

5rd Annual International Workshop on Grid Simulator Testing of Energy Systems and Wind Turbine Powertrains



Hosted by The Florida State University Center for Advanced Power Systems
2000 Levy Ave. Tallahassee FL, 32310
November 15th and 16th

Workshop Agenda

Day 1 – November 15th

8:00 – 8:30 **Registration - Breakfast**

8:30 – 8:45 **Welcome and Opening Remarks**

8:45 – 10:30 **Session 1**

FSU – Status Update and Projects	M. Steurer
NREL – Status Update and Projects	V. Gevorgian
Clemson – Status Update and Projects	C. Fox
Aachen – The Impact of Mechanical-HiL on Electrical Properties of Wind Turbines	U. Jassmann
Aachen – Experimental Experiences with full-scale Wind Turbine Certification	J. Bielemeier

10:30 – 10:45 **Coffee Break**

10:45 – 12:00

Session 2

Fraunhofer – DyNaLab Update: Meeting Industry Needs and Standardization	T. Jersch
Fraunhofer – Hil-Grid-Cop: Generator and Converter Testing	T. Jersch
IREQ – Small Scale Closed-Loop Testing Advancements and Full-Scale Amplifier Project Update	O. Tremblay
RTDS – Modeling Power Converters with User Definable Loss	C. Jegues

12:00 – 13:00

Lunch

13:00 – 14:20

Group Discussion: Model Validation for PHIL and CHIL

Introduction Presentation by NREL: Grid Simulator and Generator Models Validation

14:20 – 15:40

Session 3

NREL – Multi-PCC Distribution System PHIL	B. Lundstrom
Waseda Univ. – Overview of Distribution Network Simulator	S. Yoshizawa
Quanta Technology – Distribution System Real Time Simulation	A. Momeni
ABB - Trends in Grid Simulation	Kai Pietiläinen

15:40 – 15:55

Coffee Break

15:55 – 17:15

Session 4

FSU - Analysis of Linear Interface Algorithms for PHIL Simulation	J. Langston
RTDS – PHIL Developments to Improve stability margins	C. Jegues
Strathclyde – Experiences in Testing Flywheel Energy Storage	F. Coffele
AIST – Power Hardware-in-the-Loop Testing of 500kW PV Inverter	H. Kikusato

17:15

FSU CAPS Tour and Group Dinner

CAPS facility

Day 2 – November 16th

8:00 – 8:20 **Registration - Breakfast**

8:20 – 10:20 **Session 5**

FSU – Dual Power Hardware-in-the-Loop Simulation of Energy Storage Systems for Shipboard Applications	M. Bosworth
FSU - PHIL Experimentation of Non-Isolated AC/DC Converter with Comparison Amplifier	T. Szymanski
CU – Electrical and Mechanical Testing of High Speed Motors and Drives	J. Leonard
NREL – Overview of CGI/Dynos/PHIL platform	P. Koralewicz
NREL - CGI for impedance characterization of inverter-coupled generation	S. Shah
INL - Faster Than Real-time Co-Simulation with High Performance Computing	R. Hovsopian

10:20 – 10:40 **Coffee Break, Networking**

10:40 – 12:00 **IEEE P2004 Working Group Meeting (Open to all attendees)**

IEEE P2004 Agenda	M. Steurer
Anti-Islanding and 1547 PHIL Update	K. Schoder, J. Leonard

12:00 – 12:30 **Closing Remarks**
