House Subcommittee on Water, Power and Oceans John Fleming, Chairman Hearing Memo

May 15, 2015

To: House Subcommittee on Water, Power and Oceans

From: Water, Power and Oceans Subcommittee Republican Staff

Hearing: May 20, 2015 1:30 pm House Water, Power and Oceans Subcommittee

Legislative Hearing on H.R. ____ (Zinke, MT – At Large), "The Electricity

Reliability and Forest Protection Act"

Bill Summary

In order to help ensure reliable electric service and to reduce power-line caused wildfires, H.R. ____(Zinke, MT – At Large) promotes federal land management agency consistency, accountability, and timely decision-making as it relates to protecting electricity transmission and distribution lines on federal lands. In light of federal electricity reliability standards, vegetative management on and adjacent to power lines has been widely recognized as an important tool towards ensuring grid reliability, allowing for the transmission of renewable electricity resources and protecting humans, flora and fauna.¹

The legislation is based on extensive testimony presented to the House Natural Resources Committee.² Six witnesses will testify on this bill.

Invited Witnesses (listed in alphabetical order)

Mr. Doug Benevento
Director of Public Policy Development
Xcel Energy
Denver, Colorado

Mr. Mark Hayden, General Manager Missoula Electric Cooperative Missoula, Montana

¹ Department of Energy: 2015 Quadrennial Energy Review, Ch. 2, p. 15 http://energy.gov/epsa/downloads/quadrennial-energy-review-full-report

² Keeping the Lights On and Reducing Catastrophic Forest Fire Risk: Proper Management of Electricity Rights of Way on Federal Lands: Oversight hearing before the Committee on Natural Resources, 113th Cong. (May 7, 2014); and The Need for Proper Forest Management on Federal Rights of Way to Ensure Reliable Electricity Service: Oversight Hearing Before the Subcommittee on Water and Power and the Subcommittee on Forests and Forest Health of the H. Comm. on Natural Resources, 109th Cong. (May 3, 2006).

Mr. Neil Kornze (or designee)
Director, Bureau of Land Management
U.S. Department of the Interior
Washington, DC

Mr. Dave Markham, President/CEO Central Electric Cooperative Redmond, Oregon

Mr. Tom Tidwell (or designee) Chief, U.S. Forest Service U.S. Department of Agriculture Washington, DC

Additional witness TBD

Background

Federal Land Management Agencies and Electricity Rights of Way

The U.S. Forest Service (Forest Service) manages 155 National Forests and 20 National Grasslands, encompassing 192 million acres throughout the United States.³ Forest Service lands include 3,000 authorized electric transmission and distribution facilities, including about 1,300 rural electric facilities⁴ and accounting for nearly 18,000 miles of electrical rights-of-way (ROW).⁵ Similarly, the Bureau of Land Management (BLM) administers 247.3 million acres, including over 71,613 miles of electrical transmission and distribution lines.⁶ The costs of operating, maintaining and repairing these electricity lines on these ROW are borne by utility companies and their electricity ratepayers.

An electricity right-of-way can have multiple benefits. While an obvious benefit is to provide a linear path for delivering electricity from a generation source to electricity ratepayers, another beneficial purpose is the creation of wildlife corridors (see Photo 1 below). According to the National Wild Turkey Foundation (NWTF), "the most important turkey use of a ROW is for reproduction. Several studies have found that many hens selected old field vegetation on a ROW for nesting....the close proximity of the forest and old field habitat offers a variety of resources (e.g. food) for turkeys and other wildlife...the food chain begins with grasses and forbs, which

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³ The Need for Proper Forest Management on Federal Rights of Way to Ensure Reliable Electricity Service: Oversight Hearing Before the Subcommittee on Water and Power and the Subcommittee on Forests and Forest Health of the H. Comm. on Natural Resources, 109th Cong. (May 3, 2006), written testimony of Mr. Joel Holtrop, Deputy Chief, National Forest System, U.S. Dept. of Agriculture.

