

In Support of a Federal Clean Energy Standard That Reduces Greenhouse Gas Emissions to Address Climate Change While Keeping Electricity Affordable and Reliable

Public power utilities across the country continue to reduce their greenhouse gas (GHG) emissions through a variety of means, such as fuel switching to lower-emitting resources, investments in renewable and other non-emitting resources, the integration of distributed energy resources, and a host of energy efficiency measures. They also have been reducing GHG emissions by facilitating the electrification of the transportation sector in their communities, including the deployment of charging infrastructure, offering rebates for electric vehicles (EVs), and developing special rate structures to incent off-peak charging, among other things. In addition, some public power utilities are reducing GHG emissions by promoting the electrification of water and space heating, as well as appliances. As new technologies become commercially available and additional investments are made in clean energy technologies, public power utilities will further reduce their GHG emissions.

The American Public Power Association (APPA) and its members are committed to addressing climate change. All sectors, as well as the global community, will need to do their part to reduce GHG emissions to address climate change. APPA recognizes that different policies may be needed to reduce GHG emissions from each geographic region and each industry sector of the U.S. economy. Given that electricity is the lifeblood of the nation's economic and national security, as well as vital to the health and safety of all Americans, climate legislation must include policies that ensure the affordability and reliability of electricity for all customers. It also must set a realistic path for emissions reductions that provides sufficient time for the development and broad commercialization of new clean energy technologies and the construction of clean resources, transmission, and other electric infrastructure. In addition, it will need to provide sufficient time for strategic planning and coordinated investments sequenced over time to facilitate the development of a more flexible grid that will be needed for the clean energy transition.

NOW, THEREFORE, BE IT RESOLVED: That the American Public Power Association (APPA) supports regulatory certainty through congressional enactment of a federal clean energy standard (CES) to reduce greenhouse (GHG) emissions from the electric sector that protects affordability and reliability by meeting the tenets outlined in this resolution; and

BE IT FURTHER RESOLVED: That legislation to create a federal CES should do all the following:

- Establish a target of getting to net-zero emissions by 2050 to provide public power utilities with sufficient time to site, permit, and construct clean energy and transmission projects and for the

commercial development of needed technologies, such as long-term energy storage, green hydrogen, advanced nuclear reactors, and carbon capture utilization and storage (CCUS).

- Be technology neutral, based on the level of GHG emissions generated by each technology and not on other factors.
- Set multiannual incremental increases in clean electricity goals to minimize the cost of compliance. Retiring, retrofitting, or retooling large fossil fuel-fired power plants will significantly reduce emissions. This transition will not occur in small, annual increments, but rather will happen in large blocks with no emission reductions in some years and significant reductions in others.
- Include safety valves for reliability, affordability, and technology administered primarily by the Department of Energy (DOE) in consultation with the Environmental Protection Agency (EPA) and other federal agencies:
 - A reliability safety valve is needed to ensure that as electric utilities increase their percentage of clean electricity resources, grid reliability is not compromised. Reliable and affordable electricity is essential to the nation's economic and national security, as well as vital to the health and safety of all Americans.
 - States and regional transmission organizations/independent system operators (RTOs) should have an important role in assessing the reliability impacts of increasing reliance on intermittent resources. The Federal Energy Regulatory Commission, North American Electric Reliability Corporation, DOE, and other federal entities should be obligated under a federal CES to ensure continued reliability.
 - A cap on rate increases is needed that would temporarily pause a compliance obligation if retail electricity rates (including the cost of generation, transmission, and delivery to retail customers) go above the cost of inflation due to incremental costs specific to CES compliance. This would help prevent significant rate increases for customers, especially for economically disadvantaged individuals and families.
 - It should be designed in a manner that ensures electric utilities that need a cost cap can use it to contain costs and protect electric customers.
 - It must also consider that electric utilities in many states are subject to state clean energy requirements, some of which are additional to, and not overlapping with, the requirements of a federal CES. As such, a federal CES should seek to mitigate this redundancy by giving electric utilities credit for state compliance, or

