Extending practical guidance for climate data in adaptation planning and policymaking for energy systems

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Utilities, regulators, and policymakers across the world are grappling with how to maintain reliable, cost-effective, and accessible energy systems under climate change. During such climate adaptation planning, stakeholders must make critical decisions, including selection and/or creation of climate data to integration of climate data into existing planning and decision-making processes. These decisions can play a pivotal role in shaping adaptation choices and their long-term value. But guidance for these processes is still developing, so decisions vary utility to utility, potentially undermining the value of adaptation plans and our ability to compare and integrate plans across systems and geographies.

This breakout session will extend existing guidance for decision-makers on using climate data during adaptation planning. While our focus will be on the electric power system, we will consider other energy sectors, including compound hazards across sectors, if time permits.

Key outputs could include:

- Decision tree(s) with concrete recommendations mapping activities and goals to data decisions and datasets.
- Practical guidance on defining sets for stress testing, a common framework for adaptation planning amongst utilities in the wider policy context of climate stress testing.
- Practical guidance that illuminates trade-offs between approaches, with an eye towards identifying the “best” versus “good enough” approaches
- Options for ‘adding value’ to existing climate datasets via postprocessing, whether through climate/weather modeling or transformation of climate data into more useful variables via impact models