task l: Finalize and approve MAP; make available to agencies and the public. | 12/15/03 |

| Generic Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 6. Technical specialists, including biologists, will survey the preliminary alignment in the field to determine any site-specific conditions that can be avoided. For biological resources, these will include San Joaquin kit fox burrows and denning areas, areas where blunt-nosed leopard lizard occur, giant kangaroo rat burrows, raptor nesting areas, and productive wetlands areas. [All applicable conditions in the Biological Assessment and Biological Opinion will be adhered to in meeting this mitigation measure.] | Contractor/ A7400 | Task a: Determine site-specific sensitive areas in the field. | Complete |
| | G5600/A7400 | Task b: Ensure compliance with BO; stake exclusion areas in the field. | Rolling Schedule |
| | G5600/A7400/ Contractor | Task c: Monitor site work for compliance with BO. | 12/04 |
| Conduct pre-construction surveys for listed and special-status animal species 14-30 days in advance of ground-disturbing activities per Biological Opinion and USFWS survey protocols. This will require a rolling schedule to ensure the 14-30-day window is maintained. Includes field office locations, parking areas, materials storage and prefabrication sites, etc. used by the construction contractor. | Contractor | Task d: Determine areas of active work at least 30 days out. | Rolling schedule |
| | Contractor's Monitors | Task e: Conduct surveys in accordance with Biological Opinion. | Rolling schedule |
| | Contractor's Monitors | Task f: Prepare and deliver weekly reports to Western. | 12/04 |
| | A7400 | Task g: Coordination with USFWS and CA DFG as required. | 12/04 |
| 7. PG&E will continue to consult with Merced and Fresno County officials during the siting process. County personnel will be able to review the proposed actions and submit their recommendations to the CPUC. [Western and/or the construction contractor will continue to coordinate with appropriate county officials until the project is completed; reporting to CPUC will not be required.] | N1600/ Contractor | Task a**:** Coordinate with and inform counties of plans and crossings, as needed. | 12/04 |
| 8. Locate new access roads parallel to contours of landform wherever feasible. | G5600 | Task a: Design access roads to follow landforms and minimize erosion potential. | Complete |
| 9. Avoid diagonal orientations of transmission lines across cultivated fields. | G5600 | Task a: Where possible, site the transmission line to avoid agricultural areas entirely. | Complete |
| | G5600/N1600 | Task b: Where avoidance is not feasible, site structures to minimize impact to agricultural activities. Landowner coordination may be necessary. | Complete |

| Generic Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 10. If practical, tower placement will be adjusted to avoid orchards and vineyards, row crops, and furrow-irrigated crops (with tower-furrow angles greater than 61%). When possible, the alignment should avoid more heavily cultivated crops in preference for nonagricultural land or crops such as alfalfa, corn, and small grains. | G5600<br><br>G5600/N1600 | Task a: Where possible, site the transmission line to avoid agricultural areas entirely.<br><br>Task b: Where avoidance is not feasible, site structures to minimize impact to agricultural activities. Landowner coordination may be necessary. In certain areas, use a single-pole design to minimize impacts. | Complete<br><br>Complete |
| 11. When locating towers in row crops is unavoidable, if possible, preference should be given to fields with rows that would be parallel, rather than perpendicular, to the transmission line. | G5600<br><br>G5600/N1600 | Task a: Where possible, site the transmission line to avoid agricultural areas entirely.<br><br>Task b: Where avoidance is not feasible, site structures to minimize impact to agricultural activities. Landowner coordination may be necessary. In certain areas, use a single-pole design to minimize impacts. | Complete<br><br>Complete |
| 12. Place transmission lines and towers toward the center of the field where possible. Avoid placing towers at the edge of fields where canals or irrigation ditches are located. | G5600<br><br>G5600/N1600 | Task a: Where possible, site the transmission line to avoid agricultural areas entirely.<br><br>Task b: Where avoidance is not feasible, site structures to minimize impact to agricultural activities. Landowner coordination may be necessary. In certain areas, use a single-pole design to minimize impacts. | Complete<br><br>Complete |
| 13. Avoid angular joining of transmission line alignments. | G5600 | Task a**:** Consider when defining transmission line centerline. | Complete |

| Generic Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 14. Avoid mechanical move irrigation systems. Select crops using flood or border check irrigation over those using furrow irrigation. | G5600<br><br>G5600/N1600 | Task a: Where possible, site the transmission line to avoid agricultural areas, and especially irrigated areas, entirely.<br><br>Task b: Where avoidance is not feasible, site structures to minimize impact to agricultural activities. Landowner coordination may be necessary. | Complete<br><br>Complete |
| 15. Tower placement should avoid areas where riparian vegetation or other vegetation communities of value occur. | A7400/G5600<br><br>A7400/G5600/ Contractor | Task a: Evaluate riparian and other special vegetation communities. Site transmission line to avoid if possible; identify crossing location(s) of least impact if not possible.<br><br>Task b: Monitor construction activities. | Complete<br><br>12/04 |
| 16. Avoid siting towers on ridgelines and hilltops wherever possible. This measure will serve to reduce the incidence of "skylining;" that is, positioning a tower so that it is seen silhouetted against the skyline. The measure will also help prevent highly visible alterations of land forms resulting from grading operations. [The terrain in the Project area will necessitate placing structures on high points. However, there will be two existing transmission lines in the foreground, and higher ridges behind the new line, so visual impacts will be slight.] | A7400/G5600 | Task a: Incorporate visual sensitivity into transmission line siting considerations/criteria. | Complete |
| 17. Minimize the number of towers visible from sensitive viewpoints within recreation areas. | A7400/G5600 | Task a: Incorporate visual sensitivity into transmission line siting considerations/criteria. | Complete |
| 18. In areas identified as visually sensitive, the finish on transmission towers should be dull and non-reflective. | A7900 | Task a: Incorporate requirement into construction specification – Divisions 4 and 5. | Complete |
| 19. Temporary facilities, such as construction yards, and conductor tensioning and splicing sites should be sited to minimize disruption of the landscape by landform alteration and vegetation removal. | G5600<br><br>G5600<br><br>A7400/G5600/ Contractor | Task a**:** Incorporate requirement into construction specification.<br><br>Task b**:** Advise construction contractor.<br><br>Task c**:** Monitor site work. | Complete<br><br>Complete<br><br>12/04 |

| Generic Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 20. PG&E will work with affected property owners, as necessary, on alignment and tower location during the right-of-way acquisition process. [Western will work with property owners on alignment and structure locations, as necessary.] | N1600/G5600 | Task a: Work with landowners on final siting of structures and access roads, if necessary. | Complete |
| 21. Appropriate selection of design parameters (i.e, conductor surface gradient, conductor diameter, and conductor configuration) and proper location of the transmission line route to avoid critical locations will reduce corona-induced radio and television interference to acceptable levels. | A7900 | Task a: Incorporate into design. | Complete |
| | N1600/N5500 | Task b: Respond promptly to any complaints. | Open |
| | N5500 | Task c: Complete modifications to mitigate problem. | Open |
| 22. Conduct pre-construction field surveys to locate and record cultural and paleontological resources within the project right-of-way and, in particular, resources that are situated at proposed facilities and roadway locations. [Includes all field office locations, parking areas, materials storage and prefabrication sites, etc. used by the construction contractor. Also address traditional cultural properties and Native American use areas, as identified by the ethnographic study.] | Contractor/ A7400 | Task a**:** Conduct intensive field surveys. | Complete |
| | Contractor/ A7400 | Task b**:** Conduct ethnographic study. | Complete |
| | A7400 | Task c**:** Consult with tribes. | 12/04 |
| | A7400 | Task d**:** Consult with the State Historic Preservation Officer (SHPO). | Complete |
| | A7400 | Task e: Prepare and execute a Programmatic Agreement governing cultural resources activities. | Complete |
| | A7400/G5600 | Task f**:** Determine project modifications to avoid/minimize impact. | Complete |
| | A7400/G5600/ Contractor | Task g**:** Construction monitoring. | 12/04 |
| Conduct paleontological survey for fossil resources. | Contractor/ A7400 | Task h: Field surveys for paleo resources. | Complete |
| | Contractor | Task i: Field monitoring in sensitive areas. | 12/04 |

| Generic Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 23. Avoid sensitive resources by locating construction activities in non-sensitive locations. Consultation with cultural and paleontological resource professionals during the siting of the transmission line will facilitate mitigation through avoidance. | Contractor/ A7400 | Task a**:** Conduct intensive field surveys. | Complete |
| | Contractor/ A7400 | Task b**:** Conduct ethnographic study. | Complete |
| | A7400 | Task c**:** Consult with tribes. | Complete |
| | A7400 | Task d**:** Consult with SHPO. | Complete |
| | A7400/G5600 | Task e**:** Determine project modifications to avoid/minimize impact. | Complete |
| | A7400/G5600/ Contractor | Task f**:** Construction monitoring. | 12/04 |
| 24. Conduct cultural resource data recovery programs, through surface collection and excavation, at significant resource sites where adverse impacts cannot be otherwise mitigated. [No eligible sites were recorded during the Class III survey of the right-of-way and access road easements. Construction monitoring not necessary unless cultural resources are discovered during construction. Native American monitoring of certain locations important to affected tribes will be monitored by a Native American monitor.] | Contractor/ A7400 | Task a**:** Conduct intensive field surveys. | Complete |
| | Contractor/ A7400 | Task b**:** Conduct ethnographic study. | Complete |
| | A7400 | Task c**:** Consult with tribes. | Complete |
| | A7400 | Task d**:** Consult with SHPO. | Complete |
| | A7400/G5600 | Task e**:** Determine project modifications to avoid/minimize impact. | Complete |
| Monitoring of selected sites by Native American monitor. | A7400/G5600/ Contractor | Task f**:** Construction monitoring. | 12/04 |

