



NUCLEAR ENERGY INSTITUTE

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May 24, 2012

Ms. Yoira K. Diaz-Sanabria  
Chief  
Division of License Renewal  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**Subject:** Industry Comments – NRC Public Meeting Regarding Subsequent License Renewal (SLR) on May 9, 2012

**Project Number: 689**

Dear Ms. Diaz-Sanabria:

NEI, as a representative of the commercial nuclear industry, was pleased to participate in the referenced public meeting regarding the NRC plans and processes for Subsequent License Renewal. This process, codified in 10 CFR Part 51 and 10 CFR Part 54, has proven effective in renewing nuclear power plant operating licenses. As companies do long-range planning, there is tremendous benefit in having a stable and predictable regulatory process in place that results in continued operation of the nuclear asset. In that same context, companies are looking beyond the first license renewal period and considering subsequent renewal.

The current license renewal process assures safe plant operation and provides a stable and predictable regulatory platform. The existing regulations will serve us well as we move into the second renewal period, and we do not envision the need for any substantive changes to this regulatory process. Some significant features of the existing process are:

- Sound, mature process with transparency in procedures and data
- Proven in over 14 years of use and 72 renewed licenses granted

- Continuous and on-going incorporation of operating experience and lessons learned as documented in periodic revisions to industry and regulatory guidance documents
- Proactively addresses aging management issues
- Collaborative process working with industry and other stakeholders

As we move toward this next phase of license renewal, the commercial nuclear industry, along with EPRI and the DOE, are taking directed initiatives to further improve our understanding of the systems, structures, and components (SSC) aging processes and mechanisms and improve the suite of tools for aiding in aging identification and management process. Some of these initiatives are:

- Active and ongoing replacement of major plant SSCs with SSCs that often incorporate advanced materials that are more resistant to aging effects
- Coordination with the DOE's Light Water Reactor Sustainability Program for R&D in materials and component degradation studies
- Coordination with EPRI for research on long-term operation of existing plants
- Industry studies using actual plant data and pilot plants
- Coordination with international research bodies studying long term operation and SSC aging mechanisms

Throughout the original licensed period and the extended license, the industry has effectively utilized operating experience and R&D efforts to identify and resolve aging issues as a part of routine plant operations and maintenance. The key concept behind this continuous learning and improvement process is to incorporate insights and observations related to SSC aging effects as soon as they are discovered and then modify the inspection/repair/replacement activities and requirements to maintain the necessary margins for continued safe and efficient operations. The industry has made significant investments into advanced condition monitoring and preventative/predictive maintenance and inspection programs in order to enhance equipment condition and take necessary corrective action well before a loss of a safety function could occur due to aging effects.

To date, there have been no new aging effects identified that are unique to the period of time between 60 and 80 years of plant operations. However, if a new aging effect were to be identified (through the rigorous application of the operating experience and R&D efforts), the licensees will address it immediately as part of the ongoing plant operation activities and procedures.

NEI will continue to work with the industry and our technical partners to sustain and develop projects and initiatives that will support SLR and continued safe operation of clean, reliable, carbon-free electricity generating nuclear power plants.

Ms. Yoira K. Diaz-Sanabria

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Thank you for conducting this public meeting on this very important topic. If you have any questions or require additional information, please contact me or Jason Remer (202-431-8204; [sjr@nei.org](mailto:sjr@nei.org)).

Sincerely,

A handwritten signature in black ink that reads "Chris Earls". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Christopher E. Earls

c: Ms. Stacie Sakai, NRR/DLR, NRC