

NASEO-NARUC GEB State Interviews

NASEO
National Association of
State Energy Officials



During April and May 2019, NASEO and NARUC conducted interviews of the 14 states participating in the Working Group. The intent of the interviews was to understand each state's energy landscape, interest in GEBs, and what each state seeks from Working Group participation. Understanding state interests and contexts will shape Working Group direction and activities.

The discussions covered state contexts, including profiles of the electricity system and its market and regulatory structure; roles of the State Energy Office, Public Utility Commission, and other agencies; whether any pertinent demonstration projects or pilots are underway or planned; and whether state energy and electricity planning processes had included grid-interactive considerations. States were offered confidentiality to ensure open discussion.

The state interviews yielded a rich set of information and perspectives, some detailed and state specific but others generalizable and thematic.

Main Points from the Interviews:

States want to learn about other states' experience and activities. This includes projects, policies, and regulatory actions. They want to learn about results, lessons, and insights. They are interested in tangible examples.

States are interested in GEB and load flexibility to help meet broader electricity and energy system objectives. When asked about motivations for GEB, such as moderating peak demand, modernizing the grid and addressing congestion, enhancing energy resilience, or addressing emissions, many states said essentially "yes, all of the above." States are interested in such areas as renewable resource integration, microgrids and other DERs to support resilience, meeting air pollution and climate goals, and beneficial electrification and electric vehicles. Working Group states include those with surplus generation as well as ones perceiving generation and transmission constraints.

Some states are interested in GEB and load flexibility applications for state and public buildings. States have multiple motivations in this area. Some focused primarily on opportunities to reduce utility costs. Many pointed to resilience benefits that could accrue, particularly to critical public facilities. Others have state "lead-by-example" objectives for improving energy efficiency, reducing energy-related emissions, and promoting cleaner energy at state or public facilities. These interests suggest options for using public buildings as demonstration test beds for GEB and other building energy technologies. This can be analogous to federal facility technology demonstration and validation projects performed through the U.S. General Services Administration's Proving Ground program and the Department of Defense's Environmental Security Technology Certification Program (ESTCP).

Many states want to understand how to value and assess the performance of GEB (and broader DER integration) and their states' potential for implementation. States agreed that this is an area that needs more exploration. Topics for further consideration include: What is the value of GEB and to whom? How can performance and its value be measured? How can costs and benefits be evaluated?

States noted technical challenges, but most states recognize that policy and regulatory factors can impede GEB and load flexibility. Even if technologies are readily available and implementable, what would incite building owners to implement GEB and load flexibility? What incentives are there for utilities to rely on customer- or third party-owned assets and actions to provide grid services? Among Working Group states, utility market and regulatory structures vary significantly as does the availability and use of peak demand charges, time-of-use rates, and demand response programs. Some of the states are actively exploring new utility business models. The states differ in advanced metering infrastructure (AMI) penetration and have mixed experience with “grid modernization” proceedings.

How or can traditional energy efficiency programs mesh with GEB and load flexibility?

Some states indicate interest in expanding traditional energy efficiency programs to include other DERs, load flexibility, and electrification. This was raised with respect to utility ratepayer-funded efficiency programs but can apply to energy savings performance contracts (ESPCs), state building performance targets, and other policies and programs. There can be good opportunity for energy efficiency to work in concert and synergy with other DERs through GEB but there is also the hazard of conflict and forgone energy efficiency investment.

The state interviews suggest multiple areas for exploration and explication. They will help guide the Working Group’s consideration of topics for webinars, exchange, and resource development; areas for further research and technical assistance; and directions for state consideration of road mapping exercises and pilot demonstrations.