| Generic Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 25. Consult with Native Americans concerning Native American resources that cannot be mitigated through avoidance, in order to seek mutually acceptable solutions to minimize project effects on significant resources. | Contractor/ A7400 | Task a**:** Conduct intensive field surveys. | Complete |
| | Contractor/ A7400 | Task b**:** Conduct ethnographic study. | Complete |
| | A7400 | Task c**:** Consult with tribes. | Complete |
| | A7400/G5600 | Task e**:** Determine project modifications to avoid/minimize impact. | Complete |
| Monitoring of selected sites by Native American monitor. | A7400/G5600/ Contractor | Task f**:** Construction monitoring. | 12/04 |
| 26. Comply with all terms and conditions of the Section 401 Water Quality Certification and Section 404 Clean Water Act permits as they apply to crossings of Waters of the United States. | A7400 | Task a: Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/A7400/ Contractor | Task c: Monitor site work. | 12/04 |
| 27. Comply with all terms, conditions, and other requirements contained in the USFWS Biological Opinion (June 10, 2003) for the Path 15 Project. | A7400 | Task a: Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/A7400/ Contractor | Task c: Monitor site work. | 12/04 |

| Generic Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 28. Coordinate with California Department of Fish and Game on State special-status species. | A7400 | Task a: Provide DFG with applicable project documents: BA, BO, special-status species report, maps, etc. | Complete |
| | A7400 | Task b: Address DFG comments/concerns. | Open |
| | G5600/A7400/ Contractor | Task c: Monitor site work. | 12/04 |

**Table 4.2: Short-term Mitigation Commitments and Action Plan for the Path 15 Transmission Project**

| Short-term Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 1. Soil surfaces will be wetted at a rate of 0.5 gallons of water per square yard two times per day for dust control (EPA 1977). This measure reduces dust by about 50 percent. [Dusting of agricultural crops, orchards, vineyards, grasslands, etc. will not be allowed. The Contractor shall prevent generating dust by watering, as necessary, the roads, structure sites, staging areas, tensioning and pulling sites, and any other construction area having the potential to generate dust.] | A7400 | Task a: Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/A7400/ Contractor | Task c: Monitor site work. | 12/04 |
| 2. When possible construction activities should be scheduled during periods of low wind to reduce fugitive dust emissions. | A7400 | Task a: Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/A7400/ Contractor | Task c: Monitor site work. | 12/04 |
| 3. All construction equipment should be frequently monitored and serviced to ensure conformance with exhaust standards. | A7400 | Task a: Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/A7400/ Contractor | Task c: Monitor site work. | 12/04 |

| Short-term Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 4. Existing roads will be used for access wherever possible. Minimize number and length of new construction access roads particularly in intensively farmed areas. Use temporary spur roads to towers and remove those roads not required for maintenance. Access roads should be designed to the minimum standard necessary for construction and maintenance vehicle access. | A7400 | Task a: Incorporate access road design requirements into construction specification – Division 2a or 13. | Complete |
| | G5600/A7400 | Task b: Identify existing roads to be used, and additional access needs. | Complete |
| | G5600 | Task c: Identify areas where overland travel will suffice, and where new roads will be required. | Complete |
| | G5600/A7400/ Contractor | Task d: Monitor site work; restore/re-seed where appropriate. | 12/04 |
| 5. Minimize vegetation stripping along the alignment. | A7400 | Task a: Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600/A7400/ Contractor | Task b: Monitor site work; restore/re-seed where appropriate. | 12/04 |
| 6. Design drainage control structures to carry runoff at appropriate velocities. Use properly sized and installed culverts under permanent access road fill sections and discharge runoff to natural drainages that will not be overloaded. | A7400 | Task a**:** Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/ Contractor | Task c: Monitor site work. | 12/04 |
| 7. Minimize steepness and unobstructed length of fill slopes. Protect new constructed fills from rain splash and surface runoff with slope protection, such as punch straw, tackifier, or jute netting. [Hydro-mulch or other more recent methods for surface stabilization may also be used.] | A7400 | Task a**:** Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/N1600 | Task c: Coordinate restoration activities with landowner. | 12/04 |
| | G5600/A7900/ Contractor | Task d: Monitor site work. | 12/04 |

| Short-term Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 8. Replant temporarily disturbed areas with a mixture of perennial grasses, forbs, brush, shrubs, and tree species that will provide effective erosion control. Prepare a firm, rough seedbed on fill or cut slopes and apply appropriate types and amounts of fertilizers and seed mixtures. Consider reseeding with native plants only in sensitive areas not subject to grazing. [Reseeding mixtures shall be landowner/manager approved; an approved seed mixture is provided in the specifications package.] | A7400<br><br>G5600<br><br>G5600/N1600<br><br>G5600/A7900/ Contractor | Task a**:** Incorporate requirement into construction specification – Division 2a or 13.<br><br>Task b: Advise construction contractor.<br><br>Task c: Coordinate restoration activities with landowner.<br><br>Task d: Monitor site work. | Complete<br><br>Complete<br><br>12/04<br><br>12/04 |
| 9. Avoid causative construction operations during the wet season. Moist soil is generally more susceptible to compaction than dry soil. Minimize the use of heavy equipment on agricultural land to avoid soil compaction. | A7400<br><br>G5600<br><br>G5600/A7900/ Contractor | Task a**:** Incorporate requirement into construction specification – Division 2a or 13.<br><br>Task b: Advise construction contractor.<br><br>Task c: Monitor site work. | Complete<br><br>Complete<br><br>12/04 |
| 10. Perform contour discharge or ripping operations at the conclusion of construction. This would loosen compacted soil and develop the seedbed for re-vegetation. [Agricultural areas only. Would increase natural vegetation damage and erosion potential in other areas.] | A7400<br><br>G5600<br><br>G5600/N1600<br><br>G5600/A7900/ Contractor | Task a**:** Incorporate requirement into construction specification – Division 2a or 13.<br><br>Task b: Advise construction contractor.<br><br>Task c: Coordinate restoration activities with landowner.<br><br>Task d: Monitor site work. | Complete<br><br>Complete<br><br>12/04<br><br>12/04 |
| 11. In agricultural areas where sites would be graded, topsoil should be stockpiled. After construction, topsoil should be replaced and the site graded to the original contours. If appropriate, the site should be reseeded in accordance with agency or landowner objectives. ["Sites" refer to structure locations and access roads.] | A7400<br><br>G5600<br><br>N1600<br><br>G5600/A7900/ Contractor | Task a**:** Incorporate requirement into construction specification – Division 2a or 13.<br><br>Task b: Advise construction contractor.<br><br>Task c: Coordinate with landowner.<br><br>Task d: Monitor site work. | Complete<br><br>Complete<br><br>12/04<br><br>12/04 |

| Short-term Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 12. Add chemical additives to seedbed during re-vegetation to counteract potential chemical imbalances. [If specified by land management agencies.] | A7400 | Task a**:** Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/A7900/ Contractor | Task c: Monitor site work. | 12/04 |
| 13. Base the tower design on geotechnical evaluation and sound geotechnical engineering practice, including analysis for cut and fill slopes, compaction requirements, and surface or slope drainage. [As a point of clarification, the structure foundations need to be based on geotechnical considerations.] | A7900 | Task a**:** Incorporate requirement into construction specification – Division 2a. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/A7900? Contractor | Task c: Monitor site work. | 12/04 |
| 14. Where possible, avoid road construction on very steep slopes to minimize surface erosion and slumping. | A7400 | Task a: Incorporate access road design requirements into construction specification – Division 2a or 13. | Complete |
| | G5600/A7400 | Task b: Identify existing roads to be used, and additional access needs. | Complete |
| | G5600 | Task c: Identify areas where overland travel will suffice, and where new roads will be required. | Complete |
| | G5600/A7400/ Contractor | Task d: Monitor site work; restore/re-seed where appropriate. | 12/04 |

| Short-term Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 15. Re-contour, prepare the surface, and seed all roads, construction sites, and other disturbed areas not required for project operation and maintenance. | A7400 | Task a: Incorporate access road design requirements into construction specification – Division 2a or 13. | Complete |
| | G5600/A7400 | Task b: Identify existing roads to be used, and additional access needs. | Complete |
| | G5600 | Task c: Identify areas where overland travel will suffice, and where new roads will be required. | Complete |
| | G5600/A7400/ Contractor | Task d: Monitor site work; restore/re-seed where appropriate. | 12/04 |
| 16. As much as possible, avoid construction activities and land surface disturbance in the immediate vicinity of unique plant communities and habitat features, such as remnant sand dunes, rock outcrops, riparian zones, alkali areas, other wetlands, kit fox natal dens, and raptor nesting cliffs. These unique features will be determined in consultation with the resource agencies. | Contractor/ A7400 | Task a: Determine site-specific sensitive areas in the field. | Complete |
| | G5600/A7400 | Task b: Ensure compliance with Biological Opinion; stake exclusion areas in the field. | Rolling schedule |
| | G5600/A7400/ Contractor | Task c: Monitor site work for compliance with BO. | 12/04 |
| 17. Avoid construction activities in watercourses and wetlands since these areas are both infrequent and sensitive in the generally arid project area. | Contractor/ A7400 | Task a: Determine site-specific sensitive areas in the field. | Complete |
| | G5600/A7400 | Task b: Ensure compliance with Biological Opinion; stake exclusion areas in the field. | Rolling schedule |
| | G5600/A7400/ Contractor | Task c: Monitor site work for compliance with BO. | 12/04 |

