



# Agenda

## Workshop on Supercritical Carbon Dioxide Brayton Cycle Energy Conversion R&D

September 11, 2014



### Omni William Penn

530 William Penn Pl,  
Pittsburgh, PA 15219

**Meeting Objective:** Discuss the challenges and obstacles related to Supercritical Carbon Dioxide Brayton Cycle Energy Conversion and the actions needed to support the wide-scale commercialization of power cycles based on supercritical CO<sub>2</sub> as the working fluid. This discussion will inform preliminary plans for continued R&D and the President's FY 2015 Congressional Budget Request that includes \$27.5 million for a pilot-scale facility. A straw-man approach to conducting the required R&D and pilot projects will be presented in terms of the government's draft objectives. Discussing these objectives and potential options or approaches to these objectives will provide the government with additional technical and engineering information relating to the potential execution of the program. Stakeholder input will help to inform DOE's preliminary planning, pending authorization from Congress to launch a pilot project.

### Morning – 8:00 AM

Welcome, introduction and objectives (D. Mollot or delegate – < 15 minutes)

### Session I - DOE's Supercritical Carbon Dioxide Brayton Cycle Energy Conversion R&D (8:15 – 11:15 AM)

1. Update on DOE's Supercritical Carbon Dioxide Brayton Cycle Energy Conversion R&D (Ross Brindle – Introduction < 15 minutes)
  - 1.1. Summarize the June workshop results (Mark Lausten, 20 minute presentation with 20 minute Q&A)
  - 1.2. Review industry input to NE 2014 STEP RFI (B. Robinson or delegate, 20 minute presentation with 20 minute Q&A)
  - 1.3. Present SCO<sub>2</sub> R&D activities currently underway across the DOE complex (R. Dennis or delegate, 20 minute presentation with 20 minute Q&A)

### AM Break – 10:15 -10:35

- 1.4. Present preliminary SCO<sub>2</sub> power cycle benefits analysis (K. Gerdes or delegate, 20 minute presentation with 20 minute Q&A)

### Morning Session Concludes – 11:15

### Session II – Objectives and Approaches to R&D Supporting the Development of Supercritical CO<sub>2</sub> Based Power Cycles (11:15 – 4:00 PM)

2. Facilitated government and industry dialog on R&D challenges and approaches to the development of supercritical CO<sub>2</sub> based power cycles (Ross Brindle facilitates a discussion that substantiates and clarifies options to draft program objectives in response to the June 2014 workshop and 2014 NE RFI).

### Working lunch ->

- 2.1. Open Discussion

### Adjourn – 4:00 PM