



## Webinar

# Proposed SERC UFLS Standard

November 9, 2009

2:30 to 3:30 PM EST (1:30 to 2:30 PM CST)

Pat Huntley, SERC Staff

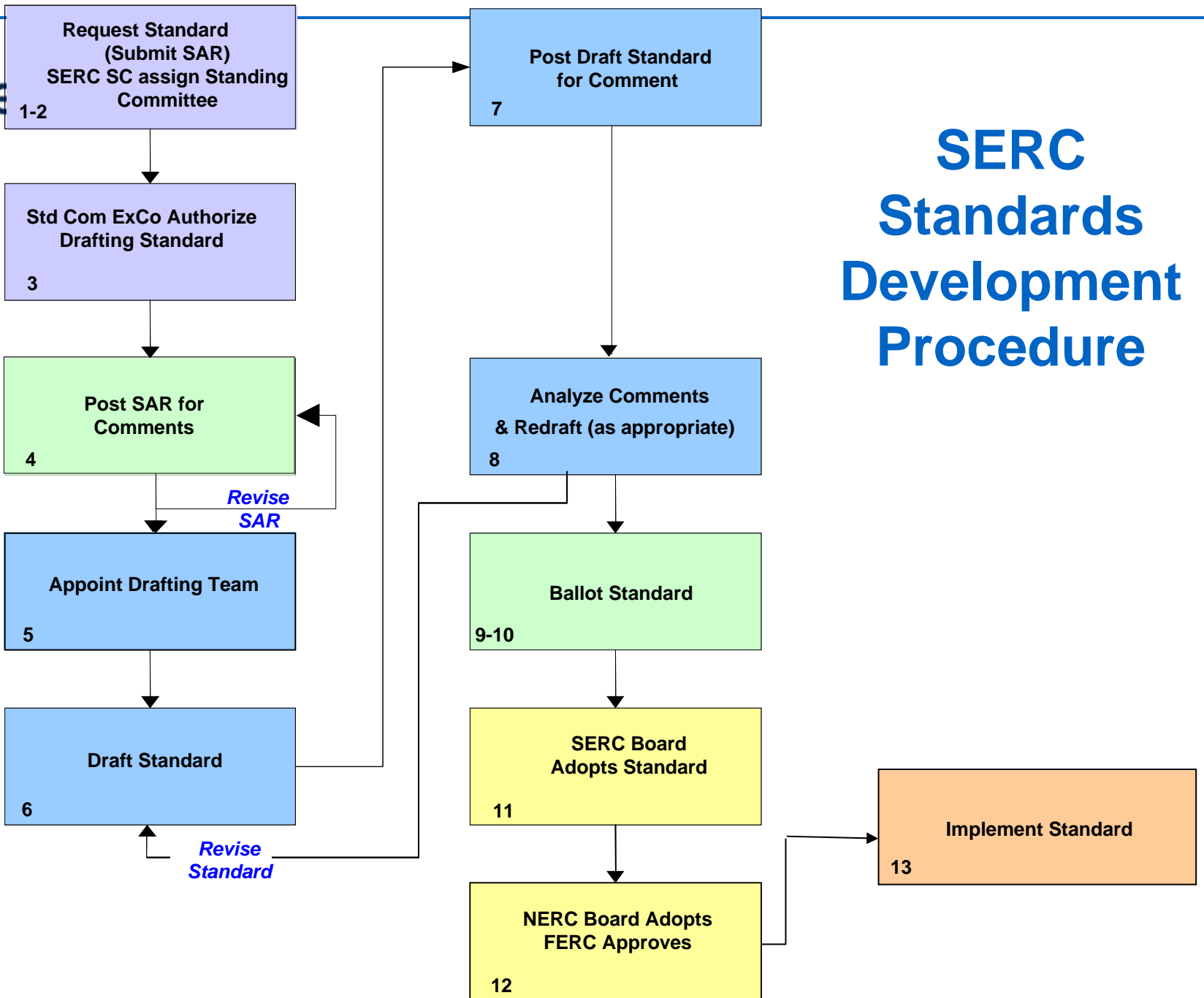
and

Bob Jones, Southern Company Services

Chair of SERC UFLS Standard Drafting Team

# Presentation Agenda

- SERC Regional Standards Development Procedure
- Proposed SERC UFLS Standard: Background
- Proposed SERC UFLS Standard: Requirements



