



**North American SynchroPhasor Initiative
Tutorial on IEC 61850
Technical Interoperability Standard for
Synchrophasor Measurement & Data Communications
October 16, 2012
1:00 to 5:30 pm**

**Westin Buckhead Hotel
3391 Peachtree Road, NE
Atlanta Georgia 30326**

The NASPI community has invested significant time and effort in the development of IEC technical interoperability standard 61850-90.5, the technical interoperability standard newly adopted by the International Electrotechnical Commission as part of the reference architecture for electric power systems. This tutorial will give attendees a clear and practical understanding of what this technical standard entails, how it be used for PMU measurements and data communications, why technical interoperability standards matter, and what comes next. The tutorial will be taught by two IEEE Fellows and associated experts who developed the new standard and are guiding the electric industry in its implementation.

There will be no registration fee for this tutorial. The meeting registration link is at <http://www.nerc.net/meetingregistrations/Committee.aspx?meetingdate=10/16/2012&meetingtype=NASPI%20IEC>.

NASPI has secured a block of rooms at the Westin Buckhead Hotel for the nights of October 15 through 18 for those who wish to attend this tutorial or the NASPI Work Group meeting, which will be held on October 17 and 18. The hotel reservation link is at <https://www.starwoodmeeting.com/StarGroupsWeb/booking/reservation?id=1112307682&key=5AA40>.

Draft Agenda (August 17, 2012)

Tuesday, October 16, 2012		
12:30 - 1:00 pm	Registration and networking	
1:00 - 1:10 pm	Welcome, introductions, and logistics review	Alison Silverstein (NASPI)
1:10 - 1:20 pm	Tutorial objectives and a brief history of IEC 61850	Vahid Madani (PG&E) Ron Farquharson (Enernex)
1:20 - 1:35 pm	IEC 61850 benefits and overview of NIST standardization process	Mark Adamiak (GE Energy) Ron Farquharson (Enernex)

1:35 - 2:45 pm	Insight in IEC 61850 - What is it?	Ralph Mackiewicz (Cisco) Herb Falk (Cisco) Alex Apostolov (PAC World)
2:45 - 3:00 pm	Q& A Session	Damir Novosel (Quanta Technology)
3:00 - 3:15 pm	Break (refreshments and networking)	
3:15 - 3:50 pm	IEC 61850 Applications with real-life examples	Christophe Brunner () Vahid Madani (PG&E)
3:50 - 4:30 pm	IEC 61850-90-5, including interaction with IEEE 37.118	Mark Adamiak (GE Energy)
4:30 - 4:40 pm	Brief overview of IEEE 1588 test results – Concept and practical examples and lessons learned	Farnoosh Rahmatian (Quanta Technology) Mark Adamiak (GE Energy)
4:40 - 5:10 pm	Interoperability issues, tests, and practical examples (PMU, PDC, SuperPDC)	Vahid Madani (PG&E) Farnoosh Rahmatian (Quanta Technology)
5:10 - 5:25 pm	Q&A session	Damir Novosel (Quanta Technology)
5:25 pm	Adjourn	