| Short-term Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 18. Avoid work on unstable slopes and rock outcrops. | A7400 | Task a: Incorporate access road design requirements into construction specification – Division 2a or 13. | Complete |
| | G5600/A7400 | Task b: Identify existing roads to be used, and additional access needs. | Complete |
| | G5600 | Task c: Identify areas where overland travel will suffice, and where new roads will be required. | Complete |
| | G5600/A7400? Contractor | Task d: Monitor site work; restore/re-seed where appropriate. | 12/04 |
| 19. Minimize surface disturbing activities such as grubbing, grading, ditching and filling to the extent possible. | A7400 | Task a**:** Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600/A7400 | Task b: Identify areas where overland travel will suffice, and where new roads will be required. | Complete |
| | G5600 | Task c: Advise construction contractor. | Complete |
| | G5600/A7400/ Contractor | Task d: Monitor site work; restore/re-seed where appropriate. | 12/04 |
| 20. Provide fire protection measures and avoid releases of fuels, oils, and other hazardous substances to the ground and water. [No smoking allowed at any time, anywhere on the project, with the sole exception of inside closed vehicles due to extreme fire danger. Butts shall remain inside the vehicles.] | A7400 | Task a: Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/A7400/ Contractor | Task c: Monitor site work. | 12/04 |

| Short-term Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 21. Schedule activities to minimize construction in the specific vicinity of golden eagle nests or kit fox natal dens during the periods of greatest sensitivity, i.e. February through the end of the nesting or denning period. | Contractor/ A7400 | Task d: Conduct spring biological surveys on access road locations and centerline relocations. | Complete |
| | G5600 | Task e: Adjust structure and access road locations to avoid sensitive resources where necessary/possible. | Complete |
| | A7400/G5600 | Task f: Ensure compliance with Biological Opinion; stake exclusion areas in the field. | Rolling schedule |
| | G5600/A7400/ Contractor | Task g: Monitor site work for compliance with BO. | 12/04 |
| 22. Attach raptor nesting platforms to towers at intervals greater than one mile in raptor use areas. Place these on the towers in positions least likely to cause operation and maintenance problems. The number of nesting platforms would be determined during the transmission line alignment analysis. [In order to minimize impact on kit foxes and other listed species, raptor nesting platforms will not be installed in certain areas along the line. Use single pole steel structures with anti-perching devices in some areas to minimize raptor advantages. Desirability of raptor perching/nesting platforms will be determined in coordination with appropriate agencies and/or landowners, but perching/nesting platforms will not be placed in agricultural areas.] | A7900/A7400 | Task a: Incorporate requirement into construction specification. | Complete |
| | A7400 | Task b: Determine advisability of installing raptor perching/nesting platforms. | Complete |
| | G5600 | Task c: Advise construction contractor. | Complete |
| | G5600/A7400/ Contractor | Task d: Monitor site work. | 12/04 |
| 23. Construction of staging areas and pulling sites should be located adjacent to roads where practical. Soil from construction activities should be properly disposed of. | A7400 | Task a: Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/A7400/ Contractor | Task c: Monitor site work. | 12/04 |

| Short-term Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 24. Construction should be timed whenever practical to minimize disruption of normal seasonal activities for both crop and range land. | A7900A7400 | Task a: Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/A7400/ Contractor | Task c: Monitor site work. | 12/04 |
| 25. Post-construction cleanup and removal practices detailed in Section 2.3.8 should be followed. [Access roads and crane pads may be re-seeded, but kept for maintenance use.] | A7400 | Task a: Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/A7400/ Contractor | Task c: Monitor site work. | 12/04 |
| 26. Whenever possible shift construction areas (such as conductor pulling and splicing areas and construction yards) to nonagricultural land or less sensitive crops. | A7400 | Task a: Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/A7400/ Contractor | Task c: Monitor site work. | 12/04 |
| 27. Existing roads damaged by activities related to the transmission line should be repaired to a condition equal to or better than their condition prior to the construction of the transmission line. | A7400 | Task a: Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/A7400/ Contractor | Task c: Monitor site work. | 12/04 |

| Short-term Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 28. The limits of construction activities should normally be predetermined, with activity confined within those limits. All construction vehicle movement outside the right-of-way should normally be restricted to pre-designated access or public roads. | A7400 | Task a: Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/A7400/ Contractor | Task c: Monitor site work. | 12/04 |
| 29. No paint or permanent discoloring agents should be applied -to rocks or vegetation to indicate survey or construction activity limits. Survey markers, flagging, or other suitable material should be used to delineate limits. | A7900 | Task a: Incorporate requirement into construction specification. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/A7400/ Contractor | Task c: Monitor site work. | 12/04 |
| 30. Where blasting is required for access roads or tower footings, debris should be recovered and removed where practical. | A7400 | Task a: Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/A7400/ Contractor | Task c: Monitor site work. | 12/04 |
| 31. Excavated material or other construction materials should be removed following construction. [Will be done in agricultural areas. In grassland areas excavated materials will be spread around the structure base or used to level access road and or crane pad at the excavation site.] | A7400 | Task a: Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/A7400/ Contractor | Task c: Monitor site work. | 12/04 |

| Short-term Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 32. In construction areas where excavation is not required, vegetation should be left in place wherever possible and the original contours should be maintained in an undisturbed condition. | A7400 | Task a**:** Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600/A7400 | Task b: Identify areas where overland travel will suffice, and where new roads will be required. | Complete |
| | G5600 | Task c: Advise construction contractor. | Complete |
| | G5600/A7400/ Contractor | Task d: Monitor site work; restore/re-seed where appropriate. | 12/04 |
| 33. Where vegetation of high density or low diversity is encountered in the right-of-way, clearing to a harsh right-of-way edge should be avoided. Instead, it should be done to emulate natural clearings with irregular edges. [Since the right-of-way is either grassland or intensive agriculture, this provision will likely not be employed.] | A7400 | Task a: Incorporate requirement into construction specification – Division 2a or 13. | Complete |
| | G5600 | Task b: Advise construction contractor. | Complete |
| | G5600/A7400/ Contractor | Task c: Monitor site work. | 12/04 |
| 34. PG&E will provide clear information about right-of-way acquisition, construction and maintenance activities, and project schedules. [Western will perform these tasks.] | N1600 | Task a: Coordinate with landowners. | Open |

## Table 4.3: Long-term Mitigation Commitments and Action Plan for the Path 15 Transmission Project

| Long-term Mitigation Commitment | Responsible Party | Action | Target Completion Date |
|---|---|---|---|
| 1. Avoid permanent access road clearing to the extent possible, allowing the short annual grasses to cover the ground surface. | A7400 | Task a: Incorporate access road design requirements into construction specification – Division 2a or 13. | Complete |
| | G5600/A7400 | Task b: Identify existing roads to be used, and additional access needs. | Complete |
| | G5600 | Task c: Identify areas where overland travel will suffice, and where new roads will be required. | Complete |
| | G5600/A7400/ Contractor | Task d: Monitor site work; restore/re-seed where appropriate. | 12/04 |
| 2. All access roads not required for maintenance should be either permanently closed using the most effective and least environmentally damaging methods appropriate to the landowners, or be re-graded, put to bed, and re-vegetated with concurrence of landowner. | A7400 | Task a: Incorporate access road design requirements into construction specification – Division 2a or 13. | Complete |
| | G5600/A7400 | Task b: Identify existing roads to be used, and additional access needs. | Complete |
| | G5600 | Task c: Identify areas where overland travel will suffice, and where new roads will be required. | Complete |
| | G5600/A7400/ Contractor | Task d: Monitor site work; restore/re-seed where appropriate. | 12/04 / Open |
| 3. An ambient noise survey will be conducted at selected, sensitive sites along the route prior to construction and operation of the line. These measurements will then be available if complaints are received after the line is placed in operation. [Due to the remote location of the proposed transmission line route the need for this survey will be minimal.] | N1600/N5000 | Task a: Identify locations where ambient noise could potentially be a problem. | Open |
| | N1600/N5000 | Task b: Take field readings. | Open |
| | N1600/N5300 | Task c: Respond to post-construction noise complaints. | As needed. |
| | N5300 | Task d: Replace damaged insulators or conductor if found to be the cause. | As needed. |

| | | | |
|---|---|---|---|
| 4. PG&E will resolve AM radio and television interference complaints and make every reasonable effort to promptly correct the cause of the interference when it has been established that this interference is from PG&E facilities. [Western will conduct this activity, unless the problem is PG&E substation equipment.] | N1600/N5300<br><br>N5300 | Task a: Respond to post-construction noise complaints.<br><br>Task b: Replace damaged insulators or conductor if found to be the cause. | As needed.<br><br>As needed. |
| 5. To provide a basis for evaluating and correcting any adverse effects caused by the transmission line, radio and TV field strength measurements will be made after the selection of the final transmission line alignment, prior to construction and operation of the transmission line. If complaints are received after operation of the line, PG&E will be able to take corrective measures to provide satisfactory service. [Due to the remote location of the proposed transmission line route the need for this survey will be minimal. Western will address any interference issues as they may arise.] | N1600<br><br>N1600/N5000<br><br>N1600/N5300<br><br>N5300 | Task a: Identify locations where transmission line interference could potentially be a problem.<br><br>Task b: Take field readings.<br><br>Task c: Respond to post-construction interference complaints.<br><br>Task d: Replace damaged insulators or conductor if found to be the cause. | Open<br><br>Open<br><br>As needed.<br><br>As needed. |

**Note:** All dates are keyed to the September 29, 2003 Project Schedule, and are subject to change as the Project Schedule is updated, or as tasks are completed.

# Attachment 1

## Mitigation Monitoring

Policy: Western will ensure that we fulfill our commitments to mitigate the environmental effects of our activities.

Background: Western routinely commits to specific actions for the protection of cultural and biological components of the environment from adverse effects of our activities. For example, before a pole-replacement project, Western might locate an endangered plant community on the transmission right-of-way. The NEPA document for the project would most likely specify that the maintenance crews would avoid the plants. Western routinely commits to implement stormwater pollution prevention strategies, reduce visual impacts, undertake erosion control, limit use of pesticides, and avoid cultural sites, wetlands, riparian areas and other important habitats.

