

Gatlinburg Area Wildfires

November 28-29, 2016

UTA Conference 2017

Allen E Robbins

Superintendent

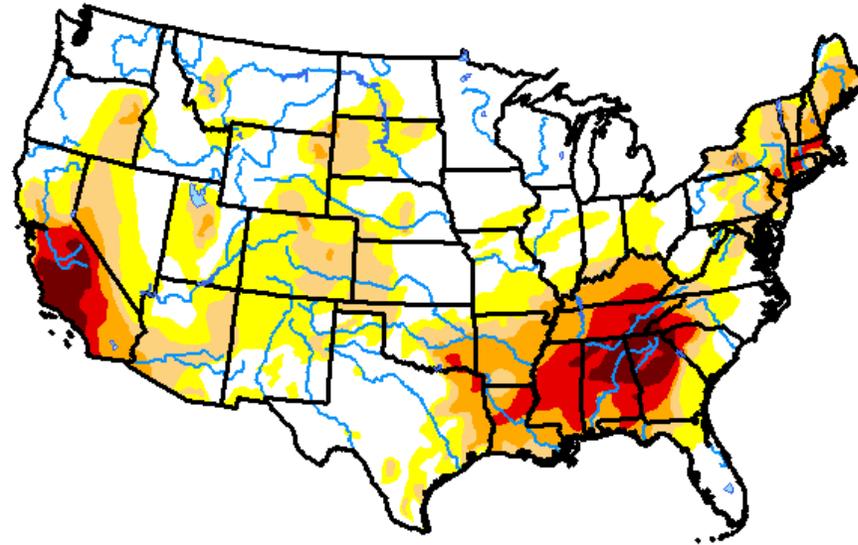
Sevier County Electric System

Beginning in the afternoon on Monday, November 28, 2016 and extending into the early morning hours the following day, wind driven wildfires burned nearly 18,000 acres, damaged or destroyed over 2,400 structures, injured nearly 200 people, and tragically claimed the lives of 14 individuals in Gatlinburg and the surrounding area of Sevier County. Total estimated losses are over \$1 billion.

Conditions:

Exceptionally dry weather in the late Summer and Fall had created prime conditions for wildfires in the central part of the southeast region.

U.S. Drought Monitor CONUS



November 22, 2016

(Released Wednesday, Nov. 23, 2016)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	45.00	55.00	31.14	17.07	8.26	2.73
Last Week <i>11-15-2016</i>	48.01	51.99	30.13	14.44	6.40	2.36
3 Months Ago <i>08-23-2016</i>	54.63	45.37	19.42	7.41	2.70	1.11
Start of Calendar Year <i>12-29-2015</i>	66.99	33.01	18.74	11.56	6.28	2.70
Start of Water Year <i>09-27-2016</i>	53.60	46.40	18.96	8.10	3.20	1.16
One Year Ago <i>11-24-2015</i>	61.55	38.45	21.90	14.83	8.42	2.70

Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

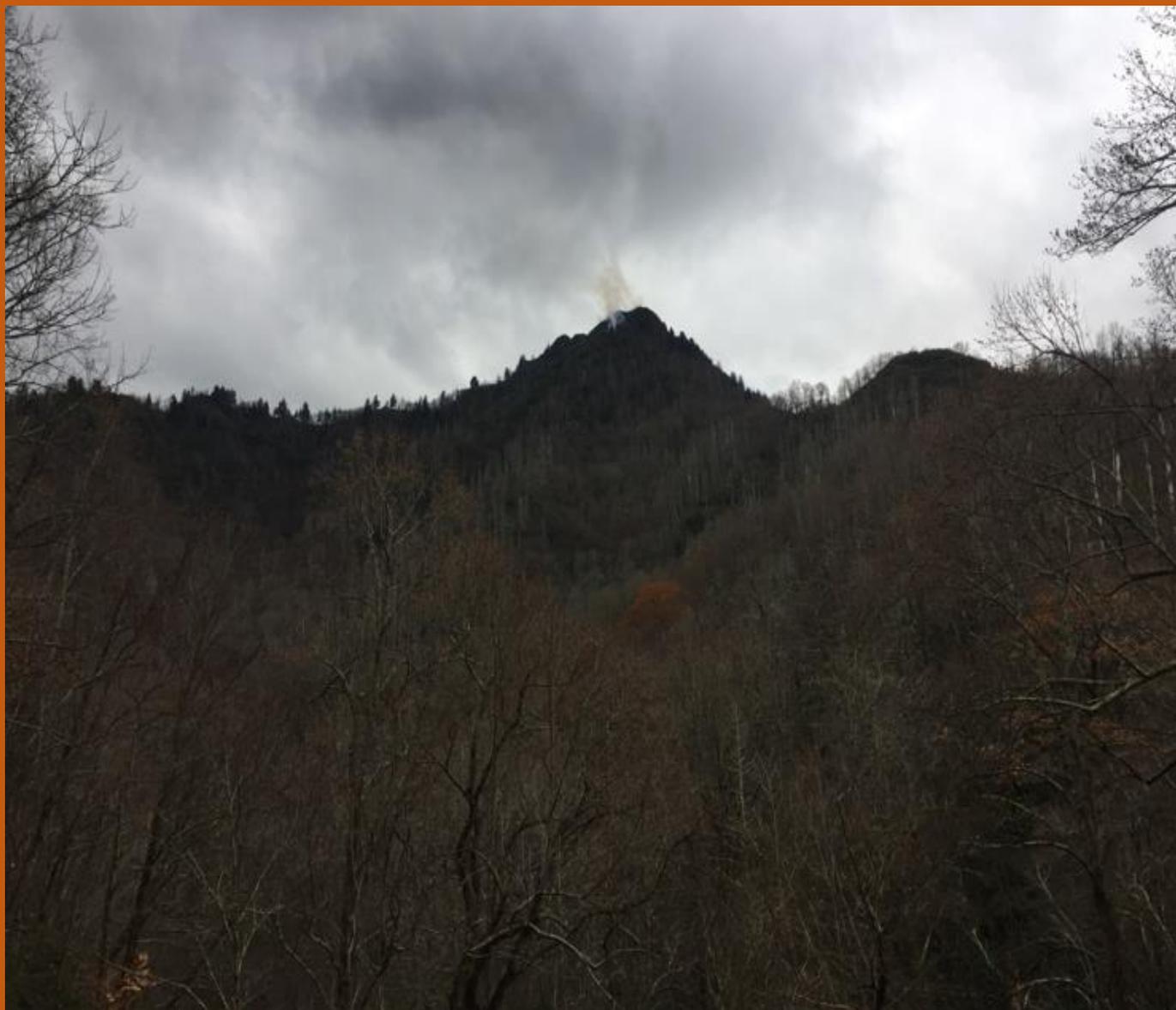
Richard Heim
NCEI/NOAA



<http://droughtmonitor.unl.edu/>

How it started:

On Wednesday, November 23, a small brush fire was