



## **North American SynchroPhasor Initiative Working Group Meeting February 20 & 21, 2013**

**Huntington Beach Hyatt Regency Hotel  
21500 Pacific Coast Highway  
Huntington Beach CA 92648**

This NASPI work group meeting will feature reports on the successful use of synchrophasor technology outside North America. There will be three technical sessions at this meeting, addressing oscillatory behavior and angular separation in the Eastern Interconnection, using phasor technology to spot blackout precursors, and long-term horizons for phasor technology use.

There will be a \$200 registration fee to cover meeting costs, refreshments and lunch on the two meeting days; the fee for students is \$75. There will be a late fee of \$100 added for registrations after February 8, 2013 and a charge of \$50 for processing refunds. The meeting registration link is [here](#).

Even though the deadline for rooms at the NASPI group rate has passed, the Hyatt Regency Huntington Beach Hotel may be able to make a few more rooms available at this rate (although there are NO guarantees of room or rate availability at this late date). Make your reservation [here](#).

### ***Final Agenda***

<b>Wednesday, February 20, 2013</b>		
7:30 - 8:00 am	Registration, refreshments, and networking – Mariners Foyer Work Group meeting in Mariners Ballroom	
8:00 - 8:10 am	Welcome, introductions, and logistics review	Jeff Dagle (PNNL) Alison Silverstein (NASPI)
8:10 - 8:30 am	Welcoming keynote	Mike Montoya (SCE)
8:30 - 8:40 am	NERC update and comments	Bob Cummings (NERC)
8:40 - 8:50 am	NASPI Project Manager's update	Alison Silverstein (NASPI)
8:50 - 9:00 am	DOE intro	Phil Overholt (DOE)

9:00 - 10:30 am	<p>International presentations</p> <ul style="list-style-type: none"> <li>• Stuart MacDonald (Transpower, New Zealand) &amp; Ann Moore (OSIsoft) -- Synchrophasor development infrastructure implementation at Transpower, New Zealand</li> <li>• David Cole (Qualitrol UK) – Fault monitoring and WAMS in the Arab Gulf GCC Interconnection</li> <li>• Diego Echeverria (Cenace, Ecuador) – Ecuador’s experiences with synchrophasor technology</li> <li>• Luis Alejandro Camargo (XM, Colombia) – Synchrophasor use in Colombia</li> </ul>
10:30 - 10:45 am	Break (refreshments and networking, sponsored by OSIsoft)
10:45 am - 12:00 pm	<p>International presentations</p> <ul style="list-style-type: none"> <li>• Bonian Shi (Sifang Automation, China) – Power grid dynamic monitoring and disturbance identification</li> <li>• Galina Antonova (ABB-Canada) &amp; Reynaldo Nuqui (ABB-USA) -- Real-time Monitoring of Power Oscillations and Modal Damping in the European ENTSO-E System</li> <li>• Greg Zweigle (Schweitzer Engineering Laboratory) – Synchrophasor-based grid control in Central America</li> </ul>
12:00 - 1:00 pm	Lunch (provided) – Lighthouse Courtyard
1:00 - 2:00 pm	<p>Technical session 1 – Oscillatory behavior and angular separations in the Eastern Interconnection</p> <ul style="list-style-type: none"> <li>• Bob Cummings (NERC)</li> <li>• Dave Bertagnolli (ISO-NE)</li> <li>• Tony Weekes (Manitoba Hydro)</li> <li>• G. Kumar Venayagamoorthy (Clemson University) – PMU-based real-time oscillation monitoring</li> </ul>
2:00 - 2:50 pm	<p>International presentations</p> <ul style="list-style-type: none"> <li>• Ragnar Guðmannsson (Landsnet, Iceland) – Five years of synchrophasor use in the control centre</li> <li>• Men Kun (Southern China Power Grid) – Damping control based on WAMS in the South China Grid</li> </ul>
2:50 - 3:30 pm	<p>Technical updates</p> <ul style="list-style-type: none"> <li>• Testing and certification update – Mladen Kezunovich (SGIP)</li> <li>• Western event data library – Zea Flores (WECC)</li> <li>• Comtrade update – Dan Brancaccio (Bridge Energy Group)</li> </ul>
3:30 - 3:40 pm	Break (refreshments and networking)
3:40 - 6:00 pm	<p>Task Team break-out sessions</p> <ul style="list-style-type: none"> <li>• Data &amp; Network Management Task Team (Shoreline Room) – Dan Lutter (Allied Partners) on implementing non-GPS clocking methods</li> <li>• Operations Initiatives Task Team (Catalina Room) -- Sergey Arutyunov (FSK EES, Russia’s federal electric grid) on contemporary status of WAMS/WACS technologies in the Russian electric power system</li> <li>• Performance Standards Task Team (Mariner’s Ballroom)</li> <li>• Planning Initiatives Task Team &amp; Research Initiatives Task Team (Driftwood Room) -- Mladen Kezunovich &amp; Tianshu Bi on synchrophasor system performance measures in the China grid</li> </ul>
6:00 - 7:30 pm	Reception (sponsored by Alstom Grid) – Lighthouse Courtyard

<b>Thursday, February 21, 2013</b>	
7:30 - 8:00 am	Refreshments and networking – Mariners Foyer
8:00 – 9:40 am	Technical session 2 – Synchrophasor technology and blackout prevention and analysis <ul style="list-style-type: none"> <li>• Damir Novosel (Quanta Technology) &amp; Vahid Madani (PG&amp;E) – moderators</li> <li>• U.S.-Canada 2003 blackout – Bob Cummings (NERC) &amp; Alison Silverstein (NASPI)</li> <li>• Brazil blackouts -- Renan Giovanini (ONS)</li> <li>• San Diego-Mexico 2011 blackout – Enrique Martinez (CFE)</li> <li>• WECC efforts to improve reliability -- Steve Ashbaker (WECC)</li> <li>• Commentators – Marianna Vaimann (IEEE-CFTF) &amp; Anjan Bose (DOE)</li> </ul>
9:40 – 10:00 am	Break and refreshments
10:00 - 11:30 pm	Technical session 3 – Fun with synchrophasors -- long-term opportunities and applications <ul style="list-style-type: none"> <li>• Alison Silverstein (moderator)</li> <li>• Micro-PMUs for distribution system use -- Sascha von Meier (CIEE)</li> <li>• Time-synchronized actions – Greg Zweigle (Schweitzer Engineering Labs)</li> <li>• Dejan Sobajic (NYISO)</li> <li>• Vickie van Zandt (WECC)</li> <li>• Jim McIntosh (Z Global)</li> <li>• Harish Mehta (MehtaTech)</li> </ul>
11:30 – 12:00 pm	Task Team Report-outs
12:00 - 1:00 pm	Lunch (provided) – California Courtyard
1:00 – 1:40 pm	<ul style="list-style-type: none"> <li>• Preview of SCE's Advanced Technology Laboratories – Tony Johnson (SCE)</li> <li>• Oscillations in WECC – new findings – Chuck Wells (OSIsoft)</li> </ul>
2:00 pm	Meeting adjourns

Tour of SCE's Advanced Technology Laboratories for those who made arrangements in advance.