Resolution Recommending State Commissions Act to Adopt and Implement Distributed Energy Resource Standard IEEE 1547-2018

Whereas State commissions have statutory responsibility for regulating utilities that provide energy services;

Whereas State commissions have a statutory obligation to ensure that the electric utilities they regulate provide safe and reliable service at just and reasonable rates;

Whereas many States are experiencing the installation and interconnection of distributed energy resources ("DERs"), as sources of electric power that are connected to, operate in parallel with, and are capable of exporting power to local distribution systems, including, but not limited to, distributed solar photovoltaic generation and distributed energy storage;

Whereas many States recognize that DER, if interconnected and operated in a safe and reliable manner with uniform standards across multiple jurisdictions, can offer economic, reliability, resilience, and environmental benefits to consumers, communities and utilities;

Whereas all States benefit from timely adoption of rigorous, clear, up-to-date standards for safe and reliable interconnection, integration and parallel operation of DERs;

Whereas in April 2018, the Institute for Electrical and Electronics Engineers ("IEEE") published a significantly updated *IEEE Standard 1547TM --2018 for Interconnection and Interoperability of DERs and Associated Electric Power Systems Interfaces* ("IEEE 1547-2018"), which is a voluntary, nationally applicable standard that will transform how DERs interact with and function on the electric distribution system;

Whereas IEEE 1547-2018 is technology neutral and specifies the performance and functional technical capability requirements needed to ensure technically sound interconnections, as well as a number of necessary improvements for distribution and bulk power system reliability;

Whereas IEEE 1547-2018 requires DER to be capable of performing specific grid support functions related to voltage, frequency, communications, and controls to ensure that increasing levels of DERs are reliable at both the distribution and bulk power system levels, and can be visible to grid operators;

Whereas DER equipment compliant with IEEE 1547-2018 is anticipated to be available in the 2021 timeframe; reliable deployment of this equipment requires consideration and coordination by State regulators and utilities as outlined in the standard;

Whereas IEEE 1547-2018 highlights responsibilities, including determination of performance categories, of State regulators and other authorities governing interconnection requirements;

Whereas delaying implementation of IEEE 1547-2018 could result in new DERs being connected to the grid using legacy technical requirements and standards that could prevail for the duration of the DER's lifetime;

Whereas significant logistical and legal barriers exist to modifying DER interconnection requirements post-installation, such that it is preferable to apply the desired DER configuration at the time of initial DER installation;

Whereas the North American Electric Reliability Corporation ("NERC"), in the draft Reliability Guideline, "Bulk Power System Reliability Perspectives on the Adoption of IEEE 1547-2018" encourages State regulators to "support early implementation of IEEE 1547-2018 and begin engaging with necessary stakeholders;"

Whereas adoption and implementation of IEEE 1547-2018 requires action by State regulators and utilities to integrate the standard into interconnection tariffs, such as addressing issues related to technology, location, settings of utility-owned protective elements, among other factors;

Whereas successful State implementation of the updated IEEE 1547-2018 will benefit from stakeholder engagement, including electric distribution system operators, DER customers and developers, and bulk power system operators, and identifying and engaging such subject matter experts may take significant lead-time;

Whereas NARUC, IEEE, Electric Power Research Institute, National Renewable Energy Laboratory, Regulatory Assistance Project, Interstate Renewable Energy Council, NERC, National Rural Electric Cooperative Association and others have compiled excellent resources to support State commissions on IEEE 1547-2018 implementation based on evidence and research;

Whereas IEEE and nationally recognized testing laboratories are working on testing procedures (IEEE 1547.1) and certification (UL 1741) based on IEEE 1547-2018 with the anticipation of widespread availability of certified equipment in 2021; now, therefore be it

Resolved that the Board of Directors of the National Association of Regulatory Utility Commissioners, convened at its 2020 Winter Policy Summit in Washington, DC, recommend State commissions, consistent with the practices and procedures of that State, convene proceedings that engage stakeholders soon; utilize existing research and experience and make evidence-based decisions to adopt the current IEEE 1547; and align implementation of the standard with the availability of certified equipment.

Sponsored by the Committee on Electricity
Adopted by the Board of Directors, on February 12, 2020