

2008 Fuel Cells Peer Review

Sheraton Station Square

April 21 - 25, 2008



AGENDA



MONDAY, APRIL 21, 2008 - HASELTON I & II

- 8:00 - 9:00 a.m. Continental Breakfast/Registration - **HASELTON I & II FOYER**
- 9:00 - 9:45 a.m. Peer Review Panel Kick Off Meeting - Open to NETL and ASME staff only
- Review of ASME Process - Michael Tinkleman/Ross Brindle, ASME
 - Meeting logistics/completion of forms - Steven Ostheim/Charles Schmidt, TMS
 - Role of NETL - José Figueroa, NETL
- 9:45 - 10:45 a.m. Overview - Open to NETL and ASME staff only
- Program Manager - Wayne Surdoval
- 10:45 - 11:00 a.m. **BREAK - HASELTON I & II FOYER**
- 11:00 - 12:00 p.m. **Project # 41837** - Coal-Based Solid Oxide Fuel Cell Power Plant Development -
Jody Doyon, Fuel Cell Energy, Inc.
- 12:00 - 12:20 p.m. Q&A
- 12:20 - 12:55 p.m. Discussion, evaluation, and written comments
- 12:55 - 2:00 p.m. **Lunch (on your own)**
- 2:00 - 3:00 p.m. **Project # 41246** - Solid State Energy Conversion Alliance -
Steven R. Shaffer, Delphi Corporation
- 3:00 - 3:20 p.m. Q&A
- 3:20 - 3:55 p.m. Discussion, evaluation, and written comments
- 3:55 - 4:10 p.m. **BREAK - HASELTON I & II FOYER**
- 4:10 - 4:55 p.m. **Project # 42812** - Santa Clara County California Solid Oxide Fuel Cell Project -
Caroline Judy, Santa Clara County California
- 4:55 - 5:15 p.m. Q&A
- 5:15 - 5:45 p.m. Discussion, evaluation, and written comments



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TUESDAY, APRIL 22, 2008 - HASELTON I & II

- 7:00 - 8:00 a.m. Continental Breakfast/Registration - **HASELTON I & II FOYER**
- 8:00 - 9:00 a.m. **Project # 42613** - Coal Gas Fueled SOFC Hybrid Power Systems with CO₂ Separation -
Joseph F. Pierre, Siemens Power Generation
- 9:00 - 9:20 a.m. Q&A
- 9:20 - 9:55 a.m. Discussion, evaluation, and written comments
- 9:55 - 10:10 a.m. **BREAK - HASELTON I & II FOYER**
- 10:10 - 10:55 a.m. **Project # 42810** - Solid Oxide Fuel Cell Technology Stationary Power Application Project (NC) -
Joseph F. Pierre, Siemens Power Generation
- 10:55 - 11:15 a.m. Q&A
- 11:15 - 11:45 a.m. Discussion, evaluation, and written comments
- 11:45 - 12:45 p.m. **Lunch (on your own)**
- 12:45 - 1:30 p.m. **Project # 42614** - Solid Oxide Fuel Cell Coal-Based Power Systems -
Matthew Alinger, GE Global Research
- 1:30 - 1:50 p.m. Q&A
- 1:50 - 2:20 p.m. Discussion, evaluation, and written comments
- 2:20 - 2:35 p.m. **BREAK - HASELTON I & II FOYER**
- 2:35 - 3:20 p.m. **Project # 42513** - Evaluation of a Functional Interconnect System for Solid Oxide Fuel Cells -
James Rakowski, Allegheny Technologies
- 3:20 - 3:40 p.m. Q&A
- 3:40 - 4:10 p.m. Discussion, evaluation, and written comments

WEDNESDAY, APRIL 23, 2008 - HASELTON I & II

- 7:00 - 8:00 a.m. Continental Breakfast/Registration - **HASELTON I & II FOYER**
- 8:00 - 8:45 a.m. **Project # FEAA066** - Reliability of Materials and Components for Solid Oxide Fuel Cells -
Edgar Lara-Curzio, Oak Ridge National Laboratory
- 8:45 - 9:05 a.m. Q&A
- 9:05 - 9:35 a.m. Discussion, evaluation, and written
- 9:40 - 10:25 a.m. **Project # FWP-40552** - Low Cost Modular SOFC Development - **REFRACTORY GLASS** -
Jeff Stevenson, Pacific Northwest National Laboratory
- 10:25 - 10:45 a.m. Q&A
- 10:45 - 11:15 a.m. Discussion, evaluation, and written comments
- 11:15 - 11:25 a.m. **BREAK - HASELTON I & II FOYER**

