FEDERAL ENERGY REGULATORY COMMISSION
OFFICE OF ENERGY POLICY AND INNOVATION
TECHNICAL CONFERENCE ON UNIT COMMITMENT SOFTWARE

JUNE 2, 2010
Location: Commission Meeting Room

8:00	**Richard O'Neill, FERC** Welcome and Introduction
	Session A: Unit Commitment Models in ISO Markets
8:20	**Andy Ott, PJM** Unit Commitment in PJM
	Mark Rothleder, California ISO Unit Commitment in the CAISO Market
	Rana Mukerji, NYISO NYISO Day Ahead Unit Commitment Design
10:20	**Break**
	Session B: Experience, Challenges, and Future Directions in Unit Commitment
10:30	**Art Cohen and Chien-Ning Yu, ABB** Unit Commitment in Energy Markets: Recent Experience and Future Directions
	William Hogan, Harvard Scarcity Pricing and Locational Operations Reserve Demand Curve
11:40	**Lunch**
12:40	**Boris Gisin and James David, PowerGEM** Practical Security Constrained Unit Commitment Implementation Challenges
	Boris Gisin and Qun Gu, PowerGEM PJM Perfect Dispatch
1:40	**Break**
	Session C: Advances in Hardware and Software
1:50	**Jeremy Bloom and John Gregory, IBM** How Advances in Algorithms and Processors Will Impact Power System Markets and Operations
	Alkis Vazacopoulos, FICO Solving Hard Mixed Integer Programming Problems
	Session D: New Designs and Advanced Unit Commitment Models
3:00	**Kory Hedman, Arizona State University** **Co-Author: Shmuel Oren, University of California, Berkeley** Co-optimization of Network Topology in Future Unit Commitment Models
	Tongxin Zheng, ISO-NE **Co-Authors: Eugene Litvinov, Jinye Zhao, ISO-NE** Risk-based Approach to Reliability Unit Commitment
4:15	**Break**
	Session E: Test Model Data Sets
4:30	**Richard O'Neill and Eric Krall, FERC** Test Model Data Sets
	Avnaesh Jayantilal, Areva T&D and Jim Waight, Siemens IEC Working Group 16 Activities
5:30	**Richard O'Neill, FERC** Day 1 Conclusion

JUNE 3, 2010

Location: Commission Meeting Room

8:00	**Richard O'Neill, FERC** Day 2 Welcome
	Session F: Special Topics
8:05	**Li Zhang and Paul Gribik, Midwest ISO** Extended LMP
	Gary Stern, Southern California Edison **Co-Authors: Joseph Yan, Peter Luh** What Objective Function Should be Used in ISO and RTO Unit-Commitment Models – A Market Participant Point of View
9:15	**Break**
	Session G: Variable Energy Resources and DR in Unit Commitment Models
9:25	**Erik Ela, NREL** Advanced Unit Commitment with High Penetrations of Variable Generation: Research at the National Renewable Energy Laboratory
	Ali Koc, IBM Modeling Intermittent Resources and Storage for Generation Planning
	Marija Ilić, Carnegie Mellon Integrating Large-Scale Wind Power in Coordination with Price Responsive Demand
	Dhiman Chatterjee, Midwest ISO Efficient Ramp Provisioning for Net Load Following with Variable Energy Resources
	Mark Rothleder and Udi Helman, California ISO Stochastic Simulation of Unit Commitment and Dispatch Under a 20% RPS in California
11:45	**Break**
	Session H: Modeling Uncertainty and Flexibility in Unit Commitment Models
11:55	**David Sun, Alstom** Modeling Resource Operational Flexibility in Unit Commitment
12:30	**Lunch**
1:20	**Jianhui Wang and Audun Botterud, Argonne National Laboratory** Stochastic Unit Commitment Modeling: Implementation and Market Implications
	Mohammad Shahidehpour, Illinois Institute of Technology Stochastic Security-Constrained Unit Commitment in a Volatile Environment
	Pablo Ruiz, CRA Comparison of Stochastic and Reserve Methods for Uncertainty Management
3:05	**Break**
3:15	**Xing Wang, Areva T&D** Smart Dispatch for Electricity Markets
	Session I: Forecasting for Market Operations
3:50	**Audun Botterud, Argonne National Laboratory** Wind Power Forecasting in Electricity Market Operations
	Victor M. Zavala, Emil Constantinescu, and Mihai Anitescu, Argonne National Laboratory Economic Impacts of Advanced Weather Forecasting on Unit Commitment
	Conclusion and Next Steps
5:00	**Richard O'Neill, FERC**

