SOUTHWESTERN POWER ADMINISTRATION



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



Gregg Happle Lead Electronics Technician Springfield, MO

Special thanks to:

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UPDATE

OCTOBER - DECEMBER 2007

Administrator Mike Deihl Set to Retire

After 12 years as the top man at Southwestern, and another 20 years or so of Federal service in other parts of the country, Michael A. Deihl -- or Mike, as he's known to employees, customers, and friends of the agency -- is stepping down from the Administrator's post in favor of a quiet life of retirement "somewhere in the northern Rocky Mountains."

"We're going to sell our house, put our stuff in storage, and head west," Deihl says of his immediate retirement plans. "My wife Debbie and I plan to drive around the northwest area of the country until we find someplace we like. When we do, we'll buy a house -- preferably a log home -- call the movers to bring our stuff, and settle in for the duration."

The more rugged areas of the west have been home to Deihl before. He began his Federal career in 1976 with the Bureau of Reclamation in Wyoming and Colorado. During his 11 years there, he held the positions of Electrical Engineer, Chief of the Centralized Control Branch,



MIKE DEIHL LOOKS FORWARD TO CARVING A RELAXING FUTURE IN THE MOUNTAIN WEST. HE CELEBRATED THE END OF HIS TENURE AT A LUNCHEON IN HIS HONOR WITH FRIENDS, FAMILY, CUSTOMERS, AND CO-WORKERS.

Manager of the East Slope Power Generation and Reservoir Facilities, and Chief of the Communications and Control Division.

In 1987, Deihl transferred to Hoover Dam as Chief of the Maintenance Division. After three years there, he accepted a position in 1990 with the Alaska Power Administration as Manager of the Snettisham Hydroelectric Project. He was soon promoted to Power Division Director, and in 1992 was appointed Administrator of the Alaska Power Administration, where he served until his appointment to Southwestern in 1995.

"When I started my career, I used to say you'd never get me into a job where I had to live in a city, wear a tie, and sit behind a desk, but really, one of my proudest accomplishments over the course of my career is moving from a GS-5, Step-1 position, where I helped build transmission lines and worked on a line construction crew, to becoming a member of the Federal Senior Executive Service, and leading two of the Power Marketing Administrations (PMAs) within the Department of Energy."

As Administrator of Southwestern, Deihl will likely be best remembered for his ability to build powerful coalitions of Federal power stakeholders while promoting the strong

Equipment Expo Exposes Environmental Efforts

Hundreds of backhoes, tractors, and trucks sat ready under a virtual forest of aerial lifts raised to their fullest height. Among them swarmed a crowd of electric industry professionals, including three from Southwestern, united for a common purpose. This was not, however, the scene of a massive emergency restoration project. Rather, it was a regular morning at the 2007 International Construction and Utility Equipment Exposition in Louisville, Kentucky.



CRAFT SUPERINTENDENTS STEVE HILL AND JERRY MURR KICK THE TIRES OF A HYBRID VEHICLE AS PART OF AN ONGOING EFFORT TO LEARN MORE ABOUT LEVERAGING GREEN TECHNOLOGIES FOR SOUTHWESTERN'S OPERATIONS.

As part of Southwestern's overall efforts to make its operations more energy efficient, Craft Superintendents Jerry Murr, Kenny Broadaway, and Steve Hill of the Gore, Jonesboro, and Springfield Maintenance Units, respectively, attended the 2007 Exposition this past October. The trio sought to experience firsthand the new biodiesel and hybrid vehicles coming available on the market, and the expo provided a perfect forum for asking detailed questions, comparing technologies side-byside, and getting an under-the-hood look at the kind of trucks and utility vehicles that Southwestern crews use every day.

After spending a few days among the exhibits and demos, and attending educational sessions on alternative fuels, emissions, and hybrids, the three supers had learned a great deal about the pros and cons of each technology.

"Everybody is manufacturing new diesel equipment compatible with either diesel or biodiesel fuels," says Murr. "But the portion of biodiesel that is made up from an agricultural product such as soybeans does not have as much energy as the fossil fuel component. Therefore, you will not get as many miles per gallon."

What really excites Murr is the advance of hybrid technologies for heavy-duty vehicles like boom trucks, which comprise about 60% of Southwestern's fleet. Hybrids incorporate electric motors with fuel engines and automatically adjust between the two depending on power needs.

