

UPDATE

April - June 2008

Hydro Strategy “Produced” in Vegas

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The UPDATE is published by and for customers, retirees, contractors, and employees of Southwestern Power Administration like:



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- Dallas Cooper
- Loyd Hines
- Harry Mardirosian
- Beth Nielsen
- Fritha Ohlson

WNT

- Ashley Butler
- Vicki Clarke
- Ruben Garcia
- William Hiller
- Brad Howland
- Kathy O’Neal

Corps

- Lee Beverly
- Little Rock District

SPRA

- Barbara DelGrosso

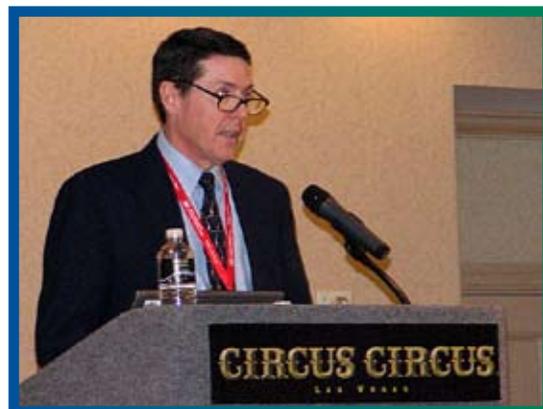
“Produce the Power!” was the theme as representatives from Federal hydropower customers, customer groups, and national associations joined those from the Power Marketing Administrations (PMA) and the U.S. Army Corps of Engineers (Corps) in Las Vegas, Nevada, on May 13-14, 2008, for the third Hydropower Strategic Workshop.



Nearly 120 people, including those involved in the daily operation of Corps hydropower projects and powerplants, managers and technical staff of Federal wholesale hydropower customers, and top level executives from the U.S. Department of the Army and the U.S. Department of Energy, met to provide direction and input for the future of the Federal hydropower program.

The aggressive agenda, intended to build on the foundation of the two prior workshops, focused on four major themes: Produce Sustained Hydropower Funding; Produce Workable Solutions to Water Supply Storage Reallocations; Produce Sustainable Hydropower Infrastructure; and Produce an Empowered and Aligned Hydropower Community.

Steven Stockton, Director of Civil Works for the Corps, gave a welcoming address which emphasized the need for more outspoken advocacy of Corps infrastructure funding. He noted that while regional organizations lobby for specific regional needs, there still needs



SOUTHWESTERN’S GEORGE ROBBINS ADDRESSES WORKSHOP PARTICIPANTS REGARDING WATER REALLOCATION ISSUES.

to be a unified, national voice for the Federal hydropower program as a whole. This concept became a common thread throughout the workshop.

The first day’s schedule included panel discussions regarding each of the four workshop themes.

Produce Sustained Hydropower Funding

The panel, comprised of PMA staff and hydropower customers, addressed the effectiveness of funding arrangements.

Ozark Turbine #4 Rehab In Progress



THE BEEFIER NEW RUNNER HUB IS DESIGNED TO WITHSTAND THE FORCES DELIVERED BY THE ARKANSAS RIVER ONCE IT IS INSTALLED AT OZARK DAM POWERHOUSE.

“The runner hub and shafts have been removed, and we’re disassembling the wicket gate mechanism,” says Beverly. “The next step is to remove the wicket gate ring, and then we’ll proceed with painting and refurbishing the water passage.”

Once that process is completed, the new parts will begin to be installed. Beverly says that the turbine contractor, VA Tech, successfully assembled, tested, and balanced the new runner hub last month at its facility in Toronto, Canada, and is now disassembling it for transportation to Ozark.

The work on the turbine contract consists of turbine design, model testing, and fabrication; disassembly and reassembly of all five turbines; and work on the speed increasers. Upgrades in the new turbines are designed to correct the problems associated with the original slant-axis design.

Funding for the turbine replacement and other Ozark major rehabilitation work has so far been provided through a combination of appropriations and customer-funding. To date, approximately \$28.8 million has been received in appropriations, while funding through the Jonesboro Memorandum of Agreement has totaled nearly \$30 million. 💧

The major rehabilitation of all five turbines at Ozark Dam Powerhouse is underway, with contract crews currently focusing much of their efforts on Unit #4.

