



**NASPI TECHNICAL WORKSHOP
MODEL VALIDATION USING SYNCHROPHASOR DATA**

**TUESDAY, OCTOBER 22, 2013
8:30 am to 12:30 pm**

**Crowne Plaza Chicago O'Hare Hotel
5440 N. River Rd.
Rosemont, Illinois 60018**

O'Hare V Ballroom

This workshop will provide a detailed grounding in the benefits of using synchrophasor data for electric system and power plant model validation and explain the process and steps for doing so. Presenters will address recent requirements and opportunities for model validation, provide an overview of generator and power system models and model validation tools, and explain what synchrophasor data are needed for power plant and system model validation. Several speakers will provide detailed briefings on the process and results of several specific cases where synchrophasor data have been successfully used for power plant model validation, identification of inappropriate asset operations, and dynamic grid models.

If you wish to attend this technical workshop, please register at [model val workshop](#); there is no registration fee.

If you cannot join us in person for this workshop, you can follow the presentations in real time through webinar access -- use → [Join Lync Meeting](#) (<https://lcmeeet.pnnl.gov/teresa.carlon/RYJ8RKQM>). Remote participants will not be able to interact with the presenter. The workshop presentations will be posted on the NASPI website (www.naspi.org) and we will attempt to archive and post the webinar as well.

The Work Group meeting of the North American SynchroPhasor Initiative, which will feature progress reports from the North American synchrophasor project grant recipients, technical sessions and a vendor trade show, will begin on the afternoon of October 22 (following this workshop) and run through noon on October 24 in the Crowne Plaza Chicago O'Hare Hotel. The NASPI Work Group meeting will require separate registration ([WG meeting reg](#)) and a fee of \$350 for late registrants.

NASPI MODEL VALIDATION TECHNICAL WORKSHOP AGENDA

- 8:30 am Intro -- Tom Burgess (NERC)
- 8:40 am Intro to power plant models and grid models -- Bob Cummings (NERC)
- 8:55 am Why use synchrophasor data for model validation -- Vickie vanZandt (WECC)
- 9:05 am Expectations and practicalities for using phasor data -- Dmitry Kosterev (BPA)
- 9:15 am The basics of plant model validation using PMU disturbance data – Dmitry Kosterev (BPA) – Value of using PMUs for model validation and detection of control abnormalities; data required for model validation and calibration; steps required to set up model validation and generator performance monitoring process by Transmission Planner and Generator Owner; WECC and BPA case studies.
- 10:00 am Break
- 10:15 am Case study 1 -- Wind power plant model validation -- Bob Zavadil (for UVIG, using OG&E wind plant data) -- current model validation efforts (scope, what kinds of wind plants and turbines being studied), how applicable plant-specific data and model results are to other wind plants, why it's needed, what data they're using, how it's going, when it'll be done, what's next.
- 10:35 am Case study 2 -- NYPA validation of dynamic VAR controllers (STATCOM and SVC) -- George Stefopoulos (NYPA) & Pouyan Pourbeik (EPRI) (invited)
- 10:50 am Case study 3 -- ISO-NE validation of nuclear plant unit models -- Xiaochuan Luo (ISO-NE)
- 11:05 am Case study 4 -- ERCOT using phasor data to find inaccuracies in generator models -- Bill Blevins (ERCOT)
- 11:20 am Q&A part 1
- 11:30 am Case study 5 – using phasor data for power plant model calibration and PSS failure detection -- Bernie Lesieutre (University of Wisconsin)

- 11:45 am Case study 6 -- using phasor data and simulations in the RTDMS and PGDA programs to validate system response and dynamic models -- Bharat Bhargava (EPG)
- 12:00 pm Power system dynamic model validation -- Eric Allen (NERC) and Dmitry Kosterev (BPA) -- what model used, why it needs validation, what it takes to develop a validation base case, what synchrophasor data being used, what's the process for doing this, how long will it take to get a model you're happy with, how much of the calibration process requires getting the underlying grid components modeled accurately rather than working on the synergistic results?
- 12:15 pm Q&A part 2
- 12:30 pm Adjourn