

Agenda for DOE-CERTS Workshop on Oscillation Monitoring for Control Center Operations

Workshop Location: Southwest Power Pool (SPP), 201 Worthen Drive, Little Rock, AR 72223

Meeting Room: Auditorium A

Workshop Overview:

The workshop will introduce the basics of oscillation monitoring for power system practitioners on day one. Day two of the workshop is intended for engineers on the theory and computational methods for analyzing oscillations from synchrophasor data.

Day 1 – The Basics on Oscillations

Thursday, November 3, 2016 – 8:30am – 3:00pm

8.30 to 8.45: Introduction and Welcome note

8.45 to 9.15: Power system states and measurements: SCADA versus Phasor Measurement Units (PMU)

9.15 to 10.15: Intro to power system stability: Voltage collapse, Oscillations, Angle stability, Islanding

10.15 to 10.30: Break

10.30 to 11.30: Oscillations overview: Natural versus forced, Well-damped versus poorly damped, Local versus inter-area

11.30 to 12.30: Lunch

12.30 to 1.00: Mechanisms of oscillations: Faulty controls, improper operation, unusual conditions, poorly designed controls, ...

1.00 to 1.30: Oscillation mitigation strategies: Source location and follow-up as related to oscillation mechanism

1.30 to 2.00: Oscillation analysis of historical events

2.00 to 3.00: Wrap up and Round table discussion

Day 2 – Oscillation Analytics

Friday, November 4, 2016 – 8:30am – 4:00pm

8.30 to 8.45: Welcome note and workshop overview

8.45 to 10.00: Summary of small-signal stability analysis (model versus measurements) and oscillations

10.00 to 10.15: Break

10.15 to 12.00: PMU Based oscillation methods: Oscillation detection, Ambient data analysis, and Ringdown analysis

12.00 to 1.00: Lunch

1.00 to 2.00: Demo of WSU offline oscillation analysis tools DMO and EAO

2.00 to 3.30: Analysis of recent oscillation events in the east and in the west using WSU tools

3.30 to 4.00: Wrap-up and round table discussions