"In the last few years International has been producing a hybrid diesel/electric bucket truck that can run on either regular diesel or biodiesel," says Murr. "It's equipped with a special transmission that acts somewhat as a generator." He explains that the boom can be operated on just electrical energy for about two hours. When

the batteries need to recharge, the truck's engine starts automatically, requiring only about five minutes to completely charge the battery bank. The engine then shuts itself off again.

"These trucks have been shown to generate diesel savings from 10% to 60%," notes Murr. "Basically, the more the trucks have their booms in the air, the more savings they generate."

That may all look good on paper, but how do these things feel on the road? Murr and Broadaway put a hybrid truck through the paces on a three-mile course set up at the expo. "It was an automatic. It had plenty of get up and go. I was very satisfied with the drive I took," reports Murr. Hybrid trucks, like their passenger vehicle cousins, save fuel on in-town, stop-and-go traffic as kinetic energy is recaptured during braking to help keep the battery charged.



JERRY MURR GETS A FEEL FOR THE POWER OF A HYBRID BUCKET TRUCK. THIS TRUCK CAN OPERATE A BOOM ON ELECTRIC FOR TWO HOURS BEFORE RECHARGING ITSELF, SAVING **10-60%** ON DIESEL.

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Bull Shoals Unit 1 Returned to Service

Federal power stakeholders definitely had something to be thankful for when Bull Shoals Unit 1 was put back on-line the week of Thanksgiving 2007, after being out of service for over a year due to the explosion of a 50-year-old pothead insulator.

On September 6, 2006, the stress cone assembly of the Unit 1 oil-filled cable pothead failed and exploded from a buildup of combustible gases. The explosion and resulting fire broke windows in the transformer gallery and knocked the Unit 2 transformer out of service due to damage to the transformer's bushings. The 161-kV oil-insulated cable connecting the Unit 1 transformer to the Bull Shoals switchyard was also corrupted and rendered unusable.



SOUTHWESTERN AND CORPS PERSONNEL DESIGNED A SOLUTION USING AN OVERHEAD TRANSMISSION LINE FROM THE SWITCHYARD TO RETURN UNIT 1 TO SERVICE.

Mark Dixson, Hydropower Business Line Manager of the Corps' Little Rock District, explains what happened in greater detail: "On September 6th, the powerplant's station service power was shut down in order to allow a contractor to take measurements on the station service switchgear. After the contractor completed his measurement, powerplant personnel started the process of restoring power to the plant. When the station service was energized, the transformer cable pothead insulator bushing exploded and caught fire. Our assessment is that the oil head insulator had an oil leak which was the fuel source. When the station service circuit was re-energized a voltage transient caused a flashover to occur, which caused the oil to ignite, and the bushing to explode."

Southwestern crews worked closely with the Little Rock District of the U.S. Army Corps of Engineers (Corps) to repair and test the Unit 2 transformer bushings. Their teamwork brought Unit 2 out of forced outage status within two short weeks of the explosion. Damage to the Unit 1 oil-insulated cable was considered more problematic, however, because replacement of the existing system in-kind was expensive and required considerable lead time.

"Essentially, very few contractors make repairs to this type of oil insulated cable system," Dixson explains, "and there is a long lead time for materials, not to mention limited competitive bids." Dixson and other Little Rock District personnel met with staff from Southwestern's Substation and Transmission Engineering Section in April 2007 to discuss the pros and cons of replacing the existing system and to examine other alternatives.



THE UNIT 1 TRANSFORMER CABLE POTHEAD WAS SEVERELY DAMAGED IN A SEPTEMBER 6, 2006, EXPLOSION. SOUTHWESTERN IS WORKING WITH ITS CUSTOMERS AND THE CORPS TO REPLACE THE REMAINING 50-YEAR-OLD POTHEADS ON UNITS 2-8. "We analyzed multiple options," says Dixson, "including one in which we would install a truss structure on the roof of the powerhouse, route overhead transmission lines to intermediate poles placed near the switchyard, then route the overhead transmission lines to the switchyard itself. This would have replaced all of the oil insulated cables, but unfortunately, it was quite expensive and the powerhouse would not have been able to support the new transmission structure without major changes."

Dixson says a similar alternative was considered in which all oil insulated cables would be replaced with overhead transmission lines anchored in the face of the dam, but again, the expense was considerable. In the end, the group decided that the most expedient and cost-effective alternative was to run overhead transmission lines from anchors in the face of the dam directly to the switchyard for Unit 1 only and to leave the undamaged oil-filled cables for Units 2-8 in service.

