UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Increasing Market and Planning Efficiency through   Docket No. AD10-12-004
Improved Software

SUPPLEMENTAL AGENDA NOTICE

(May 20, 2013)

Take notice that Commission staff will convene a technical conference on June 24, 25, and 26, 2013 to discuss opportunities for increasing real-time and day-ahead market efficiency through improved software. A detailed agenda with the list of times for the selected speakers and presentation abstracts will be published on the Commission's website[1] after May 13, 2013.

This conference will bring together diverse experts from public utilities, the software industry, government, research centers and academia and is intended to build on the discussions initiated in the previous Commission staff technical conferences on increasing market and planning efficiency through improved software.

The agenda for this conference is attached. If any changes occur, the revised agenda will be posted on the calendar page for this event on the Commission's web site (www.ferc.gov) prior to the event.

Kimberly D. Bose,
Secretary.

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[1] http://ferc.gov/industries/electric/indus-act/market-planning/2013-conference.asp

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ERRATA NOTICE

(May 21, 2013)

On May 20, 2013, the Commission issued a "Supplemental Agenda Notice" in the above-captioned proceeding. The web link in Footnote 1 did not have "www" before "ferc.gov". Footnote 1 of the notice is revised to read:

1 http://www.ferc.gov/industries/electric/indus-act/market-planning/2013-conference.asp

Kimberly D. Bose,
Secretary.

Document Content(s)

Monday, June 24, 2013

8:15 AM	Arrive and welcome (3M-2)
	Richard O'Neill, Federal Energy Regulatory Commission (*Washington, DC*)
8:45 AM	Session M1 (Meeting Room 3M-2)
	Hybrid Approach for Incorporating Uncertainty in CAISO's Market Operations
	Khaled Abdul-Rahman, Hani Alarian, Clyde Loutan, California ISO (*Folsom, CA*)
	Applying Robust Optimization to MISO Look Ahead Unit Commitment
	Yonghong Chen, MISO (*Carmel, IN*)
	Xing Wang, Alstom Grid (*Redmond, WA*)
	Yongpei Guan, University of Florida (*Gainesville, FL*)
	Mixed Integer Programming (MIP) for Faster and More Optimal Solutions: The NYISO Proof of Concept Experience
	Matthew Musto, Muhammad Marwali, NYISO (*Rensselaer, NY*)
	Preventive-Corrective control for contingency modeling in AC PF based SCUC
	Petar Ristanovic, California ISO (*Folsom, CA*)
	James Frame, Siemens (*Minneapolis, MN*)
10:45 AM	Break
11:00 AM	Session M2 (Meeting Room 3M-2)
	External Network Model Expansion and Energy Imbalance Market at CAISO
	Mark Rothleder, George Angelidis, James Price, California ISO (*Folsom, CA*)
	Modeling, Simulation, and Computational Needs for RTOs: A PJM Perspective
	Paul Sotkiewicz, PJM Interconnection, LLC (*Norristown, PA*)
	Co-optimization of Congestion Revenue Rights in ERCOT Day-Ahead Market
	Chien-Ning Yu, Vladimir Brandwajn, Show Chang, ABB/Ventyx (*Santa Clara, CA*)
	Sainath M. Moorty, ERCOT (*Taylor, TX*)
	Pricing Mechanism for Time-Coupled Multi-interval Real-Time Dispatch
	Tengshun Peng, Dhiman Chatterjee, MISO (*Carmel, IN*)
1:00 PM	Lunch
1:45 PM	Session M3 (Meeting Room 3M-2)
	Practical Experience Developing Software for Large-Scale Outage Coordination
	John Condren, James David, Boris Gisin, PowerGEM (*Clifton Park, NY*)
	Automated Transmission Outage Analysis Using Nodal Based Model
	Nancy Huang, Dan Moscovitz, PJM Interconnection (*Norristown, PA*)
	John Condren, PowerGEM (*Clifton Park, NY*)
	Pricing Scheme for Two-Stage Market Clearing Model
	Jinye Zhao, Eugene Litvinov, Tongxin Zheng, Feng Zhao, ISO New England (*Holyoke, MA*)
	Stochastic Unit Commitment with Intermittent Distributed Wind Generation via Markovian Analysis and Optimization
	Yaowen Yu, Peter B. Luh, Mikhail A. Bragin, University of Connecticut (*Storrs, CT*)
	Eugene Litvinov, Tongxin Zheng, Feng Zhao, Jinye Zhao, ISO New England (*Holyoke, MA*)
3:45 PM	Break
4:00 PM	Session M4 (Meeting Room 3M-2)
	Multi-Area Security Constrained Economic Dispatch
	Raquel Lim, Muhammad Marwali, New York Independent System Operator (*Rensselaer, NY*)
	External Network Model Expansion at CAISO
	Mark Rothleder, George Angelidis, James Price, California ISO (*Folsom, CA*)
	An Application of High Performance Computing to Transmission Switching
	Zhu Yang, Shmuel S. Oren, University of California,Berkeley (*Albany, CA*)
	Anthony Papavasiliou, Catholic University of Louvain
	Kory Hedman, Pranavamoorthy Balasubramanian, Arizona State University (*Tempe, AZ*)
5:30 PM	Adjourn

