

## 2010 Workshop on High Temperature Superconducting Wires

June 3 – 4, 2010

Hilton Americas-Houston Hotel, Houston, TX

### DRAFT GAMEPLAN

**Sponsors:** Department of Energy; Los Alamos National Laboratory; Electric Power Research Institute (EPRI); Texas Center for Superconductivity at the University of Houston (TcSUH); Bruker, Coalition for the Commercial Application of Superconductors (CCAS); American Superconductor Corporation; SuperPower, Inc.

#### Thursday, June 3, 2010

- 7:30am Registration – 4<sup>th</sup> level, West outside *Lanier Grand Ballroom J/K* (west escalator/elevators)
- Breakfast Buffet – 4<sup>th</sup> level, West *Lanier Grand Ballroom J/K*
- 8:00am Welcome, *Allan Jacobson, TcSUH/University of Houston* – 4<sup>th</sup> level, West *Lanier Grand Ballroom J/K*
- 8:10am DOE OE Perspective, *Debbie Haught, Office of Electricity Delivery and Energy Reliability, DOE*
- 8:20am DOE Office of Science Perspective, Workshop Background and Recent Activities Relating to a Vision for HTS, *George Crabtree, Argonne National Laboratory*
- 8:50am Discussion of New Opportunities and Needs for HTS Applications, Moderator—*David Larbalestier*
- Cables – *Steve Ashworth, Los Alamos National Laboratory*
  - Fault Current Limiters – *Robert Duckworth, Oak Ridge National Laboratory*
  - High Field Magnets – *Jon Thomkins, Fermi Laboratory*
  - Wind Generators – *Name, Organization*
- 10:15am Morning Refreshment Break – 4<sup>th</sup> level, West *Lanier Grand Ballroom J/K*
- 10:45am Plenary Discussion on Performance Requirements for HTS Applications and Wire Metrics (*continued*)
- HTS Wire Development and Production – *Jack McCall, American Superconductor*

- HTS Wire Development and Production – *Venkat Selvamanickam and John Dackow, SuperPower, Inc.*

11:45am Breakout Group Instructions, *Brian Marchionini, Energetics Incorporated*

11:50am Buffet Lunch – 4<sup>th</sup> level, West *Lanier Grand Ballroom J/K*

1:00pm Breakout Group Discussion Topics and Lead Facilitators:

- Cables, *Amit Goyal, Oak Ridge National Laboratory*
- Fault Current Limiters, *Mike Sumption, Ohio State University*
- Other Applications, *Bruce Strauss, Office of Science (or David Larbaestier)*

Breakout Group Activity #1. Metrics

What are the short (0-5 years), mid (6-10 years), and long term (11-15 years) metrics for the breakout group topic areas? Vote on the top 3 metrics.

	Short (0-5 years)	Mid (6-10 years)	Long (11-15 years)
<b>Factors Affecting Cost</b>			
<b>Critical Current Performance</b>			
<b>Other Performance Characteristics</b>			
....			

2:30pm Breakout Group Activity #2. Barriers and Challenges to Achieving the Metrics

What are the short (0-5 years), mid (6-10 years), and long term (11-15 years) barriers and challenges to the breakout group topic area?

	Short (0-5 years)	Mid (6-10 years)	Long (11-15 years)
<b>Factors Affecting Cost</b>			
<b>Critical Current Performance</b>			
<b>Other Performance Characteristics</b>			

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3:30pm Afternoon Refreshment Break (15 min.) – *Ballroom of the Americas F – 2<sup>nd</sup> level*

3:45pm Breakout Group Activity #3. Technology Needs

What are the short (0-5 years), mid (6-10 years), and long term (11-15 years) needs that should be addressed in order to overcome the barriers and challenges identified in the previous activity? Identify and discuss approaches that can lead to incremental but significant cost reduction and increased performance in the short term. Identify innovations that can result in dramatic reduction in wire cost and improved performance in the medium-to-long term.

	Short (0-5 years)	Mid (6-10 years)	Long (11-15 years)
<b>Factors Affecting Cost</b>			
<b>Critical Current Performance</b>			
<b>Other Performance Characteristics</b>			
....			

5:00pm Breakout Group Discussions recap in main session. *Moderator, Steve Eckroad, EPRI*

Each of the facilitators will give a 10 minute or less recap of the metrics, barriers and needs they developed.

5:45pm Adjourn Day 1

6:30pm Reception/Cash Bar – Skyline Room, 24<sup>th</sup> Floor

7:00pm Dinner sponsored by University of Houston – Skyline Room, 24<sup>th</sup> Floor

**Friday, June 4, 2010**

7:30am Breakfast Buffet – *Ballroom of the Americas F – 2<sup>nd</sup> level, West*

8:00am Breakout group discussion (same rooms as yesterday)

Breakout Group Activity #3. Action Plans

For the top priority needs, what is the action plan for achieving the metrics? This action plan includes key activities and technical approaches, and resource requirements. The templates below will be given to the breakout group participants to complete. The group will be split into caucus groups in order to complete as many of the action plan templates as possible.

<b>Action Plan Template</b>		
<b>Top Priority Need #1 [from Exercise #3. Complete this template for the other needs.]</b>		
Key Activities for the top priority needs	Duration of activity	Resource requirements (low, medium, high)
Activity 1.		
Activity 2.		
Activity 3.		

10:00am Morning Refreshment Break – *Ballroom of the Americas F – 2<sup>nd</sup> Level*

10:15am Breakout group discussion – continued

The group will work on developing a power point presentation to present to the rest of the workshop participants in the summary session. The breakout group presentation will be no longer than 10 minutes. The format for the summary presentations includes:

- Major Findings
- Comments on Metrics and Vision
- Key Barriers and Challenges
- Key Needs
- Actions and Next Steps

11:00am Breakout group reports – 4<sup>th</sup> level, *West Lanier Grand Ballroom J/K*

11:45am Final thoughts and closing remarks, DOE

12:00pm Adjourn