Such commitments often expedite the clearance process and allow Western to proceed with minimum expense and delay. A project, which would otherwise require an EA/FONSI, might be cleared with a CX because Western committed to avoid important environmental resources, thus eliminating adverse effects. In addition, meeting these commitments enhances Western's reputation for responsible environmental stewardship with regulators, land managing agencies, Native American tribes, and private landowners.

To preserve these benefits, Western must ensure that we carry out the mitigation actions to which we commit.

When Western makes mitigation commitments, DOE requires a mitigation action plan that describes how mitigation will be planned and implemented. In such projects, annual mitigation reporting is required and will be submitted with Western's Annual Site Environmental Report. The reporting is required until the mitigation is completed.

Process: Western will audit selected projects that have the following characteristics for mitigation compliance:

National Register eligibility of cultural resources; presence of fossils
Sensitivity and importance of biological resources present
Size and scope of project
Interest from stakeholders
Mitigation reporting requirements

In addition, some projects will be selected at random.

Western will keep records in each regional office of monitored projects and findings, and use this information at least annually to assess the effectiveness of mitigation methods and the effectiveness of its processes for ensuring that mitigation is carried out as

planned. Western will take corrective action as soon as deficiencies are identified, and report the results of mitigation monitoring in the Annual Site Environmental Report.

# APPENDIX F

# MITITAGION ACTION PLAN
# HOOVER DAM BYPASS PROJECT

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# MITIGATION ACTION PLAN

**for the**

## MODIFICATION AND CONSTRUCTION OF TRANSMISSION LINES FOR THE U.S. HOOVER DAM BYPASS PROJECT – PHASE II, HOOVER DAM AND BOULDER CITY, NEVADA

**(DOE/EA-1478)**

**WESTERN AREA POWER ADMINISTRATION**

**October 2003**

## Western Area Power Administration

# Mitigation Action Plan

## 1.0 HISTORY AND BACKGROUND

The Western Area Power Administration (Western) prepared an Environmental Assessment (EA) (DOE/EA-1478) for the Modification and Construction of Transmission Lines for the U.S. Hoover Dam Bypass Project, referred to as Phase II (Project). Based on the EA, Western has determined that the proposed Project would not result in any significant environmental impacts, and the preparation of an environmental impact statement (EIS) will not be required. The basis for this determination is described in the Finding of No Significant Impact issued in October 2003.

Western proposes to double-circuit a portion of the Hoover-Mead #5 and #7 230-kV Transmission Lines with the Henderson-Hoover 230-kV Transmission Line newly renamed Henderson-Mead #1. The double circuiting will be in the area of Hoover Dam and Mead Substation. In addition, a fiber optic cable will be placed extending from the Hoover Power Plant to Mead Substation mainly carried along on the new double-circuited structures. The modifications and construction to the transmission lines and placement of the fiber optic cable would be completed in 2004. A number of environmental protection measures are included with the proposed action to minimize potential adverse environmental effects.

The requirements for preparing a Mitigation Action Plan (MAP) are specified in 10 CFR part 1021 (Section 331(b), Department of Energy National Environmental Policy Act Implementing Procedures). These guidelines state that DOE shall prepare a MAP for commitments to mitigations that are essential to render the impacts of a proposed action not significant. The guidelines further state that the MAP shall also explain how mitigation will be planned and implemented. The EA analyzed the impacts of the proposed Project. Western has determined that five mitigation measures are essential to render the impacts of the proposed action not significant: 1) mitigating impacts to historic facilities, 2) avoiding and mitigating impacts to archaeological sites during construction, 3) avoiding and monitoring for the Mojave Desert tortoise, 4) avoiding and monitoring for the Gila monster, and 5) avoiding and monitoring for the peregrine falcon.

## 2.0 FUNCTION AND ORGANIZATION OF THE MITIGATION ACTION PLAN

The following sections describe the plans and actions by which Western will implement and verify mitigation action commitments described above.

Section 3.0 describes the monitoring and verification of mitigation actions and the reporting requirements. Section 4.0 describes the mitigation commitments and action plans for the Project. The commitment to the mitigation is presented along with an action plan composed of the tasks, responsible party, and schedule anticipated for the mitigation.

## 3.0 MITIGATION ACTION PLAN MONITORING AND REPORTING SYSTEM

Section 5.d. (11) (f) of DOE Order 451.1B, National Environmental Policy Act Compliance Program, requires Western to report MAP activities in its Annual Site Environmental Report (Annual Report), published by January 31 of each year. The Annual Report will reflect new information or changed circumstances. If major changes to mitigation included in this MAP are necessary, these changes will be described in the Annual Report. The Annual Report will be made available to the public.

A member of Western's environmental staff will verify mitigation results and determine if the mitigation actions achieved their intended purpose. Existing organizational and administrative controls will be used to gather information regarding implementation and status of mitigation actions. Such controls include applicable reporting systems, inspection, and verification. The results of inspection and verification will be reported on the anniversary of the MAP in the Annual Report. When mitigation actions are completed and verified, the information will be included in the Annual Report.

## 4.0 MITIGATION COMMITMENTS AND ACTION PLANS

Mitigation practices were defined for the Project in the EA and were considered during the assessment of impacts of the Project. Measures not addressed as part of this MAP will be implemented as part of Western's standard business and environmental program practices.

Table 4.1 outlines the mitigation measures to reduce impacts to less than significant and action items necessary to assure the mitigation is implemented to protect important cultural resource sites (archaeological and historical), and sensitive wildlife species (Mojave Desert tortoise, Gila monster and peregrine falcon).

| **TABLE 4.1<br>MITIGATION MEASURES** | | **WESTERN ACTIONS NEEDED TO AVOID SIGNIFICANT IMPACT.** |
|---|---|---|
| Cultural Resources (archaeological) | Sites subject to impacts from construction activities would be monitored during structure replacement and fiber optic installation activities. Archaeological and Tribal monitors will be used to ensure that the two newly recorded prehistoric sites eligible to the National Register of Historic Places are avoided and project activities are modified to mitigate any impact. | 1. Western will assure an Archaeological monitor and Tribal monitor will present pre-construction training to all project construction crews, explaining the importance of the sites and the reason for protecting and respecting these sites and similar sites within the area.<br>2. Site 26CK6725 is a multiple rock ring site. Western will require that project activities, personnel and equipment will not access the site other than to allow the construction contractor to place a rope on the ground during the conductor pulling process. The rope may be laid across the site, but not pulled. The rope will be placed by hand under the supervision of an archaeological monitor. |

| TABLE 4.1<br>MITIGATION MEASURES | | WESTERN ACTIONS NEEDED TO AVOID SIGNIFICANT IMPACT. |
|---|---|---|
| | | 3. Site 26CK6726 is a monolith rock shelter. Western will require that project activities, personnel and equipment will not access the site except under supervision of the archaeological monitor. The structure due for replacement will not be accessed by the current spur access road but rather, a new spur access road that will be constructed from the northeast toward the existing access road. Development, use and rehabilitation of the new spur access road will be supervised by the archaeological monitor and a tribal monitor. The new access spur road will be approximately 80 feet long and 12 feet wide. Fill from an approved area will be brought in to create the new spur access road and will not be pulled from the adjoining areas. Western's construction contractor will be using a large crane to remove sections of the current structure tower. These sections will be unbolted and lowered to ground level away from the rock shelter site in order to complete the remaining disassembly. The reverse will occur for the placement of the new monopole structure. The sections will be assembled at ground level away from the rock shelter and the crane will move the structure sections into place. |
| Cultural Resource (historical) | Historic facilities subject to impacts from construction will be mitigated through documentation. | 1. Western will assure that the Hoover-Mead #5 and #7 230-kV Transmission Lines will be documented in the amended Historic American Engineering Record for Hoover Dam and a draft provided to the Nevada State Historic Preservation Office. |
| Wildlife (Mohave Desert tortoise) | Protection of the Mojave Desert tortoise. Western and the U.S. Fish and Wildlife Service (USFWS) have identified areas of tortoise habitat the southern 5.2 miles of the project area. This area will be surveyed and monitored for the present of the Mojave Desert tortoise during this project so as to reduce possible harm or injury to the Mojave Desert tortoise. | 1. Western will assure that a qualified tortoise biologist will train all project personnel prior to access to the project area on the identification, habitat, and protection measures employed for this project to ensure that desert tortoises are not inadvertently harmed.<br>2. A qualified tortoise biologist will conduct preconstruction surveys prior to the start of project activities at each work location to include but not limited to pad sites, staging areas and access routes anytime during the year. |

| TABLE 4.1<br>MITIGATION MEASURES | | WESTERN ACTIONS NEEDED TO AVOID SIGNIFICANT IMPACT. |
|---|---|---|
| | | 3. A qualified tortoise biologist will be present for survey and monitoring from March 15-October 15 (active season) during surface-disturbing activities to ensure that desert tortoises are not inadvertently harmed.<br>4. A qualified tortoise biologist will be on-call for survey and monitoring from October16-March 14 (inactive season) during surface disturbing activities to ensure that desert tortoises are not inadvertently harmed.<br>5. Herbicides shall not be used in the project area.<br>6. Vehicular traffic shall be restricted to existing access roads and new constructed assess spur roads or those approved by Western in consultation with the USFWS.<br>7. Vehicles shall not exceed 15 miles per hour speed limit on non-public access roads.<br>8. All project activities will be confined to designated areas and blading of vegetation shall only occur in limited areas designated for that purpose by the qualified tortoise biologist.<br>9. All litter shall be restricted to disposal in covered raven-proof trash receptacles and the trash removed daily.<br>10. Fully implement all measures, including the reasonable and prudent measures, terms and conditions, reporting requirements, and reinitiation requirements in the biological opinion issued October 22, 2003 by the USFWS. |
| Wildlife (Gila monster) | | 1. Western will ensure implementation of the "Gila Monster Protocol for Minimizing Impacts on Construction Sites," by the biological monitor on-site for the Mojave Desert tortoise. |
| Wildlife (peregrine falcon) | | 1. Western will coordinate with the Federal Highway Administration on a monitoring program and restrict construction during the breeding season if an active peregrine falcon nest is located within one-quarter mile of the project area. |

