

THE NATIONAL ASSOCIATION OF STATE UTILITY CONSUMER ADVOCATES RESOLUTION 2009-03

SMART GRID PRINCIPLES OF THE NATIONAL ASSOCIATION OF STATE UTILITY CONSUMER ADVOCATES

Whereas, the National Association of State Utility Consumer Advocates (“NASUCA”) has an earnest and long-standing interest in issues and policies that affect electric consumers, including issues and policies that involve new technologies, reliability of electricity service, and rates; and

Whereas, NASUCA has adopted a resolution setting forth its principles on Advanced Electric Metering and Advanced Metering Infrastructure (“AMI”); and

Whereas, NASUCA recognizes that the U.S. Department of Energy defines “Smart Grid” as a broad range of solutions that optimize the energy value chain;¹ and

Whereas, Section 1306(d) of the Energy Independence and Security Act of 2007, Pub. L. No. 110-140, 121 Stat. 1492 (2007) (“EISA”) states:

The term “smart grid functions” means any of the following:

- (1) The ability to develop, store, send and receive digital information concerning electricity use, costs, prices, time of use, nature of use, storage, or other information relevant to device, grid, or utility operations, to or from or by means of the electric utility system, through one or a combination of devices and technologies.
- (2) The ability to develop, store, send and receive digital information concerning electricity use, costs, prices, time of use, nature of use, storage, or other information relevant to device, grid, or utility operations to or from a computer or other control device.
- (3) The ability to measure or monitor electricity use as a function of time of day, power quality characteristics such as voltage level, current, cycles per second, or source or type of generation and to store, synthesize or report that information by digital means.
- (4) The ability to sense and localize disruptions or change in power flows on the grid and communicate such information instantaneously and automatically for purposes of enabling automatic protective responses to sustain reliability and security of grid operations.

¹ Smart Grid: Enabler of the New Energy Economy, A Report of the Electricity Advisory Committee at p. 3 (Dec. 2008), <http://www.oe.energy.gov/DocumentsandMedia/final-smart-grid-report.pdf>.

- (5) The ability to detect, prevent, communicate with regard to, respond to, or recover from system security threats, including cyber-security threats and terrorism, using digital information, media, and devices.
- (6) The ability of any appliance or machine to respond to such signals, measurements, or communications automatically or in a manner programmed by its owner or operator without independent human interventions.
- (7) The ability to use digital information to operate functionalities on the electric utility grid that were previously electro-mechanical or manual.
- (8) The ability to use digital controls to manage and modify electricity demand, enable congestion management, assist in voltage control, provide operating reserves, and provide frequency regulation.
- (9) Such other functions as the Secretary (of Energy) may identify as being necessary or useful to the operation of a Smart Grid; and

Whereas, the American Recovery and Reinvestment Act of 2009 (“ARRA”) provides funds for expenses necessary for electricity delivery and energy reliability activities to modernize the electric grid, to include demand responsive equipment, enhance security and reliability of the energy infrastructure, energy storage research, development, demonstration and deployment, and facilitate recovery from disruptions to the energy supply, and for implementation of programs authorized under EISA; and

Whereas, the protection of ratepayers who will be asked to pay for Smart Grid investments is of paramount concern because Smart Grid technologies will affect ratepayers’ electric usage, rates, bills and equipment in their homes and businesses.

NOW THEREFORE, NASUCA RESOLVES that it supports the following Smart Grid principles:

- 1) A Smart Grid should be designed to improve the efficiency, reliability and security of the electric grid.
- 2) States, federal agencies, and utilities should conduct a detailed analysis of the costs and benefits of a proposed Smart Grid project through an evidentiary proceeding and should only go forward with the project if the benefits outweigh the costs. Such a proceeding would weigh all the tangible benefits leading to cost reductions from improved efficiencies accruing to the utility from Smart Grid deployment and would defray any Smart Grid investment costs against the identified utility tangible cost-reduction benefits when considering any utility cost-recovery. States should encourage utilities to seek ARRA funds to reduce the cost impact on ratepayers and consumers of any approved Smart Grid deployment.
- 3) States should evaluate utility cost recovery for Smart Grid projects using the same ratemaking principles and criteria used to consider any other rate base investments or expenses in order to protect the interests of the ratepayers.

- 4) States, federal agencies, and utilities should develop and employ rate mitigation measures to protect ratepayers from rate shock due to Smart Grid deployment.
- 5) The electric ratepayers should not bear the entire cost of planning and implementing the Smart Grid if the Smart Grid also provides benefits to other sectors. Cost recovery of Smart Grid investments should be based on a proportional share of sector benefits. Those sectors may include, but are not limited to, transportation, telecommunications, and information technology industries.
- 6) An integrated approach to Smart Grid design includes adherence to FERC standards; optimization of regional and local planning to reduce rates, increase reliability and integrate renewable resources; and consideration of the interoperability with technology in neighboring utility service territories or grid systems and with existing or potential customer-side technology.
- 7) Smart Grid technology is in many cases new and evolving and the FERC and states should take steps to ensure that the specific set of technologies associated with a utility's proposed installation is in fact capable of operation as proposed, and to insure against the installation of technology that is soon outdated or stranded. Such assurances could take the form of placing the risk of loss associated with stranded costs, buyers' remorse or the like on shareholders.
- 8) Smart Grid design should prioritize a secure communications network with appropriate safeguards to prevent security breaches and reliability deficiencies.
- 9) Any implementation of a Smart Grid project should meet Federal and state requirements for cyber security and protect the privacy of customer usage information, both with respect to usage data derived by the utility for customer billing and information obtained concerning a customer's specific usage of electricity.
- 10) Consumption information obtained should be used to properly and accurately reflect demand side data with respect to electric energy and capacity in order to improve load forecast capabilities.
- 11) Smart Grid should be used to enable and inform the development of programs and policies that will lead to reduced costs for consumers. For example, Smart Grid should assist in the identification of portions of the grid that are nearing capacity in order for steps to be taken to reduce demand on that portion.

- 12) In conjunction with the installation of Smart Grid technology on the local level, local distribution utilities must maintain and operate their infrastructure system in a safe, adequate, and reliable manner.
- 13) That States and utilities should not be permitted to use Smart Grid deployment as a means for reducing consumer protections with regard to electric service in general and termination procedures in particular.
- 14) That the implementation of Smart Grid should not lead to mandatory dynamic pricing of electricity usage for residential and small commercial customers.

BE IT FURTHER RESOLVED that the Federal Energy Regulatory Commission should refrain from granting incentive returns for Smart Grid infrastructure, refrain from requiring the early replacement of otherwise useful transmission or distribution plant and refrain from making decisions that serve to restrict or otherwise impinge upon the ratemaking authority traditionally held by state regulatory commissions.

BE IT FURTHER RESOLVED that NASUCA authorizes its Executive Committee to develop specific positions and to take appropriate actions consistent with the terms of this resolution. The Executive Committee shall advise the membership of any proposed action prior to taking action if possible. In any event the Executive Committee shall notify the membership of any action pursuant to this resolution.

**Approved by NASUCA
Boston, MA**

June 30, 2009

**Submitted by:
NASUCA Electric Committee**

June 29, 2009

**Abstained:
Indiana**