



Your Electric Company
Since 1938

POWER SOURCE



"Owned By Those We Serve"

August 2011 Vol. 15 No. 08

Youth Tour Delegates Return From Washington, D.C.

Somehow it just isn't the same – reading about something in a book or actually seeing it first-hand, living it. This is the feeling our Government In Action Youth Tour delegates express when they return from their trips to our nation's capital, Washington, D.C.

This year was no different. Misha Riley representing Melrose High School and Tye Gallagher representing Grady High School recently returned from their Youth Tour trip sponsored by Farmers' Electric Co-op and other electric co-ops throughout the state. Both young people expressed gratitude for the opportunity to participate in this year's tour and spoke fondly of the memories they will carry with them the rest of their lives.

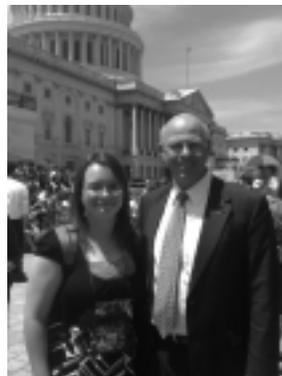


Iwo Jima Memorial

While most average high school seniors-to-be spent their summer vacation sleeping late, watching entirely too much T.V., swimming, or maybe even working, Misha and Tye enjoyed a 7 day trip to Washington, D.C. with approximately 30 other of

New Mexico's best and brightest.

While in Washington, the tour included numerous presidential and war memorials, the National Cathedral, Ford's Theater, Mount Vernon, Arlington Cemetery, the Smithsonian Institution, meetings with the New Mexico Congressional delegation, and many other fun and exciting things. Misha said, "Being in our nation's capitol gives you a new sense of pride for our country." Misha went on to give us her perspective on politicians. "I have to say, as far as our Congressmen are concerned, Senator Steve Pearce impressed me the most. He gave us straight answers about how he felt about certain issues, not just telling us what he thought we wanted to hear." Tye had an equally good time



Misha with Sen. Pearce

See **YOUTH TOUR** on **PAGE 4**

Poles Being Treated



In Your Area

Continuing through this month and into late September or early October, GLS, Ground Line Services out of San Antonio, Texas, will be testing and treating poles for Farmers' Electric, (FEC). They will be in the Newkirk, Montoya, Quervo, Garita, and Trimentina areas.

Pole testing and treating is a yearly maintenance program that FEC performs, however, every pole is not tested each year, rather, they are tested on a ten year rotation.



This type of maintenance program helps to ensure that FEC can continue to supply safe, reliable electricity to our members.

Youth Tour.....	1
Manager's Message.....	2
Ask Willie.....	3
Youth Tour Pics.....	4

Manager's Message...

Lance Adkins, GM

Keeping the Electricity Flowing Can Get Tricky

Most folks do not realize how much effort it takes to make a light-bulb light at the flip of a switch. Considering that electric power cannot be created and stored efficiently with technologies available today, the balance between electric production (generation) and load on the system (consumption) is a continuous balancing act for those who work to keep power flowing. Electricity is literally consumed in a light-bulb in a home less than one-second after being generated at

a power-plant that may be located several hundred miles distant. In past articles I have discussed how electricity is generated, transmitted across long-distance high-voltage transmission lines (69,000 to 345,000 volts in our region) and finally distributed to consumers over the Cooperative's distribution systems at voltages from 2,400 to 14,400 volts.

Many folks also do not realize that a disturbance anywhere on the system has the potential to disrupt power to an entire region of the country. Theoretically, an electrical fault (short-circuit) in a home could trigger a series of events that eventually lead to the catastrophic failure of the regional electric grid. I understand this example borders on ridiculous, but please bare with me. Beginning with the fuse or breaker box in a home, tracing the lines back to the generation source, there are a number of fuses, sensors, sectionalizers, breakers, relays and sophisticated computer systems precisely coordinated so that an electrical fault anywhere on the system is isolated to the smallest line section possible. This is similar to the breaker-box in a home where a main-breaker supplies power to many individual circuit-breakers. On the high-voltage side, these devices are continuously monitored and periodically tested by utility personnel to ensure proper operation; most of the time. Farmers' Electric's system is a part of the "Eastern Grid" one of the three major power grids in the United States. The Eastern Grid is considered to be largest "machine" in the world, a network with thousands of generation resources, transmitting power over millions of miles of line, operating as a single-system to serving over one billion consumers.

Consider the Northeast blackout of 1965, when one transmission relay, thought to have been incorrectly reset after maintenance and testing, was responsible for beginning a chain of events that left 30 million people in Ontario and seven northeastern states without power. According to investigators, the relay caused a key transmission line to disconnect from the system, quickly overloading other transmission lines causing each to trip in turn. Estimated time from the initial trip to lights-out; less than 10 seconds! One result from the blackout and subsequent federal investigation was the formation of a number of regional reliability organizations, including the predecessor of the North American Electric Reliability Corporation (NERC). In addition, the Southwest Power

"The Eastern Grid is considered to be largest "machine" in the world, a network with thousands of generation resources, transmitting power over millions of miles of line, operating as a single-system to serving over one billion consumers."

