

## **Public power looks for reliability, cost-effectiveness in smart grid technologies, APPA says**

Smart grid technologies can play a valuable role "as long as they are proven and cost-effective," APPA said in July 12 comments to the Department of Energy. The role played by smart grid technology is going to be defined in part by the capabilities of the communications systems to maintain critical reliability, durability and speed in carrying essential smart grid data, APPA said in response to a DOE request for information on utilities' smart grid communications requirements. The association filed separate comments on data privacy issues.

APPA "does not underestimate the value that a smarter grid could potentially provide to our member utilities and their customers." However, "the best advances for the electric utility industries are centered on safety and reliability," APPA said.

Public power utilities "are looking at investments in any smart technology under a framework tailored to their specific needs and operating environments," APPA said. Compared to other industries, utilities "require that equipment exhibit durability under harsh and demanding environments for years into the future," APPA said. Because of public power's not-for-profit business model, "incurrence of costs without clear, defined and desired benefits is unacceptable." The determining factors in selecting a particular technology "ultimately come down to reliability and cost-effectiveness," APPA said.

Security is essential to any digital overlay and "no digital technology that can be compromised through a communications network should have direct digital control capability," APPA said. A communications systems also "should be operational at least 99.999% of the time in order to be useful for the provision of smart grid grade utility services," APPA said. "For utilities to use existing telecommunications commercial networks, these networks would have to increase dramatically their reliability."

DOE is better suited than the Federal Communications Commission to develop recommendations for accommodating smart grid technologies, due to the department's comprehensive understanding of electric utility operations and infrastructure, and the dynamics of meeting retail electric customer needs, APPA said.

Utilities are concerned the FCC might focus "on what services telecommunications companies can provide, as opposed to what services electric utilities actually need," APPA said. "Such a focus could in turn lead to undue emphasis on telecommunications-related changes to current utility infrastructure and the upgrades required to accommodate possible innovations in communications technology."

Some public power utilities face barriers to entry in providing advanced communications services to their consumers, due to state laws and regulations that either forbid them from providing such services or impose onerous conditions, APPA said. Such barriers to entry "run counter to the avowed goals of Congress and the administration to upgrade and increase broadband deployment nationwide, and to further the development of the 'smart grid,'" APPA said. — ROBERT VARELA

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