2005 ACCOMPLISHMENTS

Engineering

California earthquake research working group initiated

Western joined an earthquake research working group headed by the California Institute for Energy and Environment to help improve the seismic performance of transmission lines and substations in California. The California Energy Commission provided about $2 million per year for earthquake engineering research. The group is identifying weaknesses in the transmission system, suggesting research projects to improve these weaknesses and evaluating proposals from research agencies. This group will help ensure that Western's transmission system is as secure and reliable as possible, especially against the forces of Mother Nature.

Environment

Multi-Species Conservation Program agreement signed

Western staff, Interior agency representatives and the governors of California, Arizona and Nevada signed an agreement during a ceremony in April 2005 to protect numerous natural resources along the lower Colorado River Basin. The Secretary of the Interior hosted the ceremony to commemorate the signing of the Lower Colorado Multi-Species Conservation Program—a coordinated, comprehensive, long-term multi-agency effort to conserve and recover endangered species and to protect and maintain wildlife habitat on the lower Colorado River. The program would create more than 8,100 acres of riparian, marsh and backwater habitat for four listed species and 16 other species native to the lower Colorado River. By joining the agreement, Western gained approval to operate and maintain our facilities in compliance with the Endangered Species Act over the next 50 years.

Sacramento voltage support preliminary work started

Western reached agreement in January 2005 with the Sacramento Municipal Utility District for the district to provide $630,000 to complete pre-design activities and field data for a proposed double circuit 230-kV transmission line between Western's O'Banion Substation and SMUD's Elverta and/or Natomas substations in central California. The city of Roseville contributed an additional $70,000. The proposed transmission line was the preferred alternative identified in a 2003 environmental impact statement that studied possible solutions to resolve voltage support problems in the Sacramento area. Western is now doing field surveys and determining what additional environmental compliance work is needed.

Vietnamese environmental program supported

Western environmental staff met with a delegation of their Vietnamese counterparts both at Western and in Vietnam to exchange information about how to manage and address polychlorinated biphenyl contamination issues. After the Vietnamese utility workers and government officials visited Western's office, Sept. 16 and 17, 2004, as part of a tour arranged by the U.S. State Department and the Vietnamese government, a Western environmental manager traveled to Vietnam in April 2005 to provide assistance in setting up and implementing a PCB management program. PCBs were used in utility operations and now must be contained and cleaned up to prevent environmental harm. Western has significant experience in managing PCBs, and staff previously served on a State Department team providing support in Vietnam.

Human Resources

Career Progression Program launched

Western launched a 12-month, self-directed Career Progression Program in FY 2005 to help employees develop career paths and prepare for future roles, while helping Western retain knowledge in crucial job skills. The program helps entry-level employees develop skills and related competencies that will prepare them to compete for new types of positions, if and when they become available. The program is one aspect of succession planning efforts at Western to cope with expected retirements. Roughly 38 percent of Western employees were eligible for retirement at the end of calendar year 2005.

First Emerging Leaders Program class graduated

The first 20 participants in Western's Emerging Leaders Program graduated from the year-long developmental program on Feb. 18, 2005. The competitive program teaches non-supervisory employees about the competencies and leadership skills required for target positions and also

broadens their knowledge of Western's mission and vision in an ever-evolving utility industry. The ELP is one of three developmental programs that will prepare Western employees for supervisory and managerial positions.

Maintenance

National Fire Plan Award received

Western's Western Colorado Maintenance Office staff and representatives from the Bureau of Land Management, U.S. Forest Service and other cooperating agencies received a National Fire Plan award in February 2005 from Interior Assistant Secretary Lynn Scarlett and Agriculture Assistant Secretary Mark Ray for their work on the Uncompahgre Plateau Project. The award was for the work by project participants in reducing fire problems on the western Colorado plateau, including removing tall, hazardous trees and reducing fire hazards along power line rights-of-way. This work has led to the improvement of the ecosystem as a whole, including thinning vegetation that attracts more diverse wildlife to the right of way.

Operations

Continuing Education Provider status granted by NERC

The North American Electric Reliability Council awarded Continuing Education provider status to Western's Rocky Mountain Region in FY 2005, joining the Upper Great Plains Region that received the status in FY 2004. This action also confirms that Western's Electric Power Training Center courses meet NERC requirements for dispatcher professional development. As a NERC-approved Continuing Education provider, Western can develop and deliver training that allows students to earn continuing education credits. Western will use this status to provide dispatcher training to assist in maintaining NERC system operator certification. Courses include: Interconnected Power System Operations; Western Electricity Coordinating Council/ Minimum Operating Reliability Criteria System Operator Training; North American Electric Reliability Council Dispatcher Certification Preparation; Real-Time Operations and Reliability Readiness; and Relaying for Operations Personnel.