See **RELIABILITY** on **PAGE 3**

Board of Trustees:**Mike West***President***George Dodge***Vice President***Ernest Riley***Secretary-Treasurer***Paul Quintana***Trustee***Pat Woods***Trustee***Billy Tate***Trustee***Donnie Bidegain***Trustee***General Manager:****Lance R. Adkins****POWER SOURCE**

is published monthly by Farmers' Electric Cooperative, Inc. Questions or article ideas should be directed to :

Thom J. Moore,

POWER SOURCE

Editor, P. O. Box 550

Clovis, New Mexico

88102-0550

Phone 762-4466 or

1-800-445-8541

www.fecnm.org**To Report****An Outage**

We are on-call 24 hours each day, 365 days each year, to serve **your** electric power needs.

Clovis

762-4466

Fort Sumner

355-2291

Santa Rosa

472-3971

Toll Free

1-800-445-8541

RELIABILITY from PAGE 2

Pool (SPP) was formed as the Regional Transmission and Reliability Coordinator for our region including portions of eastern New Mexico, panhandle of Texas, Oklahoma, Nebraska, and portions of Arkansas, Louisiana, Kansas, Mississippi and Missouri. Things appeared to moving along nicely, that is until August, 2003.

While many of us do not remember the blackout of 1965, it is difficult to forget the images on news broadcasts of folks leaving New York City, crossing major bridges on foot as the 2003 Northeast blackout continued into the evening. At the height of the blackout over 55 million people were out of power including Ontario and all or portions of eight northeastern states. Live news coverage included a number of commentators including former New Mexico Governor Bill Richardson, who also served for a time as head of the Department of Energy, stating that the United States is "a superpower with a third-world electricity grid." Investigators eventually determined that a combination of human error and equipment failure were responsible for the blackout beginning with a sagging transmission line that contacted a tree somewhere in Ohio. Based on findings from the investigation, Congress passed the Energy Policy Act of 2005, including expanding the authority of the Federal Energy Regulatory Commission (FERC) to implement mandatory reliability standards for electric utilities.

Clearly, the effort to reduce the likelihood of similar events and to increase the reliability of our national electric grids is a noble goal. New reliability initiatives have also led to the creation of many new jobs in the utility and regulatory job sectors. Of course, these new jobs and enhanced reliability add additional layers of costs for consumers. Sometimes more is not necessarily better; now large systems are controlled by sophisticated computer systems that have the ability to predict failure and take predetermined action, all interconnected and controlled through electronic networks including the internet. Now we have a new threat to reliability of the electric grid, computer hackers bent on causing mischief or worse. I can attest that Farmers' Electric, even as a small participant in the bulk electric grid, now has a number of new i's to dot and t's to cross. Only time will tell if the additional effort and cost results in a more-reliable electric grid.

Until Next Month,



It's almost contest time!

Clue: Hybrid Water heater

More details to follow...

**Ask Willie!**

Q. Hey Willie! It's almost bird hunting season! Do you ever have problems with careless people shooting at your electrical equipment? Does it really do much damage?



A. Great question! And perfect timing I might add! Yes, bird hunting season is almost upon us and with it comes a few crackpots who like to take potshots at our electrical equipment. Keep in mind that most hunters are responsible hunters, but the few that use us as target practice make life harder on the rest of us. Here's a few reasons why you shouldn't shoot at our stuff:

- You are inconveniencing your fellow member-consumers whose electricity has been disrupted.
- It could be a matter of life and death to someone on a life-support system or to someone who is hit by a stray shot.
- Damage to electrical equipment is very expensive to repair. Lines may be cut or weakened from a shot, and they may sag or break, becoming a severe hazard for anyone who comes into contact with the line.
- Broken insulators can cause power outages that are hard – and expensive – to find. An insulator cracked by a bullet can remain on line for a long time before it finally fails.

Enjoy your sport, but be a responsible hunter. Teach your children to respect power lines, electrical equipment, and guns so that they, too, will be responsible hunters.

Ask Willie
c/o Farmers' Electric Cooperative
PO Box 550
Clovis, NM 88102-0550

YOUTH TOUR *from PAGE 1*

in Washington. "Aside from the Washington Monument, my favorite thing to see was probably the Gutenberg Bible that is on display in the Library of Congress. I had read a lot about Gutenberg and his bibles, but I didn't know the Library had one." Tye summed up his trip this way, "I've heard or read about many of the things in Washington before, but the fact that I was actually there and saw these things first-hand, still strikes me at times. Having the opportunity to see and experience Washington was probably the most fun I've had in a long time."

Farmers' goal, through our association with the Government In Action Youth Tour, is to increase the students' understanding of government, our nation's history, and electric cooperatives. Based on what our participants have shared with us, we believe we have accomplished this goal.

If you are a high school Junior this year, what are your plans for next summer? Don't just lay around counting the days until school starts, take a trip of a lifetime! We promise, it will change you forever. Watch this publication for more information on the tour or ask your guidance counselor for more details.



"Owned By Those We Serve"



**PRESORTED
STANDARD
U.S. POSTAGE PAID
CLOVIS, NM
PERMIT NO. 9**

FARMERS' ELECTRIC COOPERATIVE, INC.
OF NEW MEXICO
3701 Thornton, P. O. Box 550
Clovis, New Mexico 88102-0550