detected near the Chimney Tops in the GSMNP. It was later determined that arson was the source of that fire. The fire slowly grew to approximately 6 acres by Saturday.



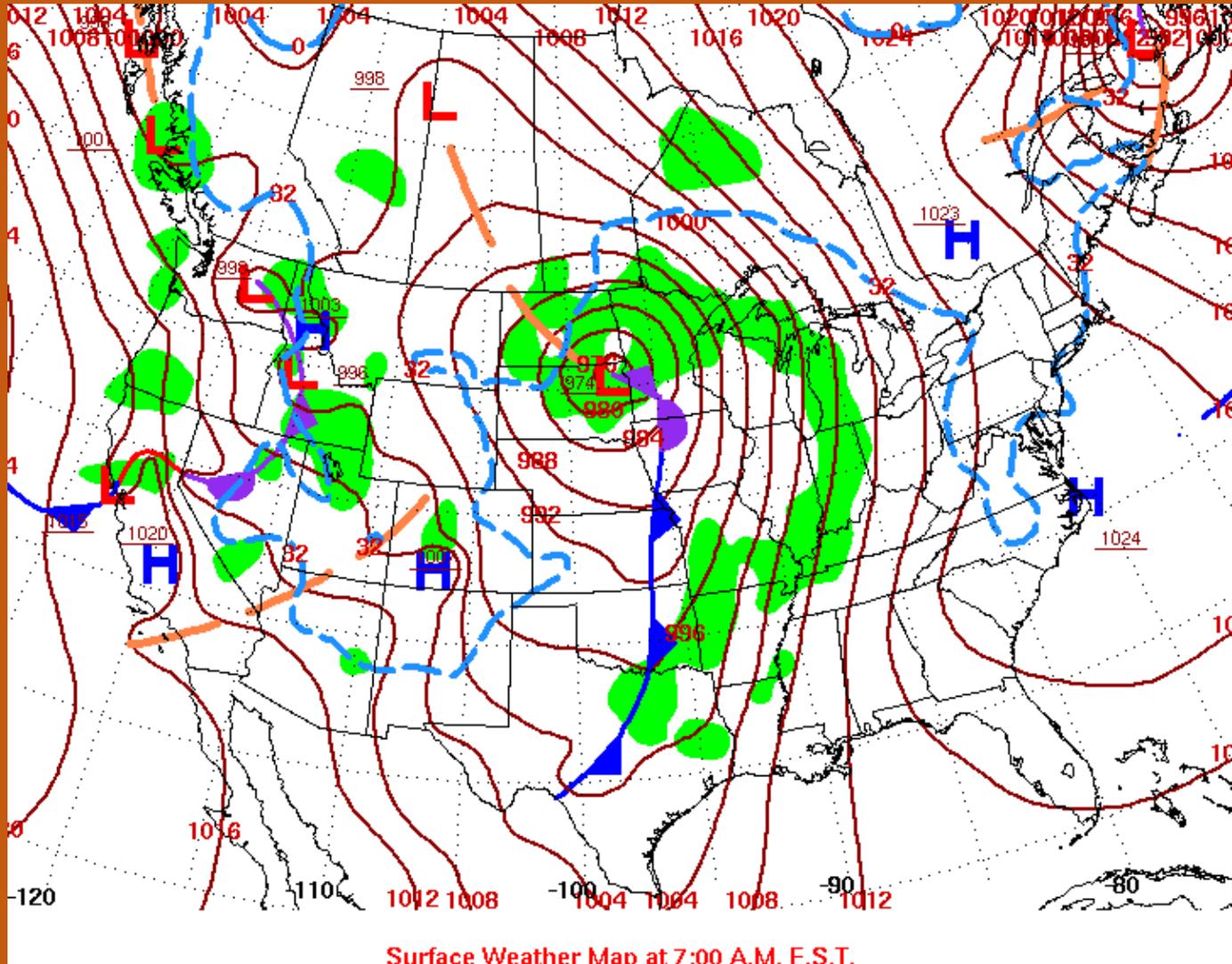
Growing Concern:

