

Report to: Utah Public Service Commission

Electric Service Reliability - Major Event Report UT-10-4

Event Date(s): December 20 5:00a.m. – December 22, 2010
Date Submitted: January 26, 2011
Primary Affected Locations: American Fork, Cedar City-Milford,
Richfield, Park City
Exclude from Performance Reports: Yes
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Report Approved by: Dennis Hansen

Event Description:

A heavy snowstorm preceded by three days of unusually heavy rain caused significant damage to Rocky Mountain Power facilities from December 20 through December 22, 2010 resulting in extensive outages to its central Utah customers. Rain-saturated soils in combination with heavily snow-laden trees made for a disastrous combination when land, snowpack and trees simply gave way, taking electrical facilities down. Some areas reported 6-8 feet of new snow in this storm. At the height of the event, approximately 13,000 Rocky Mountain Power customers were impacted. Sustained interruptions of service to customers were caused by heavy snow unloading off lines, trees or limbs across or through conductor, downed poles and lines, and damage to customer equipment. Sustained interruptions affected 155 substations and 217 circuits.

The longest interruption was on Lone Tree #11 circuit in the Cedar City operating area, affecting 4 non-residential customers for 27,121 minutes (19 days), the third stage of a step-restored outage where several poles and crossarms were broken, 12 spans of primary wire were down, and the access road was closed to our crews for several days due to rockslides and avalanches. This outage affected two FAA radar sites, a QWest communications site, and a Rocky Mountain Power microwave site. Ultimately, a helicopter was used to assess damages and a contract crew helicoptered materials in to make temporary repairs; the company will complete permanent repairs in late spring.

The unweighted average stage duration of all sustained interruptions statewide was 597 minutes, the median duration was 217 minutes and the mode duration 20 minutes. Statewide for the 3 day period, 40% of affected customers were restored within 3 hours; 883 customers were off supply for more than 24 hours.

Total Customer Minutes Lost = 12,048,105
Total Sustained Incidents = 377
Total Sustained Customer Interruptions = 33,974

Restoration:

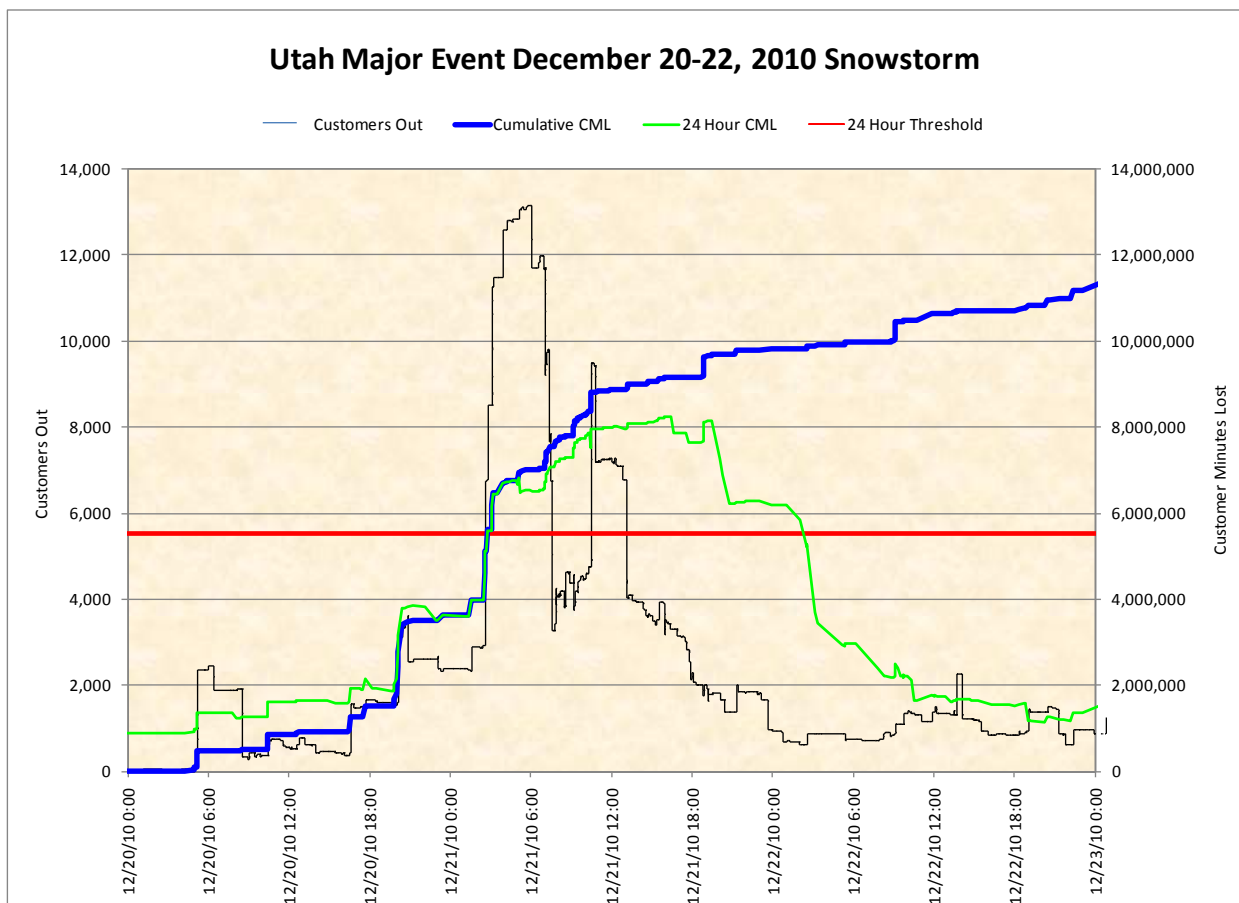
Additional equipment and manpower resources were contracted as well as borrowed from the company's Salt Lake and Jordan Valley operating areas. Crews worked round the clock under extremely difficult and hazardous conditions, faced with rough terrain, very deep snow, freezing temperatures, very frequent falling trees and limited access to food in remote areas. Patrol and

restoration activities were extremely hindered by numerous access issues; in addition to the heavy snow, crew access to facilities was challenged by deep canyons and mountain terrain, road closures, snow drifts, flooding, rock slides, fallen trees and extreme danger of avalanche. Most areas were only accessible by snowcat, snowshoes, or helicopters to airlift crew and material in, and crews were frequently out of cell phone or radio range. Crews employed 15 snowcats, 10 snowmobiles and 6 helicopters in addition to bulldozers and other road-clearing equipment. A ski resort owner assisted company crews with line patrol and provided extra snowcats for area access.

Many customers experienced multiple outages as additional trees would fall across previously restored lines. Some facilities had to be rigged with temporary repairs until full permanent repairs are possible after snowmelt in the spring.

Facilities damage included replacement of 14 distribution poles, 2 transmission poles, 213 crossarms, and more than 25,000 feet of conductor.

Customer calls reflected patience and understanding about restoration delays as the media gave extensive coverage of the landslides, flooding and hazardous conditions faced by crews. Company community managers maintained direct communication with key community leaders, county officials and radio stations about every two hours during the day and into the night.



Restoration Resources:

Troubleman/assessors	41
Internal local crewmembers	72
Internal borrowed crewmembers	40
External (contract) crewmembers	82
Vegetation crewmembers	92
Support staff	33
Total	360

Estimated Major Event Cost:

Expense \$725,000 Capital \$635,000 TOTAL \$1,360,000

SAIDI, SAIFI, MAIFI Report: (Attached)

Major Event Threshold:

Rocky Mountain Power is requesting designation of this storm and its consequences to be classified as a “Major Event” for exclusion from network performance reporting. This major event exceeded the company’s current Utah threshold for customer minutes lost in a 24-hour period (pursuant filed Advice/Approval Letters 04-13/05-13 adopting IEEE P1366 major event methodology effective the company’s fiscal year 2006).