

Statement of Mike Neal

On behalf of Arizona Public Service

And

The Edison Electric Institute

Before

The House Subcommittee on Water and Power

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The House Subcommittee on Forests and Forest Health

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My name is Mike Neal, and I am the Manager of Forestry and Special Programs for Arizona Public Service (APS), where I administer 5,000 miles of transmission and 15,000 miles of distribution lines throughout Arizona. I appreciate the opportunity to testify before this joint subcommittee hearing on behalf of APS and the Edison Electric Institute (EEI).

APS, Arizona's largest and longest-serving electricity utility, serves more than 1 million customers in 11 of the state's 15 counties. With headquarters in Phoenix, APS is the largest subsidiary of [Pinnacle West Capital Corporation](#) (NYSE: PNW).

EEI is the premier trade association for U.S. shareholder-owned electric companies and serves international affiliates and industry associates worldwide. Our U.S. members serve 97 percent of the ultimate customers in the shareholder-owned segment of the industry and 71 percent of all electric utility ultimate customers in the nation.

It has been one year since APS and EEI first spoke with members of the House and Senate about problems associated with managing rights-of-way on federal lands. At the time, the August 2003 blackout that left 50 million Americans without electricity was a recent memory, and Congress was close to enacting a comprehensive energy bill that would make reliability standards mandatory, including standards for vegetation management. We came to Congress out of concern – based on our own direct experience and those of other utilities – that the inability to manage vegetation related to rights-of-way on federal land poses a risk to grid reliability and public safety and could lead utilities to violate mandatory reliability standards. We also talked to former Chairman Wood and Commissioner Brownell at the Federal Energy Regulatory Commission (FERC) about the issue, that they both might understand and support effective and aggressive utility vegetation management (UVM) efforts to prevent future blackouts and ensure the integrity of the nation's electric grid.

I am here to thank you for including a provision in the Energy Policy Act of 2005 that begins to address this issue and for your continuing oversight interest. I am also here to report progress in Arizona towards resolving some of our concerns, while recognizing that similar progress needs to be made elsewhere in the country.

Managing and clearing vegetation on or near rights-of-way has often been very difficult, regardless of whether the right-of-way is located on private or federal land. While Integrated Vegetation Management (IVM) and UVM requirements only impact 'less than a fraction of a percent' of overall federal lands, the consequences of not effectively managing the rights-of-way (ROW) and powerline corridors can be monumentally damaging to the rest of the land (massive forest fires, etc). It can also jeopardize reliable electric service. The three most recent major power outages in the United States were triggered by electric transmission line interaction with trees. The blackouts of July 2, 1996, August 10, 1996, and August 14, 2003, resulted in the loss of power to 2 million, 4 million, and 50 million customers respectively. In 2003, a tree-caused blackout in Italy left 55 million Europeans in the dark.

- The last major U.S. blackout led to intense review by utilities, the FERC, the North American Reliability Council (NERC) and the National Association of State Regulatory Commissions (NARUC). Among the most significant conclusions reached during this review was that existing laws and requirements governing UVM activities were inadequate to assure a low probability of future vegetation related blackouts. Also, the decentralized process and variable procedures for approving utility vegetation management activities for rights-of-way across federal lands are an obstacle to timely and scientifically-based vegetation management.

The first conclusion has been and is being addressed by a revision of existing standards for utility vegetation management that will ultimately become a FERC-approved mandatory reliability standard. Violation of the new standard could result in penalties of up to \$1 million a day. Addressing the second conclusion is still a work in progress.

In general, the problems of managing rights-of-way on federal land are several:

- Vegetation management decisions are not timely, even for required routine maintenance. The inability to carry out routine maintenance can quickly lead to an emergency danger situation, increasing the risk of fire and the loss of power. Trees continue to grow towards the powerlines regardless of a decision timeline.
- Decisions regarding acceptable practices are inconsistent across districts, and sometimes even from year to year within the same districts. The presence of pre-approved vegetation management plans has not always insulated utilities from inconsistent decisions.
- Redundancy and repetition in reviews and work requirements add delay without a corresponding benefit.
- The inability to remove dead and dying trees or other vegetation poses an immediate threat to transmission facilities, whether located within or adjacent to a right-of-way.
- Federal land managers often do not adequately appreciate or understand the technical requirements for managing rights-of-way to assure reliability and public safety, including reducing fire hazards.
- Finally, federal land managers often do not accept or recognize the environmentally beneficial, technically sound, and cost effective techniques of IVM, which is the utility standard. In fact, the American National Standards Institute (ANSI) has recently approved a new standard for IVM under the A-300 standard. This is a consensus standard developed and approved with representation from the arboricultural industry, the Department of Labor, the Forest Service and the National Park Service.

Arizona Public Service has experienced all of these problems at one time or another in our efforts to carry out essential activities on our rights-of-way within 5 of the 6 national forests crossed by our powerlines in Arizona. For almost a decade, we were stymied in our efforts to obtain a consistent approach to vegetation management, which came to a head in one forest when no clearance of vegetation was allowed for 18 months even though we were able to clear to our standards on the 4 other national forests. Last June, we had to take a 500 kV line out of service when the line tripped from interaction with 5 overgrown trees we had been unable to get permission to remove. This ignited a fire in overgrown brush under the wires. Had wind conditions been different, we would not have been able to extinguish the fire and another 500 kV line parallel to this line would have been affected. Our line was out of service for over 18 hours until the problem was found. We had to bring online peaking units to compensate. These units are much more expensive to run.

