MEMORANDUM OF UNDERSTANDING Between the U.S. DEPARTMENT OF ENERGY and THE GRIDWISETM ALLIANCE

This Memorandum of Understanding ("MOU") is entered into this 14th day of September, 2016, by and between the United States Department of Energy ("DOE") and The GridWiseTM Alliance ("GridWise").

Purpose and Authority.

The purpose of this MOU is to provide a coordinated framework for DOE and GridWise (each a "Party" and, collectively, the "Parties") to work together. The goal of these collaborative efforts will be to create a more efficient, affordable electricity transmission and distribution grid that uses new energy and information technologies and that enhances national security. The Department of Energy enters into this MOU under the authority of section 646 of the Department of Energy Organization Act (Pub. L. No. 95-91, as amended; 42 U.S.C. § 7256).

Background.

DOE leads the Federal government's efforts to modernize the electric grid. It is actively developing policies, tools, and technologies to create a smarter, cleaner, and more reliable grid throughout the United States.

GridWise is a not-for-profit corporation whose members come from a wide range of organizations across the electric utility industry. Like DOE, these organizations are committed to modernizing the electricity grid.

Both DOE and GridWise intend to make the electric grid in the United States smarter, more reliable, more secure, and cleaner. Both also hope to make their respective programs more effective in areas of mutual interest. To that end, they have contemplated several objectives. These development goals include (1) leveraging advancements in information and communication technologies, as well as data analytics and control technologies, to transform and modernize energy infrastructure; (2) creating value for all participants in generating, delivering and using electricity by developing and deploying innovative and highly impactful solutions; (3) enhancing electricity grid security and reliability through an information-rich power grid that uses assets better and allows high clean energy penetration; (4) empowering consumers to manage their energy consumption better, in turn benefiting from their participation in optimizing power grid operation; and (5) promoting U.S. thought leadership and technology innovation globally.

Responsibilities of the Parties.

A. DOE:

The Parties agree that DOE shall provide expertise to help GridWise identify mutually beneficial activities to pursue in partnership. Before any action, DOE may review contemplated activities to ensure that they are prudent and consistent with DOE's mission, scope, and resources.

B. GridWise:

The Parties agree that GridWise, working with DOE, shall identify activities and take actions that will advance the joint vision this MOU describes.

The goals of the identified activities will include (1) establishing fora for timely and open exchange of information on current and planned activities relevant to the vision described above, involving a broad array of stakeholders; (2) establishing open working groups on key topics affecting development and implementation of the vision described above; (3) establishing non-exclusive vehicles for engaging a broad array of stakeholders, including the utility industry, regulatory organizations, energy, telecommunications and information technology vendors, consumer groups, government and non-governmental organizations; (4) publishing materials that are critical to broad stakeholder understanding of key technical and policy issues; (5) leading U.S. participation in international forums to promote U.S. leadership and technology innovation around the world; (6) identifying and promoting best practices across the industry related to the vision above; (7) supporting technology innovation through Research, Development and Demonstration programs that effectively accelerate the deployment of solutions to support the vision described above.

IV. Points of Contact.

The points of contact responsible for administration of this Agreement are:

DOE:

Michael Pesin, Deputy Assistant Secretary, Office of Electricity

and Energy Reliability

GridWise:

Steve Hauser, CEO, The GridWise Alliance

V. Terms and Termination.

Nothing in this MOU shall give either Party the right to make commitments of any kind for or on behalf of the other Party without that Party's prior written consent.

This MOU shall remain in effect until terminated by either Party upon 60 days written notice to the other Party.

This MOU shall take effect when signed by both Parties and shall terminate at midnight on October 1, 2021, unless extended by mutual written agreement of the Parties.

This MOU in no way restricts either of the Parties from participating in any activity with other public or private agencies, organizations or individuals, or from entering into agreements with other parties to achieve its mission.

This MOU is neither a fiscal nor a funds obligation document. Nothing in this MOU authorizes or is intended to obligate the Parties to expend, exchange, or reimburse funds, services, or supplies, or transfer or receive anything of value.

This MOU is strictly for internal management purposes for each of the Parties. It is not legally enforceable and shall not be construed to create any legal obligation on the part of either Party. This Agreement shall not be construed to provide a private right or cause of action for or by any person or entity.

In fulfilling their obligations under this MOU, the Parties may exchange information generated by themselves or by others. Such information received by DOE will be kept confidential and not disclosed to the public to the extent that it is determined to qualify for exemption from disclosure under the Freedom of Information Act (FOIA), the DOE regulations implementing the FOIA, and the Trade Secrets Act, as amended.

If DOE receives a FOIA request for any confidential information furnished to DOE by GridWise, DOE will, as far as applicable law and regulations require, consult with GridWise before determining whether the information is exempt from disclosure.

This MOU is subject to, and will be carried out in compliance with, all applicable laws, regulations and other legal requirements.

VI. Modifications.

This MOU may be modified by mutually acceptable written amendment duly executed by authorized officials of DOE and GridWise.

VII. <u>Entire Agreement</u>.

This MOU constitutes the full and final understanding of both Parties on all subjects contained within it. All prior negotiations, understandings, and agreements are merged into this Agreement.

VIII. Execution.

The Parties have caused this MOU to be executed in duplicate originals by their duly authorized representatives. The MOU takes effect on the date of the last signature below.

For the U.S. Department of Energy:

Liz Dalton Principal Deputy Assistant Secretary

Office of Electricity Delivery and Energy Reliability

For The GridWiseTM Alliance:

Scott Prochazka

Board Chairman

Date