

**Vegetation-Related Transmission Outages  
First Quarter 2007**

**May 22, 2007**

Vegetation-related transmission outages that occurred in the first quarter of 2007 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.

During the first quarter of 2007, there were five vegetation-related outages reported for 200 kV and higher transmission lines. There were four 230 kV and one 500 kV transmission outage caused by trees falling into lines from outside the right-of-way zone (Category 3). There were no Category 1 or Category 2 outages reported.

**Category 3 — Outages Caused by Vegetation Falling Into Lines from Outside the Right-Of-Way**

**Midwest Reliability Organization**

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

- The transmission owner reported a 230 kV vegetation-related outage occurred on February 23, 2007, with a duration of four hours and 3 minutes. A 90 foot tall Tamarack broke off near the ground. The tree was located 60 feet outside the right-of-way. The tree was removed.

**Western Electricity Coordinating Council**

Reported three 230 kV and one 500 kV vegetation-related transmission outages from outside the right-of-way.

- The transmission owner reported a 500 kV vegetation-related outage occurred on January 5, 2007, with a duration of 9 hours and 41 minutes. The top of an off the right-of-way tree broke off and lodged on the wire. The top of the tree was removed and the line was put back in service.
- The transmission owner reported a 230 kV vegetation-related transmission outage occurred on January 6, 2007, with a duration of 3 hours and 44 minutes. High winds and heavy rain caused an off the right-of-way tree to fall into the line. The tree was removed and the line put back into service. Right-of-way edges are monitored for danger trees.
- The transmission owner reported a 230 kV vegetation-related transmission outage occurred on February 10, 2007, with a duration of three days. During a winter storm, a 115 foot tall Douglas Fir, well off the right-of-way, uprooted and fell into one phase of the transmission line, resulting in a sustained line outage. Several inches of rain fell in the 24 hours preceding the outage and peak wind speeds during the storm were occurring at the time of the outage. The transmission owner has an annual proactive vegetation management program and has a vegetation consultant analyzing its system. The tree has been removed. In addition, no customers were affected.
- The transmission owner reported a 230 kV vegetation-related transmission outage occurred on March 11, 2007, with a duration of 20 hours and 18 minutes. A large fir tree fell into the line causing relay action. There was no damage to the conductors. The line was restored back to service after the tree was removed.

In addition to the four total vegetation-related outages reported for 200 kV and higher transmission lines, WECC reported one vegetation-related transmission outage caused by vegetation falling into lines from outside the right-of-way for RRC designated critical lines <200 kV.

Table 1 summarizes the number of transmission outages by voltage level and category.

**Table 1 — 2007 Vegetation-Related Transmission Outages**

Region	First Quarter			Second Quarter			Third Quarter			Fourth Quarter		
	<i>Category 1</i>	<i>Category 2</i>	<i>Category 3</i>	<i>Category 1</i>	<i>Category 2</i>	<i>Category 3</i>	<i>Category 1</i>	<i>Category 2</i>	<i>Category 3</i>	<i>Category 1</i>	<i>Category 2</i>	<i>Category 3</i>
	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)
<b>ERCOT</b>	0	0	0									
<b>FRCC</b>	0	0	0									
<b>MRO</b>	0	0	1-230 kV									
<b>NPCC</b>	0	0	0									
<b>RFC</b>	0	0	0									
<b>SERC</b>	0	0	0									
<b>SPP</b>	0	0	0									
<b>WECC</b>	0	0	1 <200 kV 3-230 kV 1-500 kV									
<b>Subtotal</b>	0	0	1 <200 kV 4-230 kV 1-500 kV									