

# WECC

#### Event and Performance Analysis Subcommittee

October 20, 2022

Greg Park, NWPP—Chair Alan Wahlstrom, SPP—Vice Chair

#### **EPAS**

- EPAS Purpose
  - Analyze events and Western-Interconnection-wide performance and disseminate lessons learned to mitigate re-occurrence of similar events
- Items for Approval and Discussion:
  - EPAS Charter
  - Communications Systems Performance Guide for Electric Protection Systems
  - WECC RAS Design Guide
  - White paper on EHV Transmission Line Protection
  - White paper on Model Power System Testing
  - White paper on Installing and Maintaining Protective Relay Systems
  - White paper on Relaying Current Transformer Application (retire)

#### **Recent and Upcoming Activities**

Held in-person, open-door meeting on September 7, 2022



- EPAS Charter
  - Updated language: replace OC with RRC
  - Change required forum from five to one-third EPAS members
  - Added additional language on closed sessions (transparency)
- Communications Systems performance Guide for Electric Protection Systems
  - Moved footnotes to Availability Section
  - Added wording for clarification, eliminate Special Protection Scheme

- WECC RAS Design Guide
  - Add statement that negative impact must be considered in RAS design
  - Add statement that RAS intended to drop generation frequency performance to avoid underfrequency load shedding
- White paper on EHV Transmission Line Protection
- New section called "Relay Type"
  - Add statement that communications should have independent backup to maintain protection coverage
  - Recommend application base testing of relay

- White paper on Model Power System Testing
  - In General Section, simplified item "b" on transients involving cross country faults and define SIR ratio
  - Deleted Item 1 in notes concerning instrument transformers
  - Added language to Item 7 in the Preparation for Modeling Power System Testing: "if power system results don't match short circuit results, follow the below steps."
  - In Test Conditions Section, changed Item 2 from test at 15-degree increments to 30, and angles from 0-180 to 0-90

- White paper on Installing and Maintaining Protective Relay Systems
  - In "Performing Commissioning or Installation Tests," a note was added: "see IEEE PSRC, WG I-25 Commissioning Testing of Protection Systems and the Joint Review of Protection System Commissioning Programs published by FERC"
- White paper on Relaying Current Transformer Application
  - Retire and archive due to outdated information



#### **Three-Year Work Plans**

Title	Reliability Risk Priority	Status	Target Date
Changing resource and load mix (RWG assigned)	2: Changing Resource Mix	$\odot$	Ongoing
Extreme natural events (See GOWG status)	4: Extreme Natural Events	$\odot$	Ongoing
Review and approve work group documents as needed	Committee Specific Priority	$\odot$	Ongoing







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