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UNITED STATES HOUSE OF REPRESENTATIVES

COMMITTEE ON NATURAL RESOURCES

"KEEPING THE LIGHTS ON AND REDUCING CATASTROPHIC FIRE RISK: PROPER MANAGEMENT OF ELECTRICITY RIGHTS-OF-WAY ON FEDERAL LANDS"

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Thank you Mr. Chairman, I appreciate the opportunity to provide the Committee with information about the Bonneville Power Administration's experience with the management of electricity rights-of-way on Federal lands.

As background, the Bonneville Power Administration (BPA) provides nearly three-quarters of the electricity in the Pacific Northwest, and maintains a network of approximately 15,000 circuit miles of high-voltage electric transmission lines and over 8,500 miles of access roads. BPA's electric transmission system operates in seven states – Oregon, Washington, Idaho, and portions of Montana, Nevada, Wyoming, and California. About 1,500 miles of BPA's transmission system is located on lands managed by the United States Forest Service and the Bureau of Land Management.

Vegetation management is a major component of BPA's maintenance of the transmission system. We need to keep vegetation a safe distance away from our transmission facilities, including our transmission lines and access roads. We must be able to get to these facilities to carry out routine and emergency maintenance, and we must make sure that nothing falls into or grows too close to the transmission line. If vegetation is too close to our lines, it can arc over and cause serious injury or death to someone nearby, it can cause an outage of the line, or it can start a fire. This can also happen when a line overheats on a hot day or when it is carrying a high power load, and as a result, stretches and sags closer to the vegetation below. For example, in August of 1996, a very hot day created sag in some lines which led to arcing into an orchard tree that grew too high, and caused an outage that extended to parts of Canada and ten Western states. Over seven million residences and businesses lost power.

BPA has an extensive vegetation management program designed to ensure the safety and reliability of BPA's transmission system while protecting the environment. BPA's vegetation management is guided by a number of safety standards, including the National Electrical Safety Code, which defines the minimum safe distance between objects or workers and energized lines. In addition, BPA adheres to the North American Electric Reliability Corporation (NERC) Reliability Standards, as well as those developed by the Western Electricity Coordinating Council (WECC) the regional entity responsible for coordinating and promoting bulk electric system reliability for the western interconnected transmission systems. These standards require BPA to define specific heights and distances for trees and other vegetation near its transmission lines. In addition to NERC and WECC standards, BPA adheres to a program of inspection, monitoring, maintenance, and reporting regarding vegetation management associated with its transmission

facilities. A Category 1 grow-into outage[1] can result in potential NERC fines up to $1,000,000 per day and also require BPA to implement a mitigation plan which may be even higher in cost.

In general, BPA's policy is that trees or other vegetation in the rights-of-way may not grow over 10 feet tall at maturity, unless they are in a deep canyon so they could not possibly grow into the line. BPA also selectively removes "danger trees" – trees that could potentially grow, fall, or bend into the lines – from the area next to the right-of-way. We select them for removal based on the overall condition of the tree, the stability of the ground around the tree, the tree species, and any other defect that might cause the tree to be "unstable" and likely to fall into the transmission line.

Vegetation management is done using a number of techniques tailored to the unique characteristics of the landscape. Typically manual cutting with chainsaws is the primary method, and sometimes mechanical cutting is used. We may apply herbicides on smaller trees or incompatible brush, or do follow-up herbicide treatments on stumps. We manage vegetation in the rights-of-way to achieve a maintenance-free period, which tends to be three to four years on the West side of the Cascades, and three to eight years on the East side of the Cascades.

In 2000, we developed our vegetation management program in consultation with stakeholders and the public in a programmatic Environmental Impact Statement. Further, before each site-specific vegetation management action, we walk through a number of planning steps to ensure the activity is tailored to the specific area and that site-specific environmental factors are taken into account.

[1] A "Category 1 grow-into outage" is an outage caused by vegetation growing into lines from vegetation inside and/or outside of the right -of –way. NERC Reliability Standard FAC-003-1.

In addition to our extensive vegetation management program, BPA also undertakes regular maintenance of the transmission structures themselves. The maintenance work can be as simple as replacing several old wood transmission poles with new wood poles. It can also mean the more comprehensive rebuilding of entire segments of aging lines with new poles, new conductors, and access roads improvements and reconstruction. As part of our ongoing maintenance of BPA's transmission infrastructure, BPA is working steadily to repair, rehabilitate, or replace components whose current condition warrant such actions. For example, for fiscal year 2014, BPA expects to replace over 450 wood pole structures, undertake 75 miles of wood pole line rebuilds, and replace steel components on approximately 200 miles of lattice steel lines. BPA expects to continue at this pace as long as it is needed, which may be for the next several years.

In undertaking its vegetation management and maintenance activities on Federal lands, BPA works to ensure that it is adapting its activities to the particular habitat standards and guidelines of the particular lands to the extent consistent with the reliability standards for electrical transmission. BPA undertakes an environmental analysis for all of its vegetation management, wood pole replacement, and line rebuilds, and coordinates with the local Federal land managers. For example, both the Forest Service and Bureau of Land Management were cooperating agencies in the development of BPA's programmatic vegetation management environmental impact statement and endorsed its adoption and the associated site-specific planning framework. For simple wood pole replacements, BPA typically notifies individual districts of the planned replacements, and engages with local managers if there are specific issues to address. For rebuilds, BPA typically invites the local Federal land managers to join as cooperating agencies in the environmental analyses conducted, and relies heavily on experts from these agencies to inform BPA as to local environmental conditions and concerns. While the low-growing vegetation

management requirements and access road developments necessary for reliable electricity infrastructure are not always well-matched to the land management goals of a particular area, BPA works hard to try and address Federal land manager concerns. For example, we've partnered with the Bridger-Teton National Forest to manage our rights-of-way while minimizing bark beetle habitat from the ensuing felled trees. BPA is also in the middle of working collaboratively with the USFS in developing a national permit with associated operations and maintenance plan to further detail our cooperative interactions on BPA assets which cross USFS National Forests.

In BPA's experience, coordination and communication between BPA and the Federal land managing agencies is key to fostering a mutual understanding of our important Federal missions. It is critical that land management planning continue to acknowledge and incorporate the needs of a reliable energy infrastructure, and that transmission operation and maintenance acknowledge and incorporate the needs of Federal land management goals.

Thank you for this opportunity, and I am happy to answer any questions you may have.