Also in about the same time frame, in the same forest, a lightning strike started a fire in overly dense brush under a 500 kV transmission line. The heavy black smoke from the fire tripped the circuit five times. We've also lost distribution lines to fire where vegetation management activities were blocked, in one case leaving a community without power for 12 hours.

I tell you these stories to underscore the critical need for federal land managers and utilities to work together to revamp the current approach to managing rights-of-way on federal lands. In 1997, I approached our forest officials about developing a memorandum of understanding (MOU) to provide a more effective and consistent process for managing our rights-of-way, including accepted practices. When our effort stalled, EEI stepped in around 2001, with the support of APS and other member utilities, to seek such an MOU at the national level. Negotiations on this MOU intensified following the August 2003 blackout and during the oversight conducted by Congress in 2005. In the Energy Policy Act of 2005 (EPAc), Congress requires federal land managers to expedite approvals necessary to assure that companies can comply with mandatory reliability standards approved by FERC for vegetation management.

I am pleased to report that that Memorandum of Understanding is now in the process of being signed by the U.S. Forest Service, the Bureau of Land Management, the Fish and Wildlife Service, the Environmental Protection Agency, the National Park Service, and EEI on behalf of its member companies. We view this as a first step towards implementation of Section 1211 (c) of EPAc and towards assuring that management of rights-of-way on federal lands is not an impediment to maintaining reliable electric service. The MOU recognizes the technical standards and requirements for maintaining reliability and signals to all federal land managers that meeting them is a priority.

I am also pleased to report that we have made significant progress as well within our national forests in Arizona. We have agreed upon a clear and technically sound definition of a "hazard tree," which will facilitate the identification and removal

of hazard trees. The Regional Forester has initiated a Section 7 Emergency Endangered Species Act Consultation for hazard tree removal that embodies a comprehensive programmatic approach to power line maintenance activities. Phase I requires the individual forests to initiate an emergency Section 7 consultation on hazard tree removal. Phase II will develop a biological opinion covering hazardous tree removal for a period of 18 months, and Phase III will be preparation of a comprehensive programmatic biological assessment and opinion covering hazardous tree removal and routine right-of-way maintenance.

In addition, we are again moving towards completion of an MOU with all 6 national forests in Arizona, which will recognize the technical requirements and accepted practices for managing a transmission and distribution right-of-way for reliability. Nevertheless, we have a long way to go in Arizona, and certainly elsewhere in the country, to assure the reliability of facilities on federal land. I encourage you to be vigorous in your oversight and to step in when it is productive to do so.

In conclusion, I would like to briefly summarize the practical day-to-day effect of the progress that we have made with the Forest Service in Arizona since APS and EEI initiated discussions with the Committee a year ago.

- Past history – Notifications of hazard tree removals were done by a phone call with no consistent process in place. In fact, most removals took at least a couple of weeks to get processed with little cooperation from the Forest Service. In some cases we had to go over the District Rangers authority to the Forest Supervisor to get approval.
- Present – We have a hazard tree process in place that sends information on trees, GPS locations, and maps attached to an email that is responded to within a day or two for removal.
- Past history – We used to wait for months to years for biological assessments to be completed by the Forest Service for our work in the forests. They said it wasn't a priority and they were overloaded with work.
- Present – We now do our own biological assessments and have them sent in for approval before we are scheduled to do the work. This is a much simpler process and lets us schedule our work instead of the Forest Service. It has reduced the time to weeks instead of months or years in all national forests except for one.
- Past history – There was not a programmatic approach to combining numerous projects together for the Forest Service or the U.S. Fish and Wildlife Service (USFS) and it would take over 120 days for work to be approved thru the USFWS.
- Present – We are in the process of developing a programmatic agreement with all Arizona Forests and USFWS that will eliminate the 120-day waiting period and streamline our work tremendously. Once this project is completed in 2008 the utilities will contact the Forest Service in the beginning of the year for its annual work plan and file a report at the end of the year on the accomplishments.
- Past history – Our integrated vegetation management program wasn't accepted by all the national forests for managing rights-of-way, even though this approach is based on over 50 years of university research. In one case we haven't been able to perform this function for over 4 years.
- Present – APS and the Forest Service have put together a UVM working group to develop an MOU for IVM work practices. This was completed and presented to the Forest Supervisors on April 27, 2006 and we are now waiting for their decision. If approved this will provide a consistent approach to all vegetation maintenance activities within all 6 National Forests in Arizona. This process will make all utilities and forests accountable to a standard format and process of doing business. No longer will individuals within a certain forest dictate their own personal agendas to the work we need to accomplish. Forest Supervisors will appoint a central point of contact for each forest to act as a liaison for Arizona utilities.
- Past history – Emergency consultations (EC) were used on trees infested by the bark beetle, but the trees did not fit the initial requirements of the existing hazard tree definition. This always led to a lot of discussion and disagreement between utilities, Forests, and USFWS which delayed our ability to remove the trees.
- Present – EC are now being built into the programmatic document and hazard trees will be addressed with a process for their identification and removal throughout the State. Once this process is approved the utility will identify the hazard trees and remove them without intervention from the Forest Service as long as the utility follows the programmatic agreement. At the end of the year the utilities will file a report on the hazard tree program which will include number, location and species.

Finally, the character of the electric grid has changed considerably since the Energy Policy Act of 1992. EPLA 2005 will accelerate those changes. As a result, where powerlines cross federal lands, these lands should be considered first

and foremost as an essential part of the nation's critical infrastructure. Thank you for holding this hearing. APS and EEI look forward to working with you on these issues.