

**Chairman Burns' Remarks at the
NRC/DOE Advanced Reactor Workshop
September 1, 2015**

Thank you Lance for that introduction. I want to acknowledge both Glenn Tracy and John Kelly for their opening remarks and Assistant Secretary John Koteck, who will be following me in a moment.

Welcome to today's joint NRC and DOE workshop on advanced reactors. Let me start by acknowledging the "three-legged stool in the room." That is, the very different roles that NRC, DOE, and industry have in developing and deploying innovative technologies. The NRC's leg of the stool, of course, is to ensure the safety and security of new technologies. The DOE's role is to provide support with research and project development. And, of course, the stool would fall over without the initiative of the industry to pursue non-light-water reactor technologies.

These three legs have worked together before. There are many examples of past NRC and DOE cooperation on non-LWR projects, dating back to the Clinch River Breeder Reactor construction permit application, which was developed in part by DOE's predecessor agency, the Energy Research and Development Administration. There are many other examples, including cooperative work on the DOE-sponsored Modular High Temperature Gas Reactor design, the GE-Hitachi PRISM, DOE's Sodium Fast Reactor Design, and, most recently, the Next Generation Nuclear Plant.

In each case, the NRC and DOE worked together while staying in their congressionally mandated roles and responsibilities, and the industry did their part as well.

Which brings us to the modern era of advanced reactors and today's workshop.

I think it important to underscore that although the NRC's current regulatory framework is focused on light water reactors, we believe we could license a non-LWR under the current, existing framework. However, under the NRC's rules, an application for a nuclear reactor design that differs significantly from previously licensed designs or that uses innovative means to accomplish safety will only be approved if the performance of safety features of the new design have been demonstrated through either analysis, test programs, or demonstration of a prototype plant.

The NRC's attention to advanced reactors predates the 21st century. Back in 1986, the Commission issued a Policy Statement on the Regulation of Advanced Reactors, later updated in 2008. Let me give you the shorthand version of the statement. It says the Commission intends to develop the capability for timely assessment and response to innovative and advanced reactor designs that might be presented for our review. It also encourages the earliest possible interaction between the NRC and applicants, vendors, and other government agencies. The goal is to obtain early identification of regulatory requirements and to provide all interested parties, including the public, with a timely and independent assessment of the safety and security characteristics of advanced reactor designs.

So, yes, we recognize that because the NRC's current licensing regulations and guidance were developed based on light-water reactor technologies, there are potential knowledge gaps for both the staff and prospective applicants in understanding the acceptance criteria for non-light water reactor designs. We're working to address those gaps. We are participating with DOE in a

joint, two-phase initiative regarding general design criteria for non-LWRs. We are also participating in non-light-water reactor standards development activities sponsored by the American Nuclear Society.

We are also interested in what concrete improvements stakeholders might offer to our approaches or processes. So I encourage an open dialogue with the NRC staff both here and in other venues.

Now for a brief caution. As demonstrated over the past 10 years, industry and financial market turbulence have had a significant impact on the NRC's ability to plan for the submission of new reactor applications.

It's critically important that the industry keep the NRC informed of its progress and plans so we can plan appropriately. The horizon of nuclear power in the U.S. has been somewhat fuzzy in the past and like a large ship, the NRC can be slow to change course. We're making adjustments now to the current reality. But we need open communication with the non-LWR developer community and with the DOE, to keep the ship on course and to optimize our planning processes and resource expenditures for any future non-LWR application submitted to the NRC.

Finally, it is important to note that our budget is approved by Congress and we can't easily move large numbers of resources from one project to another.

So, again, I welcome you to this workshop and thank you for joining in the three-legged stool. The NRC stands ready to work with DOE and the industry on licensing new technologies while protecting the safety and security of the public, and the environment.

I wish you all a successful workshop.