



Statement of Work

Energy Markets and Planning (E-MAP) Program

Assisting States in Developing Comprehensive Roadmaps to Address Energy Infrastructure Modernization

1. Background

The National Association of State Energy Officials (NASEO) and the U.S. Department of Energy's Office of Electricity Delivery and Energy Reliability (DOE-OE) have increasingly heard from states and private sector stakeholders about the need to address a growing range of interdependent electricity system issues, such as the following: the need to modernize the electric grid and distribution system and related energy infrastructure; dramatic advances in and increased use of demand-side and supply-side energy efficiency, renewable energy, distributed energy, and smart grid technologies; improvements in energy storage and two-way power flow opportunities; utility business models; and, greater public and private focus on resilience, reliability, and affordability. To assist State Energy Offices in addressing this complex set of interrelated energy challenges and economic opportunities, NASEO, with support from DOE-OE, created the Energy Markets and Planning (E-MAP) program.

2. Objective

The goal of the E-MAP program is to help states develop comprehensive approaches to advancing electric system and related energy infrastructure modernization, resilience, and affordability. To achieve this, the program will provide assistance to three pilot states, working through their State Energy Offices, to develop a state-led energy system modernization roadmap that takes a comprehensive view across the electric system to include advances in renewable energy, distributed generation, energy storage, ancillary services, and energy efficiency with the aim of fostering market innovation and ensuring a reliable, affordable, and environmentally sustainable electric system. The best practices, lessons learned, and resources developed through working with these pilot states will be made available to help other states pursue goals and undertake their own roadmapping and energy system planning efforts.

3. Timeline

The Nevada Governor's Office of Energy (NGOE) will commit to an 18-month state-led electric system modernization roadmap process which takes a comprehensive view across the electric system. A detailed description of the project timeline, complete with Tasks and Milestones, can be found in **Appendix A**.

4. Scope of Work

The NGOE commits to an 18-month state-led electric system modernization roadmap process which takes a comprehensive view across the electric system, comprising several intermediate tasks and culminating in a state roadmap document. The roadmapping effort includes, but not be limited to, advances in renewable energy, advanced metering, infrastructure, demand response, distributed generation, energy storage, energy efficiency, and other energy system considerations with the aim of fostering market innovation and ensuring a reliable, affordable, and environmentally sustainable electric system.

5. Tasks

The NGOE shall perform the following Tasks in support of this work effort:

- 5.1 The NGOE shall work with NASEO to identify the project team and key stakeholders to participate in building and informing the roadmapping process (state energy office staff, state and local government agency staff, utilities, industry, non-profits, regulatory commissioners, etc.)

Milestone 5.1.1: Identify Project Team and Stakeholder Group

Milestone 5.1.2: NGOE and NASEO develop technical assistance needs document

Deliverable 1: Technical assistance and needs document

- 5.2 The NGOE shall assist NASEO in analyzing and identifying key energy sectors, trends, emerging technologies, and system interdependencies to conduct a baseline assessment of the state energy landscape (e.g., renewable energy, distributed generation, utility business models, storage, services, resiliency efforts, policies, regulations, laws, state energy planning efforts).

Milestone 5.2.1: NGOE and NASEO initiate baseline assessment of state energy system

Milestone 5.2.2: Vision and principles are developed by NGOE and shared with NASEO

Deliverable 1: Inventory and summary of state challenges and opportunities

Deliverable 2: Baseline assessment report of state energy system

- 5.3 The NGOE shall convene the Stakeholder Group to provide roadmapping status updates and identify additional areas of interest, system interdependencies, gaps in research, best practices, lessons learned, and emerging trends. NASEO will assist as needed by developing meeting schedules, coordinating conference calls, drafting agendas, and preparing meeting minutes and summaries.

Milestone 5.3.1: Explore approaches and potential impacts of grid modernization and how it can be used to meet state energy goals and requirements

Deliverable 3: Stakeholder meeting/call notes and summaries

Deliverable 4: Briefing report on stakeholder group input

- 5.4 Based on workproducts produced in previous tasks, the NGOE shall assist NASEO in the completion of a state energy system grid modernization strategy (roadmap document), which will incorporate state inventories, state energy system baseline analyses, stakeholder input, grid modernization needs, system interdependencies, and recommend goals/targets for decision-makers to consider.

Milestone 5.4.1: Synthesize work products, draft goals/targets and critical strategies, and identify best practices, lessons learned, policy recommendations, and potential next steps (e.g., milestones, action planning, collaboration).

Deliverable 5: Report on state energy system grid modernization strategy

- 5.5 The NGOE shall work with NASEO to collect and share data, work products, and successes with stakeholders, including other states, on an as needed basis. Data and products from this grant will be used to aid NASEO's development of an E-MAP Roadmapping Toolkit.

Milestone 5.5.1: Participate in program update calls with NASEO staff and share best practices, lessons learned, and resources developed to assist NASEO in the development of an E-MAP Roadmapping Toolkit.

Deliverable 6: Regular calls with NASEO staff and call summaries

Deliverable 7: Quarterly technical progress reports

6. Technical Assistance

With the assistance of NASEO, the NGOE will develop a brief, anticipated technical assistance needs document that identifies potential data, analytical, policy, and other assistance that would facilitate the roadmapping process. This initial information will be shared with DOE-OE. Technical assistance needs will be communicated by the NGOE to NASEO – the primary technical assistance provider – for coordination with DOE-OE and other potential assistance providers.

7. Deliverables

1. Technical assistance and needs document
2. Inventory and summary of state challenges and opportunities
3. Baseline assessment report of state energy system
4. Stakeholder meetings/call notes and summaries
5. Briefing report on stakeholder group input
6. Report on state energy system grid modernization strategy
7. Regular calls with NASEO staff and call summaries
8. Quarterly technical progress reports

8. Reporting

It is NASEO's intention to publish subcontract report deliverables (see **Section 7**) containing publicly available information for distribution through the NASEO Fuels and Grid Integration Committee and on the internet through the NASEO website. All work products and deliverables will be shared with DOE-OE. Reports should not contain any confidential or proprietary information. The NGOE shall submit all report deliverables as electronic files in Microsoft Word format to:

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