Anticipated Attendees

Affan Abdullah	FERC
Manish Agrawal	University of South Florida
Syed Ahmad	FERC
Mihai Anitescu	Argonne National Laboratory
Alper Atamturk	University of California, Berkeley
Clayton Barrows	Penn State University
Vic Batson	Sparsix
Louise Behnke	FERC
Gil Bindewald	DOE
Jeremy Bloom	IBM
Seth Blumsack	Penn State University
Audun Botterud	Argonne National Laboratory
Emmanuel Canon	
Gustavo Ayres de Castro	SAP
Dhiman Chatterjee	Midwest ISO
Hong Chen	PJM
Richard Li-Yang Chen	Sandia National Laboratories
Art Cohen	ABB
John Condren	PowerGEM
Daniel Considine	Sparsix
Emil Constantinescu	Argonne National Laboratory
Carla Culemann	California ISO
John Cutting	New York ISO
Tom Dautel	FERC
Jim David	PowerGEM
Paul Denholm	National Renewable Energy Laboratory
Richard Dillon	SPP
Oleg Diyankov	Sparsix
Feng Dong	Siemens
Pearl Donohoo	MIT
John Dumas	ERCOT
James Eason	FERC
Erik Ela	NREL
Joe Eto	Lawrence Berkeley National Laboratory
Michael Ferris	University of Wisconsin
Emily Fisher	Lawrence Berkeley National Laboratory
Theresa Flaim	
Franz Franchetti	Carnegie Mellon University
Clifford Franklin	Westar
Alireza Ghassemian	FERC
Eric Gimon	DOE
Boris Gisin	PowerGEM
Fred Glover	OptTek
Anupam Gopal	GE

Ian Grant	TVA
John Gregory	IBM
Paul Gribik	Midwest ISO
Qun Gu	PowerGEM
Russ Guttromson	Pacific Northwest National Laboratory
Chris Hagman	American Transmission Company
Patty Harrell	DC Energy
Kory Hedman	Arizona State University
Jeff Hein	National Renewable Energy Laboratory
Udi Helman	California ISO
William Hogan	Harvard University
Shaw Hossain	Westar
John Idzior	Reliability First Corp.
Marija Ilić	Carnegie Mellon University
Sasan Jalali	FERC
Avnaesh Jayantilal	Areva T&D
Randell M. Johnson	Northeast Utilities Service Co.
Shaun Johnson	New York ISO
Jayant Kalagnanam	IBM
Diego Klabjan	Northwestern University
Charles Knight	Florida Power and Light
Ali Koc	IBM
Adriana Kocornik-Mina	DOE
Vladimir Koritarov	Argonne National Laboratory
Eric Krall	FERC
William Lamanna	New York ISO
Warren Lasher	ERCOT
Sven Leyffer	Argonne National Laboratory
Jeff Linderoth	University of Wisconsin
Eugene Litvinov	ISO New England
Peter Luh	Southern California Edison
Pamela Mead	New York ISO
Alex Meeraus	GAMS
Malcolm Metcalfe	Sempra Power
Nick Miller	GE
John Mills	SPP
Jim Mitsche	PowerGEM
Khosrow Moslehi	ABB
Rana Mukerji	New York ISO
Todd Munson	Argonne National Laboratory
Fred Murphy	Temple University
Bernard Neenan	EPRI
Emily Nelson	New York ISO
Hyungseon Oh	National Renewable Energy Laboratory
Richard O'Neill	FERC
Shmuel Oren	University of California, Berkeley

Andy Ott	PJM
Pablo Ovando	FERC
Balaji Padmanabhan	University of South Florida
Mark Petri	Argonne National Laboratory
Russ Philbrick	
Robert Pike	New York ISO
Herminio Pinto	Nexant
Norm Richardson	Ventyx
Elaine Robinson	New York ISO
Mark Rothleder	California ISO
Pablo Ruiz	CRA
Sarah Ryan	Iowa State University
David Sallstrom	ABB
Mohammad Shahidehpour	Illinois Institute of Technology
Patrick Shanahan	American Transmission Company
Kip Sikes	Idaho Power, NTTG
Yves Smeers	UC Louvain
Zack Smith	New York ISO
Heather Starnes	SPP
Joann Staron	P3 Consulting
Gary Stern	Southern California Edison
David Sun	Alstom
Sergey Terekh	Sparsix
Steven Thomas	MIT
David Till	TVA
Lan Trinh	ABB
Summer Trudell	Ventyx
Jeffrey Urbach	DOE
Sundar Vankataraman	GE
Jack VanKuiken	Argonne National Laboratory
Davin Van Zandt	GE
Alkis Vazacopoulos	FICO
Bala Venkatesh	Ryerson University
Jim Waight	Siemens
Jianhui Wang	Argonne National Laboratory
Xing Wang	Areva T&D
David Whiteley	EIPC
Joseph Yan	Southern California Edison
Chien-Ning Yu	ABB
Victor M. Zavala	Argonne National Laboratory
Li Zhang	Midwest ISO
Jinye Zhao	ISO New England
Tongxin Zheng	ISO New England
Jinxiang Zhu	ABB
Robert Zimmerman	Cornell