



WECC Wildfire Data Analysis EAP Conference

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Wildfire Data

- Total reported incidents by years
- Total incidents by voltage class
- Average duration in hours of line's removed from service by voltage and year
- Percentage of lines effected by voltage class
- Number outages caused by wildfires on lines part of the Major WECC Transfer Paths
- Number of incidents on BES lines by voltage class
- Average duration in hours of total reported incidents by voltage class
- Number of transmission line outages by reason for line removal
- Average amount of load dropped (in megawatts) per incident
- Average number of customers losing service per incident
- Number of outages associated with PSPS or state programs

Benefits and Trends

- Are there transmission lines that are more susceptible to wildfire trips than others?
- Are transmission-initiated wildfires increasing over time?
- What trend can we see for lines taken out of service due to Public Safety Power Shutoffs (or similar programs)?
- Are any changes needed to Reliability Standards (FAC-003-4 & FAC-501-WECC-2)?
- What trends we are seeing related to wildfires (size, number, duration) in the West?

Benefits and Trends

- Gathering this data over time allows WECC to further identify trends from year to year and can help determine best practices for mitigation.
- Gathering data from all TOPs provides a broader awareness of how wildfires are impacting entities across the entire interconnection and the reliability risks impacting the BPS.
- The data provides an annual view of the interconnection performance during wildfires.

2017 WILDFIRE PERIMETERS



PERIMETERS OF WILDFIRES IN THE US REPORTED IN 2017



APPROXIMATE BOUNDARIES OF TOPS THAT REPORTED INCIDENTS IN 2017

APPROX.
ACRES
BURNED

1.0 M

REPORTING
ENTITIES

18

37

MAPPED
PERIMETERS

220 TOTAL INCIDENTS
REPORTED

15 UNKNOWN UNMAPPED
FIRES THAT CAUSED INCIDENTS

FIRES IN
THE US

71,499

10.0 M APPROX. ACRES
BURNED IN THE US

2018 WILDFIRE PERIMETERS



PERIMETERS OF WILDFIRES IN THE US REPORTED IN 2018



APPROXIMATE BOUNDARIES OF TOPS THAT REPORTED INCIDENTS IN 2018

APPROX. ACRES BURNED **1.6 M**

REPORTING ENTITIES **18**

32 MAPPED PERIMETERS

142 TOTAL INCIDENTS REPORTED

15 UNKNOWN UNMAPPED FIRES THAT CAUSED INCIDENTS

FIRES IN THE US **58,083**

8.8 M APPROX. ACRES BURNED IN THE US

2019 WILDFIRE PERIMETERS



PERIMETERS OF WILDFIRES IN THE US REPORTED IN 2019



APPROXIMATE BOUNDARIES OF TOPS THAT REPORTED INCIDENTS IN 2019

APPROX. ACRES BURNED **0.27 M**

REPORTING ENTITIES **13**

15 MAPPED PERIMETERS

209 TOTAL INCIDENTS REPORTED

9 UNKNOWN UNMAPPED FIRES THAT CAUSED INCIDENTS

FIRES IN THE US **50,477**

4.7 M APPROX. ACRES BURNED IN THE US

2020 WILDFIRE PERIMETERS



PERIMETERS OF WILDFIRES IN THE US REPORTED IN 2020



APPROXIMATE BOUNDARIES OF TOPS THAT REPORTED INCIDENTS IN 2020

APPROX. ACRES BURNED **3.7 M**

REPORTING ENTITIES **21**

45 MAPPED PERIMETERS

269 TOTAL INCIDENTS REPORTED

24 UNKNOWN UNMAPPED FIRES THAT CAUSED INCIDENTS

FIRES IN THE US **58,950**

10.1 M APPROX. ACRES BURNED IN THE US

2021 WILDFIRE PERIMETERS



PERIMETERS OF WILDFIRES IN THE US REPORTED IN 2021



APPROXIMATE BOUNDARIES OF TOPS THAT REPORTED INCIDENTS IN 2021

APPROX. ACRES BURNED **2.5 M**

REPORTING ENTITIES **23**

45 MAPPED PERIMETERS

137 TOTAL INCIDENTS REPORTED

25 UNKNOWN UNMAPPED FIRES THAT CAUSED INCIDENTS

FIRES IN THE US **58,985**

7.1 M APPROX. ACRES BURNED IN THE US



Electric Reliability and Security for the West

www.wecc.org