

## Meeting Notes

# 2023-02 Analysis and Mitigation of BES Inverter-Based Resource Performance Issues

November 14, 2023

November 21, 2023

November 29, 2023

November 30, 2023

Conference Call with Web Access

### Introductions and Chair's Remarks

### NERC Antitrust Compliance Guidelines and Public Announcement

### Agenda Items

#### 1. November 14, 2023

##### Start Drafting Standard PRC-030-0

- a. Reviewed SAR and comment passed to the drafting team
- b. Discussed how to proceed with drafting and functional entities
  - i. Started discussing what entities this applies to
    - (1) Decided added
      - (a) Planning Coordinator
      - (b) IBR Generator
      - (c) Reliability Coordinator
    - (2) Removed
      - (a) Distribution Provider
- c. Created Purpose Statement

#### 2. November 21, 2023

- a. Spoke about functional entities finalizing section
- b. Created plan of Identification, Analysis, Mitigation for requirements
- c. Discussion on identification how to approach for IBRs
- d. Created subgroups for identification at facility level and system level.

### **3. November 29/30, 2023**

- a. Got language down from two subgroups.
- b. Had discussion on facility level identification and related standards.
- c. Reworded language to have a time basis, MVA basis, and % reduction will finalize at next meeting.
- d. System level identification discussed related to EOP-004, how to make it differ.
- e. System level had a footnote added about time identification, with exceptions footnote.
  - i. Generation loss due to weather events, market schedule changes, or failure of data communications can be excluded.
- f. Will finalize language next meeting measures and move to analysis.

g.

<b>Attendance for November 15, 2023</b>					
	<b>Name</b>	<b>Company</b>	<b>Member/ Observer</b>	<b>Questions assignment</b>	<b>Conference Call/Web (Y/N)</b>
	<b>Mark Gutzmann</b>	<b>Xcel Energy</b>	<b>Chair</b>		<b>Y</b>
	<b>Biju Gopi</b>	<b>CAISO</b>	<b>Vice Chair</b>		<b>N</b>
	<b>Andy Hoke</b>	<b>NREL</b>	<b>Members</b>		<b>Y</b>
	<b>Chester Li</b>	<b>Hydro One</b>			<b>N</b>
	<b>Patrick Gravois</b>	<b>ERCOT</b>			<b>Y</b>
	<b>Patrick Dalton</b>	<b>MISO</b>			<b>Y</b>
	<b>Mohamed ElNozahy</b>	<b>Independent Electricity System Operator of Ontario (IESO)</b>			<b>Y</b>
	<b>Emily Greene</b>	<b>Electric Power Engineers</b>			<b>Y</b>
	<b>Anuradha Kariyawasam</b>	<b>Electranix Corporation</b>			<b>Y</b>
	<b>David Marshall</b>	<b>Southern Company Services</b>			<b>Y</b>
	<b>Anthony Williams</b>	<b>Duke Energy</b>			<b>Y</b>

	Li Yu	HECO			Y
	Dan Waugh	NextERA			Y
	Tracy MacNicoll	Utility Services			Y
<b>Attendance for November 21, 2023</b>					
Member/ Observer	Name	Company		Questions assignment	Conference Call/Web (Y/N)
Chair	Mark Gutzmann	Xcel Energy			Y
Vice Chair	Biju Gopi	CAISO			Y
Members	Andy Hoke	NREL			Y
	Chester Li	Hydro One			Y
	Patrick Gravois	ERCOT			Y
	Patrick Dalton	MISO			Y
	Mohamed ElNozahy	Independent Electricity System Operator of Ontario (IESO)			Y
	Emily Greene	Electric Power Engineers			N
	Anuradha Kariyawasam	Electranix Corporation			Y

	<b>David Marshall</b>	<b>Southern Company Services</b>			<b>Y</b>
	<b>Anthony Williams</b>	<b>Duke Energy</b>			<b>N</b>
	<b>Li Yu</b>	<b>HECO</b>			<b>Y</b>
	<b>Dan Waugh</b>	<b>NextERA</b>			<b>Y</b>
	<b>Tracy MacNicoll</b>	<b>Utility Services</b>			<b>Y</b>
<b>Attendance for November 29, 2023</b>					
	<b>Name</b>	<b>Company</b>	<b>Member/Observer</b>	<b>Questions assignment</b>	<b>Conference Call/Web (Y/N)</b>
<b>Chair</b>	<b>Mark Gutzmann</b>	<b>Xcel Energy</b>			<b>Y</b>
<b>Vice Chair</b>	<b>Biju Gopi</b>	<b>CAISO</b>			<b>Y</b>
<b>Members</b>	<b>Andy Hoke</b>	<b>NREL</b>			<b>Y</b>
	<b>Chester Li</b>	<b>Hydro One</b>			<b>Y</b>
	<b>Patrick Gravois</b>	<b>ERCOT</b>			<b>Y</b>
	<b>Patrick Dalton</b>	<b>MISO</b>			<b>Y</b>
	<b>Mohamed ElNozahy</b>	<b>Independent Electricity System Operator of Ontario (IESO)</b>			<b>Y</b>

	Emily Greene	Electric Power Engineers			Y
	Anuradha Kariyawasam	Electranix Corporation			N
	David Marshall	Southern Company Services			Y
	Anthony Williams	Duke Energy			Y
	Li Yu	HECO			Y
	Dan Waugh	NextERA			N
	Tracy MacNicoll	Utility Services			Y
<b>Attendance for November 30, 2023</b>					
	<b>Name</b>	<b>Company</b>	<b>Member/Observer</b>	<b>Questions assignment</b>	<b>Conference Call/Web (Y/N)</b>
<b>Chair</b>	Mark Gutzmann	Xcel Energy			Y
<b>Vice Chair</b>	Biju Gopi	CAISO			Y
<b>Members</b>	Andy Hoke	NREL			Y
	Chester Li	Hydro One			Y
	Patrick Gravois	ERCOT			Y

	<b>Patrick Dalton</b>	<b>MISO</b>			<b>Y</b>
	<b>Mohamed ElNozahy</b>	<b>Independent Electricity System Operator of Ontario (IESO)</b>			<b>Y</b>
	<b>Emily Greene</b>	<b>Electric Power Engineers</b>			<b>Y</b>
	<b>Anuradha Kariyawasam</b>	<b>Electranix Corporation</b>			<b>Y</b>
	<b>David Marshall</b>	<b>Southern Company Services</b>			<b>Y</b>
	<b>Anthony Williams</b>	<b>Duke Energy</b>			<b>Y</b>
	<b>Li Yu</b>	<b>HECO</b>			<b>Y</b>
	<b>Dan Waugh</b>	<b>NextERA</b>			<b>Y</b>
	<b>Tracy MacNicoll</b>	<b>Utility Services</b>			<b>Y</b>