Ozark’s troubled Unit #4 has most recently been offline since July 2004. The first of Ozark’s five units to undergo rehabilitation, Unit #4 had suffered from a cracked flange on its shaft caused by operational stresses related to the slant-axis design. Unit #2, diagnosed with the same problem, is also offline awaiting rehabilitation. At this time, Units #1, #3, and #5 are still in operation, but they too are awaiting their turns at rehabilitation.

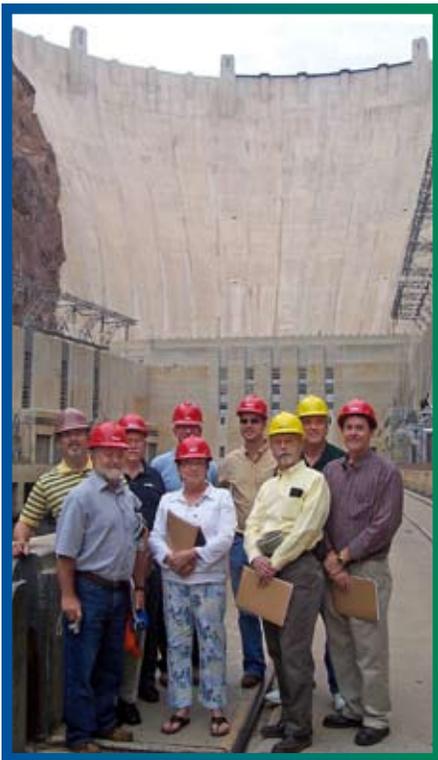
Lee Beverly, Program Project Manager at the Little Rock District of the U.S. Army Corps of Engineers, reports that the work is progressing as expected on Unit #4, although a return-to-service date has not yet been determined.



ABOVE: THE OLD RUNNER HUB IS REMOVED FROM UNIT #4 FOR REPLACEMENT AS PART OF A MAJOR REHABILITATION THAT WILL INVOLVE ALL FIVE TURBINES AT OZARK DAM POWERHOUSE.

BELOW: CONTRACTORS REMOVE THE STUB SHAFT OF UNIT #4 IN MAY 2008, ALLOWING ACCESS TO THE WICKET GATES.





WORKSHOP ATTENDEES POSE IN FRONT OF THE POWERHOUSE DURING A HARD HAT TOUR OF HOOVER DAM.

HYDRO WORKSHOP, CONTINUED FROM PAGE 1

Kamau Sadiki, Corps Hydropower Business Line Manager, gave an overview of the appropriations process for hydropower, and then Southwestern Administrator Jon Worthington and representatives from Western Area Power Administration, Southeastern Power Administration, and Bonneville Power Administration (Bonneville) gave reports on their specific marketing areas. Worthington stressed in his remarks that hydropower rates must continue to be competitive in order to be viable.

It was noted that the Jonesboro Memorandum of Agreement (MOA), established among Southwestern, the Corps, and the City of Jonesboro, Arkansas, has provided more funding for Corps projects than any other alternative funding vehicle, aside from Bonneville's statute-approved revolving fund. Southwestern Power Resources Association (SPRA) Executive Director Ted Coombes explained that the Jonesboro MOA was not, however, designed to handle the costs of major rehabilitation projects such as it is now doing, and noted how cash flow can be interrupted by drought conditions like those experienced in 2006. Coombes and Tom Graves, Executive Director of the Mid-West Electric Consumers Association, both reiterated the critical need for continued Congressional appropriations for major rehabilitations.

Produce Workable Solutions to Water Supply Storage Reallocations

George Robbins, Director of Southwestern's Division of Resources & Rates, outlined the differences in procedures used by the Corps and by Southwestern with regard to determining the magnitude and value of energy and capacity that

is lost when water storage is reallocated from hydropower to municipal and industrial use. The panel also discussed issues associated with reallocations that reduce the energy and capacity in contracts between hydropower customers and the Federal government.

Following the panel discussion, the workshop participants gathered for lunch, where Roger Stark, an attorney with Kirkpatrick, Lockhart, Preston, Gates & Ellis in Washington, D.C., talked about the pros and cons of public-private partnerships and third party financing. Panel discussions then continued during the afternoon.

Produce Sustainable Hydropower Infrastructure

This panel addressed topics including Facilities and Equipment Management System (FEMS) implementation; hydroAMP (Asset Management Strategy); and the O&M Cost Benchmarking Initiative. Participants included Mike Alder, co-chair of the Joint Operating Committee of Bonneville, and employees representing various Corps organizations.