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⁵ Testimony of Mr. Jim Pena, Associate Deputy Chief of the National Forest System, U.S. Forest Service, Committee on Natural Resources, 113th Cong., "*Keeping the Lights On and Reducing Catastrophic Forest Fire Risk: Proper Management of Electricity Rights of Way on Federal Lands*," May 7, 2014, p. 2

⁶ Department of Energy: *Report to Congress: Corridors and Rights-of- Way on Federal* Lands, Pg. 2. http://energy.gov/sites/prod/files/oeprod/DocumentsandMedia/congress 020906.pdf

are eaten by rats and rabbits, which are eaten by predators, who might also eat turkey eggs, poults, and adults."⁷

In addition, properly managed rights-of-way can provide a source of our domestic food supply. According to the North American Pollinator Protection Campaign:

Millions of acres of utility ROW habitat crisscross all types of ecosystems as they bring energy to our homes and businesses. If these ROW are managed with integrated vegetation management program, they can attract and sustain millions of native wild bees, butterflies and beetles and other animals that pollinate and can insure the reproduction of over 75% of all flowering plants...Pollinating animals assist plants in reproduction bytransferring pollen, allowing those plants to produce seeds, berries, nuts and other foods important to the survival of many species of wildlife, and to the production of an estimated 1/3 of the human food supply.



Photo 1: Wild Turkeys foraging on an electricity right-of-way. Source: NWTF

The Need to Maintain Electricity Rights-of-Way

Many ROW are surrounded by living, dying or dead trees that can make contact with an electricity line if not properly maintained. Vegetative management is a critical tool for



Photo 2: Tree Leaning on Distribution Line in the Big Horn National Forest. Source: Big Horn REA

safeguarding electricity infrastructure and wildlife habitat on ROW located on federal and other lands. The goals of vegetative management are to ensure electricity line reliability, preventing tree-related fires and keeping the public and habitat safe. A typical vegetative management program carried out by an electric utility with above-ground transmission or distribution lines includes tree pruning and removal, manual or mechanical vegetation control around poles or substations, tree-planting or transplanting, and tree inventories. The standard utility practice for managing these ROW

is called Integrated Vegetative Management (IVM), which is generally defined as the "practice of promoting desirable, stable, low-

⁷ http://www.nwtf.org/conservation/bulletins/bulletin 19.pdf

⁸ http://www.nwtf.org/conservation/bulletins/bulletin 19.pdf

growing plant communities—that will resist invasion by tall-growing tree species—through the use of appropriate, environmentally sound, and cost-effective control methods."

As noted above, there are almost 90,000 miles of electric transmission and distribution lines on Forest Service and BLM lands. In order to perform IVM, perform infrastructure inspections and operate and maintain power lines on these lands, electric utilities must seek permission and approval from the appropriate federal land management agency, which will typically use processes under the National Environmental Policy Act to assess whether the proposed vegetative management measures comply with federal environmental laws. Despite these electricity corridors being "less than a fraction of a percent" of overall federal lands, the consequences of not effectively managing the electricity right-of-way can be significant and catastrophic. ¹⁰

When a right-of-way is not properly maintained, a tree can grow into or fall on to a power line, causing fires and a domino effect of electricity blackouts. For example, on August 10, 1996, three power lines in the Pacific Northwest sagged on to untrimmed trees, causing a massive electricity blackout that impacted 7.5 million people across fourteen western states, two Canadian provinces and part of Mexico. An August 14, 2003 blackout caused by a falling tree

led to an outage for 50 million electricity customers (see Photo 3 right). 12

As a result of the 2003 blackout and ongoing reliability concerns, what was then the North American Electric Reliability Council (NERC) finalized vegetative management standards and guidelines for the electric industry in 2005. In the same year, Congress passed and the President signed the Energy Policy Act of 2005 (P.L. 109-190), which focused on creating nationwide mandatory electricity reliability standards to avoid widespread electricity blackouts. The law contains the following reliability provision (Section 1211):

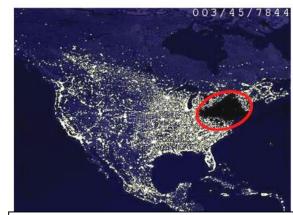


Photo 3: Satellite Photo Impacts of the August 14, 2003 Electricity Blackout. Source: AM980.ca

Federal agencies responsible for approving access to electric transmission or distribution facilities located on lands within the United States shall, in accordance with applicable law, expedite any Federal agency approvals that are necessary to allow the owners or operators of such facilities to comply with any reliability standard, approved by the Commission under section 215 of the Federal Power Act, that pertains to vegetation management, electric service

