

NERC Information Resources on Cold Weather Preparation and BPS Impacts

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.

Here 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](#)

[Winter Weather Readiness for Texas Generators](#), (2011)

[January 2014 Polar Vortex Review](#)

[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 Reliability Guideline](#) Version 3 (Dec 2020) 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](#)

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

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](#)

Winter Weather Webinars from 2012 – 2021 can be found [on this site](#).

Annual Winter Reliability Assessments 2003/2004 thru 2021/2022 can be found [on this site](#).