Produce an Empowered and Aligned Hydropower Community

Representatives from the Corps reiterated the need for the Federal hydropower community to embrace a unified message that would raise awareness and understanding of hydropower as a national strategic resource. SPRA's Coombes suggested that each PMA customer group, as well as each national association, prepare a presentation explaining its regional and national policies, actions, and plans to advance the Federal hydropower program.

The panel also addressed stakeholders' perspectives on the Reliability Compliance Standards of the North American Electric Reliability Corporation (NERC) that became effective in June 2007. While it was noted that the Corps, the Bureau of Reclamation, and PMAs are taking steps to comply with NERC's Compliance Standards, discussion focused on the legality of one Federal agency assessing penalties or fines on another.

After the conclusion of the panel discussions, three breakout workgroups met to develop tangible solutions to the issues raised during the day, and prepare recommendations to the workshop participants the following morning. Later that evening, participants gathered for dinner where Gary Loew, Chief of the Programs Integration Division at Corps Headquarters in Washington, D.C., spoke about hydropower funding.

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Workgroup Recommendations

On the second day, the first workgroup addressed how to resource the Hydropower Program for long-term sustainability and reliability. Their recommendations included:

- Advance Direct Funding for Corps O&M with customer involvement
- Continue customer-advanced funding with long-term contracts and shared control
- Improve joint planning efforts within Federal agencies
- Increase appropriations for hydropower
- Work with national customer base to seek legislative opportunities

It was also suggested that a “National Tool Box” be developed to facilitate obtaining necessary annual funds. The Tool Box, from which desired tools could be selected regionally, would include direct funding, customer funding, and justifications to obtain maximum Congressional appropriations.

The second workgroup addressed how to mitigate the impacts that water storage reallocations under Corps policy would have on hydropower. Their recommendations included:

- Determine energy impact based upon withdrawals in water supply contracts
- Recognize hydropower contracts as a permanent right like water supply contracts
- Assign values to lost energy and capacity that reflect the marketing of the power resource prior to reallocation
- Include stakeholders early and often in the reallocation process in a more collaborative way
- Allow PMAs to determine impacts to hydropower and compensation for the lost resource
- Consider and properly evaluate reallocations from active storage pools other than hydropower

The third workgroup examined how to develop a communications strategy to promote the value of Federal hydropower to the public and key decision makers. The group recommended that a comprehensive Federal hydropower message, targeted at Federal agencies and the Administration, state and local governments, environmental groups at all levels, and the general public, should emphasize:

- Renewability
- Reliability and black start capabilities
- Affordability, cost-based rates, and independence from foreign and domestic cost fluctuations
- Federal ownership, and a 100-plus-year track record of success
- Potential to increase capacity, efficiency, and environmental benefits through modernization
- Need for infrastructure investment

The workgroup also recommended a policy of engaging the media through various means, including printed materials regularly distributed to the identified audiences; project tours for Congressional members, Congressional staff, and Federal agency representatives; Congressional briefings held by Corps Headquarters; issue briefings published by the PMAs; and consistent participation in meetings with project stakeholders regarding competing uses.

At the end of the two days, Barbara DelGrosso, SPRA’s Director of Operations, observed that the third Federal Hydropower Strategic Workshop already reflected a greater unity among participants. “All in all, this third workshop seemed more substantive than the previous two,” she says. “There seems to be more commitment from all the participating groups to work together and to follow through on identified action items.” 💧



SOUTHWESTERN’S MARSHALL BOYKEN REVIEWS THE SUCCESSES OF THE JONESBORO MOA AT PROVIDING ALTERNATIVE FUNDING FOR NON-ROUTINE CORPS MAINTENANCE IN SOUTHWESTERN’S REGION.



SOUTHWESTERN ADMINISTRATOR JON WORTHINGTON ADDRESSES THE SPRA MEMBERSHIP AT SPRA'S 2008 ANNUAL MEETING IN TULSA, OKLAHOMA.

SPRA Renews Commitment at 51st Annual Meeting

Energy efficiency and environmental sustainability are enjoying increased focus at the national level, so as springtime blossomed into life this year it only seemed appropriate for the Southwestern Power Resources Association (SPRA) to base the theme of its annual meeting on renewability, adaptation, and improvement. A banner featuring the words "Renew, Revamp, Revive, Restart, Rekindle, Redevelop, Reinforce, Rejuvenate, Revitalize, Regenerate" greeted attendees as they gathered for meetings held April 8-10, 2008, at the Downtown Doubletree in Tulsa, Oklahoma.