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⁹ http://www.epa.gov/pesp/htmlpublications/ivm_fact_sheet.html

¹⁰ Testimony of Mr. Michael Neal, Manager of Forestry and Special Programs for Arizona Public Service, House Committee on Natural Resources Oversight Hearing "Keeping the Lights on and Reducing Catastrophic Forest Fire Risk: Proper Management of Electricity Rights of Way on Federal Lands," May 7, 2014, p. 2

¹¹ http://energy.gov/sites/prod/files/oeprod/DocumentsandMedia/BlackoutFinal-Web.pdf

¹² http://www.am980.ca/2013/08/14/blackout-10-years/

¹³ Federal Energy Regulatory Commission FAC-003-2

¹⁴ Pub. L. 109-190, 120 Stat. 298.

restoration, or resolution of situations that imminently endanger the reliability or safety of the facilities. ¹⁵

As implemented, the above federal reliability standard mandates up to a \$1 million per day penalty for utilities that allow trees to grow into transmission lines as a way to prevent cascading blackouts.¹⁶

Over a decade later, vegetative management is still an important issue. For example, the Department of Energy's recent 2015 Quadrennial Energy Review (QER), states:

Reliability and resilience projects have also included operations and maintenance activities, such as aggressive vegetation management. While it might be considered low-tech, vegetation management is an essential activity; both the 1996 West Coast and 2003 East Coast-Midwest power outages started from trees along transmission lines.¹⁷

This policy echoes 2014 testimony given by Mr. Ed Roberson, Assistant Director of Resources & Planning at BLM:

The growth of vegetation within utility rights-of-way can, in some cases, pose risks to the infrastructure needed to provide a continuous supply of electrical power. Trees can fall or otherwise make contact with overhead power lines, sometimes resulting in power outages or fires, which pose threats to public safety, private property, and natural resources...To provide a dependable supply of electricity, utilities must manage vegetation near their transmission and distribution lines to prevent blackouts and wildfires.¹⁸

The Challenges of Maintaining Electricity Rights-of-Way and Adjacent Hazard Trees on Federal Lands

Despite the 2005 federal law to maintain ROW, federal land agencies have been subject to criticism for not allowing vegetative management policies to be carried out on a consistent and timely basis. Specifically, some electricity providers have voiced concerns that federal land managers carry out policies contradictory from one another, that there is no timely decision-making process for removing dangerous trees and that redundancy in reviews and work requirements add unnecessary delay. As an example, Mr. Bobby Bright, the former Chief Executive Officer of the San Miguel Power Association in southwestern Colorado, testified about his interaction with the Forest Service to the House Resources Committee in 2006:

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¹⁵ *Id* at Sec. 215.

¹⁶ Testimony of Mr. Randall Miller, Director of Vegetative Management, PacifiCorp, House Committee on Natural Resources Oversight Hearing "Keeping the Lights on and Reducing Catastrophic Forest Fire Risk: Proper Management of Electricity Rights of Way on Federal Lands," May 7, 2014, p. 3

¹⁷ Department of Energy: 2015 Quadrennial Energy Review, Ch. 2, p.15 http://energy.gov/epsa/downloads/quadrennial-energy-review-full-report

¹⁸ Testimony of Mr. Ed Roberson, Assistant Director, Resources & Planning, U.S. Bureau of Land Management, House Committee on Natural Resources Oversight Hearing "Keeping the Lights on and Reducing Catastrophic Forest Fire Risk: Proper Management of Electricity Rights of Way on Federal Lands," May 7, 2014, p. 1

There is little consistency from agency to agency, district to district, or even within the same offices. There seems to be no standard operating procedure.... We are not asking for a free pass to build whatever we want wherever we want it. We are asking for a streamlined process with consistent procedures and requirements...It would also relieve some of the staffing shortfalls that these agencies are experiencing.¹⁹

Similarly, at a House Natural Resources Committee hearing last May entitled "Keeping the Lights on and Reducing Catastrophic Forest Fire Risk: Proper Management of Electricity Rights of Way on Federal Lands," Mr. Randall Miller of PacifiCorp testified about federal staffing inconsistencies:

The inconsistent viewpoints of Federal land managers create difficulties for utilities because local authorities are empowered to make their own decisions for what is or is not appropriate in their jurisdictions. The arrangement creates unpredictable directives regarding what is or what is not authorized on utility corridors on Federal lands - in spite of land managers ostensibly working with the same policies and procedures.²⁰

Electric utilities are not only focused on managing vegetation on ROW, but are also concerned about adjacent high-risk and hazardous trees outside the corridor. Many electric utilities remain threatened with liability for fires on federal lands caused by nearby, but outside the ROW trees falling on power lines.²¹ Despite being potentially liable for trees that are outside of the ROW but are on federal lands, utilities may encounter opposition and lengthy delay from some Forest Service personnel to remove the high risk trees. Indeed, Mr. Mike Easely, who represented a rural electric cooperative in Wyoming, testified on the following liability issue:

Carbon Power and Light (Carbon) had been conducting regular maintenance and clearing of rights of way (ROW). Personnel noticed several trees outside of the ROW (Forest Service trees) and noted if the trees fell, they would fall into their power lines. The cooperative took the initiative to contact officials in the Medicine Bow National Forest to bring this problem to their attention. Among other things they were told that if a tree outside their ROW fell into the lines and caused a fire, the cooperative would be held liable for damages! It should be noted that most, if not all, of the trees being cleared, or needing to be cleared, were dead due to beetle kill and were not viable living trees. Carbon had to jump

²⁰ Testimony of Mr. Randall Miller, Director of Vegetative Management, PacifiCorp, House Committee on Natural Resources Oversight Hearing "Keeping the Lights on and Reducing Catastrophic Forest Fire Risk: Proper Management of Electricity Rights of Way on Federal Lands," May 7, 2014, p. 6

¹⁹ Testimony of Mr. Bobby Bright, CEO, San Miguel Power Association, *The Need for Proper Forest Management on Federal Rights of Way to Ensure Reliable Electricity Service*: Oversight Hearing Before the Subcommittee on Water and Power and the Subcommittee on Forests and Forest Health of the H. Comm. on Natural Resources, May 3, 2006

²¹ The Need for Proper Forest Management on Federal Rights of Way to Ensure Reliable Electricity Service: Oversight Hearing Before the Subcommittee on Water and Power and the Subcommittee on Forests and Forest Health of the H. Comm. on Natural Resources, 109th Cong. (2006) (written testimony of Steven Eldrige, General Manager and CEO, Umatilla Electric Cooperative).

through many bureaucratic hoops, conducting one study after another that delayed the clearing of ANY trees for over two years and at a cost of over \$1.6 million to their member-owners. Because of the delays, the cooperative was not able to clear all of the trees needed in one season. We were all very fortunate that a forest fire was not ignited by one of these dead trees falling into a wire. ²²

This liability framework results in a situation where federal officials are unwilling to take measures to maintain trees on lands they manage, but the cost of that negligence ultimately could fall on ratepayers. H.R. ____ addresses this to ensure that a utility is not liable if the federal government failed to allow the utility to manage vegetation on or adjacent to the right-of-way. However, a utility would still be liable if its lines or facilities spark a fire not related to the federal government's decision or indecision on vegetative management.

The Forest Service reported 113 and 232 wildfires, respectively in 2013 and 2012, caused by contact between power lines and trees on its lands. H.R. _____ seeks to reduce such wildfires, in part, by promoting federal consistency, accountability, and timely decision-making as it relates to protecting electricity transmission and distribution lines on federal lands from trees. The Forest Service and BLM have maintained that they have and are working on partnerships with utilities to maintain rights-of-way. Indeed, the Forest Service has promoted its so-called "Desk Guide" for vegetative maintenance near power lines.

According to the agency, the document "emphasizes that where transmission lines face imminent threat from vegetation, utilities may treat that vegetation without waiting for Forest Service approval."²⁵ The agency also stated that it anticipated signing an interagency Memorandum of Understanding with utilities by the end of 2014. ²⁶ To date, that document has not been signed. Both agencies also maintain that they need adequate funding to process permits and to oversee utility activities, however some utilities have argued that it is more a question of agency accountability and lack of timelines.²⁷

Section-by-Section Analysis of H.R.

