

investments and grid innovation, and we look forward to working with DOE in support of implementing the GRIP generally.

UTC is an international association for the telecom and information technology interests of utilities and other critical infrastructure industries.² Founded in 1948, UTC advocates for policies that support and protect critical infrastructure communications and IT systems that utilities use to ensure the safe, reliable and secure delivery of essential energy and water services efficiently, affordably and effectively. UTC's perspective on the RFI is based on UTC's focus on utilities' use of telecommunications and information technologies to support the safe, reliable and secure delivery of essential energy services to the public at large. These telecommunications and IT systems underpin utility infrastructure and support operational resilience, enhanced monitoring, control and intelligence (i.e., smart grid), and innovation. As DOE implements the GRIP, UTC urges the DOE to ensure access to funding for communications and IT networks that support utility operations and infrastructure resilience, smart grid, and grid innovation.

Utilities are increasingly implementing advanced distributed automation systems to remotely monitor and control their operations, and these DA systems rely on communications and IT to function safely, reliably and securely. Similarly, utilities are seeing an increasing amount of distributed energy resources, and these DERs rely on communications and IT to effectively manage the flow of electricity over transmission and distribution infrastructure. Likewise, utilities are faced with an increasing number of electric vehicles and charging these EVs also relies on communications and IT for coordination and synchronization to ensure system reliability, efficiency and security. Of course, utilities are under increasing challenges from cybersecurity threats, and utilities need enhanced communications and IT systems to protect against a variety of increasingly sophisticated attacks. Finally, utilities are deploying

² See www.utc.org for more information about the Utilities Technology Council.

fiber and wireless communications networks to support and provide access to public communications services for consumers, often in areas where there are no commercial communications service providers, and this fiber and wireless infrastructure serves multiple purposes, including voice and data communications for utility operations as well.

As DOE recognizes, these communications networks specifically and utility infrastructure generally are under increasing threats from hurricanes and other natural catastrophic events, but they're also under increasing attack from physical and cyber intrusions, as well. These communications and IT systems are critical for utilities in the aftermath of these catastrophic events and they need to be robust and resilient to prevent cyber and physical attacks. They can also help to avoid wildfires sparked by downed power lines. Unfortunately, these communications and IT systems often get overlooked or overshadowed by the applications they help to support and the efforts underway to restore power. Yet, they are incredibly important during emergency response, including coordinating mutual aid in the aftermath of catastrophic events such as hurricanes, tornados and wildfires that affect large geographic areas and hundreds or thousands of workers from different utilities rendering mutual assistance. These communications systems are designed, built and maintained to high standards for reliability and resilience, mainly to ensure that utilities are able to communicate during power restoration when commercial communications systems are usually out of service and/or otherwise unavailable. As such, the DOE should ensure that utilities are able to access funding through GRIP for investments in communications and IT systems that support grid resilience. In that regard, UTC applauds the DOE for including among eligible uses and technical approaches for grid resilience grants, certain "monitoring and control equipment, utility pole management, adaptive protection systems, advanced modeling technologies, and hardening of power lines, facilities, substations, or other systems"³ – all of which

³ RFI at 7.

involve the use of communications and IT systems and which therefore should also be eligible for grid resilience grants.

Similarly, smart grid relies on communications and IT systems. Advanced metering infrastructure needs wireless and wireline communications to enable their functionality, and many utilities use their own private communications networks to operate their AMI systems. Advanced Supervisory Control and Data Acquisition (SCADA) and Distribution Automation (DA) systems that utilities use to monitor and control the flow of electricity and improve electric efficiency and reliability also depend on wireless and wireline communications and IT systems to enable their functionality, and some of the applications they support require extremely low levels of latency and high reliability to isolate faults on the grid and reroute power. Synchrophasors that utilities use to measure power quality also rely on communications and IT systems to collect data on a more granular basis in order to improve energy efficiency and reliability. In short, these and other smart grid applications are enabled by communications and IT technologies, and the DOE should ensure that access to funding for smart grid investments includes communications and IT by utilities. In this regard, we applaud the DOE for including among eligible uses and technical approaches for smart grid grants, “[e]nhancing secure communication and data flow between distribution components, through investments in optical ground wire, dark fiber, operational fiber, and wireless broadband communications networks.”⁴

Communications and IT is also key to demonstrating innovative approaches for transmission, storage, and distribution infrastructure to harden and enhance resilience and reliability and to enhance regional grid resilience, implemented through States by public and rural electric cooperative entities on a cost-shared basis. As DOE provides funding through the GRIP for states, local governments, Tribes, and public utility commissions to facilitate coordination and collaboration with electric sector owners

