#### NASPI Working Group Meeting Control Room Solutions Task Team (CRSTT) Monthly Meeting

#### Presenters: Mike Cassiadoro and Jim Kleitsch May 18, 2016



# Agenda

- I. Introductions
- II. Provide Status Update on CRSTT Focus Area Documents
- III. October NASPI Model Verification Workshop Announcement – 10/18/2016 – Seattle
- IV. Phase Angle Monitoring Technical Session
- V. Southern Wisconsin Oscillation Info
- VI. Review of CRSTT Goals for 2016
- VII. Adjourn

#### **Focus Area Document Updates**

- 3. Using Synchrophasor Data for Phase Angle Monitoring ETC May 2016
  - (Cassiadoro TRS, Chanoski NERC, Nuthalapati Texas A&M)
  - Video clips associated with the paper were posted to the CRSTT web site in April
  - Alison Silverstein reviewed the document one last time and provided minor editing recommendations. Waiting fro NDR to review and provide feedback on those changes. Once those have been addressed we will post to the NASPI web site.

#### Focus Area Document Updates (On their way to completion)

- 4. Enhanced State Estimation Survey ETC June 2016
  - (Vaiman V&R Energy, Kleitsch ATC, Cassiadoro TRS)
  - Alison reviewed and blessed the survey in late April / early May. We
    incorporated several of her recommended changes to make the survey more
    streamlined. (Multiple questions per page, etc..)
  - Marianna found one additional issue with the sequence of the survey that we are still working to address.
  - My thanks to Teresa and John at PNNL for their help (and patience!!) as we work through the survey development.

#### Focus Area Docs – Status Update (Cont.) (Stalled? How do we get them started/restarted?)

- 5. Oscillation Detection
  - (Dyer EPG, Blevins and Rjagopalan ERCOT, Patel EPRI)
- 6. Determining Disturbance Locations
  - (Dyer EPG, Zweigle SEL Inc., Cassiadoro TRS, Kleitsch ATC)
- 7. Using Synchrophasor Data to Monitor Reactive Power Balancing
  - (Cassiadoro TRS, SCE –A.J, Peak RC Zhang)
- 8. Establishing Operating Limits and Determining Transfer Capabilities
  - (Cassiadoro TRS, Ali Quanta, Viaman V&R Energy)

## **Model Verification Technical Workshop**

- Being held 10/18/2016 in Seattle the day before the NASPI meetings begin
- Joint effort between NASPI and NERC SMS (Synchronized Measurements Subcommittee)
- NERC SMS technical paper on model validation coming out soon
- Will perform tool comparisons using test data sets to compare accuracy, functionality, etc...
- Alison Silverstein already working to invite participants

## **Phase Angle Monitoring Technical Session**

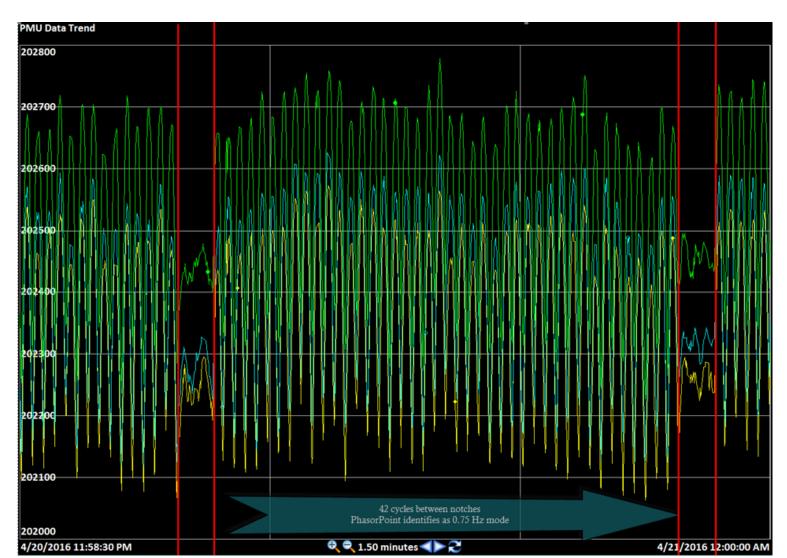
NASPI Leadership Team is planning a Phase Angle Monitoring Technical Session for October 2016 Work Group Meeting.

