

## **An Overview of Nuclear Plant License Renewal in the United States**

*Commissioner Stephen G. Burns, USNRC*

The regulatory requirements for renewal of a nuclear power plant operating license in the U.S. focus on ensuring that long-lived, passive structures and components are appropriately age-managed so that they can continue to safely perform their intended function during the 20-year period of extended operation. License renewal application reviews at the NRC cover two main areas: safety and environmental. Under a renewed operating license, the licensee is responsible for meeting all existing NRC requirements, as well as additional requirements related to aging management.

The U.S. fleet of operating reactors continues to mature. By 2030, the average age of currently operating U.S. nuclear power reactors will be over 50 years. More than a decade ago, the U.S. nuclear industry began expressing interest in pursuing “subsequent license renewal,” which is a second renewed license that would extend a plant from 60 to 80 years. The NRC and the nuclear power industry have agreed on the four top technical issues and are working to finalize the resolutions of these issues. Outside of these technical issues, several other factors are influencing utility decision-making with respect to pursuing subsequent license renewal or not.