The meetings began as Southwestern briefed SPRA's Hydropower Operations Committee on the current status of hydropower operations, informing the members that as of March 4, 2008, all system storage projects were at or above 100% Energy-in-Storage (EIS). Of special note was the fact that as of April 1, 2008, system-wide storage reached 171.5% EIS, exceeding the previous high of 169.1% set on May 4, 1990.

At SPRA's Transmission Committee meeting, Southwestern updated members on its continuing analysis of the implications to Southwestern of Federal Energy Regulatory Commission's Order Nos. 890 and 890-A, which were designed to prevent undue

discrimination and preference in transmission service. Southwestern also presented a year-to-date analysis of Transmission Loading Relief, as requested by the Committee.

That evening, SPRA members were invited to an informational "movie night" featuring a barbecue dinner and a screening of the 2003 film "Power Trip," a documentary detailing the struggles of an American power company trying to rebuild the electric grid in the economically devastated Republic of Georgia following that country's independence from Russia.

On the second day of meetings, Southwestern reported to the Federal Power Marketing Committee regarding the budget status for FY 2009 and provided an update on several major rehabilitation projects and other projects funded under the Jonesboro Memorandum of Agreement.

At the Competing Uses Committee meeting, Southwestern briefed SPRA members on the status of efforts to coordinate Federal power marketing activities with those of other interests, including storage reallocations, minimum flows, and fish and wildlife.

The renewal theme reappeared at the end of the workday, with springtime centerpieces of gardening



LEFT: FORMER SOUTHEASTERN ADMINISTRATOR CHARLES BORCHARDT POSES WITH RALPH GILLIS OF GILLIS AND ANGLE.

BELOW: LARRY JONES (KENNETT, MISSOURI) SHARES A GRIN WITH BARBARA DELGROSSO (SPRA).



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TOP LEFT: A GREAT LUNCH ELICITS SMILES FROM JON WORTHINGTON (SOUTHWESTERN), JOHN ROBERTS (TULSA DISTRICT CORPS), MICHAEL ENSCH (CORPS HQ), COLONEL ANTHONY FUNKHOUSER (TULSA DISTRICT CORPS), AND TED COOMBES (SPRA).

MIDDLE LEFT: CUSTOMERS AND SOUTHWESTERN EMPLOYEES MINGLE AT TULSA HEADQUARTERS DURING A BUFFET BREAKFAST FEATURING

HOMEMADE DISHES PREPARED BY SOUTHWESTERN VOLUNTEERS.

BELOW LEFT: MICHAEL ENSCH RECEIVES A COMMEMORATIVE PLAQUE FROM TED COOMBES AFTER HIS KEYNOTE ADDRESS.

BELOW RIGHT: SOUTHWESTERN'S STEPHANIE BRADLEY MUGS CUSTOMERS WITH TRAVEL CUPS SPORTING SOUTHWESTERN'S LOGO FOLLOWING THE ANNUAL SPRA CONFERENCE BREAKFAST HOSTED BY SOUTHWESTERN.



items and flowers on the tables as guests enjoyed dinner. Short videos related to energy technologies, transmission, and other "electric-themed" film clips were projected on a large screen as entertainment and food for thought.

On the final day of the meeting, SPRA Executive Director Ted Coombes reported on the state of the SPRA organization, and Southwestern Administrator Jon Worthington gave the Administrator's Report. Keynote speaker Michael Ensched, Chief of Operations at U.S. Army Corps of Engineers Headquarters in Washington, D.C., shared his knowledge regarding the status of Corps funding for power projects.

The meeting concluded with the election of SPRA board members and a buffet luncheon before participants headed out to their respective homes, refreshed and renewed. 💧

Structural Adjustments Accommodate State Highway

Sometimes the road has to push on through. That was the case as Southwestern worked with the Arkansas State Highway and Transportation Department (AHTD) to adjust Southwestern's Jonesboro to Greers Ferry transmission line to accommodate a right-of-way crossing by the new State Highway 67 realignment near Jonesboro, Arkansas.

According to Southwestern Civil Engineer Harry Mardirosian, who performed the engineering design and shepherded the project through Southwestern's engineering, procurement, and construction process, the crossing area is located in a rice field which is annually irrigated by flooding, and where the transmission line has been historically prone to storm damage.