New subcontrol area under SMUD implemented

Western successfully switched its Sierra Nevada facilities over to subcontrol operations under the Sacramento Municipal Utility District's control area on Jan. 1, 2005. As a contract-based subcontrol area operator, Western manages the physical flow of electricity for project use loads and to customers directly connected to Western's nearly 1,000 miles of transmission lines in northern California.

Post 2004 Operations implemented

When long-standing contracts with Pacific Gas and Electric Company expired on Jan. 1, 2005, SN began serving its customers under a new power marketing plan and operational configuration based on successor arrangements. These arrangements, including ones with the California Independent System Operator, were approved by the Federal Energy Regulatory Commission. Western now provides firming energy and ancillary services for project use loads and full load service customers, services that PG&E previously provided. Western coordinates with the Bureau of Reclamation and customers to develop generation schedules and load forecasts for project use loads and customers.

SCADA System upgraded

Under a partnership created in October 2004, Western and Southwestern power administrations are updating SWPA's aging Supervisory Control and Data Acquisition system, while Western and SWPA look into a future of shared system development backups and reliability. The SCADA system that Southwestern and Western are now sharing will improve grid reliability as both agencies will have full freedom to make changes rapidly to respond to power industry requirements or system emergencies. The cooperative effort also allows the agencies to provide backup resources for each other in times of crisis.

Student dispatch program launched

Finding and shaping the right people to become reliable system operators is the goal of Western's new Dispatcher Trainee Program, launched in FY 2005 at Upper Great Plains' Watertown office. Through the Dispatcher Trainee Program, two students enrolled at Bismarck State College in North Dakota working toward a two-year degree in electrical and transmission system technology get hands-on training and experience at Western, while taking online courses to learn the theory behind the process. After two years, participating students will take the North American Electric Reliability Council Certification Exam. If there's an opening for a dispatcher, they can be converted to career status and hired for the vacant position. With this program, Western can customize training of future dispatchers so that they are familiar with the unique aspects of Western's system.

Western recognized as NERC example of excellence

The North American Electric Reliability Council recognized Western's UGP Control Areas in its "Examples in Excellence" program for using electric industry practices that NERC identifies as exceptionally effective in protecting reliability of the interconnected bulk electric system. NERC recognized West-

ern for our approach to monitoring frequency from multiple locations across our large service territory. Western's Upper Great Plains Region operates two control areas—one in the Midwest Reliability Organization Region (Eastern Interconnection) and one in the Western Electricity Coordinating Council Region (Western Interconnection). Operators monitor frequency at 148 locations and display 38 of these quantities on a single display representing a geographical map of these two control areas.

Power Marketing

Final allocations awarded for Pick-Sloan customers

In October 2004, Western announced final allocations to three customers from the Post-2005 Resource Pool of the Pick-Sloan Missouri Basin Program—Eastern Division. Auburn, Iowa will receive 128 KW of summer capacity and147 KW of winter capacity; Pocahontas, Iowa, will receive 1,052 KW of summer capacity and 1,072 KW of winter capacity; and Montana State University—Bozeman, will receive 2,113 KW of summer capacity and 3,072 KW of winter capacity. The 15-year allocations come from a Federal power resource pool of Pick-Sloan's long-term marketable resource that becomes available Jan. 1, 2006.

General Power Contract Provisions revised

Western's marketing staff revised our General Power Contract Provisions to incorporate new standard provisions and to update existing provisions to comply with recent changes in the electric utility industry and new business practices. The GPCPs are a compilation of generally applicable contracting provisions that are typically included in new or amended contracts between Western and its customers. Western published final GPCPs on June 15, 2005. Western conducted an informal consultation process in each region to solicit customer comments on proposed changes during the two-year revision project. The updated GPCPs include revised provisions on delivery of service, rates, billing and payment, power sales, transfer of interest, choice of law and other provisions, such as liability and authorization contingencies. The newly adopted provisions will be phased in over time as Western's power contracts are revised or amended.

New firm power allocations offered to tribes

Because Western is committed to serving Native American tribes, we began delivering hydropower benefits to new tribal customers as we implemented the Energy Planning and Management Program's Power Marketing Initiative for the Salt Lake City Area/Integrated Projects. On Oct. 1, 2004, 57 tribes in the Salt Lake City Area/Integrated Project's marketing territory and five tribes in Rocky Mountain's marketing area became eligible to receive the benefits of Federal power from Western. Add to that the four tribes in the Sierra Nevada Region that began receiving Central Valley Project power allocations in January. These new tribes, as well as existing Native customers, bring the total number of tribes Western serves to 87.

