

## Vegetation-Related Transmission Outage Report Fourth Quarter 2009

The NERC Board of Trustees Compliance Committee has reviewed and accepted this Vegetation-Related Transmission Outage Fourth Quarter 2009 Report.

Vegetation-related transmission outages that occurred in the fourth quarter of 2009 are being reported in accordance with standard FAC-003-1.

The standard requires each outage to be categorized as one of the following:

- Category 1 — Grow-ins: Outages caused by vegetation growing into lines from vegetation inside and/or outside of the ROW.
- Category 2 — Fall-ins: Outages caused by vegetation falling into lines from inside the ROW.
- Category 3 — Fall-ins: Outages caused by vegetation falling into lines from outside the ROW.

All Category 1 and 2 outages are considered to be violations of NERC standard FAC-003-1, with corresponding levels of noncompliance defined in the standard. The reporting of these violations is handled separately as part of the NERC performance reporting process. Category 3 outages are not considered to be violations of NERC standard FAC-003-1. Table 1 is a summary of the vegetation outages that occurred in the fourth quarter by voltage class and category.

**Table 1: Fourth Quarter 2009 Summary of Vegetation-Related Outages  
by Voltage Class and Outage Category**

Category	RE Designated Critical Lines <200 kV	230 kV	345 kV	500 kV	765 kV	Total
Category 1 — Grow-ins						0
Category 2 — Fall-ins						0
Category 3 — Fall-ins	1	1				2
<b>Total</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>

In comparison, during the fourth quarter of 2008, the following 10 vegetation-related transmission outages were reported:

- Category 3 outages:
  - 1 – 345 kV
  - 5 – 230 kV
  - 4 – <200 kV

## Category 1 — Grow-ins

No outages caused by vegetation growing into lines from vegetation inside and/or outside of the ROW were reported during the fourth quarter 2009.

## Category 2 — Fall-ins

No outages caused by vegetation falling into lines from inside the ROW were reported during the fourth quarter 2009.

## Category 3 — Fall-ins

Two outages caused by vegetation falling into lines from outside the right-of-way were reported during the fourth quarter 2009:

### **SERC Reliability Corporation**

Reported one 230 kV vegetation-related transmission outage from outside the right-of-way:

1. The transmission owner reported one 230 kV vegetation-related transmission outage from outside the right-of-way on December 19, 2009 with a duration of 15 hours. A 71-foot Laurel Oak tree 12 inches in diameter and rooted 11 feet off the right-of-way, fell through the line. The tree had some decay at the stump but the tree crown was healthy. The entity speculates that the tree fell due to weather-induced fatigue. The tree did not need to be cut to restore the line since it fell through the line.

### **Western Electric Coordinating Council**

Reported one RE Designated Critical Lines <200 kV vegetation-related transmission outage from outside the right-of-way:

1. The transmission owner reported one RE Designated Critical Lines <200 kV vegetation – related transmission outage from outside the right-of-way on October 9, 2009 with a duration of 6 hours and 22 minutes. A tree fell into the line and was removed, continuing vegetation management efforts in conjunction with the proper authorities.

Table 2 summarizes the number of transmission outages by voltage level, region, and category.