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# APPENDIX G

# MITITAGION ACTION PLAN
# EXIRA STATION

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APPENDIX A
MITIGATION ACTION PLAN

# MITIGATION ACTION PLAN

**for the**

**EXIRA STATION PROJECT**

**(DOE/EA-1474)**

**WESTERN AREA POWER ADMINISTRATION**

**July 2003**

## Western Area Power Administration

# Mitigation Action Plan
# Exira Station

### 1.0 HISTORY AND BACKGROUND

Western Area Power Administration (Western) prepared an Environmental Assessment (EA) (DOE/EA-1474) for the interconnection of the Exira Station (Project), an electric generating peaking facility, to Western's transmission system. Missouri River Energy Services (MRES), on behalf of Western Minnesota Municipal Power Agency (WMMPA), applied to Western to interconnect the Project to Western's Denison-Creston 161-kilovolt (kV) Transmission Line. The project is located in Audubon County, Iowa on land purchased by WMMPA. Based on the EA, Western has determined that the proposed Exira Station Project would not result in any significant environmental impacts, and the preparation of an environmental impact statement (EIS) will not be required. The basis for this determination is described in the Finding of No Significant Impact dated July 2003.

Western's action for the Project would involve modifications to its transmission system to accommodate the additional power generated at the new peaking facility. Modifications would include:

1. Constructing a new switching station adjacent to the peaking facility.
2. Constructing about 2,000 feet of new transmission line and associated tie into the Denison-Creston 161-kV Transmission Line.
3. Making minor modifications to its existing communication system to facilitate operating the new switching station.

MRES' actions for the proposed Project include:

1. Constructing and operating the Exira Station, a peaking generation facility containing two simple cycle gas-fired combustion turbines.
2. Constructing and operating an interconnecting pipeline with Northern Natural Gas Company's interstate gas pipeline.
3. Drilling of up to seven groundwater wells to supply water for the plant's cooling water system and for water injection to the combustion turbines.
4. Constructing a 2,500 foot access road to the facility.
5. Constructing two stormwater catch basins. One would expand an existing small man-made wetland on the Project site.
6. Installing ancillary equipment including water holding tanks, cooling system, fences, communication systems, and electrical equipment.

The requirements for preparing a Mitigation Action Plan (MAP) are specified in 10 CFR 1021 (Section 331(a), Department of Energy National Environmental Policy Act Implementing Procedures). These guidelines state that DOE shall prepare a MAP for commitments to mitigations that are essential to render the impacts of a proposed action not significant. The guidelines further state that the MAP shall also explain how mitigation will be planned and implemented. The EA analyzed the impacts of the proposed Project. Two mitigation measures were described that are essential to render the impacts of the proposed action not significant: 1) protection of the Henslow sparrow, an Iowa State threatened species and 2) protection of neighboring groundwater wells from impacts associated with use of groundwater by the proposed Project.

## 2.0 FUNCTION AND ORGANIZATION OF THE MITIGATION ACTION PLAN

The following sections describe the plans and actions by which Western will implement and verify mitigation action commitments expressed in the FONSI.

Section 3.0 describes the monitoring and verification of mitigation actions and the reporting requirements. Section 4.0 describes the mitigation commitments and action plans for the Project. The commitment to the mitigation specified in the FONSI is presented along with an action plan composed of the tasks, responsible party, and schedule anticipated for the mitigation.

## 3.0 MITIGATION ACTION PLAN MONITORING AND REPORTING SYSTEM

Section 5.d. (11)(f) of DOE Order 451.1B, National Environmental Policy Act Compliance Program, requires Western to report MAP activities in its Annual Site Environmental Report, published by January 31 of each year. This annual report will reflect new information or changed circumstances. If major changes to mitigation included in this MAP are necessary, these changes will be described in the annual report. The annual report will be made available to the public.

A member of Western's environmental staff will verify mitigation results and determine if the mitigation actions achieved their intended purpose. Existing organizational and administrative controls will be used to gather information regarding implementation and status of mitigation actions. Such controls include applicable reporting systems, inspection, and verification. The results of inspection and verification will be reported on the anniversary of the MAP in the Annual Report. When mitigation actions are completed and verified, the information will be included in the Annual Report.

## 4.0 MITIGATION COMMITMENTS AND ACTION PLANS

Mitigation practices were defined for the Project in the EA and were considered during the assessment of impacts of the Project. Western maintains standard mitigative practices for the construction of transmission lines and substations (Construction Standard 13, Environmental Quality Protection). These standards are also applicable to construction of the plant and associated facilities. Additional mitigation is proposed by MRES to reduce impacts associated with plant construction and operation. These mitigation measures are identified in Table 2.5-1 of

the EA. With the exception of the mitigation measures for protection of the Henslow sparrow and neighboring groundwater wells, these measures will be implemented by Western and MRES as part of their standard operating procedures.

Table 4.1 outlines the mitigation measures to reduce impacts to less than significant and action items necessary to assure the mitigation is implemented to protect the Henslow sparrow and the neighboring groundwater wells.

| TABLE 4.1<br>MITIGATION MEASURES FOR EXIRA STATION | | APPLICABILITY | |
|---|---|---|---|
| | | **MRES Responsibility**<br>**(Plant Site, Switch-yard, Natural Gas Pipeline and Interconnect, Access Road)** | **Western Responsibility**<br>**(Transmission Line and Interconnect)** |
| Water | MRES shall conduct a groundwater pump test to determine the potential impacts of producing groundwater from the property. If the test results indicate a potential for significant impact to adjacent residential groundwater users, MRES would implement mitigation measures to resolve these impacts. Western will monitor the pump test and any mitigation measures developed to assure there are no significant impacts to adjacent residential groundwater users. | **Action:** Provide Western with a copy of the plan for pump testing for review.<br><br>**Action:** Provide Western with a letter report of pump test results.<br><br>**Action:** Provide Western with plans for mitigation measures to resolve impacts to adjacent residential groundwater wells | **Action:** Review plans for groundwater pump test.<br><br>**Action:** Review pump test results for impact to wells.<br><br>**Action:** Review mitigation measures to assure there are no significant impacts. |
| Biology | In accordance with Iowa Department of Natural Resources (IDNR) agreement for protection of the Henslow sparrow: | | |
| | 1) Prior to Project construction, MRES would identify any Henslow's sparrow nest locations and confirm whether nesting activities are complete. Western would determine what appropriate actions would be taken based on nesting status. | **Action:** Conduct biological survey to locate any Henslow sparrow nests; prepare letter report of results and submit to Western and IDNR prior to construction. | **Action:** Review MRES report and determine if further actions need to be taken. |
| | 2) Within a few days of the survey, the areas to be disturbed will be mowed if no Henslow sparrows are found. | **Action:** If no Henslow sparrows are found during the survey, mow the areas to be disturbed. | N/A |
| | 3) Prior to spring 2004, coordinate with IDNR and the Farm Services Administration (FSA) to determine what additional actions are required during operations for protection of the Henslow sparrow. | **Action:** By March 2004, submit a letter report to Western that includes what measures will be taken during operation for protection of the Henslow sparrow.<br><br>**Action:** Incorporate actions into standard operating procedures (SOP) for plant operations. | **Action:** Review letter report to assure measures are appropriate and have been coordinated with IDNR and FSA.<br><br>N/A |

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# APPENDIX H

# MITITAGION ACTION PLAN
# WOLF POINT – WILLISTON TRANSMISSION LINE REBUILD

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# MITIGATION ACTION PLAN

**for the**

**WOLF POINT, MT – WILLISTON, ND**

**TRANSMISSION LINE REBUILD**

**(DOE/EA-1401)**

**WESTERN AREA POWER ADMINISTRATION**

**July 2003**

## Western Area Power Administration

# Mitigation Action Plan

### 1.0 HISTORY AND BACKGROUND

Western Area Power Administration (Western) prepared an Environmental Assessment (EA) (DOE/EA-1401) for the Wolf Point to Williston Transmission Line Rebuild (Project). Based on the EA, Western has determined that the proposed Project would not result in any significant environmental impacts, and the preparation of an environmental impact statement (EIS) will not be required. The basis for this determination is described in the Finding of No Significant Impact issued in July 2003.

Western Area Power Administration (Western) proposes to rebuild a 95-mile segment of the Wolf Point to Williston 115-kilovolt (kV) Transmission Line to 230-kV standards and expand its existing Williston Substation to accommodate the voltage upgrade. Western maintenance forces would rebuild the transmission line over several construction seasons. The rebuild and substation expansion would be completed in 2011. A number of environmental protection measures are included with the proposed action to minimize potential adverse environmental effects.

The requirements for preparing a Mitigation Action Plan (MAP) are specified in 10 CFR part 1021 (Section 331(a), Department of Energy National Environmental Policy Act Implementing Procedures). These guidelines state that DOE shall prepare a MAP for commitments to mitigations that are essential to render the impacts of a proposed action not significant. The guidelines further state that the MAP shall also explain how mitigation will be planned and implemented. The EA analyzed the impacts of the proposed Project. Western has determined that three mitigation measures are essential to render the impacts of the proposed action not significant: 1) securing permits to discharge stormwater runoff, 2) avoiding any discovered mountain plover nesting areas, and 3) avoiding and monitoring know cultural resource sites to avoid impacts to cultural sites during construction.

### 2.0 FUNCTION AND ORGANIZATION OF THE MITIGATION ACTION PLAN

The following sections describe the plans and actions by which Western will implement and verify mitigation action commitments described above.