Parker-Davis Project Remarketing effort developed

In FY 2005, Western announced the availability of firm power allocations from the Parker-Davis Project's long-term marketable resource and began seeking applications from entities interested in this resource pool, which becomes available Oct. 1, 2008. Under Western's Energy Planning and Management Program, we plan to allocate under 20-year contracts for long-term firm power an available resource pool of about 17 MW of summer season capacity and 13 MW of winter season capacity. Qualified applicants must be preference entities as defined by section 9(c) of the Reclamation Project Act. First consideration will be given to qualified applicants in the marketing area who do not have a contract with Western for Federal power resources or are not a member of a parent entity that has a contract with Western for Federal power resources.

Safety

Safety program focuses on working safely

Western employees and managers continued to focus on working safely in 2005. In April, Western employees were once again recognized our continuing commitment to working safely by the American Public Power Association. Western earned an honorable mention for utilities with 2 million to 4 million worker hours in APPA's annual safety contest.

Western's annual Bonus Goal program included three safety goals:

- Nine or fewer injuries resulting in lost work days
- 227 or fewer lost work days
- 8 or fewer recordable motor vehicle accidents

In Bonus Year 2005, employees reached two of the three safety bonus goals with eight injury accidents and seven motor vehicle accidents, making each eligible for an award payout of $333. However, to help accommodate unplanned congressional earmarks, Western's senior managers suspended bonus goal payments for FY 2005.

Fall protection, tree trimming practices examined

The goal of decreasing lost workdays due to accidents eluded Western in 2005, with employees recording 433 lost work days during the bonus year.

In response to a fall accident suffered by a line worker in early October 2004, a team of experts was commissioned to review Western's fall protection program as it related to this accident to determine if any changes needed to be incorporated. The team made several recommendations to improve practices related to preventing falls from wood pole structures. All have now been adopted.

Western also took action in 2005 to ensure our tree trimming practices are as safe as possible. With increasing focus on outages caused by vegetation encroachments in rights-or ways, Western developed communication tools to share with landowners on trees and powerline right-of-way safety. We also updated our tree trimming procedures to protect employees from injuries while maintaining rights-or way.

Coloring contest brings health, safety home

Safety at Western isn't solely focused on on-the-job activities, although workplace safety is the primary emphasis. An annual safety coloring contest for employee's children and grandchildren brings the health and safety message home. The 2004 theme echoed a continuing focus on healthy lifestyles as a contributor to workplace safety.

More than 175 young, aspiring artists pulled out their pens, pencils, crayons and glitter to illustrate the importance of proper diet and exercise. Winners from each of the five age categories received blue ribbons and their choice of a $50 U.S. Savings Bond or a $40 check. All other contest participants received small prizes for entering the contest.

Transmission

Open Access Transmission Tariff updated

Western filed a revised Open Access Transmission Service Tariff on Jan. 25, 2005, with the Federal Energy Regulatory Commission. Western updated certain provisions to our previous tariff, which was completed in 1998, adopted the principal features of the Commission's Standard Large Generator Interconnection Procedures and Standard Large Generator Interconnection Agreement and made additional changes to further Western's mission and transmission marketing efforts.

Path 15 commissioned

Western commemorated the energization of the Path 15 Upgrade Project Dec. 14, 2004, at the California Independent System Operator's Folsom control center. Western's Administrator **Mike Hacskaylo** joined Calif. Gov. Arnold Schwarzenegger, then DOE Deputy Secretary Kyle McSlarrow and other state and Federal officials in commissioning the 500-kV transmission line, which now operates as part of California's power grid. The $250 million Path 15 Upgrade Project involved building a third transmission line and completing other work to relieve an energy bottleneck between northern and southern California. The project was built under a unique public-private partnership to increase transfer capacity within the strategic transmission corridor in central California by 1,500 MW, or enough to provide power to 1.5 million homes.

Sale of long-term non-firm transmission now offered

Western completed its first long-term non-firm transmission sale in the Rocky Mountain Region to the Municipal Energy Agency of Nebraska in May 2005. This offering will assist renewable developers with acquiring transmission that would not normally be available on a long-term basis due to transmission constraints. Western defined business practices for this yearly non-firm product, including available transmission capacity, rates, application fees and credits. On May 13, 2005, Western approved two transmission requests from MEAN to provide 40 MW of yearly non-firm transmission capacity. Expected revenue from this sale is about $540,000.

Western joins EPRI team for grid reliability metrics

Western staff are serving on an Electric Power Research Institute team on transmission grid reliability metrics. The team is defining a set of transmission system reliability metrics and supporting definitions for industry comparability, internal decision making and regulatory policymaking. After agreeing on metrics that measure the frequency and duration of transmission outages and transmission availability, as well as recommending a second phase to investigate how to standardize metrics among utilities with inherent system differences, the team issued its final report to the 29 participating North American utilities in summer 2005. This team's work will standardize how utilities' reliability efforts are measured and will ultimately help ensure a more reliable bulk interconnected transmission system.