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WEDNESDAY, APRIL 23, 2008 - **HASELTON I & II**

- 11:25 - 12:10 p.m. **Project # ORD-08-220621c** - Coal Based Fuel Cells -
University Research Initiative Projects -
• In-Situ Spectroscopy on SOFC Cathode Materials &
• Studies on the Evolution of Crystallographic Nature of Cathode Microstructural Features
in SOFC in Operation Conditions -
Randy Gemmen, National Energy Technology Laboratory
- 12:10 - 12:30 p.m. Q&A
12:30 - 1:00 p.m. Discussion, evaluation, and written comments
- 1:00 - 2:00 p.m. **Lunch (on your own)**
- 2:00 - 2:45 p.m. **Project # FWP-49071** - Solid Oxide Fuel Cell Research and Development - **SYNCHROTRON** -
Jeff Eastman, Argonne National Laboratory
- 2:45 - 3:05 p.m. Q&A
3:05 - 3:35 p.m. Discussion, evaluation, and written comments
- 3:35 - 3:50 p.m. **BREAK - HASELTON I & II FOYER**
- 3:50 - 4:35 p.m. **Project # MSD-NETL-01** - Development of Inexpensive Metal Alloy Electrodes for Cost-
Competitive Solid Oxide Fuel Cells -
Steven J. Visco, Lawrence Berkeley National Laboratory
- 4:35 - 4:55 p.m. Q&A
4:55 - 5:25 p.m. Discussion, evaluation, and written comments

THURSDAY, APRIL 24, 2008 - **HASELTON I & II**

- 7:00 - 8:00 a.m. Continental Breakfast/Registration - **HASELTON I & II FOYER**
- 8:00 - 8:45 a.m. **Project # 41572** - Functionally Graded Cathodes for Solid-Oxide Fuel Cells -
Meilin Liu, Georgia Institute of Technology
- 8:45 - 9:05 a.m. Q&A
9:05 - 9:35 a.m. Discussion, evaluation, and written comments
- 9:40 - 10:25 a.m. **Project # 42516** - Development of Sulfur and Carbon Tolerant Reforming Alloy Catalysts Aided
by Fundamental Atomistic Insight -
Suljo Linic, University of Michigan
- 10:25 - 10:45 a.m. Q&A
10:45 - 11:15 a.m. Discussion, evaluation, and written comments
- 11:15 - 11:30 a.m. **BREAK - HASELTON I & II FOYER**
- 11:30 - 12:15 p.m. **Project # FWP-40552** - Low Cost Modular SOFC Development - **MODELING** -
Moe A. Khaleel, Pacific Northwest National Laboratory
- 12:15 - 12:35 p.m. Q&A
12:35 - 1:05 p.m. Discussion, evaluation, and written comments

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THURSDAY, APRIL 24, 2008 - HASELTON I & II

- 1:05 - 2:05 p.m. **Lunch (on your own)**
- 2:05 - 2:50 p.m. *Project # ORD-07-220611* - Fuel Processing & Hydrogen Production -
David A. Berry, National Energy Technology Laboratory
- 2:50 - 3:10 p.m. Q&A
- 3:10 - 3:40 p.m. Discussion, evaluation, and written comments
- 3:40 - 3:55 p.m. **BREAK - HASELTON I & II FOYER**
- 3:55 - 4:40 p.m. *Project # ORD-08-220621a* - Coal Based Fuel Cells - Contaminant Testing (Multi-Cell Array
and Contaminant Testing) -
Randy Gemmen, National Energy Technology Laboratory
- 4:40 - 5:00 p.m. Q&A
- 5:00 - 5:30 p.m. Discussion, evaluation, and written comments

FRIDAY, APRIL 25, 2008 - HASELTON I & II

- 7:00 - 8:00 a.m. Continental Breakfast/Registration - **HASELTON I & II FOYER**
- 8:00 - 8:45 a.m. *Project # 41567* - A Low-Cost Soft-Switched DC/DC Converter for Solid Oxide Fuel Cells -
Jason Lai, Virginia Polytechnic Institute & St. Univ.
- 8:45 - 9:05 a.m. Q&A
- 9:05 - 9:35 a.m. Discussion, evaluation, and written comments
- 9:35 - 9:45 a.m. **BREAK - HASELTON I & II FOYER**
- 9:45 - 12:15 p.m. Overall meeting Wrap-up
15 minutes/reviewers x 10