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DEIHL, CONTINUED FROM PAGE 1

communications necessary to keep the agency on track in accomplishing its mission.

"I'm glad I was able to help establish one of the strongest trust-based relationships among a PMA, its customers, and the U.S. Army Corps of Engineers (Corps) in the Nation," he says proudly. "I think I'm leaving the agency in good shape for my successor. We're in a fairly good financial position, have an excellent staff, and our relationship with the customers and the Corps has gotten stronger every year."

Deihl says he is also very satisfied with the fact that, on his watch, Southwestern has never had a Reduction in Force, or RIF. The agency has not even had to furlough or demote employees due to lack of funding. With that said, however, Deihl quickly adds, "This could not have been accomplished if the employees had not responded when I asked them to tighten their belts."

"Since I've been here, we've handled dwindling funding for salaries and other personnel matters through attrition and reorganization," Deihl explains. "Sometimes all it takes is a little creative thinking to protect the agency and its employees and still accomplish our mission."



DOE DEPUTY SECRETARY CLAY SELL TRAVELED TO TULSA TO PRESENT DEIHL WITH A DISTINGUISHED CAREER SERVICE AWARD FROM SECRETARY OF ENERGY SAMUEL W. BODMAN.

The people at Southwestern are important to Deihl, and those relationships are what he says he will miss the most when he quits coming to work every day.

"It's a classic statement, but it's true," he states, "and not just at Southwestern either. I've also worked with some great folks at the Department level over the years, and, of course, there are our customers and our customer representatives. When you've worked hand-in-hand with people like these for so many years to keep Federal power viable in today's climate, you know there's going to be something missing from your day-to-day life when you walk away."

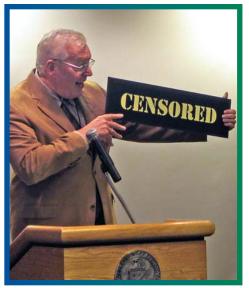


REPRESENTATIVES FROM SOUTHWESTERN'S CUSTOMERS ATTENDED DEIHL'S RETIREMENT LUNCHEON, INCLUDING RON BOWEN, GENERAL MANAGER OF CITY WATER & LIGHT OF JONESBORO, ARKANSAS; RICKY BITTLE, VICE PRESIDENT, PLANNING, RATES & DISPATCH FOR ARKANSAS ELECTRIC COOPERATIVE CORPORATION; AND LARRY JONES, SUPERINTENDENT OF UTILITIES FOR KENNETT, MISSOURI.

Deihl says if he had to pick one thing he is not going to miss it's trying to operate the agency in the midst of bureaucracy and funding stalemates. "At times it has been difficult and frustrating," he admits. "We are supposed to operate in a business-like manner, but that's been tough to do at times when the decisions we've tried to make based on facts and industry trends are blocked by those who don't understand the business. I realize we're not the only agency in this situation, but it sure doesn't make it any easier to deal with."

On a positive note, Deihl says he sees the PMAs continuing to play an important public power role as the industry's benchmark. "I believe the PMAs are in good position to help provide the Nation increasingly important green power. While Southwestern's current transmission system does not have capacity available to move large amounts of wind power across the grid, the future expansion of wind power across the Nation may impact how we do business. If you think about it, wind power and hydropower make a pretty impressive portfolio of domestically produced, renewable energy."

Deihl also believes increased use of alternative financing and net zero appropriations will be critically important to the fulfillment of Southwestern's mission in the years to come. "Let's face it, traditional appropriations are going away. For an agency like Southwestern, it makes sense to fund expenses and salaries



DESPITE HAVING TO CHOOSE HIS WORDS CAREFULLY, SOUTHWESTERN POWER RESOURCES ASSOCIATION EXECUTIVE DIRECTOR TED COOMBES HAD NOTHING BUT GOOD THINGS TO SAY ABOUT WORKING WITH DEIHL.

directly from power revenues."

Deihl also stresses to his fellow Southwestern employees the importance of educating themselves about the business and the value of being able to pitch in and help, even when a task may not fall directly into an employee's job description. "The more areas of our business you know, and the more you jump in and help, the more valuable you are to the company," he explains. "It's that simple."