⁴ RFI at 12 (emphasis added).

and operators on grid innovation, UTC respectfully urges the DOE to allow applicants to request funding for communications and IT investments that are used for these demonstration projects. In this regard, we applaud the DOE for recognizing certain eligible uses and technical approaches include “advanced transmission technologies, *coupled with advanced computational and advanced dynamic situational awareness,*” as well as “*monitoring and control technologies,* that can provide improved resilience and *extend grid visibility & situational awareness* across the entire electric delivery system by *providing real-time situational awareness* across the system.”⁵

UTC supports DOE broadly defining eligible entities for each of the respective GRIP grants for resilience, smart grid and grid innovation. In this regard, DOE should clarify that holding companies are eligible applicants as well as “electric grid operators, electricity generators, electricity storage operators, transmission owners or operators, distribution providers, fuel suppliers, and other relevant entities, as determined by the Secretary.”⁶ Similarly, DOE should clarify that multi-jurisdictional entities may seek funding, and they are not bound to a specific jurisdiction. DOE also should clarify that an eligible entity may seek grid resilience grants and smart grid investment grants in the same year. Finally, DOE should permit states to submit multiple concept papers and full applications for smart grid grants and grid innovation grants, so they may have the flexibility to propose partnerships with different utilities for different projects. These clarifications will eliminate potential barriers that could unnecessarily restrict participation in the GRIP and/or limit the extent to which utilities are able to participate in the GRIP.

In a similar way, UTC urges DOE to clarify that funding may be used to accelerate the timeframe of a planned project or increase the scope of a planned project. While section 40101(c)(1)(A) states that DOE may make a grant to an eligible entity to carry out activities that “are supplemental to existing hardening efforts of the eligible entity planned for any given year,” as a practical matter funding may be

⁵ RFI at 18 (emphasis added).

⁶ RFI at 7, *citing* 42 USC §18711(a)(2).

used to support investments that are “supplemental to existing efforts”.⁷ Moreover, this funding will be incredibly important for accelerating a planned project, including for example the deployment of communications and IT systems to support existing efforts to promote resilience to withstand and respond to hurricanes, wildfires and other natural catastrophic events. Therefore, UTC urges the DOE to ensure that funding be available to support investments in communications and IT to supplement existing efforts in grid resilience, as well as smart grid and grid innovation. In any event, the DOE should not limit smart grid and grid innovation grants to investments that are supplemental to existing efforts.⁸

UTC also supports providing applicants a minimum of 60 days to develop concept papers and a minimum of 90 days to develop full applications. This will provide sufficient time for utilities to prepare their concept papers and account for various factors including intervening holidays and internal approval necessary to file the concept papers as well as the practical reality that utilities may be submitting multiple applications which will compound the amount of time necessary to complete and file their concept papers. This will also provide sufficient time after DOE approval of their concept papers to develop the full application, accounting for the significant filing requirements such as a Technical Volume, Letters of Commitment, Budget Justification Workbook, a Community Benefits Plan and a Resilience Report that must accompany the full application.

Finally, UTC urges DOE to provide flexibility for entities in terms of the period of performance and the Build America Buy America provisions. Supply chain is a real problem and it is likely to get worse before it gets better. While efforts are underway to reduce our dependence on foreign materials and equipment, as a practical matter the lead times for certain types of materials and equipment,

⁷ Draft Financial Assistance Funding Opportunity Announcement, Department of Energy, Funding Opportunity Announcement (FOA) Number: DE-FOA-0002740 (rel. Aug. 30, 2022)(hereinafter Draft FOA).

⁸ See section 40103(b) defining the scope of grid innovation grants and section 40107 defining the scope of smart grid grants, which do not limit funding to activities that are supplemental to existing efforts, distinct from section 40101(c)(1)(A) which are limited under section 40101(c)(1)(A).

particularly communications and technology are particularly long. So the 60-month period of performance for grid resilience grants and smart grid investment grants, as well as the 60-90 month period of performance for the grid innovation grants are likely going to run headlong into the supply chain issue. In that context, the National Telecommunication and Information Administration has already requested waivers of the Build America Buy America provisions for two of its BIL grant programs in recognition that supply chain is going to make it impractical for many of the potential grant awardees to meet their build out requirements. Accordingly, the DOE should follow a similar approach and provide flexibility in terms of both the period of performance and the Build America Buy America requirements.

Respectfully submitted,

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