Mardirosian and Jonesboro Craft Superintendent Kenny Broadaway recommended replacement of the existing wood H-frame structures with a self-supporting, concrete, dead-end structure on each side of the crossing. Director of Engineering & Planning Larry Harp and Director of Maintenance Tom Green supported the recommendation.

The advantages obtained by this approach, explains Mardirosian, include increased resistance to damage caused by severe storms, insects, rot, and woodpeckers; increased reliability and reduced possibility of a cascade or other failure; and less interference with farming operations due to the absence of guy wires.



CREWS FINISH TRANSFERRING A LINE TO ONE OF THE NEW CONCRETE STRUCTURES AT THE FUTURE ROUTE OF HIGHWAY 67 NEAR JONESBORO, ARKANSAS.

According to Mardirosian, the new structures also had to be taller than the existing ones because the road proposed by AHTD will be constructed on a fill about nine feet high. The new structures are positioned along the existing transmission centerline, he adds, but they have been moved slightly to the west so that their height could be minimized while still maintaining adequate clearances and work space for Southwestern's crews.

The project was completed in June 2008, and Mardirosian is full of praise for the staff at Southwestern and AHTD, as well as the construction contractor and suppliers, who did their part to make the project a success. Even the landowner, he notes, delayed the start of this year's irrigation as part of the overall team effort. 💧

Where in the World Is Jon Worthington?



JON WORTHINGTON GREETES ARKANSAS AND MISSOURI CUSTOMERS IN SPRINGFIELD, MISSOURI, IN APRIL 2008.

Since joining Southwestern this spring, Administrator Jon Worthington has covered a lot of ground in order to personally visit as many of Southwestern's customers and employees as possible in his first year on the job. He has already visited with the members of the Southwestern Power Resources Association, the Oklahoma Association of Electric Cooperatives, and Associated Electric Cooperative, Inc., at their respective annual meetings, and has met with representatives from Jonesboro, Paragould, and Piggott, Arkansas; Carthage, Kennett, Malden, and Poplar Bluff, Missouri; and Walters, Oklahoma. Worthington has also attended hydropower conferences and workshops, and has hit the road to meet with employees at Southwestern's field offices in Gore, Oklahoma; Jonesboro, Arkansas; and Springfield, Missouri. 💧

COOL IT! Tips for Saving Energy This Summer

Summer heat is here, and that means electricity usage will be higher for the next few months as air conditioning becomes increasingly necessary. Higher consumption, however, can put additional load on the transmission grid and can even put upward pressure on utility rates, so it's important to crank up the cool air wisely.

Here are some ways to conserve energy, reduce costs, and minimize load strain while still keeping your home or business cool:



Use ceiling fans and box fans to circulate air in occupied rooms.



Set your thermostat above 70 degrees; each degree over 70 can cut cooling costs up to 3%.



Close blinds during the day before the sun heats up building interiors.

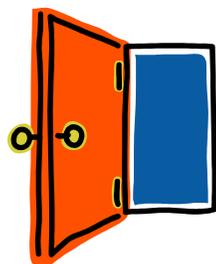


Eliminate or reduce air conditioning use from 4-7 p.m. on weekdays. This lessens electricity demand during the peak period when wholesale electricity costs are highest and reduces costs for your utility company, which helps to keep a cap on rates.



Replace blower filters every three months, and clean the outside coil on your air conditioner.

Plant trees or shrubs to shade air conditioners but not to block airflow. Likewise, place window units on the north side of buildings. An air conditioner operating in the shade uses as much as 10% less electricity than the same one operating in the sun.



Weatherstrip and caulk doors and windows if you see light or feel air coming around them.



Replace incandescent bulbs with compact fluorescent (CFL) bulbs. CFL bulbs use less energy to produce the same amount of light. They also generate less heat, which means less work for your air conditioner.



If your air conditioner is past its prime, consider purchasing a new, energy-efficient model bearing the Department of Energy's Energy Star and EnergyGuide labels. ♣

SPARKS OF INTEREST

SEPTEMBER 9-11, 2008, THE SOUTHWESTERN POWER RESOURCES ASSOCIATION (SPRA) will hold its autumn meeting at the Chateau on the Lake, located on Table Rock Lake in Branson, Missouri. For registration and additional meeting information, contact Barbara DelGrosso, SPRA's Director of Operations, at 918-622-7800, or e-mail bdg18@sbcglobal.net.