Section 3.0 describes the monitoring and verification of mitigation actions and the reporting requirements. Section 4.0 describes the mitigation commitments and action plans for the Project. The commitment to the mitigation is presented along with an action plan composed of the tasks, responsible party, and schedule anticipated for the mitigation.

## 3.0 MITIGATION ACTION PLAN MONITORING AND REPORTING SYSTEM

Section 5.d. (11)(f) of DOE Order 451.1B, National Environmental Policy Act Compliance Program, requires Western to report MAP activities in its Annual Site Environmental Report, published by January 31 of each year. This annual report will reflect new information or changed circumstances. If major changes to mitigation included in this MAP are necessary, these changes will be described in the annual report. The annual report will be made available to the public.

A member of Western's environmental staff will verify mitigation results and determine if the mitigation actions achieved their intended purpose. Existing organizational and administrative controls will be used to gather information regarding implementation and status of mitigation actions. Such controls include applicable reporting systems, inspection, and verification. The results of inspection and verification will be reported on the anniversary of the MAP in the Annual Report. When mitigation actions are completed and verified, the information will be included in the Annual Report.

## 4.0 MITIGATION COMMITMENTS AND ACTION PLANS

Mitigation practices were defined for the Project in the EA and were considered during the assessment of impacts of the Project. Western maintains standard mitigation practices for the construction of transmission lines and substations (see Appendices A1 and A2 in the EA). These mitigation measures are identified in Chapter 2 of the EA. Measures not addressed as part of this MAP will be implemented as part of Western's standard business and environmental program practices.

Table 4.1 outlines the mitigation measures to reduce impacts to less than significant and action items necessary to assure the mitigation is implemented to protect water quality, mountain plovers, future land use, and important cultural resource sites.

| TABLE 4.1<br>MITIGATION MEASURES | | Western Actions Needed<br>To Avoid Significant Impact |
|---|---|---|
| Water Resources | Permits for stormwater discharges associated with construction activities would be obtained from the Montana Department of Environmental Quality and the North Dakota Department of Health. | 1. Prior to the construction season, review the areas where structures would be replaced and define drainages that could be potentially affected by ground disturbance activities.<br>2. Based on Step 1, determine if a stormwater runoff permit would be required.<br>3. If a permit, is required, complete permit application and submit to appropriate agency.<br>4. Upon receipt of permit, provide permit to construction crews prior to structure replacement activities. |
| Wildlife | In the event mountain plovers are documented in the area, nesting areas would be avoided during the spring nesting season. | 1. Prior to the start of the construction, Western's environmental office will consult with the U.S. Fish and Wildlife Service to determine if mountain plover habitat has been identified within the project area.<br>2. If habitat has been identified, a survey by a qualified biologist would be conducted to determine if any nesting plovers are near areas where structures would be replaced.<br>3. If nesting plovers are discovered, the nesting areas would be avoided until the nesting season is over, based on periods defined by the U.S. Fish and Wildlife Service. |
| Cultural Resources | Sites subject to damage from construction activities would be avoided during structure replacement activities to avoid potential impacts. Tribal monitors will be used to ensure that known prehistoric sites are avoided. | 1. Prior to the initiation structure replacement activities near known cultural resource sites, Western's environmental office will make arrangements for Tribal monitors to monitor construction activities near know prehistoric cultural resource sites. In addition, when construction near the Tule Creek Bridge is planned, Western's environmental office will make arrangements for a qualified cultural resource monitor to monitor construction near this site.<br>2. Construction crews would be instructed to avoid the cultural sites plus a buffer (cultural sites will be designated as sensitive areas) until the monitors are available to monitor construction activities.<br>3. The Fort Peck Maintenance Office would be instructed not to conduct any maintenance on structures located near know cultural sites until cleared by Western's environmental office. Depending on the nature of the maintenance activities, maintenance work would be monitored by a Tribal monitor. |

# APPENDIX I

# ENVIRONMENTAL PERMITS

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## LIST OF ENVIRONMENTAL PERMITS
## OBTAINED OR ONGOING DURING CALENDAR YEAR 2003

| NAME | ISSUING AGENCY | STATUS | EXPIRATION DATE |
|---|---|---|---|
| ***404 Permit (Clean Water Act)*** | | | |
| Cottonwood Creek | USACE | Complete | 2/15/03 |
| Path 15 (Los Banos-Gates Transmission Project) | USACE | Open | 6/18/2005 |
| ***Migratory Bird Treaty Act/Eagle Protection Act*** | | | |
| Removal of raptor and raven nests (Colorado) | USFWS | Complete | Complete |
| Removal of bird nests (California) | USFWS | Ongoing | Open |
| Removal of bird nests (Arizona) | USFWS | Ongoing | Open |
| ***Hazardous Waste*** | | | |
| Hauler Registration | California Dept. of Toxic Substances Control Transporter | Renewed | Open |
| Hazardous Waste Hauling Permit | Minnesota Pollution Control Agency | Ongoing | Annual |
| Transporter Permit | North Dakota Department of Health | Ongoing | 10/07/09 |
| ***Permit to Operate*** | | | |
| Underground Storage Tank | Arizona Department of Environmental Quality | Ongoing | Annually |
| Diesel Tank for Backup Generator | Colorado State Inspector of Oil | Ongoing | Annually |
| ***Hazardous Materials Permit*** | | | |
| Hazardous Materials Business Plans | Alameda County | Ongoing | Annually |
| | Calavaras County | Ongoing | Annually |
| | Colusa County | Ongoing | Annually |
| | Contra Costa County | Ongoing | Annually |
| | Fresno County | Ongoing | Annually |
| | Glenn County | Ongoing | Annually |
| | Kern County | Ongoing | Annually |
| | Lassen County | Ongoing | Annually |
| | Mendocino County | Ongoing | Annually |
| | Merced County | Ongoing | Annually |
| | Modoc County | Ongoing | Annually |
| | Napa County | Ongoing | Annually |
| | Placer County | Ongoing | Annually |
| | Plumas County | Ongoing | Annually |

| NAME | ISSUING AGENCY | STATUS | EXPIRATION DATE |
|---|---|---|---|
| Hazardous Materials Business Plans (cont.) | Riverside County | Ongoing | Annually |
| | Sacramento County | Ongoing | Annually |
| | San Bernardino County | Ongoing | Annually |
| | San Joaquin County | Ongoing | Annually |
| | Santa Barbara County | Ongoing | Annually |
| | Santa Clara County | Ongoing | Annually |
| | Shasta County | Ongoing | Annually |
| | Tehama County | Ongoing | Annually |
| | Yolo County | Ongoing | Annually |
| Hazardous Waste Generation Permit (separate permits for 21 facilities) | Arizona State Department of Environmental Quality | Ongoing | Annually |
| HazMat Storage Permit | Nevada State Fire Marshall | Ongoing | Annually |
| ***Water Quality*** | | | |
| Septic Tank Permit | Nevada Bureau of Water Pollution Control | Ongoing | Annual |
| North Dakota Pollution Discharge Elimination System General Permit for Stormwater Discharges Associated with Construction Activity | North Dakota Department of Health | July, 2001 | Temporary |
| | City of Bismarck | July, 2001 | Temporary |
| ***Clean Air Permits*** | | | |
| Facility Permit – generator | Sacramento Metropolitan Air Quality Management District, California | Ongoing | Annually |
| Air Quality Permit – Logan Creek Microwave Facility | Glenn County Air Pollution Control District, Arizona | Ongoing | Annually |
| Air Quality Permit | Maricopa County, Arizona | Ongoing | Annually |
| ***Diesel Dispensing*** | | | |
| Facility Permit | Bay Area Air Quality Management District | Ongoing | Annually |
| Facility Permit | Shasta County Air Quality Management District | Ongoing | Annually |
| Facility Permit | Sacramento Metropolitan Air Quality Management District | Ongoing | Annually |
| ***Gasoline Dispensing*** | | | |
| Facility Permit | Bay Area Air Quality Management District | Ongoing | Annually |
| Facility Permit | Shasta County Air Quality Management District | Ongoing | Annually |
| Facility Permit | Sacramento Metropolitan Air Quality Management District | Ongoing | Annually |

# APPENDIX J

# 2003 ANNUAL PERFORMANCE REPORT
# NATIONAL ENVIRONMENTAL PERFORMANCE TRACK

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OMB No. 2010-0032

**2003 Performance Track Annual Performance Report**

# U.S. Department of Energy, Western Area Power Administration

# A080005

**Year 3 Annual Performance Report**

# SECTION A: GENERAL FACILITY INFORMATION

**A.1 Name of your facility:**

U.S. Department of Energy, Western Area Power Administration

**A.2 Name of your parent company:**

U.S. DOE, Power Marketing Administration

**A.3 Facility contact person for the Performance Track program:**

| | |
|---|---|
| **Name:** | Ms. Nancy Werdel |
| **Title:** | Environmental Protection Specialist |
| **Phone:** | (720) 962-7251 |
| **Fax:** | (720) 962-7263 |
| **Email:** | werdel@wapa.gov |

**A.4 Facility location:**

| | |
|---|---|
| **Street Address:** | 12155 W. Alameda Parkway |
| **Address Cont:** | P.O. Box 281213 |
| **City:** | Lakewood |
| **State:** | CO |
| **Zip Code:** | 80228-8213 |

**Mailing address (if different from above):**

| | |
|---|---|
| **Mailing Address:** | P.O. Box 281213 |
| **Address Cont:** | |
| **City:** | Lakewood |
| **State:** | CO |
| **Zip Code:** | 80228-8213 |

**A.5 Facility's website address (if any):**

http://www.wapa.gov

**A.6 Number of employees (full-time equivalents) who currently work in the facility:**

More than 1,000

**A.7 Does your company meet the Small Business Administration definition of a small business for your sector?**

No

**A.8** **North American Industrial Classification System (NAICS) Code(s) that is(are) used to classify business at the facility:**

