



# IBEW Policy Brief

January 2025

## 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 modernized transmission systems 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 for 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 is a lifeline that preserves jobs and stabilizes local economies.

Advanced nuclear technology is also key, providing reliable, zero-carbon power around the clock. This provides a critical baseload energy unlike sources like wind and solar that are intermittent. 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.

Modernizing transmission infrastructure 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 electricity demands. Building new transmission lines not only facilitates the expansion of energy sources but also creates opportunities for skilled workers to contribute to critical infrastructure projects, driving local economic growth.

Labor standards, such as Davis–Bacon prevailing wage laws, apprenticeship utilization, and OSHA-certified safety training, are central to ensuring all these projects are completed safely, quickly, and with a commitment to pro-worker protections. Through its apprenticeship programs and safety initiatives, the IBEW equips workers with the skills to meet the demands of these transformative projects, providing employers with a reliable and highly capable workforce.

### PRIORITIES

- **Enforce Davis–Bacon prevailing wage standards:** Prevailing wage laws ensure fair compensation, promote ethical competition, and create a level playing field where contractors prioritize quality, safety, and expertise.
- **Expand apprenticeship utilization requirements:** Requiring registered apprenticeships fosters workforce development, ensuring a pipeline of skilled workers who can 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 reliable, 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 FOR ADVOCACY

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

Upgrading transmission infrastructure is urgent for energy integration and meeting growing electricity demands.

### **“Nuclear’s round-the-clock availability not only stabilizes the grid and other 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 much-needed long-term jobs.

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

Davis–Bacon prevailing wage laws ensure workers are fairly compensated while enabling 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 innovating 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 program, the IBEW provides employers with a steady supply of reliable, highly skilled workers prepared for the energy transition.