

# Real-Time Stability Monitoring SAR

CRSTT Quarterly Meeting Update

Draft slide deck · July 2026

# Agenda

Proposed flow for a 45-minute SAR Task Force update and discussion

1. Introduction and background: why the SAR is needed
2. Task Force Plan, Work Products, Timelines
3. Recent Updates
4. Review of RTSM White Paper
5. Proposed Ask to CRSTT
6. Next steps

## Meeting intent

Use the CRSTT slot to re-establish context, review the latest white paper direction, and gather targeted input from the broader CRSTT community.

Primary outputs: peer reviewers, current-practices input, and feedback on SAR direction.

# Introduction / Background

Real-time dynamic system visibility gap and the proposed SAR response

## Driver

Power system complexity continues to increase with IBRs, DERs, reduced inertia, grid-forming devices and changing frequency response.

There is a gap in real-time stability / oscillation monitoring and related operating plans requirements for TOP and RCs.

## SAR purpose

Develop a NERC Standard Authorization Request to address real-time stability monitoring and oscillation requirements within NERC standards.

The SAR is intended to clarify monitoring, assessment, communication and operating-plan expectations.

## Scope focus

Existing NERC requirements and gaps, including FAC-011, RTA / OPA concepts, and the WECC IRO-002-7 variance.

External jurisdiction practices and large-event recommendations to support technical justification.

# Task Force Plan, Work Products, Timelines

From task force plan to white paper and SAR package

Leadership team: Dr. Mani Venkatasubramanian, Marianna Vaiman, Michael Nugent, Kevin Ostash and Jared Tarr.

Vision: enable real-time stability and oscillation monitoring in the Control Room.

Mission: develop a NERC SAR addressing real-time stability monitoring and oscillation requirements.

Core work products: white paper / report, draft SAR, and NERC working-group feedback package.



## **Review & research (Fall/Winter 2025)**

Existing standards, large events, external practices



## **White paper (Spring/Summer 2026)**

Draft combined report and recommendations



## **SAR draft (Fall 2026)**

Develop SAR language and rationale



## **Engage (Fall / Winter 2026)**

SMWG / EMSWG / RTOS feedback

# Recent Updates

Status entering the July CRSTT quarterly discussion

Task Team continued to develop the RTSM SAR White Paper. Current development areas include definition updates, large system event recommendations, review of current practices

The latest version will be reviewed with the CRSTT broader group during the meeting today.

Broader CRSTT feedback is needed on the paper with a focus on:

- Identify peer reviewers of white paper from CRSTT

- Contributors for the current practices section

# Review of RTSM White Paper

Marianna to review the latest version of the white paper with the larger CRSTT group.

## **Suggested discussion prompt**

Review individual sections of entire whitepaper.

Focus on remaining content.

Discuss where specific assistance is required.

# Proposed Ask to CRSTT

Requested meeting use, white paper review and peer-review volunteers

## Formal Review of Content:

Collect names of broader CRSTT members willing to peer review the paper.

## Input for the “Current Practices” section:

Specific ask: a paragraph or two on each participant’s existing PMU / WAMS capabilities and how they are using them.

This input can help ground the white paper in real operating practice and make the SAR rationale more defensible.

### Suggested discussion prompt

What feedback should be incorporated into the white paper before the next revision?

Who can peer review from an RC/TOP/TO, vendor, regulatory or academic perspective?

### Suggested collection template

- Entity / area represented
- PMU / WAMS capabilities in service
- How tools are used in operations
- Existing procedures, alarms or communication practices
- Known gaps or lessons learned

# Next Steps

Convert CRSTT input into white paper modifications/course corrections which will help SAR development

## During CRSTT

Capture peer reviewers, current-practices contributors and feedback on SAR framing.

## After CRSTT

Update white paper sections based on discussion, especially current practices and feedback on monitoring / action scope.

## Leadership follow-up

Resolve terminology: stability, real-time dynamic system state, TO vs TOP, and how prescriptive the SAR should be.

## SAR package

Use the revised paper to shape SAR language and prepare future NERC SMWG / EMSWG / RTOS engagement.  
Present SAR at upcoming NASPI CRSTT in the fall.