Tuesday, June 25, 2013

8:15 AM	Arrive and welcome (3M-2)
8:30 AM	**Session T1-A (Meeting Room 3M-2)**

Session T1-A (Meeting Room 3M-2)

SMART-ISO: Modeling Uncertainty in the Electricity Markets
  Hugo Simao, Warren Powell, Boris Defourny, Princeton University (*Princeton, NJ*)

Multifaceted Solution for Managing Flexibility with High Penetration of Renewable Resources
  Nivad Navid, MISO (*Carmel, IN*)

Secure Planning and Operations of Systems with Stochastic Sources, Energy Storage and Active Demand
  Ray Zimmerman, C. Lindsay Anderson, Robert J. Thomas, Cornell University (*Ithaca, NY*)
  Carlos Murillo-Sánchez, National University of Colombia (*Manizales, Caldas, Colombia*)

Clustering-Based Strategies for Stochastic Programs
  Victor M. Zavala, Argonne National Laboratory (*Lemont, IL*)

Session T1-B (Meeting Room 3M-4)

Profit Maximizing Storage Allocation in Power Grids
  Anya Castillo, Dennice Gayme, John's Hopkins University (*Baltimore, MD*)

Application of Semidefinite Programming to Large-scale Optimal Power Flow Problems
  Michael Ferris, Daniel Molzhan, Bernie Leseiutre, Chris De Marco, University of Wisconsin (*Madison, WI*)

AC-Nonlinear Chance Constrained Optimal Power Flow
  Daniel Bienstock, Columbia University (*New York, NY*)
  Michael Chertkov, Russell Bent, Los Alamos National Lab (*Los Alamos, NM*)

A Novel Parallel Approach to Solving Constrained Linear Optimization Problems
  Stephen Elbert, Kurt Glaesemann, Karan Kalsi, Pacific Northwest National Laboratory (*Richland, WA*)

10:30 AM	Break
10:45 AM	**Session T2-A (Meeting Room 3M-2)**

Session T2-A (Meeting Room 3M-2)

Unified Stochastic and Robust Unit Commitment
  Yongpei Guan, Chaoyue Zhao, University of Florida (*Gainesville, FL*)

Robust and Dynamic Reserve Policies
  Kory Hedman, Joshua Lyon, Fengyu Wang, Muhong Zhang, Arizona State University (*Tempe, AZ*)

Stochastic Programming for Improved Electricity Market Operations with Renewable Energy
  Audun Botterud, Canan Uckun, Argonne National Laboratory (*Argonne, IL*)
  John Birge, University of Chicago (*Chicago, IL*)

Compact Stochastic Unit Commitment Formulation
  Germán Morales-España, Andres Ramos, Universidad Pontificia Comillas (*Madrid, Spain*)
  José M. Arroyo, Universidad de Castilla la Mancha (*Ciudad Real, Castilla la Mancha, Spain*)

Session T2-B (Meeting Room 3M-4)

Computational Performance of Solution Techniques Applied to the ACOPF
  Anya Castillo, John's Hopkins University (*Baltimore, MD*)
  Richard P. O'Neill, Federal Energy Regulatory Commission (*Washington, DC*)

Modeling of Hardware- and Systems-Related Transmission Limits: The Use of AC OPF for Relaxing Transmission Limits to Enhance Reliability and Efficiency
  Marija Ilic, Jeffrey Lang, NETSS (*Sudbury, MA*)

Low-Rank Solution for Nonlinear optimization over AC Transmission Networks
  Javad Lavaei, Ramtin Madani, Somayeh Sojoudi, California Institute of Technology (*Pasadena, CA*)