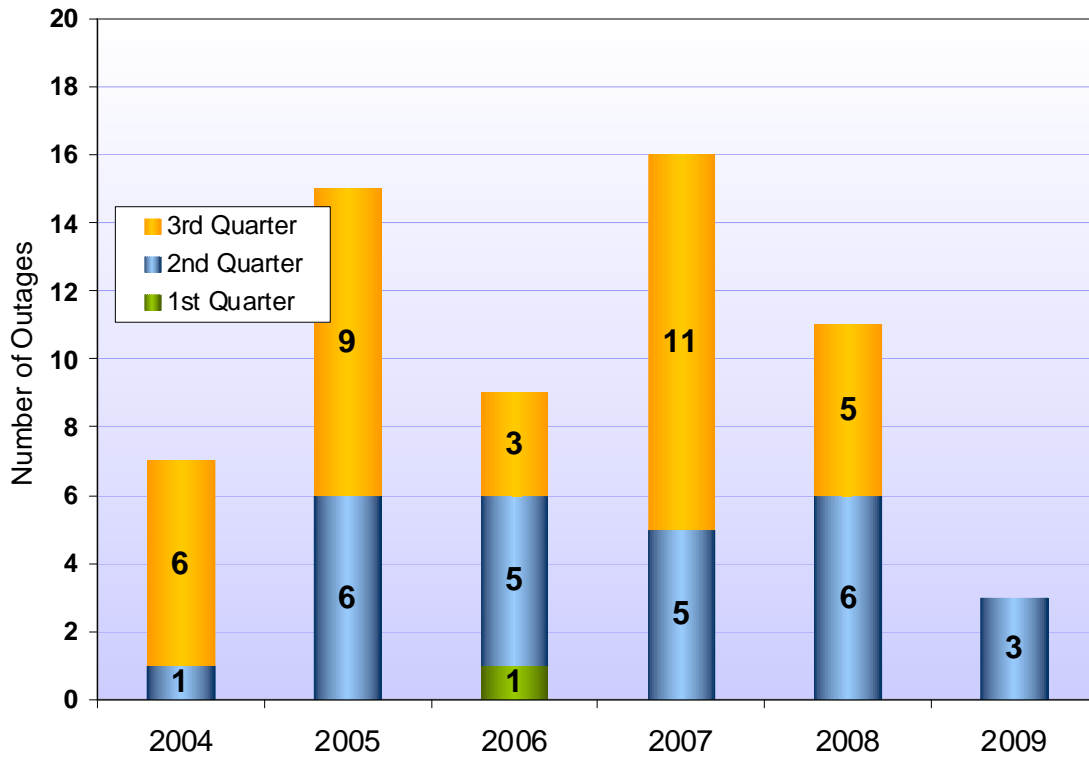
Figure 1 illustrates the number of outages caused by vegetation growing into transmission lines from within the right-of-way that have been reported since 2004. Figure 2 provides this information by voltage class for each year.

**Table 2: Summary of Vegetation-Related Transmission Outages\* by Region and by Outage Category for Each Quarter in 2009**

Region	First Quarter			Second Quarter			Third Quarter			Fourth Quarter			TOTAL		
	Category 1	Category 2	Category 3	Category 1	Category 2	Category 3	Category 1	Category 2	Category 3	Category 1	Category 2	Category 3	Category 1	Category 2	Category 3
	GROW-INS (inside/outside ROW)	FALL-INS (inside ROW)	FALL-INS (outside ROW)	GROW-INS (inside/outside ROW)	FALL-INS (inside ROW)	FALL-INS (outside ROW)	GROW-INS (inside/outside ROW)	FALL-INS (inside ROW)	FALL-INS (outside ROW)	GROW-INS (inside/outside ROW)	FALL-INS (inside ROW)	FALL-INS (outside ROW)	GROW-INS (inside/outside ROW)	FALL-INS (inside ROW)	FALL-INS (outside ROW)
FRCC						1-230 kV									1-230 kV
MRO				1-345 kV		1-230 kV							1-345 kV		1-230-kV
NPCC				1-345 kV 1-765 kV									1-345 kV 1-765 kV		
RFC															
SERC			1-230 kV			3-230 kV			3-230 kV			1-230 kV			8-230 kV
SPP															
TRE															
WECC			2-<200 kV 4-230 kV									1-<200 kV			3-<200 kV 4-230 kV
TOTAL			2-<200 kV 5-230 kV	2-345 kV 1-765 kV		5-230 kV			3-230 kV			1-<200 kV 1-230 kV	2-345 kV 1-765 kV		3-<200 kV 14-230 kV

\* Contains only sustained outages of transmission lines and does not include violations resulting from momentary outages or encroachments into the clearance zone as described in standard FAC-003.

**Figure 1: Category 1 — Grow-in Outages Caused by Vegetation Growing into Lines from Inside and/or Outside the ROW. ‡**



‡ Includes one 2007 Category 1 outage caused by vegetation growing into a RRO-designated critical line <200 kV.

**Figure 2: Category 1 —Grow-In Vegetation Related Outages of 230 kV and Higher Transmission by Voltage Class**