DEIHL LOOKS FORWARD TO BUILDING A FULL-SIZE VERSION OF THIS LOG CABIN CENTERPIECE, ONE OF MANY FEATURED AT THE RUSTIC-THEMED LUNCHEON.

As far as education goes, Deihl sees himself in his retired life as possibly delving into the world of teaching. "At Southwestern, I taught a class called "What Makes Southwestern Tick," which covered every area of Southwestern's business, including agency history, budget, rates, marketing, dam

construction, hydro generation, transmission, operations and maintenance, and many other topics. I was surprised at how much I enjoyed myself. I think I wouldn't mind doing something like that someday."

Until then, Deihl is likely to stay busy taking care of his log home while gazing at a beautiful sunset over the majestic Rocky Mountains. "It's been a good ride," he says with a smile.





Colleagues gathered to wish Deihl well, including (clockwise from top right) Mike Hacskaylo, retired Western Area Power Administrator, who recounted shared experiences; Jim McDonald, Southwestern Assistant Administrator, who delivered gift presentations from employees; Gene Reeves, retired Southwestern Assistant

ADMINISTRATOR, WHO GAVE DEIHL A FINE STRAW COWBOY HAT; AND LEANN JENKINS, EXECUTIVE DIRECTOR OF THE OKLAHOMA FEDERAL EXECUTIVE BOARD, WHO PRESENTED DEIHL WITH A COMMEMORATIVE PLAQUE.





POTHEAD, CONTINUED FROM PAGE 6

"The advantages of repairing only the Unit 1 cable using this scheme included a shorter repair time, lower cost, and the ability for the Corps and Southwestern to do most of the work in-house," Dixson explains.

In the end, it was a well orchestrated collaboration of Southwestern engineering, maintenance, acquisition, and administrative staff; Corps powerhouse and operations staff; and specialized contract employees that accomplished the task of installing the new overhead lines.

Southwestern Civil Engineer Harry Mardirosian designed the overhead lines and provided technical requirements to Corps staff in charge of designing the anchors to be installed in the face of the dam. Mardirosian also designed switchyard structural improvements to accommodate the new overhead lines. His specifications were expedited through Southwestern's procurement office to a specialized contractor who fabricated and installed the steel.

"The work was accomplished through a committed, competent team made up of Corps staff, the steel fabricator, construction contractors, and Southwestern employees," says Mardirosian. "Each person had a vital role."

Maintenance crews from Southwestern's Gore and Springfield offices did their part by installing the overhead lines as well as the additional bus work in the switchyard and on the transformer deck necessary to support the new configuration.

Tom Green, Southwestern's Director of Maintenance, is proud of the work his crews were able to accomplish in such a short time. "Southwestern's work force completed the installation of the overhead conductors and bus work for Unit 1 at Bull Shoals, and the job went very well. The Gore and Springfield Maintenance Units worked together and performed in an expedient and professional manner."

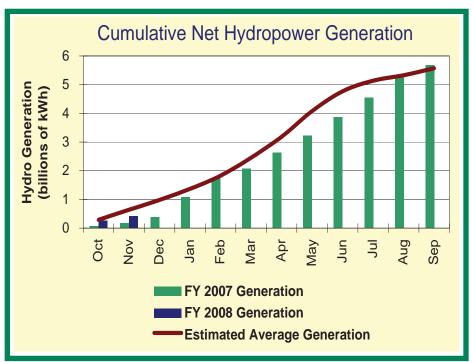
Green adds that additional thanks go to Southwestern Administrative Officer Susan Johnson, who, with the help of Southwestern Lineman Gary Gregory, procured all the materials for the installation of the overhead transmission lines within the time frame required.

Southwestern was able to assist the Corps under a 1999 Memorandum of Understanding between Southwestern and the Little Rock District. The MOU allows Southwestern to work with the Corps to provide switchyard maintenance at all projects within the Little Rock District. Similar agreements exist with the Corps' Fort Worth, Kansas City, and Tulsa Districts.

As for the oil-filled cable systems for Units 2-8, the Corps and Southwestern are working under the 1999 Memorandum of Agreement (MOA) among Southwestern, the Corps, and City Water & Light Plant of Jonesboro,

Arkansas, to replace the remaining pothead insulators so that the integrity of the existing oil-filled cables can be maintained and future unscheduled outages can be prevented. The work, which is expected to be completed by late spring of 2009, includes procurement and installation of new potheads, transformer bushings, and lightning arrestors.

