



U.S. DEPARTMENT OF
ENERGY



Chairs' Charges to the Breakout Sessions



Breakout Session #1

Advanced Computing for Energy – Promises and Challenges

Charge to the Breakout Session:

■ Investments in computing resources

- Does the Department have cutting edge computing resources suitable to assist in advancing industrial needs?
- What added resources would make a difference?

■ Availability of computing resources

- Has the Department deployed resources in a way that makes them available to industry?
- Do Department process facilitate or hinder user access?

■ Utilization of computing resources

- Are Laboratory resources available to assist Industry in addressing areas of deployment risk?
- Do Industry users have the where-with-all to access DOE Computing assets or should the Department refocus on user access?



Dana Christensen,
NREL



Breakout Session #2

Energy Innovation via Computing: Success Stories

Charge to the Breakout Session:

■ Where and why advanced computing

- What role does advanced computing play in your company?
- What advantages have you realized from advanced computing?



Steve Ashby,
PNNL

■ Challenges faced and overcome

- What challenges did you face and how did you overcome them?
- What was the nature of the challenges: technical, cultural, financial?
- Comment with respect to “build, deploy, and use” computing lifecycle

■ Advice to others

- What advice would you give others considering the use of advanced computing?
- What could USG, especially DOE, do to facilitate wider adoption of advanced computing for energy problems?

Breakout Session #3

Energy Innovation via Computing: Potential and Challenges

Charge to the Breakout Session:

■ What does energy innovation mean to you?

- What problems are you solving today?
- Does the ability to solve more complex analysis problems differentiate you in the market?

■ How could advanced computing help?

- What kinds of simulations and analytics does your company require?
- Do companies in your business sector recognize the value of advanced computing?

■ What grand challenges exist that are holding energy innovators back?

- What are the gaps, that if filled, would help your company compete more effectively?
- What role does code validation through experiments play in your simulation effort?
- Are you finding a workforce appropriately trained in computation/simulation?

■ What recommendations do you have for increasing utilization of advanced computing for energy?

- What advice would you give others considering the use of advanced computing?
- What could USG/DOE do to facilitate and promote wider adoption?



Dona Crawford,
LLNL



Breakout Rooms & Schedule

■ Rooms

- Breakout #1
 - Grand Ballroom E-G
- Breakout #2
 - Lake Fairfax
- Breakout #3
 - Lake Anne

■ Schedule

- Wednesday
 - 2:30 pm – Work
 - Breaks and Adjourn at Breakout Lead’s Discretion
- Thursday
 - 8:00 am – Resume Work
 - 9:45 am – Break
 - 10:00 am – Plenary for Initial Reports (20 minutes each)
 - 11:00 am – Resume Work, Lunch at Lead’s Discretion
 - 2:30 pm – Break
 - 2:45 pm – Plenary for Final Reports (35 minutes each)
 - 4:30 pm – Workshop Conclusions
 - 5:00 pm -- Adjourn