KEN LEGG HAS BEEN NAMED AS THE NEW ADMINISTRATOR OF SOUTHEASTERN POWER ADMINISTRATION (Southeastern), effective July 6, 2008. Legg, a former Director of Southwestern's Division of Engineering & Planning, has been serving as Southeastern's Assistant

Administrator of Power Operations since November 2003. A former engineer with the Tulsa District of the U.S. Army

Corps of Engineers, Legg joined Southwestern in 1978, serving in both an engineering capacity and in customer service prior to becoming a Division Director in 1991. As Assistant Administrator at Southeastern, he served under both Charles Borchardt, Southwestern's former General Counsel, and Jon Worthington, Southwestern's current Administrator.



COLONEL (P) WILLIAM E. RAPP assumed command of the Northwestern Division of the U.S. Army Corps of Engineers, based in Portland, Oregon, on May 30, 2008. Colonel Rapp most recently served in Iraq as director of the Commander's Initiatives Group for the Multi-National Forces-

Iraq, and has held numerous other staff and command positions stateside and abroad.

Maintenance Branches Into Vegetation Unit

Southwestern created a new Right-of-Way Vegetation Management Unit in April 2008 to specifically manage the clearing and maintenance requirements in Southwestern's transmission rights-of-way. Former Maintenance Coordinator Loyd Hines was named Craft Superintendent of the new Unit, which was formed through a reorganization of existing crew and equipment operators in the Division of Maintenance.

"Southwestern has always had a vegetation management program," says Hines, "but new standards from the North American Electric Reliability Corporation (NERC) require that we be even more vigilant."

The new Unit was formed in part as a response to FAC-003-1, a reliability standard entitled "Transmission Vegetation Management Program" that was developed by NERC and approved by the Federal Energy Regulatory Commission (FERC) in June 2007. This standard directs utilities to prevent outages from vegetation located on transmission rights-of-way and to minimize outages from vegetation located adjacent to rights-of-ways.

"There are three purposes for tree-trimming: reliability, safety, and access," explains Hines. "Keeping trees away from transmission structures prevents accidental contact or flashovers that can cause outages and inflict serious injury on residents or our crews. And maintenance of the lines is faster and easier when there's not a lot of trees or brush in the way." Hines adds that easier access also means reduced maintenance costs.

Vegetation management has become increasingly important to Southwestern and other utilities in recent years. Greater loads and congestion on the grid make the nation's power system vulnerable to more severe outages – a critical fact that was demonstrated by the Blackout of 2003. In August of that year, an overgrown tree contacted a power line in Ohio and caused a cascading outage that ultimately affected about 10 million people in the province of Ontario, Canada, and 40 million people across eight states in the northeastern United States.

Following this massive blackout, the Energy Policy Act of 2005 authorized FERC to designate a national Electric Reliability Organization (ERO) to develop Federal reliability standards, such as FAC-003-1. NERC was named as the ERO for the United States, and has the authority to develop and enforce all reliability standards on power system entities, including Southwestern. 💧



SAFETY, ACCESS, AND RELIABILITY ARE URGENT CONCERNS SOUTHWESTERN ADDRESSES WITH ITS NEW ORGANIZATIONAL STRUCTURE.



NEW EMPLOYEES

DONALD BRADSHAW,
EQUIPMENT OPERATOR,
SPRINGFIELD RIGHT-OF-WAY
VEGETATION MANAGEMENT CREW

DINA RYAN,
ACCOUNTING TECHNICIAN,
DIVISION OF FINANCIAL
MANAGEMENT

JAMES THOMASON,
EQUIPMENT OPERATOR,
GORE RIGHT-OF-WAY VEGETATION
MANAGEMENT CREW

MISSY VALENCIA,
ACCOUNTANT, DIVISION OF
FINANCIAL MANAGEMENT

WATTS INSIDE?



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Las Vegas, NV

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for Next 50 Years

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Heightened Over Highway –
Administrator on the Road

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– Net Hydro Generation Chart

Page 9 – Vegetation
Management Reorganizes
for Reliability

Have a safe and happy Independence Day celebration!

E-MAIL PAO@SWPA.GOV TO RECEIVE THE **UPDATE** ELECTRONICALLY.

SOUTHWESTERN POWER UPDATE

UNITED STATES DEPARTMENT OF ENERGY
SOUTHWESTERN POWER ADMINISTRATION
ONE WEST THIRD STREET
TULSA OK 74103-3502