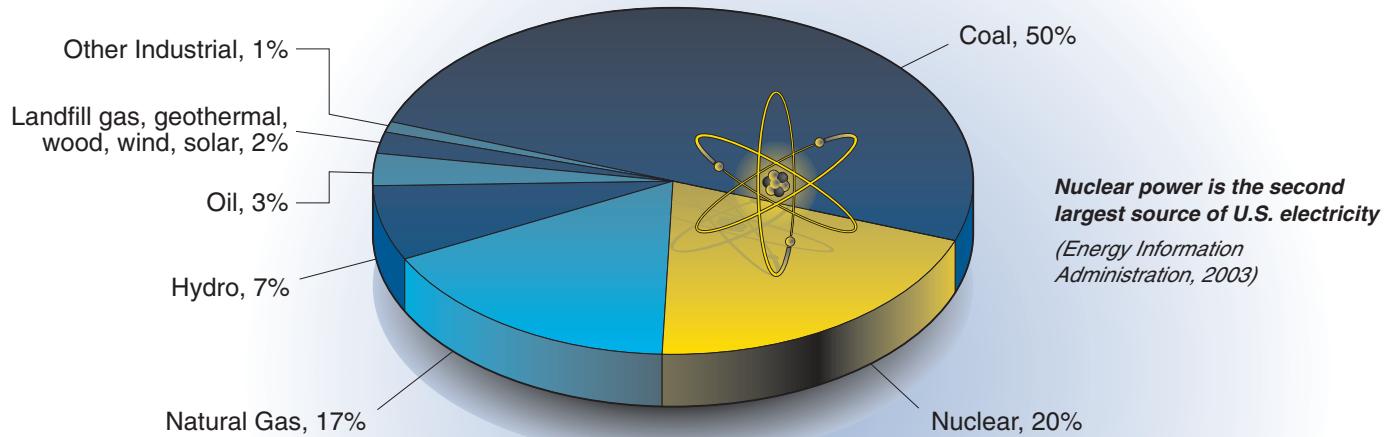




## The Global Nuclear Energy Partnership (GNEP)



### GNEP Element: Expand Domestic Use of Nuclear Power

United States  
Department of Energy



**G**NEP will build on the recent advances made by the President and Congress to stimulate new nuclear plant construction in the U.S. This will be accomplished by demonstrating the success of the streamlined regulations for siting, constructing and operating new nuclear plants through the Nuclear Power 2010 program, and by implementing incentives enacted through the Energy Policy Act of 2005 (EPACT 2005). At 20 percent of the total electricity supply in the nation, nuclear power is the second largest source of domestic electricity, while seventy percent comes from fossil burning fuels

(coal, natural gas, and oil). Increasing the amount of electricity generated by nuclear power is critical to moving the nation toward a more sustainable and secure energy future.

#### ***The public sector's roles in energy security***

The May 2001 National Energy Policy included recommendations for expanding long-term U.S. energy independence and reliability, including diversifying supply. The President's National Energy Policy calls for expanding nuclear energy as a key

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energy source for long-term energy security. Last year, the President signed the first comprehensive energy legislation in over a decade (EPACT 2005), which authorized funds for implementing the Nuclear Power 2010 program. It also established the Standby Support program.

The Nuclear Power 2010 program is a joint government/industry cost-shared effort to identify sites for new nuclear power plants, develop and bring to market advanced standardized nuclear power plant designs, and demonstrate streamlined regulatory processes.

The Standby Support program is a form of federal risk insurance to encourage “first movers” to adopt new reactor designs by protecting them against regulatory-related delays or litigation that delays full-power operations. Additionally, EPACT 2005 contains provisions for production tax credits for advanced nuclear facilities, and loan guarantees for low-emission energy production technologies.

### **How improvements would work**

The new regulatory system would allow industry to apply for Early Site Permits (ESP) that pre-qualify a site for potential nuclear power plants and then for combined Construction and Operation Licenses

(COLs) to build and operate new, advanced plants with less regulatory-related risk.

The protection for “first movers” provides an insurance policy against delays beyond the control of the power company and only applies to reactor designs approved after December 31, 1993. The first two reactors that receive a COL and start construction would be eligible for up to \$500 million in delay protection; the next four reactors would be covered at 50%, up to \$250 million of delay protection. The government would not cover the cost of any delay resulting from failure of the reactor owner to follow laws and regulations, events under the control of the owner, or normal business risks.

### **Showing that new plants can be built**

The first three ESPs are planned to be issued in 2007, potentially leading to the first COL submittal from industry in 2007-2008 and the first power company decision to proceed with construction by 2010.

Rulemaking activities associated with the Standby Support provisions of EPACT 2005 and aimed at protecting first movers, are targeted for completion in 2006.

Investing in the first few new nuclear power plants will demonstrate a streamlined process for building nuclear power plants, pave the way for future expansion of nuclear power, and promote U.S. energy and economic security.

**United States  
Department of Energy**

