

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Revision to Transmission Vegetation Management
Reliability Standard

Docket No. RM12-4-000

NOTICE INVITING COMMENTS ON REPORT

(April 23, 2012)

The Commission is posting and inviting comment upon a report prepared by the Pacific Northwest National Laboratory (PNNL) on “Applicability of the ‘Gallet Equation’ to the Vegetation Clearances of NERC Reliability Standard FAC-003-2” (PNNL Report).

The Report was commissioned by the Commission’s Office of Electric Reliability, for the purpose of obtaining an independent analysis of certain technical questions raised by the Minimum Vegetation Clearance Distances as proposed in the North American Electric Reliability Corporation’s Reliability Standard FAC-003-2 (Transmission Vegetation Management). Specifically, PNNL was commissioned to prepare a report addressing the following:

The overall scope of this project shall include analysis of the mathematics and documentation of the technical justification behind the application of the Gallet equation and the assumptions used in the technical reference paper [Exh. A of NERC’s filing]. To put the analysis into perspective, are the assumptions made in the development of the Gallet Equation and their application in NERC-approved Reliability Standard FAC-003-2 reasonable to address the minimum distance requirements needed to avoid sustained vegetation-related outages? What variations in Gallet distance may occur when comparing the original testing (use of switching impulses and corona free electrodes) against the variety of impulses a line may be subject to and the concentrations of coronal effects when using vegetation instead of corona-free electrodes? Do the equations adequately address the limiting conditions (i.e., the expected extremes in prevailing ambient conditions including temperatures, humidity, conductor position, amplification of any coronal effects and wind speed) that are important to the insulation performance of a line to prevent flashover to nearby vegetation during real-time operating

conditions? The limiting conditions will be identified, outlined, and applied in the analysis.

This analysis shall also include a discussion of the appropriateness of using one clearance for all lines with the same operating voltage as opposed to linking the clearance to “as built” and design conditions. Finally, the analysis shall identify if the proposed clearance will provide the minimum clearance needed to avoid a flashover with regard to vegetation. (Footnotes omitted.)

The PNNL Report will be posted on the Commission’s website at <http://www.ferc.gov>.

Comments on the PNNL Report should be filed with the Commission within 30 days of the issuance of this Notice. The Commission encourages electronic submission of comments in lieu of paper using the “eFiling” link at <http://www.ferc.gov>. Persons unable to file electronically should submit an original and 14 copies of the comment to the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426.

All filings in this docket are accessible on-line at <http://www.ferc.gov>, using the “eLibrary” link and will be available for review in the Commission’s Public Reference Room in Washington, D.C. There is an “eSubscription” link on the web site that enables subscribers to receive email notification when a document is added to a subscribed docket. For assistance with any FERC Online service, please email FERCOnlineSupport@ferc.gov, or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

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