

Agenda Clean Energy Innovator Fellows Training: Electricity Regulation Basics September 12, 2024

1. Welcome - U.S. Department of Energy (1:00-1:05 ET)

2. Electric Utility Regulation 101 - Grace Relf, Berkeley Lab (1:05-2:00 ET)*

- Purpose of regulation
- Market structures, electric utilities and regional grid operators
- Power sector fundamentals
 - G, T, D and end-use customers
 - Prosumer evolution and two-way power flows
- Regulatory processes
 - o Regulatory procedures
 - Types of proceedings
- Stakeholder engagement
- 3. Basics of Cost of Service Ratemaking Pete Cappers, Berkeley Lab (2:00-2:35 ET)
 - Overview
 - Elements of COS studies
 - Revenue requirements and allocation to customer classes
 - Rate design
 - Outcomes of COS ratemaking and impacts on utility finances
 - Balancing utility, policy and ratepayer objectives

Break (2:35-2:45 ET)

- 4. Cost Allocation Ronny Sandoval, Regulatory Assistance Project (2:45-3:15 ET)
 - Deeper dive into topic introduced above (e.g., see <u>Electric Cost Allocation for a New Era</u>)

5. Cost-Effectiveness Evaluation - Myles Collins, Berkeley Lab (3:15-4:00 ET)

- Benefit-cost analysis
 - o Overview
 - Summary of analytical steps
 - Specify a set of alternative investments
 - Determine benefits and costs to consider
 - Determine impacts of each alternative
 - Monetize lifetime impacts
 - Discount future impacts and calculate net present value
 - Perform a sensitivity analysis
 - Example
- Other types of cost-effectiveness evaluation
 - o Overview of least-cost best-fit, multi-criteria decision analysis, value-spend efficiency
 - Situations where these types of analyses may be used
 - o Examples

^{*} All presentations include ~10 minutes of Q&A at the end