Items to Discuss:

- Present Value to Real-time Ops (e.g., monitoring of specific corridors, wide-area monitoring)
- Exhibit Best Practices
- Demonstrate Training Methods

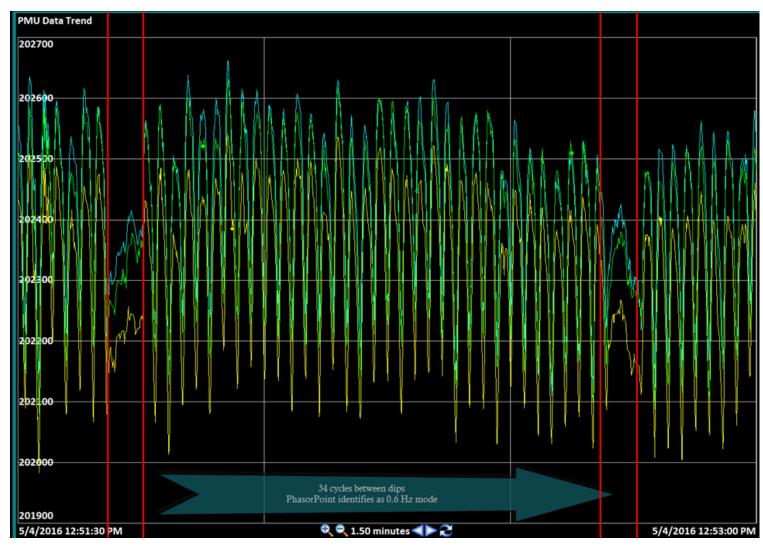
### **Southern Wisconsin Oscillations**

Our PhasorPoint oscillation monitoring application has been identifying a 0.75 Hz mode for months



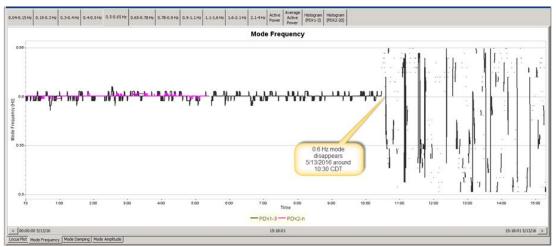
## Southern Wisconsin Oscillations [cont'd]

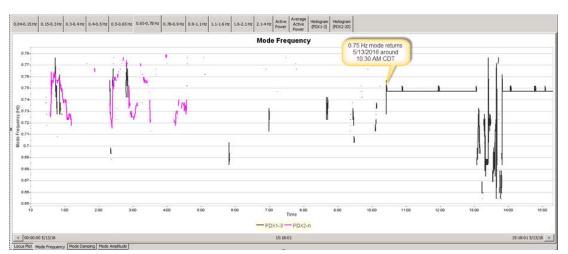
Recently the 0.75 Hz mode went away and a new 0.6 Hz mode was identified.



## Southern Wisconsin Oscillations [cont'd]

Several weeks passed and things are now back to "normal". Even with the known transition times struggling to find the source of the oscillations





## **CRSTT Goals for 2016**

- Prioritize and complete remaining focus area documents
- 2. Develop operational use case summary documents to support NASPI technical papers
- 3. Create additional video event files for use cases and simulated events (includes data sharing)
- 4. Gather operator feedback on synchrophasor applications (best practices)
  - We need to figure out who is using the data and for what so we can communicate that information and lessons learned to the larger community. (Tom Rizy)
- 5. Identify available training materials



## **CRSTT – Primary Contacts**

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- Next CRSTT Conference Call: June 15, 2016