



September 16, 2015

Debra A. Howland
Executive Director,
New Hampshire Public Utilities Commission
21 South Fruit St., Suite 10
Concord, NH 03301

RE: IR 15-296 Electric Distribution Utilities Investigation into Grid Modernization

Dear Executive Director Howland,

Siemens Smart Grid Services is pleased to provide these comments in response to the Commission's Order of Notice of July 30, 2015 in the above-captioned proceeding. Siemens is a global provider of products and services to electric utilities, including a wide range of hardware, software, and services related to grid modernization. Our comments are as follows (with six copies attached per Puc 203.02):

- **Scope:** we support the scope for "Grid Modernization" described in the Order of Notice, namely, "a broad topic that encompasses many elements, including replacement of aging infrastructure, outage management, the integration of distributed generation, and education of customers on how to manage their energy use for the benefit of the electric delivery system and to minimize energy costs ... (including) the incorporation of 'smart meters'."
- **Distributed Energy Resources (DER):** with respect to distributed generation, we would encourage the Commission to consider expanding the scope to cover DER generally, as well as to consider a broad definition of DER: "DER includes distributed generation, energy efficiency, demand response, energy storage, microgrids, and electric vehicle charging." This is consistent with the definition being considered and adopted in several other states.
- **Functionality:** over time and across geographies, we have gathered substantial input and research regarding the modernized, or "smart", grid and suggest the Commission consider the functional goals of Grid Modernization. From a societal perspective, a modernized grid could potentially 1) increase reliability through automated sensing and response to power fluctuations and outages, 2) achieve financial savings through an improved load factor and higher system efficiency, 3) enable wider adoption of DERs consistent with state policies, and 4) empower the demand side to improve electricity system efficiency.
- **Consumer Empowerment:** it appears that consumer empowerment regarding energy is among New Hampshire's goals. Our research has found that there are three key aspects to empowering electricity customers: 1) detailed, timely energy usage information for better understanding, 2) choices, including pricing options, that allow customer savings through response to price signals, and 3) supporting automation via standards and other solutions so that customers can achieve "set and forget" savings of energy and money. These may or may not all make sense for the state.
- **Incentives:** finally, it is important, to the extent the Commission determines utilities should take steps toward grid modernization, that utilities receive appropriate financial benefits consistent with the benefits delivered to consumers and society by the utilities.

Siemens would be pleased to provide additional information as desired.

Sincerely,

Chris King
Global Chief Regulatory Officer
Siemens Smart Grid Services