



IEEE-USA POLICY POSITION STATEMENT

2014 NATIONAL ENERGY POLICY RECOMMENDATIONS

ENERGY underlies three converging challenges facing the United States today: economic prosperity, security, and the environment. Electricity continues to be a key enabler in addressing these challenges, but it has come under substantial pressures to respond to environmental concerns and accommodate the rapid evolution of new generation sources and technology options available to its users. The major challenge is to develop solutions which take into account changing energy supply markets as well as financial resource availability. To ensure that we can reliably and securely meet our growing energy needs, we must:

- Promote efficiency in the conversion, delivery and use of energy and increase emphasis on the development and implementation of demand response options.
- Radically transform the transportation sector by diversifying its energy sources to reduce our dependency on oil, increase the security of our transportation system and reduce emissions. Most important options for meeting these objectives are electrified transportation and liquid fuel substitutes.
- Reduce the environmental footprint of the electric power supply by expanding use of renewable energy sources, revitalizing nuclear power generation, and reducing emissions from fossil power generation.
- Modernize the electrical energy infrastructure by transforming the network into an intelligent grid and strengthening the transmission system as needed to maintain reliability and capture economic benefits of renewable energy sources.
- Accelerate development of system reliability concepts and methods to address the evolution toward greater reliance on renewable resources and distributed generation, to enable enhanced customer technology and flexibility options, and to reflect the increasing role of electricity in providing societal energy needs.
- Defend electric infrastructure against the impacts of cyber-physical attacks by applying technology solutions as part of the development of the intelligent grid. Build-in security as part of its design.
- Assure availability of an engineering and skilled trades workforce that has the necessary knowledge and skills to design, plan, construct, operate and maintain modern energy systems.

We must learn to live with change. Building flexibility and adaptability into all elements of the physical, regulatory, and institutional aspects of our energy infrastructure is paramount.