

# Transmission Planning Technical Guide

**Appendix Updates** 

Steven Judd, PE

LEAD ENGINEER | SYSTEM PLANNING

## **Purpose**

 Discuss proposed changes to the Transmission Planning Technical Guide Appendices

## **Background – Technical Guide Reorganization**

- As discussed in the <u>September 2017 PAC meeting</u>, the technical guide was reorganized to a new format with four (4) main sections
  - Section 1: Introduction Describes purpose, source of the standards, and a description of various types of studies that are conducted
  - Section 2: Modeling Assumptions Describes the various assumptions used to create network representations used in studies
  - Section 3: Reliability Criteria and Guidelines Describes how standards and criteria are applied to establish acceptable system performance
  - Section 4: Analysis Methodology Defines the methodologies used to conduct various system planning studies
- Revision 2 was posted on the ISO website on November 14, 2017
- This was the first phase in the process with a more detailed content review planned for the future

#### **Appendices Template and Format Update**

- All appendices were updated to the newest ISO report template
- The content was also updated for consistent formatting based on the ISO Style Guide including the following items:
  - Grammar
  - General Word Usage
  - Capitalization
  - Spelling, Compounding, and Hyphenation
  - Punctuation
  - Abbreviations and Acronyms
  - Numbers, Numerals, and Units of Measurement
  - References

#### **Appendices Content Review**

- Each appendix was then reviewed to reflect the latest process and procedures
- More specifics on each appendix content updates are on the following slides

#### **Appendices Content Review, cont.**

- App A Terms and Definitions (Expected Q2 2018)
  - Add/remove terms and definitions as needed
  - Add references to NERC and NPCC glossary of terms
- App B Fast Start Generation List Retired
  - List was no longer needed after change to probabilistic methods for base case dispatches of transmission Needs Assessments and Solution Studies
- App C DR Modeling Guide (Expected Q2 2018)
  - New terminology associated with Price Responsive Demand (PRD)

#### **Appendices Content Review, cont.**

- App D Damping Criteria Retired
  - Appendix was no longer needed after criteria moved to Section 3.3.3 of Technical Guide
- App E Voltage Sag Guideline (Expected Q2 2018)
  - Update to clarify the methodology
- App F 2000 STF Memo (Draft Posted March 2018)
  - Content remained unchanged
  - Updated diagrams to be more clear and readable
- App G Phase Shifter Guide (Draft Posted March 2018)
  - Changed name from Modeling Guide to Phase Shifter Guide to focus on content of appendix
  - Removal of Sackett Phase Shifter and 3<sup>rd</sup> Waltham Phase Shifter
  - Update of all descriptions to match current operating practice

#### **Appendices Content Review, cont.**

- App H No-Fault Contingencies (Draft Posted March 2018)
  - Updated to current version of ISO Planning Procedure No. 3
- App I Transfer Methodology (Draft Posted March 2018)
  - Re-organized structure to align with Technical Guide format
  - New terminology associated with Price Responsive Demand (PRD)
- App J Load Modeling Guide (Draft Posted March 2018)
  - Added descriptions for solar PV modeling
  - Added equations to explain all steps in methodologies
  - New terminology associated with Price Responsive Demand (PRD)
  - Included Area-Owner-Zone-Bus assignments as new Section

#### **Next Steps**

- Proposed revisions to the Transmission Planning Technical Guide Appendices are/will be posted to the PAC website
- Stakeholders can provide comments for 15 days after the posting of each document to <u>PACMatters@iso-ne.com</u>
- Comments associated with each document will be grouped together and responded to soon after the comment period expires for each document

# Questions



