Grid Integration of Renewables Workshop

January 13, 2011
STANFORD UNIVERSITY
Jen-Hsun Huang Engineering Center, Mackenzie Room

Time	Session	Speaker
8:00	Continental Breakfast	
8:45 – 9:00	**Welcome**	
8:45	Introduction and Overview	Stacey Bent TomKat Center for Sustainable Energy
9:00	**Keynote Speaker: U.S. Senator Jeff Bingaman, New Mexico**	
9:30 – 12:00	**Large-Scale Integration of Renewables**	
9:30	The Supergrid: 100% Renewable Electricity Supply for Europe and Its Neighborhood	Gregor Czisch Transnational Renewables, Germany
10:10	Grid Integration Challenges for 100% Conversion to Wind and Solar Power	Mark Jacobson Stanford University
10:40 – 11:00	Break	
11:00	Enabling Renewable Energy Integration in Denmark	Hans Henrik Lindboe Ea Energy Analyses, Denmark
11:30	Panel Discussion	Moderator: Lynn Orr, Stanford University
12:00	**Keynote Speaker: Commissioner Jeffrey Byron, California Energy Commission**	
12:30 – 1:30	Lunch	
1:30 – 3:30	**Capabilities and Limitations of the Existing Grid**	
1:30	Pulling the Pieces Together: Thinking Regionally and Cooperatively	V. John White, Center for Energy Efficiency and Renewable Technologies
2:00	Efforts and Challenges to Manage California's Expected Intermittent Renewable Additions	Antonio Alvarez Pacific Gas & Electric Company
2:30	Finding Flexibility in the Existing System	Debbie Lew National Renewable Energy Laboratory
3:00	Panel Discussion	Moderator: Richard Swanson, SunPower
3:30 – 3:50	Break	
3:50 – 5:50	**Maximizing Renewable Energy Penetration on the Grid**	
3:50	Optimizing AC and DC Transmission Networks for High Penetration of Renewables	Nick Jenkins Cardiff University, United Kingdom
4:20	Key Regulatory Challenges for Deep Penetration of Renewables	Michael Wara Stanford Law School
4:50	Low Cost Grid Integration via Met-Smart Interconnection and Storage Inherent in End-Use Devices	Willett Kempton University of Delaware
5:20	Panel Discussion	Moderator: Mark Thurber, Stanford University
5:50	Closing Remarks	
6:00 – 7:00	Reception	

The workshop presentations (with permission from speakers) will be posted shortly at http://tomkat.stanford.edu.