By Sunday the fire had grown to approximately 35 acres.



Growing Concern:

Weather forecasts for Monday called for the relative humidity to drop to the upper teens to low twenties and for strong southerly winds to develop ahead of an approaching front, with possible wind gusts in excess of 60 MPH.

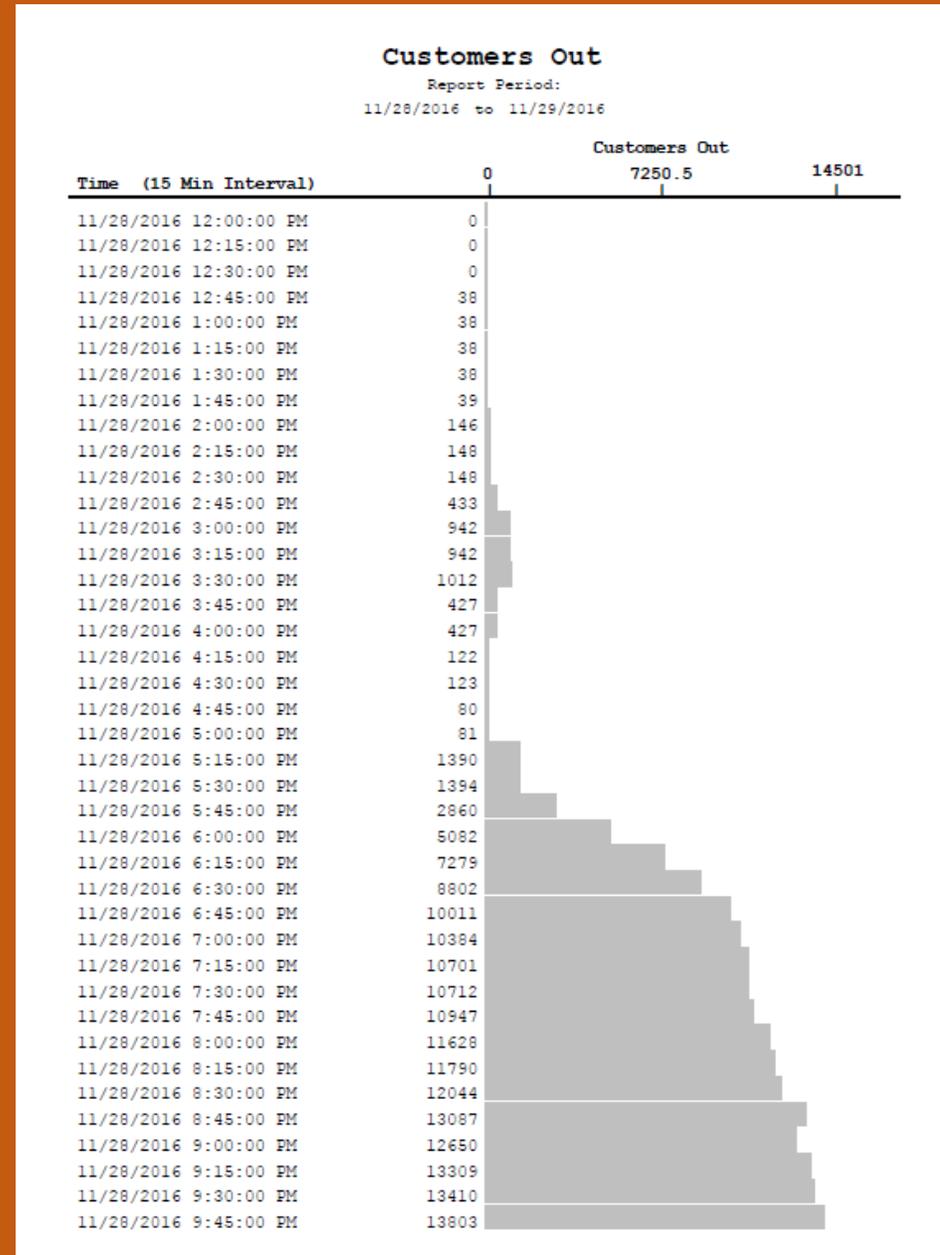


- **Increasing winds overnight Sunday night into Monday morning created spot fires up to a mile from the main fire.**
- **By midday the fire was within 1.5 miles of the Gatlinburg city limits.**
- **By 5:00 PM the fire had reached a residential area on the southern boundary of Gatlinburg.**
- **By 6:00 PM multiple fires were reported in town.**
- **Additional major fires were also burning in the Wears Valley and Cobbly Nob areas.**

Impact to Electric System

- **SCES experienced scattered outages during the day on Monday.**
- **Heavy smoke made work difficult, but most outages were restored by 4:00 PM.**

- After 5:00 PM winds intensified to 40-50 MPH sustained with gusts approaching 90 MPH.
- Outages began pouring in, primarily from downed trees initially.
- Dozens of taps were out and by 9:00 PM multiple substation circuit breakers were locked out.



- **At 9:57 PM we lost the primary 161kV TVA transmission line into our North Gatlinburg Station. We transferred to the alternate line, but it also locked out at 10:20.**
- **Our 161/69 kV substation serving our three other substations in the Gatlinburg area is located in the North Gatlinburg Station. So all of the Gatlinburg area was out of service.**
- **TVA was able to restore the primary line at approximately 11:00 PM.**

- **The fires continued to spread into the early morning hours and travelled as far as 8 miles into the SCES service territory.**
- **Finally around 2:00 AM the winds began to subside and it began to rain.**

Difficult to describe the damage and destruction even with pictures











































































Restoration Effort – SCES Crews

- **Approximately 60 linemen, apprentices, operators, laborers, engineering personnel, utility men, and locators**

Restoration Effort – Outside Crews

- **We contacted our line contractor, Service Electric Company, to request additional crews on the evening of the fires. That evening and over the next couple of days they were able to provide 17 line crews, a pole crew with track machine, and two clean up crews to pick up burnt equipment and material.**
- **We also received assistance from some other area utilities: Cleveland UB – 2 crews, Lenoir City UB – 2 crews, Clinton UB – 1 crew, Knoxville UB – 2 crews**
- **We also had many other offers of assistance from other neighboring utilities.**

Restoration Effort – Tree Crews

- **Townsend Tree Service provided 17 tree crews**
- **Wolf Tree provided 3 tree crews**

The Scope of Work

- From November 28 through December 9, crews responded to 613 separate outage events
- Replaced 436 poles
- Replaced approximately 125,000 feet of overhead conductor
- Replaced approximately 15,000 feet of URD cable
- Since December 9, SCES crews and contractors have replaced an additional 200+ poles that were damaged in the fires.
- Over 400 transformers were damaged or destroyed.

Expenses of the Wildfires

- **From November 28 through December 9 lost equipment and restoration costs were \$3.9 million.**
- **Since December 9, we have spent another \$600,000 on repair and replacement of facilities.**
- **In less than 12 hours, SCES lost 2,402 customer accounts, which generated in excess of \$2.8 million in annual revenue.**

Looming Expenses

- **Tree surveys have identified over 6,000 dead or dying trees that will pose a hazard to SCES facilities in the near future.**

FEMA Public Assistance

- **The Sevier County Wildfires were a declared disaster eligible for federal assistance.**
- **Unfortunately, only Categories A & B were declared (Debris Removal and Emergency Protective Measures)**
- **Categories C through G were not included (Category F – Permanent Utility Work)**
- **It appears at this point that SCES will receive \$57,109.24 in reimbursement.**

BUT, things are looking up!

- Millions of dollars have been injected into the area to help people to recover from their losses.
- Since the fires SCES has connected 722 new electric services.
- Many of the burned houses are already rebuilt or are currently being rebuilt, and many more are on the way.