

NERC Information Resources on Cold Weather Preparation and BPS Impacts

(As of 11/30/2023)

NERC has collected and shared information on cold weather preparation and BPS impacts for years via webinars, Special Reports, Lessons Learned, Failure Modes & Mechanisms, and other resources.

Below are links to some cold weather resources:

Reports on major BPS-impacting Cold Weather events:

[Outages and Curtailments during the Southwest Cold Weather Event of February 1-5, 2011](#)

[January 2014 Polar Vortex Review](#)

[FERC - NERC Report: The South Central United States Cold Weather Bulk Electric System Event of January 17, 2018](#)
(There are a number of 'sound practices' from the industry, starting on page 100.)

The [Generating Unit Winter Weather Readiness - Current Industry Practices - Version 4](#) (June 2023) is a resource for helping develop generator cold weather preparation plans.

[FERC - NERC - Regional Entity Staff Report: The February 2021 Cold Weather Outages in Texas and the South Central United States](#)

[FERC - NERC - Regional Staff Winter Storm Elliott Report: Inquiry into Bulk-Power System Operations During December 2022](#)

Cold weather related Lessons Learned:

[LL20110902 Adequate Maintenance and Inspection of Generator Freeze Protection](#)

[LL20110903 Generating Unit Temperature Design Parameters and Extreme Winter Conditions](#)

[LL20111001 Plant Instrument & Sensing Equipment Freezing Due to Heat Trace & Insulation Failures](#)

[LL20120101 Plant Onsite Material and Personnel Needed for a Winter Weather Event](#)

[LL20120102 Plant Operator Training to Prepare for a Winter Weather Event](#)

[LL20120103 Transmission Facilities and Winter Weather Operations](#)

[LL20120901 Wind Farm Winter Storm Issues](#)

[LL20120902 Transformer Oil Level Issues During Cold Weather](#)

[LL20120903 Winter Storm Inlet Air Duct Icing](#)

[LL20120904 Capacity Awareness During an Energy Emergency Event](#)

[LL20120905 Gas and Electricity Interdependency](#)



[LL20180702 Preparing Circuit Breakers for Operation in Cold Weather](#) (also [2018 Webinar w/FMM](#))

[LL20200601 Unanticipated Wind Generation Cutoffs during a Cold Weather Event](#)

[LL20201101 Cold Weather Operation of SF6 Circuit Breakers](#)

[LL20220301 Managing UFLS Obligations and Service to Critical Loads during an Energy Emergency](#)

[LL20221201 Air Breaker Cold Weather Operations](#)

[LL20230401 Combustion Turbine Anti-Icing Control Strategy](#)

Winter Weather Webinars (from 2012 to date) can be found [on this site](#).

Current and prior Annual Winter Reliability Assessments can be found [on this site](#).

Other Cold Weather Reports and Training Materials can be found [on this site](#).