221121

**A.9** **In your application and, perhaps, in previous annual performance reports, you described what your facility does or makes. Have there been any (additional) changes to your facility's list of products and/or activities? If yes, please list them here:**

**No Changes**

**A.10** **Have the environmental requirements applicable to your facility changed during this reporting period? If yes, please describe these changes here.**

**No Changes**

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# SECTION B: ENVIRONMENTAL MANAGEMENT SYSTEM

**B.1.a When was an EMS audit or other assessment last conducted by an independent third party at your facility?**

None of the Above

**If an assessment was conducted during 2003, please provide the type (e.g., ISO 14001 certification), the scope, and the month(s) of each assessment.**

**B.1.b When was an internal or corporate EMS audit last conducted at your facility?**

None of the Above

**If an audit was conducted during 2003, please provide the scope and month(s) of each audit.**

**B.1.c When was an internal or corporate compliance audit last conducted at your facility?**

2003

**If an audit was conducted during 2003, please provide the scope and the month(s) of each audit, and indicate who conducted the audit(s) (e.g., facility staff, corporate groups, third party). (Don't include audits, inspections, or site visits by regulatory or external organizations).**

| Scope | Dates | Who conducted the audit |
|---|---|---|
| Western has an ongoing compliance inspection program. Inspections are conducted at various facilities (substations, maintenance facilities, offices) to ensure compliance with applicable local, state and Federal environmental regulations, and environmental commitments, and to reduce environmental risks. Over 200 inspections are conducted annually throughout Western's service area. These inspections are conducted throughout the calendar year. | 2003 | Western environmental staff. |
| Compliance inspections were conducted at about 20 substations in California. | 2003 | County inspectors. |

**B.1.d (Optional) If you would like to describe any other audits or inspections that were conducted at your facility, please do so here.**

An independent review of Western's EMS Handbook was conducted in November 2003, during the last stages of development. The review concentrated on assuring the Handbook met the ISO 14001 standard sections. All gaps identified were corrected in the final version.

**B.1.e Briefly summarize corrective actions taken and other improvements made as a result of your EMS assessments and compliance audits.**

Results of inspections, assessments, and audits are forwarded to the appropriate functional area for correction. No significant corrective actions were required during 2003.

**B.1.f Has your facility corrected all instances of potential non-compliance and EMS non-conformance identified during your audits and other assessments?**

No such instances identified

**B.1.g When was the last Senior Management review of your EMS completed?**

**Who headed the review?**

**Name:**

**Title:** none performed

**B.2 ISO 14001 Certification. Is your facility currently certified to ISO 14001?**

No

**B.3 Environmental Aspects Identification. When did your facility last conduct a systematic identification and/or review of your environmental aspects?**

July 2003

**B.4 Progress Toward Achieving Objectives and Targets. In the table below, please provide a narrative summary of progress made toward EMS objectives and targets other than those reported as Environmental Performance Commitments in Section C. You may limit the summary to environmental aspects that are significant and towards which progress has been made during the reporting year. Do you have additional environmental aspects to report? Yes**

| Environmental Aspect | Progress Made This Year (e.g., quantitative or qualitative improvements, activities conducted) |
|---|---|
| Formal documentation of Western's EMS | Western completed its EMS Handbook in 2003. The Handbook formalizes Western's environmental program into the ISO 14001 framework. Western's senior managers will review and approve the Handbook in 2004. |
| Formal documentation of Western's EMS | Western continues implementation of corrective actions identified in a series of self-assessments conducted as a gap analysis for EMS development. As of 2003, a total of 72% of the corrective actions had been completed. |

# SECTION C: ENVIRONMENTAL PERFORMANCE COMMITMENTS

## COMMITMENT 1

| | | | | | |
|---|---|---|---|---|---|
| **Category:** | Air Emissions | | | | |
| **Aspect:** | Emissions of Greenhouse Gases | | | | |
| **Specific Information on Aspect (Optional):** | Carbon dioxide emissions from purchase of energy | | | | |
| | **Baseline** | **Year 1** | **Year 2** | **Year 3** | **Performance Commitment** |
| **Calendar Year:** | 2000 | 2001 | 2002 | 2003 | 2003 |
| **Actual Quantity (per year):** | 2,242 | 2,236 | 1,825 | 1,900 | |
| **Measurement Units:** | tons | **Other:** | | | |
| **Normalizing Factor:** | 1.0 | 1.0 | 1.0 | 1.0 | * |
| **Basis for your Normalizing Factor:** | No changes in Western's operations. | | | | |
| **Normalized Quantity per year:** | 2,242 | 2,236 | 1,825 | 1,900 | |

* Estimated

**C.1.b Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.**

Western has met its commitment to purchase a block of wind energy equivalent to 50,000 kilowatt-hour (kwh) per month. This amounts to approximately 20% of Western's energy consumption for its Lakewood, CO office. An electricity emission factor of 0.963 short tons/megawatt-hour (mwh) of carbon dioxide (Voluntary Reporting of Greenhouse Gases, Energy Information Administration, 2002 Data for Colorado) was used to calculate the emissions offset by purchase of the wind energy. This represents a 15.1% offset of carbon dioxide (from 2001 energy purchases) as a result of not purchasing power produced primarily by coal power plants. Western's Lakewood, CO office does not produce emissions.

**C.1.c Please list any other EPA voluntary programs to which you are also reporting these data (e.g. Energy Star, Project XL).**

None

## COMMITMENT 2

| | | | | | |
|---|---|---|---|---|---|
| **Category:** | Waste | | | | |
| **Aspect:** | Total Solid Waste | | | | |
| **Specific Information on Aspect (Optional):** | Waste recycled | | | | |
| | **Baseline** | **Year 1** | **Year 2** | **Year 3** | **Performance Commitment** |
| **Calendar Year:** | 2000 | 2001 | 2002 | 2003 | |
| **Actual Quantity (per year):** | 1,792 | 764 | 765 | 1,252 | |
| **Measurement Units:** | Other | **Other:** metric tons (mt) | | | |
| **Normalizing Factor:** | 1.0 | 1.0 | 1.0 | 1.0 | * |
| **Basis for your Normalizing Factor:** | | | | | |
| **Normalized Quantity per year:** | 1,792 | 764 | 765 | 1,252 | |

* Estimated

**C.2.b Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.**

The total solid waste generated by Western in 2003 was 4,549.8 metric tons, of which 3,297.8 metric tons were recycled. This represents a total of 72% waste recycled. Western's Performance Track goal is to recycle 75% of its solid wastes annually. Recycle amounts vary from year to year depending on the amounts and types of construction and maintenance activities performed each year. Western worked on improving its reporting processes for solid waste and recycling in 2003. The higher volume of sanitary waste is 2003 is attributed to 1) the purchase of new computers at Western's Corporate Service Office, where excess styrofoam packing (not recycled) filled the dumpsters requiring numerous additional trips to dispose of the waste. (Western uses the Department of Energy sanitary waste weight assumption of 25 pounds per cubic foot.) 2) The Upper Great Plains Region of Western increased its sanitary waste estimate significantly this year due to their calculating waste using a more quantitative method. We have consistently exceeded our goals to the Department of Energy of 1) reducing sanitary waste (our goal is 75%) and 2) recycling sanitary waste (our goal is 45%). We reduced our sanitary waste by: 91% in 2001, 91% in 2002, and 84% in 2003 as compared to the 1993 baseline. We recycled: 84% of our sanitary waste in 2001, 73% of our sanitary waste in 2002, and 72% of our sanitary waste in 2003.

**C.2.c Please list any other EPA voluntary programs to which you are also reporting these data (e.g. Energy Star, Project XL).**

None

## COMMITMENT 3

| | | | | | |
|---|---|---|---|---|---|
| **Category:** | Accidental Releases | | | | |
| **Aspect:** | Other | | | | |
| **Specific Information on Aspect (Optional):** | Sulfur Hexafluoride (SF6) | | | | |
| | **Baseline** | **Year 1** | **Year 2** | **Year 3** | **Performance Commitment** |
| **Calendar Year:** | 2000 | 2001 | 2002 | 2003 | 2003 |
| **Actual Quantity (per year):** | unknown | unknown | unknown | unknown | |
| **Measurement Units:** | Other | **Other:** percent | | | |
| **Normalizing Factor:** | 1.0 | | | | * |
| **Basis for your Normalizing Factor:** | | | | | |
| **Normalized Quantity per year:** | | | | | |

* Estimated

**C.3.b Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.**

Western continues to strive for emission reduction of SF6 gas. This has the benefit of lowering maintenance costs for equipment thus promoting system reliability as well as protecting the environment. Many leak detection activities took place in 2003 in most of Western?s regions. EIS (Equipment Imaging and Solutions), Inc of Kaufman, Texas, performed the leak detections at Western facilities and prepared reports with photos and video. Leak detections were performed at Coolidge, ED5, Flagstaff, and Pinnacle Peak substations in Arizona, and Archer, Ault, Estes Park, Ft. Thompson, Martin, and Winner Substations in Colorado. Repairs have been made to most leaking equipment. Repairs will be made to the remaining leaking equipment as soon as possible when electrical outages can be scheduled. Most regional offices have improved their emissions tracking. Ongoing improvements in SF6 inventory tracking will result in improved emissions data for 2005.