Valid Inequalities for the Alternating Current Optimal Power Flow Problem
  Chen Chen, Shmuel Oren, Alper Atamturk, UC Berkeley (*Berkeley, CA*)
  Richard O'Neill, Federal Energy Regulatory Commission (*Washington, DC*)

12:45 PM	Lunch

Tuesday, June 25, 2013

1:30 PM	Session T3-A (Meeting Room 3M-2)

Assessing the Flexibility Requirements in Power Systems
  Daniel Kirschen, Yury Dvorking, University of Washington (*Seattle, WA*)
Incorporating variability and uncertainty into reserve requirement methodologies
  Erik Ela, Michael Milligan, Bri-Mathias Hodge, Brendan Kirby, Ibrahim Krad, Mark OMalley,
  National Renewable Energy Laboratory (*Golden, CO*)
Optimal Unit Commitment under Uncertainty in Electricity Markets
  Fernando Alvarado, Rajesh Rajaraman
Large-scaled Optimal Power Flow with No Guarantee on Feasibility
  Manuel Ruiz, Girardeau, Artelys (*Paris, France*)
  Maeght, Fliscounakis, Panciatici, RTE (*Paris, France*)

Session T3-B (Meeting Room 3M-4)
Scalable Strategies for Large-scale AC-SCOPF Problems
  Nai-Yuan Chiang, Victor M. Zavala, Argonne National Laboratory (*Lemont, IL*)
  Andreas Grothey, University of Edinburgh (*Edinburgh, United Kingdom*)
An AC-Feasible Linear Approximation Approach to Finding the Optimal Power Flow
  Paula Lipka, UC Berkeley (*Albany, CA*)
**Security Constrained AC Optimal Power Flow (SC-OPF): Current Status, Implementation
  Issues and Future Directions**
  Guorui Zhang, Quanta Technology (*Raleigh, NC*)
  Xiaoming Feng, ABB USCRC (*Raleigh, NC*)
Decomposition Approaches to Transmission Switching under N-1 Reliability Requirements
  John Siirola, Jean-Paul Watson, Sandia National Laboratories (*Albuquerque, NM*)

3:30 PM	Break
3:45 PM	Session T4-A (Meeting Room 3M-2)

**Price Responsive Demand for Operating Reserves in co-optimized Electricity Markets with
  Wind Power**
  Zhi Zhou, Audun Botterud, Argonne National Laboratory (*Argonne, IL*)
Multi-Settlement Simulation of Stochastic Reserve Determination
  Robert Entriken, EPRI (*Palo Alto, CA*)
  Taiyou Yong, Eversource Consulting (*Folsom, CA*)
  Russ Philbrick, Power System Optimization (*Shoreline, WA*)
**An Affine Arithmetic Method to Solve Stochastic Optimal Power Flow Problems with
  Uncertainties**
  Mehrdad Pirnia, University of Waterloo (*Waterloo, Canada*)
**A Synergistic Combination of Surrogate Lagrangian Relaxation and Branch-and-Cut for MIP
  Problems in Power Systems**
  Peter Luh, University of Connecticut (*Storrs, CT*)
  Joseph Yan, Gary Stern, Southern California Edison (*Rosemead, CA*)
N-1-1 Contingency-Constrained Grid Operations
  Richard Chen, Jean-Paul Watson, Sandia National Laboratories (*Livermore, CA*)
  Neng Fan, University of Arizona (*Tuscon, AZ*)

Session T4-B (Meeting Room 3M-4)
Optimal Feeder Reconfiguration
  Steven Low, Qiuyu Peng, Caltech (*Pasadena, CA*)
Correcting Optimal Transmission Switching for AC Power Flows
  Clayton Barrows, NREL (*Golden, CO*)
  Seth Blumsack, Penn State University (*University Park, PA*)
  Paul Hines, University of Vermont (*Burlington, VT*)
Advances in Topology Control Algorithms (TCA)
  Pablo Ruiz, T. Bruce Tsuchida, The Brattle Group (*Cambridge, MA*)
  Michael C. Caramanis, Justin M. Foster, Evgeniy A. Goldis, Xiaoguang Li, Boston University
  (*Boston, MA*)
  C. Russ Philbrick, Polaris Systems Optimization (*Shoreline, WA*)
  Aleksandr M. Rudkevich, Newton Energy Group (*Newton, MA*)
  Richard D. Tabors, Across The Charles (*Cambridge, MA*)
Inclusion of Post-Contingency Actions in Security Constrained Scheduling
  Peng Peng, Show Chang, ABB/Ventyx (*Santa Clara, CA*)

