



Northeast Power Coordinating
Council, Inc.
Regional Standards Committee

**Introduction of the DER Forum
and Guidance**

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NPCC Board of Directors Corporate Goals for DER in 2019

NPCC Regional Standards Committee (RSC)

Goals:

- **Develop a coordinated Regional approach to reliability guidelines for distributed energy resources – by 9/19**
- **Create a forum under the RSC for DERs and expand coordination on DERs with NAGF, FERC, and NARUC - by 12/19.**

NPCC Board of Directors Corporate Goals for DER in 2019 cont.

Other NPCC TFs and WGs Goals

- Facilitate the integration of Distributed Energy Resources (DER) through promoting and assisting in the coordination of data at the transmission and distribution interface.
- Develop acceptable DER model default data for NPCC and test through UFLS sensitivity analysis report findings to RCC at September 2019 meeting and Resolve issues involving the use of a dynamic load model for the NPCC UFLS sensitivity analysis – report findings to RCC at December 2019 meeting
- Augment data collection for DERs to evaluate their potential for contributing to Essential Reliability Services, as well as their possible BPS reliability impacts. Evaluate NPCC Long-Range Energy Security and assess fuel availability as a part of evaluating resource adequacy and security.

NPCC's Role:

- **NERC BES as defined and approved by the Commission**
- **Reliability Standards apply to the BES and elements that affect the “Reliable Operation” of the BES (UFLS-UVLS)**
- **NPCC UFLS Standard and set of Directory containing Criteria.**
- **NPCC's Reliability Criteria apply to elements of the BES that have been identified through the application of A-10 BPS and only are enforceable on Full Members (also Tariffs, IAs, etc.)**
- **As DER penetrates the Distribution system it will begin to have the capability to affect the “Reliable Operation” of the BES/BPS**

NPCC RSC Activities to Date:

- **Creation of a form to report Utility Scale Distribution DER impacts on the BES-whether positive or negative-**

[DER Impact Reporting Form](#)

- **Creation of a collaborative process between NPCC RSC and Reliability Coordinating Committee (RCC) to identify a path forward to resolve, address or identify if the issue is already being studied or whether it should be NERC or Regional, a standard or guideline.**

Framework for the NPCC RSC Forum:

- Conducted on the second day of all future RSC two-day meetings-subject to need and availability of discussion items. Open and inclusive-WebEx or in person attendance if space is available.
- Provide an atmosphere for open discussion of issues, opportunities and information sharing
- Review any provided DER Impact reported through the online form or via email
- Bring in speakers and develop presentations on topics related to DER to enhance awareness, educate and identify issues
- Discuss how NPCC's groups can help coordinate interoperability between the Transmission and Distribution for DER related topics
- Create non-mandatory guidance and informational documents to support reliability and security of the BES
- Increase coordination and identify opportunities to work with State and Provincial Regulators and other local efforts in non-jurisdictional areas
- Reduce duplicity, enhance efficiency, leverage technical groups
- Formally add DER forum and guidance to the RSC Scope- ideas??

Opportunities for NPCC Guidance Document(s) on DER:

- **Coordinate issues important to BES reliability**
- **Create a common set of core BES reliability principles pertaining to issues such as interconnection requirements while identifying gaps and best practices in existing documentation across the Areas**
- **Identify emerging risks and discuss / create paths to mitigate them**
- **Create suggestions leading to Region wide DER approaches to support reliability and security**
- **Other documents that may help our member utilities with issues**
- **Guidance created would be voluntary, informational and non-enforceable. Created using NPCC's "Open Process."**

Initial DER Observations for Ongoing Discussion:

- Resource performance on Distribution vs. Transmission, and changing resource mix, reduction in inertia, market dispatch of DER, capacity to provide regulation and reserve, etc.
- Increased penetration of DER on Distribution and the need for Li-Ion Battery-safety issues under study
- Effect on the efficacy of the existing NPCC Regional UFLS programs- how will we deal with high DER penetration on the Distribution system feeders?
- Capacity expansion planning and how DER on the Distribution system will affect the Transmission planning processes
- Interoperability between the Distribution and Transmission System and visibility- forecasting-operational planning and real time operations
- Inverter related to production of Harmonics or Sub-synchronous Resonance on generator shafts

**“Intelligence is the ability to adapt to change.”-
Stephen Hawking**



Questions or Comments ?