**C.3.c Please list any other EPA voluntary programs to which you are also reporting these data (e.g. Energy Star, Project XL).**

EPA Program on SF6 Emission Reduction (voluntary)

## COMMITMENT 4

| | | | | | |
|---|---|---|---|---|---|
| **Category:** | Preservation/Restoration | | | | |
| **Aspect:** | Habitat Impacts | | | | |
| **Specific Information on Aspect (Optional):** | Colorado River Endangered Species Recovery Program | | | | |
| | **Baseline** | **Year 1** | **Year 2** | **Year 3** | **Performance Commitment** |
| **Calendar Year:** | 2000 | 2001 | 2002 | 2003 | 2003 |
| **Actual Quantity (per year):** | 507.5 | 1098.82 | 1219.32 | 1715.32 | 2250 |
| **Measurement Units:** | acres | **Other:** | | | |
| **Normalizing Factor:** | 1.0 | 1.0 | 1.0 | 1.0 | * |
| **Basis for your Normalizing Factor:** | None | | | | |
| **Normalized Quantity per year:** | 507.5 | 1098.82 | 1219.32 | 1715.32 | |

* Estimated

**C.4.b Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.**

Western continues to provide support for the Upper Colorado River Basin Endangered Species Recovery Program. Western provides funding for these activities and provides technical expertise to these efforts. The emphasis of the program has changed from acquisition of available floodplains to restoration and development of floodplain habitat already acquired and pursuit of only those additional properties that are deemed high priority and when available. The 2003 numbers include the addition of 496 acres of habitat easements (455 acres in the Green River Basin and 41 acres in the Colorado River Basin). Additional acquisitions are not anticipated. In addition, Western support stocking of endangered fish in the Colorado, Green and Gunnison rivers. In 2003, stocking included: Colorado River: Bonytail - 7,200 subadults, Colorado Pikeminnow - 1000 adults, Razorback Sucker - 16,300 subadults and 5,358 adults Gunnison River: Bonytail - 13,600, Colorado Pikeminnow - 1051 adults Green River: Bonytail - 6,400 adults, Razorback Sucker - 345,000 larvae and 2,364 adults. Western similarly supports other fish programs such as the Pallid sturgeon recovery program on the Missouri River.

**C.4.c Please list any other EPA voluntary programs to which you are also reporting these data (e.g. Energy Star, Project XL).**

None

# SECTION D: PUBLIC OUTREACH AND PERFORMANCE REPORTING

**D.1 Please briefly describe the activities that your facility conducted during the year to interact with the community on environmental issues and to report publicly on environmental performance.**

Western involves the public in its activities by using a variety of tools. Publications such as the Closed Circuit and Energy Services Bulletin bring interesting and informative articles about Western's activities and services to our customers and the public. These publications, as well as Western's Annual Report, are also posted on Western's Web site. Western holds interactive customer meetings throughout our service territory to discuss business and environmental activities that affect our power contracts. We also meet with the general public to discuss power and transmission rate adjustments and extensions, and other issues. Western conducts public involvement activities under the National Environmental Policy Act for Environmental Impact Statements/Environmental Assessments for power plant interconnections, voltage support projects, new transmission line projects, transmission line maintenance work and other projects. Western also involves the public in many of its other decision-making processes, including rate actions conducted under the Administrative Procedures Act. Public meeting notices are published in the Federal Register, newspapers, special interest newsletters and other media. Western also posts meeting notices on its Web site and provides personal notifications to individuals and organizations that have asked to be kept informed of a variety of agency activities. Besides the required public information and public comment forums, Western involves the public in decisions that affect them through a variety of informal means including opportunities to: - learn about Western's proposed action - comment on and suggest different alternatives - request specific analysis be conducted - comment on proposed decisions - learn how individual comments were addressed. During the past year Western has extensively used its Web site and e-mail to both provide information on numerous decision processes and to gather feedback from interested parties.

**D.2 Please indicate which of the following methods your facility plans to use to make its Performance Track Annual Performance Report available to the public.**

Web Site
Meetings
Press Releases
Other

URL: http://www.wapa.gov

Please Specify Other: publications including Closed Circuit (Western News) and Energy Services Bulletin

Attachments (if applicable) :

OMB No. 2010-0032

# SECTION E: Self-Certification of Continued Program Participation

The U.S. Environmental Protection Agency is not yet in a position to accept electronic signatures and therefore requests a faxed, signed copy of the Section E page. Please complete Section E online, then print Section E using the link on the Overview page. Please sign Section E or have it signed by a senior manager at your facility and fax it to the Performance Track Information Center at (617) 354-0463.

**On behalf of, U.S. Department of Energy, Western Area Power Administration, I Certify that**

**-- I have read and agree to the terms and conditions as specified in the National Environmental Performance Track Program Guide. This facility, to the best of my knowledge, continues to meet all program criteria;**

**-- I have personally examined and am familiar with the information contained in this Annual Performance Report. The information contained in this report is, to the best of my knowledge and based on reasonable inquiry, true, accurate, and complete;**

**-- My facility has an environmental management system (EMS), as defined in the Performance Track EMS criteria, including systems to maintain compliance with all applicable federal, state, tribal, and local environmental requirements, in place at the facility, and the EMS will be maintained for the duration of the facility's participation in the program;**

**-- My facility has conducted an objective assessment of its compliance with all applicable federal, state, tribal, and local environmental requirements; and the facility has corrected all identified instances of potential or actual noncompliance; and**

**-- Based on the foregoing compliance assessments and subsequent corrective actions (if any were necessary), my facility is, to the best of my knowledge and based on reasonable inquiry, currently in compliance with applicable federal, state, tribal, and local environmental requirements.**

**I agree that EPA's decision whether to accept participants into or remove them from the National Environment Performance Track is wholly discretionary, and I waive any right that may exist under any law to challenge EPA's acceptance or removal decision.**

**I am the senior manager with responsibility for the facility and am fully authorized to execute this statement on behalf of the corporation or other legal entity whose facility is part of the National Environmental Performance Track program.**

| | |
|---|---|
| **Signature/Date:** | Michael S. Hacskaylo APR 1 - 2004 |
| **Name:** | Mr. Michael S. Hacskaylo |
| **Title:** | Administrator |
| **Phone Number:** | (720) 962-7077 |
| **E-Mail Address:** | mike@wapa.gov |
| **Facility Name:** | U.S. Department of Energy, Western Area Power Administration |
| **Facility Street Address:** | 12155 W. Alameda Parkway<br>P.O. Box 281213<br>Lakewood, CO 80228-8213 |
| **Mailing Address:** | P.O. Box 281213<br>Lakewood, CO 80228-8213 |
| **Performance Track ID#:** | A080005 |

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# APPENDIX K

# 2003 POLLUTION PREVENTION AND WASTE MINIMIZATION REPORT

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# Recycling Data Report (by Site) for CY 2003

**Displaying sites:** Western Area Power Administration

# Western Area Power Administration for CY 2003

| Recycle Category | Quantity |
|---|---|
| **Paper Products:** | |
| Office and Mixed Paper | 86.60 mt |
| Corrugated cardboard | 42.50 mt |
| Phone Books | 2.50 mt |
| Newpapers/Magazines | 3.10 mt |
| **Scrap Metals:** | |
| Stainless steel | 39.70 mt |
| Copper | 99.70 mt |
| Iron/Steel | 502.60 mt |
| Aluminum | 86.70 mt |
| Aluminum Cans | 0.30 mt |
| Lead | 0.00 mt |
| Zinc | 0.00 mt |
| Other: (see discussion below) | 0.00 mt |
| **Precious metals:** | |
| Silver | 0.00 mt |
| Gold | 0.00 mt |
| Platinum | 0.00 mt |
| Other: (see discussion below) | 0.00 mt |
| **Other Items:** | |
| Antifreeze | 0.50 mt |
| Engine oils | 5.70 mt |
| Toner cartridges | 0.60 mt |
| Batteries | 33.50 mt |
| Tires | 3.00 mt |

| | |
|---|---|
| Food waste | 0.00 mt |
| Concrete/Asphalt | 95.20 mt |
| Fluorescent Bulbs | 0.50 mt |
| Ballasts | 0.00 mt |
| Glass | 0.00 mt |
| Plastic | 0.00 mt |
| Styrofoam | 0.00 mt |
| Transformers | 204.00 mt |
| Wood (chips, compost) | 0.00 mt |
| Computers/Electronics | 15.40 mt |
| Other: (see discussion below) | 2,075.70 mt |

**Explanation for other amounts:** Explanation for other amounts: Mineral Oil Dielectric Fluid = 795.2 mt; Wood Poles and Crossarms = 1279.2 mt; Wood = 0.9 mt; Solvent = 0.4 mt

**Sanitary Waste**

| Routine | Cleanup/Stabilization |
|---|---|
| 1,252.00 mt | 0.00 mt |

# Waste Generation Report (by Site) for CY 2003

Radioactive wastes reported in cubic meters (m3); Hazardous and Sanitary wastes reported in metric tons (mt)

**Displaying sites:** Western Area Power Administration

## Western Area Power Administration

| Waste Type | Routine Waste | Cleanup/Stabilization Waste | Total Waste |
|---|---|---|---|
| High Level Waste | 0 | 0 | 0 |
| Transuranic Waste | 0 | 0 | 0 |
| Mixed Transuranic Waste | 0 | 0 | 0 |
| Low Level Waste | 0 | 0 | 0 |
| Mixed Low Level Waste | 0 | 0 | 0 |
| RCRA Waste | 5 | 0 | 5 |
| State Regulated Waste | 12 | 0 | 12 |
| TSCA Waste | 44 | 0 | 44 |
| Mixed TSCA Waste | 0 | 0 | 0 |

## Grand Total for selected sites

| Waste Type | Routine Waste | Non-Routine Waste | Total Waste |
|---|---|---|---|
| High Level Waste | 0 | 0 | 0 |
| Transuranic Waste | 0 | 0 | 0 |
| Mixed Transuranic Waste | 0 | 0 | 0 |
| Low Level Waste | 0 | 0 | 0 |
| Mixed Low Level Waste | 0 | 0 | 0 |
| RCRA Waste | 5 | 0 | 5 |
| State Regulated Waste | 12 | 0 | 12 |
| TSCA Waste | 44 | 0 | 44 |
| Mixed TSCA Waste | 0 | 0 | 0 |

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