



January
2026

IBEW POLICY BRIEF

Emerging Energy Technologies and Workforce Excellence

The United States stands at the crossroads of an energy revolution. Emerging technologies such as carbon capture, utilization, and storage (CCUS), advanced nuclear power, and grid-enhancing technologies (GETs) are essential for energy reliability, economic prosperity, and the nation's climate goals. These three innovative technologies are not only critical for addressing the challenges of renewable energy integration but also ensuring the longevity of key industries that provide high-quality jobs.

CCUS technology captures carbon emissions from power plants and industrial facilities, safely storing them underground or repurposing them for commercial use. This allows traditional energy sources like coal and natural gas to remain part of the energy mix while significantly reducing emissions. For communities that rely on fossil fuel-based industries, CCUS helps preserve jobs and stabilize local economies.

Advanced nuclear technology is also key to the energy revolution, providing reliable, zero-carbon power around the clock. Unlike intermittent sources like wind and solar, this provides a critical baseload energy. In this way, nuclear energy ensures grid stability, supports American manufacturing, and strengthens energy security. By extending the lifespan of existing nuclear reactors and investing in next-generation designs, the United States can continue to lead in energy innovation while creating thousands of well-paying, unionized jobs.

Grid-enhancing technology is another element at the core of a responsible energy transition. A powerful and efficient grid is essential for integrating renewable energy sources, ensuring reliability, and meeting growing demands for electricity. In addition to the necessary work of building out new transmission lines, upgrading existing lines and improving their efficiency will also facilitate the expansion of energy generation and create more opportunities for skilled electrical workers.

Labor standards, such as prevailing wage and apprenticeship utilization requirements, as well as OSHA safety training requirements, are central to ensuring all these projects are completed safely, efficiently, and with a commitment to worker protections. Through its apprenticeship programs and safety initiatives, the IBEW meets these goals, providing employers with a reliable and highly capable workforce equipped with the skills necessary for these transformative technologies.

PRIORITIES

- **Enforce Davis–Bacon prevailing wage standards:** Prevailing wage laws ensure fair compensation, promote ethical competition, and create a level playing field for contractors who prioritize quality, safety, and expertise.
- **Expand apprenticeship utilization requirements on CCUS, advanced nuclear, and GETs:** Requiring registered apprenticeships promotes workforce development, ensuring a pipeline of skilled workers able to execute complex energy projects with precision and efficiency.
- **Mandate OSHA-certified safety training:** Comprehensive safety training reduces accidents, improves morale, and increases productivity while minimizing the costs and delays associated with workplace injuries.

- **Leverage Right-of-First-Refusal (ROFR) policies:** ROFR policies offer incumbent utilities the opportunity to build transmission projects first. These policies prioritize unionized utilities for critical projects, safeguarding labor standards and ensuring safe and efficient energy infrastructure development.
- **Tie incentives to labor standards compliance:** Tying labor standards to federal funding maximizes the economic benefit of energy projects by promoting fair competition, skilled labor, safe worksites, and community investment.

TALKING POINTS

“A modern grid is essential for the energy demands of the future.”

Upgrading transmission infrastructure is urgent for energy integration, energy independence, and skyrocketing energy demand.

“Nuclear’s round-the-clock availability not only stabilizes the grid and complements renewables like wind and solar, it also supports good union jobs.”

Investing in nuclear’s uniquely zero-carbon capacity is how the United States remains at the forefront of this critical industry.

“We do not have to choose between reducing emissions and preserving good jobs.”

Investing in carbon capture allows fossil fuel plants to contribute to an all-of-the-above energy solution while preserving high-skill, long-term jobs.

“Fair wages support fair competition, especially in new industries.”

Davis–Bacon prevailing wage laws ensure workers are fairly compensated while allowing contractors to compete based on skill and efficiency. This is key to the longevity of these newer sectors.

“Strong safety standards are the cornerstone of smart business.”

Mandating OSHA training, especially in rapidly evolving sectors, is critical to protecting workers, reducing liability, and increasing productivity.

“Current energy challenges can only be met with what unions provide: experience, efficiency, and excellence.”

Through its gold standard apprenticeship programs, the IBEW provides employers with a steady supply of reliable, highly skilled workers prepared for the energy transition.