5:45 PM	Adjourn

Wednesday, June 26, 2013

8:15 AM	Arrive and welcome (3M-2)

8:30 AM	**Session W1-A (Meeting Room 3M-2)**
	Study of Transmission Switching Under Contingencies: Formulations and Algorithms
	    Bo Zeng, Long Zhao, Wei Yuan, University of South Florida (*Tampa, FL*)
	Security-Constrained Optimal Power Flow with Sparsity Control and Efficient Parallel Algorithms
	    Dzung Phan, IBM T.J. Watson Research Center (*Yorktown Heights, NY*)
	    Andy Sun, Georgia Institute of Technology (*Atlanta, GA*)
	Candidate Selection for Transmission Switching in Large Power Networks
	    Kwok Cheung, Jun Wu, Alstom Grid (*Redmond, WA*)
	Transmission Switching for Improving Wind Power Utilization
	    Feng Qiu, Jianhui Wang, Argonne National Laboratory (*Argonne, IL*)

	Session W1-B (Meeting Room 3M-3)
	Stochastic Unit Commitment: Scalable Computation and Experimental Results
	    Jean-Paul Watson, Sandia National Laboratories (*Albuquerque, NM*)
	    Sarah Ryan, Iowa State University (*Ames, IA*)
	    David Woodruff, University of California Davis (*Davis, CA*)
	MIP Based System Flexible Capacity Requirements Determination
	    Alex Papalexopoulos, ECCO International (*San Francisco, CA*)
	Decomposition Methods for Stochastic Unit Commitment Problems
	    Suvtrajeet Sen, University of Southern California (*Los Angeles, CA*)
	Stochastic Unit Commitment: Stochastic Process Modeling for Load and Renewables
	    David Woodruff, University of California Davis (*Davis, CA*)
	    Sarah Ryan, Iowa State University (*Ames, IA*)
	    Jean-Paul Watson, Sandia National Laboratories (*Albuquerque, NM*)

10:30 AM	Break

10:45 AM	**Session W2-A (Meeting Room 3M-2)**
	Smart Wire Grid: Providing Advanced Power Flow Control for the Grid
	    Stewart Ramsay, Smart Wire Grid, Inc. (*Oakland, CA*)
	HVDC Grid Technology - Benefits of Hybrid AC/DC Grids and Optimal Power Flow Modeling Considerations
	    Xiaoming Feng, ABB (*Raleigh, NC*)
	Tres Amigas: Uniting the Electric Power Grid
	    Kenneth Laughlin, Tres Amigas, LLC. (*Santa Fe, NM*)
	Beyond Real Time: the Computational Challenges of Forecasting Dynamic Line Ratings
	    Eric Hsieh, Nexans (*Bethel, CT*)
	    Stuart Malkin, Nexans (*Portland, OR*)
	Implementing DLRs in the control room at PacifiCorp - Technology Successes and Challenges
	    TBD, Pacificorp (*Portland, OR*)

	Session W2-B (Meeting Room 3M-3)
	Scalable Parallel Analysis of Power Grid Models Using Swift
	    Ketan Maheshwari, Victor M Zavala, Justin Wozniak, Mark Hereld, Michael Wilde, Argonne National Laboratory (*Argonne, IL*)
	Improving Market Planning and Efficiency Software Through Dynamic Integration of High Quality Data
	    Christopher Vizas, Nicholas Lagakos, Anjan Deb, Chris Vizas, Jack Barker, Victor Kaybulkin, SmartSenseCom, Inc. (*Washington, DC*)
	Highly Dispatchable and Distributed Demand Response for the Integration of Distributed Generation
	    Amit Narayan, AutoGrid Systems (*Palo Alto, CA*)
	Solving MPEC Models with the KNITRO Nonlinear Solver
	    Richard Waltz, Jorge Nocedal, Ziena Optimization LLC (*Evanston, IL*)
	    Arnaud Renaud, Sylvain Mouret, Artelys (*Paris, France*)
	New methods for measuring voltage stability limits utilizing HELM tools
	    Jason Black, Battelle (*Columbus, OH*)

2:00 PM	Adjourn

Document Content(s)