## **SERC Standards Development Procedure (cont.)**

- Balloting by ballot pool formed from SERC Registered Ballot Body
  - Membership in SERC is not a requirement to vote
- Balloting is by weighted SERC sectors (IOU, Fed/St, Coop, Muni, Marketer, Merchant Gen, & ISO-RTO/Cust)
- Approval requires a two-thirds majority of the weighted sector votes cast

## Background

- SAR to SERC SC on February 27, 2008
- Began standard drafting effort in June, 2008
- Team members

Rick Foster

Sharma Kolluri

Bob Jones

Greg Davis

Andrew Fusco

Anthony Williams

John O'Connor

Tom Cain

Ernesto Paon

Jonathan Glidewell

## Current Status

- SERC SC and drafting team agreed to take Draft 4 to ballot on October 26, 2009
- Ballot Pool enrollment period open: October 2 thru November 10, 2009
- Posted for 15-day pre-ballot review: October 27 thru November 10, 2009.
- Expect 10-day posting for ballot to commence November 11, 2009.



# **SERC UFLS Standard: Requirements**

Bob Jones

Chair of SERC UFLS Standard Drafting Team

## R1 – Island determination

- TP and PC shall develop and document criteria to select portions of the Bulk Electric System (BES), including portions of adjacent interconnected regions that may form islands.
- Include at least SERC as whole and SERC SubRegion

## R2 – Minimum requirements

- Minimum of 30% of load in scheme
- Minimum of three frequency setpoints
- Highest frequency between 59.3 and 59.5 Hz
- Lowest frequency no lower than 58.4Hz
- Difference between setpoints at least 0.2 Hz, no more than 0.5 Hz

## **R3 – Performance Requirements for Scheme**

- Requirements to be met for 15%, 20%, and 25% generation deficiencies
- Other frequency recovery requirements according to draft national standard

## R4 – Scheme Assessments

- At least once every five years
- Within one year of specified changes
  - New island identified
  - Material change to scheme parameters
  - Change of identified island boundary
  - Actuation of UFLS resulting in loss of 500 MW or more
- Include tripping of non-coordinating generators

## R5 – Implementation of scheme

- DPs and TOs to implement scheme
- Large entities
  - Each step between -1 and +2 of percentage specified
  - Total load between -1 and +3 of percentage specified
- Small entities <100 MW
  - At least one step
  - Total load between -5 and +5 of percentage specified

## **R6 – Requirements for Non-coordinating Generators**

- Must arrange for additional load shedding
  - Equal or greater than maximum MW of generator
  - Set at same frequency and delay as the generator would trip
  - Load located within same Subregion and any identified island as generator

## R7 – Data Reporting

- DP and TO
  - Report setpoints, time delays, loads
- GO
  - Report UF trip points, time delays, amount of MW that could trip
  - If have to arrange for load shedding, report same info as DP/TO

## R8 – Coordination with External Entities

- Jointly review assessment results with adjacent region's group of PCs or TPs of any islands that straddle regions.
- Provide when requested scheme descriptions and study results
- Request scheme descriptions and study results from neighboring external entities

## R9 – Coordination between PCs and TPs

- PC and TP determine and identify each entity's individual and joint responsibilities for performing the functions assigned to them by the standard

# Implementation Plan

- R1, R2, R3 to become effective 12 months regulatory approval
- R4, R5, R6, R7, R8, R9 to become effective 30 months regulatory approval

# Questions?

*For additional information*

**[www.serc1.org](http://www.serc1.org)**