



Fact Sheet

JANUARY 2023

Transmission line shut-offs for wildfires

Wildfire frequency and severity continue to be a concern for utilities across the West. Wildfires are a common occurrence in the Bonneville Power Administration's service territory. Natural processes such as lightning strikes or human activities can cause wildfires. As a federal power marketing administration operating over 15,000 miles of transmission lines, BPA must be vigilant of wildfire risk to its facilities, to include both transmission infrastructure and lines, and ensure they operate in a manner that minimizes any potential increase of that risk, which can include de-energizing facilities to prevent wildfires and keep first responders safe.



A wildfire burns near a BPA right-of-way and substation.

Under what circumstances does BPA de-energize its facilities or transmission line due to wildfire?

BPA often receives questions about what wildfire risks or conditions would cause BPA to de-energize its facilities. Below are scenarios that explain transmission line shut-off actions due to wildfire risk:



SCENARIO 1

Existing wildfires cause facilities to trip out of service due to smoke or wildfire damage.

BPA has protective equipment that can “trip,” or shut off, its transmission lines when certain conditions occur. Damage due to smoke or wildfire can automatically trip a transmission line out of service. Wildfire damage can occur directly or indirectly such as when it causes a tree or branch to fall onto a line. In this scenario, there is not a specific process or procedure to de-energize the line. Rather, protection elements installed on BPA’s transmission grid automatically take the line out of service. BPA will not reenergize the line until it has thoroughly inspected its assets in the affected area and tested equipment installed to replace damaged assets.

SCENARIO 2

Bonneville proactively de-energizes lines or facilities for first responder safety and wildfire fighting efforts.

The safety of first responders and communities impacted by an ongoing wildfire-related event is a priority for BPA. In this scenario, when BPA needs to shut off a line or multiple lines to ensure first responder safety and assist wildfire fighting efforts, BPA will make the decision to de-energize. BPA will not reenergize the line(s) or facilities until it has thoroughly inspected its assets in the affected area and tested equipment installed to replace damaged assets.

SCENARIO 3

BPA proactively de-energizes transmission lines to prevent igniting a wildfire.

Section 7 of the Wildfire Mitigation Plan details the factors and process that informs BPA when to proactively de-energize a transmission line to avoid potentially starting a wildfire. This process is generally referred to as Public Safety Power Shutoff, or PSPS, and is commonly used by numerous utilities now in the Western Interconnection to proactively manage wildfire risks. The PSPS plan, like the encompassing Wildfire Mitigation Plan, does not prescribe specific outcomes; rather, it identifies the factors and decision-making process BPA uses to make a decision whether to de-energize a facility or not. To date, BPA’s experience with PSPS analyses is that each event presents its own unique set of risks and variables. The PSPS plan also includes the factors and steps BPA will take to reenergize a line after a PSPS event.



Smoke from a wildfire obscures the sun above a BPA substation.