



UNITED STATES  
**NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, D.C. 20555-0001

June 21, 2011

**\*\*\*FOR THE RECORD\*\*\***

**NRC ENSURES PUBLIC SAFETY THROUGH RIGOROUS OVERSIGHT  
OF NUCLEAR POWER PLANT SAFETY STANDARDS**

A recent Associated Press (AP) article focused on federal regulation and oversight of the nuclear power industry in the United States. Although we disagree with many of their observations and conclusions, we welcome the additional attention their article brings to the critical importance of nuclear safety and security. It is this type of dialogue that helps us to engage the public and our other stakeholders, and to continue to be vigilant in all aspects of our safety mission. And, we are always committed to doing better and doing it right.

As an independent regulatory agency, the NRC has a robust and comprehensive approach to holding U.S. nuclear power plants to strict safety standards. The AP article fails to recognize that the NRC's own inspection and maintenance requirements have led plants to detect and repair, replace or otherwise fix the equipment, systems or other issues that were described in the article and in other instances which were not highlighted. For example, the NRC's inspections last year at the Fort Calhoun plant in Nebraska showed the plant needed to correct deficiencies in its flood response plan. The NRC increased its oversight of Fort Calhoun while the plant responded, and today the plant is very well positioned to ride out the current extreme Missouri River flooding while keeping the public safe. The NRC has also ensured Westinghouse meets existing, stringent safety requirements in that company's attempt to get its AP1000 new reactor design approved.

The NRC never wavers from its primary mission – ensuring that the public remains safe during the civilian use of radioactive materials in the United States. The NRC carries out that mission by requiring all 104 U.S. nuclear power reactors to meet safety requirements, which in many cases are based on standards created and maintained by national professional organizations. For instance, the American Society of Mechanical Engineers' standards have been incorporated into requirements for reactor vessels and reactor coolant piping, while the Institute of Electrical and Electronics Engineers' standards apply to computer systems.

These professional groups, along with researchers from the NRC and the industry, regularly examine new information, including experience gathered from operating nuclear power plants, to determine if the standards should change. The NRC only endorses changes when they maintain acceptable levels of public safety; this can include adding or strengthening requirements. Even after a standard is changed, the NRC requires nuclear power plants to provide information that justifies continued safe operation during the period of time before plants can comply with the updated requirements.

The agency operates in an open and transparent manner, reaching decisions based on the best available information and analysis; safety-significant decisions are reached without regard for potential economic impacts on plant operators.

The NRC takes as much time as necessary, in some cases years, to ensure requirements are met. For example, U.S. nuclear plants have long sought approval to install digital computer control systems to replace 1970s-era controls. The NRC spent most of the past decade examining issues such as cybersecurity, software validation and system reliability, first on a generic basis and then in a plant-specific application, prior to approving a digital system last year for the Oconee plant in South Carolina. The NRC continues to inspect and oversee Oconee's installation of the new system to ensure it complies with our requirements.

The NRC also maintains its focus on existing issues, such as how materials can degrade during exposure to the conditions inside a nuclear power plant. Research and experience has shown some metal alloys can slowly develop minute cracks, and NRC-required inspections and maintenance (based on existing performance standards) help ensure this issue doesn't compromise public safety. The NRC continues its research and information-gathering on issues such as this to ensure the relevant safety requirements are based on the most up-to-date information.

The AP article fails to properly describe the sequence of events following the severe corrosion incident at the Davis-Besse nuclear power plant – a case where the licensee, FirstEnergy, was fined \$5.5 million for lying to the NRC and failing to follow critical agency requirements. The NRC kept Davis-Besse shut down for several years until the plant's damaged reactor vessel head was replaced and other required repairs were done. When later inspections revealed that the replacement head was also showing degradation, the NRC then ensured FirstEnergy accelerated its plans to install a brand-new reactor vessel head that utilizes a more corrosion-resistant alloy.

The bottom line remains the same – the NRC sets appropriate technical requirements using impartial professional standards, expertise and analysis; we have inspectors stationed at every nuclear power plant in the country, who inspect plants every day; and we enforce our requirements to ensure the public remains safe.

Again, we appreciate the diligence and the time the AP spent in preparing and publishing this article. A heightened understanding of the importance of the NRC's role in ensuring nuclear safety and security is a positive development for the agency and for the American people.