

U.S. Department of Energy H2@Scale Review Meeting Agenda

June 9, 2017

Washington Marriott Wardman Park Hotel
Delaware A, Lobby Level

Objectives:

- Gather stakeholder feedback on collaborative R&D concepts within planned H2@Scale Consortium
- Expand and evaluate draft H2@Scale RD&D Roadmap

8:00 – 8:30 AM Introduction

- Welcome to the Review Session (Dr. Sunita Satyapal, Director- U.S. DOE Fuel Cell Technologies Office)
- Overview of H2@Scale Concept (Dr. Bryan Pivovar, National Renewable Energy Laboratory)

8:30-9:30 AM Examples of Initial Capabilities within H2@Scale Consortium

- U.S. Department of Energy, Fuel Cell Technologies Office: Dr. Eric Miller
Overview of DOE Consortia Frameworks
- Sandia National Laboratories: Dr. Chris Moen
Materials Compatibility and Risk Analysis
- National Renewable Energy Laboratory: Dr. Keith Wipke
Electrolyzer Performance Testing, Scenario Planning, Financial Analysis
- Pacific Northwest National Laboratory: Dr. Jamie Holladay
Materials Compatibility, Grid Simulation, and Safety Planning
- Argonne National Laboratory: Dr. Amgad Elgowainy
Technoeconomic and Life Cycle Analysis
- Idaho National Laboratory: Dr. Rob Hovsopian
Grid Simulation and Scenario Planning

9:30-10:00 AM Open Q&A and Discussion Regarding Collaborative R&D with National Labs

10:00-10:20 AM Break

10:20-12:30 PM Breakout Sessions to provide feedback on RD&D Roadmap

Sections:

- *Grid*
- *Low-temperature electrolysis*
- *High-temperature electrolysis*
- *Infrastructure*
- *Industrial end uses*

Questions:

1. Of the R&D needs identified in the roadmap, which are the highest three priorities to address?
2. Of the priorities that received the most votes, why are these the highest priorities for R&D? What are the drivers for their need?
3. Can you identify quantitative metrics that correspond to any of the R&D needs mentioned (e.g. cost, durability)?
4. Of the R&D needs in the roadmap, which have the most efforts already ongoing (e.g. through funding to academia, funding from other government offices, or industry funding) that could be leveraged to achieve a critical mass?
5. Are any of the R&D needs conflicting (i.e. enabling multiple technology pathways when only one is likely to dominate growth)? If so, which pathway should be the focus for R&D and why?
6. Of the priorities that receive the most votes, what would be barriers to industry adoption if these needs were addressed through R&D? Who could be the earliest adopters of successes?