- 66 otherwise providing alternative compliance mechanisms that incorporate state (or
67 local) mandates.
- 68 ○ A mechanism to temporarily pause CES targets if technology does not develop to
69 required commercial scale to make deep emissions reductions feasible, reliable, and
70 economic.
 - 71 • Create a zero-emission electricity credit (ZEEC) trading market only open to electric utilities and
72 generators to help electric utilities comply with the CES. Under such a market, cost-containment
73 measures are needed to ensure ZEECs do not get too expensive and are not subject to market
74 manipulation.
 - 75 ○ Such a trading program must allow for the long-term banking of ZEECs for a minimum
76 of five years. Generation projects coming online or purchase power agreements by
77 electric utilities are very unlikely to exactly match their annual compliance obligations.
78 Increasing the period in which an electric utility can bank ZEECs will allow for more
79 reasonable compliance approaches with a CES by allowing it to hold onto its surplus
80 ZEECs for those years where it may be short of ZEECs.
 - 81 • ZEECs should transfer to the purchasing electric utility with an existing agreement that provides
82 for the transfer of renewable energy credits or other environmental attributes from the generator.
83 Similarly, federal power customers should receive ZEECs associated with purchases of federal
84 hydropower marketed by any of the federal Power Marketing Administrations or Tennessee
85 Valley Authority.
 - 86 • Allow electric utilities that are subject to a state CES that is more stringent than a federal CES to
87 monetize their ZEECs.
 - 88 • Allow electric utilities subject to clean electricity compliance obligations to receive ZEECs for
89 investments they make that reduce GHG emissions outside the electric sector.
 - 90 • Make public power utilities eligible for all energy-related tax credits, both new and existing
91 production tax credits and investment tax credits, as direct pay refundable tax credits.
 - 92 • Require the federal government to make massive investments in technology development with an
93 emphasis on dispatchable, GHG-free, or carbon-sequestered generation, such as advanced nuclear
94 reactors, hydrogen, long-duration energy storage, pumped storage hydropower, predictive sensor
95 technologies to optimize hydropower, CCUS, marine energy, etc.
 - 96 • As electric utilities increase their percentage of zero-emitting resources, a CES must ensure that
97 dispatchable resources of all types are available to serve system loads until such time that grid-
98 scale energy storage technology, including long-duration storage, is fully commercially
99 developed, widely available, and cost effective to ensure grid reliability and rate affordability.

- It should not include mandatory participation in an organized market, such as a regional transmission organization, for those entities not already participating in an organized market.
- Ensure that sufficient, cost-effective transmission is available to deliver clean electricity needed to meet a federal CES compliance obligation.
- Require the federal government to expedite the federal siting and permitting process to ensure the timely review and approval of clean energy and transmission projects needed by electric utilities to reduce GHG emissions.
- Provide cash assistance to public power utilities that own fossil-fuel fired electrical generating units that become stranded assets due to their premature retirement from compliance with a federal CES to prevent significant rate increases to customers.
 - Such assistance should be available to retire existing debt and cover the costs for the premature decommissioning of fossil fuel-fired units due to compliance with a federal CES.
- Fund grants through DOE to public power utilities for investments in grid technologies that enable available resources to meet demand, including demand response management, and technologies needed to integrate distributed energy resources, as well as electric vehicles and smart sensors.
- Fund grants through DOE and the Department of Transportation to public power utilities for electrification of transportation (terrestrial and maritime) infrastructure and emerging technologies, including hydrogen and other lower-emission transportation fuels produced by electricity.
- Allow alternative compliance payments to be made in lieu of meeting CES targets and have such funds be reinvested directly back into the communities served by electric utilities subject to clean electricity compliance obligations for activities they undertake that reduce GHG emissions.
- Establish five-year check-ins by Congress with input from DOE and EPA, as well as other federal agencies and regulated entities, on how the CES is being implemented. The review should look at progress being made, any obstacles faced by electric utilities in achieving their compliance obligations, and the costs of compliance, as well as the ability to meet targets given the evolving technologies.
- Indemnify facilities using CCUS technology and their associated sequestration activities to ensure CCUS is a viable option for reducing GHG emissions by electric utilities that own fossil fuel-fired units. It must also ensure state policies do not result in units with CCUS technology becoming stranded assets.

- Direct the National Laboratories to partner with electric utilities and technology companies on the development and deployment of affordable technologies needed to achieve net-zero emissions by the power sector.
- Recognize all forms of hydropower as a zero-emitting resource and its importance in providing grid flexibility through dispatchability and other attributes that work in support of intermittent energy resources.
- Recognize the importance of nuclear power as a reliable, dispatchable, high baseload capacity form of non-emitting generation. Existing nuclear power plants need to be preserved and new nuclear technologies need to be developed to provide reliability and further reduce GHG emissions from the power sector.
- Recognize all forms of biomass generation as renewable resources and allow for their continued use by public power utilities in meeting their compliance obligations.
- Allow electric utilities to use energy efficiency as a tool for compliance with a federal CES, but not include energy efficiency mandates on electric utilities, such as a federal energy efficiency standard, which would reduce the flexibility available to public power utilities as they transition to clean energy resources.
- Provide public power utilities and their customers with federal incentives for energy efficiency, including rebates, grants, tax credits, and programs targeted to low-or fixed income households.
- Consider the economic impacts to disadvantaged individuals and communities. Rate increases disproportionately harm the poor. A federal CES must balance targets and timelines with efficient and cost-effective emissions reductions to protect economically disadvantaged individuals and communities.

Adopted at the Legislative & Resolutions Committee Meeting

March 1, 2022

Sunsets in March 2030