Bull Shoals Dam Powerplant began generating power in 1952, and final installation of all generating units was completed in 1963. Bull Shoals Dam is located on the White River near Cotter, Arkansas, and has eight generating units with a combined installed capacity of 340 MW. The project produces an average annual energy amount of 785 million kilowatt hours.



SPARKS OF INTEREST



JON WORTHINGTON HAS BEEN SELECTED AS THE NEW ADMINISTRATOR OF SOUTHWESTERN, and is scheduled to come on board in January 2008. He currently serves as Administrator of Southeastern Power Administration.

Worthington began his Federal career at the Bonneville Power Administration and later managed the Department of Energy's National Laboratories site utilities planning and management program in Washington, D.C. He also served in the Rural Electrification Administration as well as the Federal Energy Regulatory Commission. Worthington previously served as the Deputy Assistant Administrator at Southwestern's liaison office in Washington, D.C.

THE NEXT QUARTERLY MEETING OF THE SOUTHWESTERN POWER RESOURCES ASSOCIATION (SPRA) will be held January 15-17, 2008, at Embassy Suites Hotel in Tulsa, Oklahoma. For registration and meeting information, contact Barbara DelGrosso, SPRA's Director of Member Services, at 918-622-7800 or bdg18@sbcglobal.net.

New Northwestern Division Commander - Colonel Steven R. Miles assumed command of the Northwestern Division of the U.S. Army Corps of Engineers (Corps) on November 2, 2007. Colonel Miles most recently served in Fallujah, Iraq, with the Corps' Gulf Region Division in support of the Marine Expeditionary Force. Earlier assignments include serving as Commander of the 29th Engineer Battalion at Fort Shafter, Hawaii; Joint Engineer Action Officer, U.S. Forces Japan Headquarters; and numerous other staff and command positions stateside and overseas. Outgoing commander, Brig. Gen. Gregg Martin, has assumed the post of Commandant, U.S. Army Engineer School, Fort Leonard Wood, Missouri.





BRIG. GEN. JEFFREY DORKO, former commander of the Corps' Southwestern Division, has returned to Iraq from Landstuhl Regional Medical Center in Germany where he had been recovering from shrapnel injuries sustained in a roadside bomb attack on October 29, 2007, in northern Baghdad. Dorko, who assumed command of the Corps' Gulf Region Division on October 10, 2007, was injured along with one of his aides when a roadside bomb exploded near a convoy in which he was riding.

The Corps reports that Dorko was back in Baghdad by Thanksgiving, and joined his troops and other Corps employees there for the holiday dinner.

SOUTHWESTERN'S LOCKBOX ACCOUNT at P.O. Box 880900, Dallas, Texas, was terminated on October 1, 2007. Customers who wish to continue making payments by mail must submit their payments to Southwestern Power Administration, One West Third, Tulsa, Oklahoma 74103-3502.

As an alternative to mailing payments, Southwestern encourages its customers to submit payments electronically through direct wire transfer or through the ACH System. Submission instructions for all payment methods are attached to customer invoices every month. Additional information can be obtained from Shirley Shumate at 918-595-6686, e-mail shirley.shumate@swpa.gov, or Veronica Carson at 918-595-6679, e-mail veronica.carson@swpa.gov.

EXPO, CONTINUED FROM PAGE 2

Aside from the many benefits of hybrids, the downside, currently, is cost.

"Although hybrids cost significantly more than normal diesel trucks, manufacturers hope to bring down the costs with higher production numbers in the next few years," notes Murr, who remains optimistic. "At the expo, I learned that International is planning on putting hybrid diesels into full production for 2008, and two other truck manufacturers are planning an assembly line for 2009."

Southwestern is planning a hybrid van purchase for use at Jonesboro in FY 2008, but does not yet have definite plans for any other biodiesel or hybrid vehicles at this time.

SOUTHWESTERN POWER UPDATE

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Equipment Expo

Back in Business

Generation Chart

WATTS



DOUG HICKS, SYSTEM METER & RELAY CRAFTSMAN DIVISION OF ENGINEERING & PLANNING, GORE

JIM WHITTON, EQUIPMENT OPERATOR

DIVISION OF MAINTENANCE, GORE ERIC GRANTHAM, LEGAL OCCUPATIONS STUDENT TRAINEE **DIVISION OF CUSTOMER SERVICE**

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