The bill adds a new section (section 512) to the end of the Federal Land Management and Policy Act of 1976

Section 512(a) General Directions to Enhance Reliability

²² Testimony of Mr. Mike Easely, CEO Powder River Energy Corporation, House Committee on Natural Resources Oversight "Keeping the Lights on and Reducing Catastrophic Forest Fire Risk: Proper Management of Electricity Rights-of-Way on Federal Lands," May 7, 2014, p. 1.

²³ Testimony of Mr. Jim Pena, Associate Deputy Chief of the National Forest System, U.S. Forest Service, Committee on Natural Resources, 113th Cong., "*Keeping the Lights On and Reducing Catastrophic Forest Fire Risk: Proper Management of Electricity Rights of Way on Federal Lands*," May 7, 2014, p. 2

²⁴ Id. ²⁵ Id

²⁶ Id

 $^{^{26}}$ Id

²⁷ Committee on Natural Resources, "Keeping the Lights On and Reducing Catastrophic Forest Fire Risk: Proper Management of Electricity Rights of Way on Federal Lands" 113th Cong., May 7, 2014, found in hearing transcript, Pp. 27-28.

This subsection requires the Interior Secretary (hereinafter referred to as the Secretary) and Secretary of Agriculture to provide direction to ensure that all existing and future rights-of-way for electrical transmission and distribution facilities on federal lands include provisions for utility vegetation management, facility inspection and operation and maintenance. This guidance shall be developed in consultation with the holder of the rights-of-way and allow the owner or operator to maintain the facility in good working order to comply with Federal, State, and local electric system reliability and fire safety standards established by the North American Electric Reliability Corporation (NERC).

Section 512(b) Vegetation Management, Facility Inspection and Operation and Maintenance Plans

Section 512(b) requires the Secretary and Secretary of Agriculture to afford owners and operators of ROWs the option of developing and submitting plans for the proper Secretary's approval, and to develop a coordinated process for review and approval for such plans – assuring prompt review not to exceed 30 days. This subsection also requires these plans to comply with Federal, State, and local electrical system reliability and fire safety standards, and prohibits the secretaries from amending these standards. Section 512(b) also defines "Danger Tree" as "any tree inside the ROW or located outside the ROW that would come within 10 feet or less of an electric power line or related structure," and requires the Secretary and the Secretary of Agriculture to apply his or her categorical exclusion process under the National Environmental Policy Act of 1969 to plans developed for existing transmission ROWs.

Section 512(c) Response to Emergency Situations

Under this subsection, if a danger tree has made contact with or is in imminent danger of making contact with a transmission or distribution line, the owner or operator of that line may trim or remove the dangerous condition, and shall within 24 hours notify the appropriate local agent of the relevant Secretary.

Section 512(d) Compliance with Reliability Standards

If vegetation within or adjacent to the ROW does not meet NERC clearance requirements or those established by state and local authorities, and the Secretary or Secretary of Agriculture has failed to act to allow the owner or operator of the ROW to conduct vegetation management activities three days after a request has been made, an owner or operator may, after notifying the appropriate Secretary, conduct management activities to meet those requirements.

Section 512(e) Reporting

The Secretary and Secretary of Agriculture shall report requests and actions made under subsections (c) and (d) annually on their respective websites.

Section 512(f) Liability

If the appropriate Secretary fails to authorize a transmission or distribution facility owner or operator to manage vegetation on federal lands within or adjacent to a ROW, and the vegetation causes or contributes to wildfire damage, loss, or injury, the owner or operator of the facility shall not be liable to the United States or other parties directly.

Section 512(g) Training and Guidance

The Secretaries are encouraged to develop a training program for personnel of the department involved in vegetation management decisions relating to transmission and distribution facilities. Such plans should ensure that personnel understand electric system reliability and fire safety requirements, and how to assist owners and operators of ROWs to comply with those standards.

Section 512(h) Implementation

Not later than one year after the enactment of Sec. 512, the Secretaries shall, prescribe regulations or amend existing regulations to implement the section, and shall make those regulations final no later than two years after the section's enactment.

Section 512(i) Existing Vegetation Management, Facility Inspection and Operation and Maintenance Plans

Nothing requires an owner or operator to develop and submit a new plan if one already has been approved by the appropriate Secretary before the date of enactment of this section.