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Prepared Remarks of NRC Chairman Stephen G. Burns Platts 11th Annual Nuclear Energy Conference February 17, 2015 – Washington, D.C.

Good morning. I'm honored to have been invited to provide remarks to the Platts 11th Annual Nuclear Energy Conference. This is the first public speech that I have given since being named Chairman of the Nuclear Regulatory Commission, and I am pleased to have the opportunity to do so before this audience.

As many of you know, I retired from the NRC in 2012 after a nearly 34-year career that culminated in my service as the agency's General Counsel. I spent my three years of "retirement" working in France at the OECD Nuclear Energy Agency as the head of Legal Affairs. I was then nominated and confirmed as a Commissioner of the NRC in November of 2014, serving perhaps in the one of the shortest tenures ever held by a Commissioner when I was soon thereafter designated by the President as Chairman effective January 1, 2015.

As a young attorney entering the NRC in 1978, I could not have imagined that someday I would be Chairman of this great organization. Having dedicated over three decades of my career to the NRC, I have a unique awareness of the extraordinary privilege that has been bestowed on me. I am incredibly appreciative of this opportunity.

In my last few years away from the NRC, I was struck by both the respect for this agency within the international community, as well as that community's interest in how the NRC deals with the challenges of nuclear regulation. This is due in no small part to the dedicated, talented, and knowledgeable staff of the NRC. It is the strength of our staff and their commitment to maintaining the safe and secure use of nuclear materials and facilities that has established the agency's world-wide reputation as a strong, independent and competent regulator.

I would also like to take a moment to observe that the NRC marks the 40th anniversary of its creation this year. I was pleased to have been a part of the agency's commemoration, having spent a considerable portion of my career at the agency.

Many of us can recall – and may have lived through – some of the seminal moments in the agency's history: the Browns Ferry fire in 1975, the accident at Three Mile Island in 1979, the terrorist attacks on Sept. 11, 2001, and, more recently, our response to the Fukushima Daiichi accident. Also significant have been changes in the agency's processes and the efforts to strengthen the NRC's regulations that remain important today: the evaluation of operating experience, the backfit rule,

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development of the framework for emergency planning and preparedness, the adoption of safety goals, the maintenance rule, security enhancements, and establishing the Principles of Good Regulation.

Despite these many changes and challenges, it is worth noting that the basic organizational and institutional framework of the NRC has been a relative constant over this time. Although we've had high points and a few turning points across our history, on the whole the Commission structure has served the public well over the years and has contributed to a record of effective regulation. We have learned from experience and have adapted to the challenges put before us.

New Reactor Activities

I wanted to speak briefly about where this agency stands with respect to new nuclear power development. Naturally, I present these perspectives as a regulator, and not as a promoter of any of these activities. Nevertheless, I recognize that, as a matter of good government, the NRC has a responsibility to ensure that it is a responsible and predictable regulator and a conscientious steward of the public trust.

Most of the NRC's activities for licensing new reactors have taken place under the agency's regulations in 10 CFR Part 52. Although I often hear the process referred to as the agency's "new" process for licensing, we should recall that the NRC adopted the framework in Part 52 in 1989 – now over 25 years ago! We should recall, as well, that improvement of the licensing process was called for as part of the procedural reforms proposed in the wake of the Three Mile Island accident. Through the 1990s and into the early 2000s, the NRC and industry began implementation of the process through the first design certification rules, the first early site permits, and then the first combined licenses granted for new reactors at the Vogtle and VC Summer sites in 2012.

Today, the NRC is overseeing five new units under construction: two units at the Vogtle nuclear power plant site in Georgia, two units at the VC Summer plant in South Carolina, and one unit at the Watts Bar site in Tennessee. The licensees for both the Vogtle and Summer sites are building Westinghouse AP1000 reactors, the design for which was certified by the NRC in 2006 and amended in 2012 to incorporate design changes proposed by Westinghouse. The Tennessee Valley Authority (TVA) has chosen to complete construction of Watts Bar Unit 2 under an existing Part 50 construction permit. The operating license application for Watts Bar Unit 2 is pending before the agency, and could be decided this year.

There are also currently eight active combined license applications and two design certification applications under review by the NRC; a third design certification application is in the acceptance review phase. Earlier this month, I presided as the Commission conducted a "mandatory hearing" for a combined license for the Fermi Unit 3 site in Michigan. The applicant is proposing to build a General Electric Economic Simplified Boiling Water Reactor (a design that was certified by the NRC just last year). Depending on the outcome of the Commission's review, a combined license for that reactor could also be issued later this year.

Regarding our oversight of new reactor construction, we are now approaching three years of activities at the AP1000 reactor plants at the Vogtle and Summer sites. Construction resident and regional-based inspections continue with emphasis on Inspections, Tests, Analyses, and Acceptance Criteria – ITAAC – license requirements established in accordance with Part 52. Just as we have learned from our experience in issuing the first design certifications and combined licenses, I believe

we will undoubtedly identify ways to improve our framework as we assess the outcome of construction oversight and the implementation of ITAAC at Vogtle and Summer. I look forward to my visit to the Vogtle site next week to see firsthand the work being done there.

I also visited the Watts Bar Unit 2 construction site in late January. I observed that there was a remarkable amount of work done by NRC inspectors and TVA to prepare Unit 2 for operation. As I mentioned, the application for the operating license is still pending before the NRC, but if approved, TVA expects to load fuel sometime later this year.

NRC at a Turning Point

No organization can remain static. We all eventually face turning points that require us to adapt to changes in our environment and sometimes changes that do not conform to our best efforts at predicting our future. Throughout the three decades of my "first" career at the NRC, I lived through a number of those turning points. I returned to the NRC at yet another turning point. The future for which the NRC had prepared in the early to mid-2000s, with the possibility of a wave of new reactor construction, did not materialize. As you know, the economy suffered a significant crisis in 2008 with a lingering impact for several years. Greater competition in the energy markets due in part to the drop in the price of natural gas also changed the focus of many utilities.

Now, perhaps more than ever, the NRC is being scrutinized by its stakeholders for its responsible use of resources, as well as for the regulatory requirements it imposes on its licensees. The Congress has charged the NRC with a critical mission to ensure adequate protection of public health and safety and the common defense and security, and the NRC can never lose sight of this mission. Still, the agency can and should retain focus on this mission while also taking a responsible and hard look at whether it is effectively using resources and is working on the right things.

The agency's FY 2016 proposed budget reflects the NRC's efforts to demonstrate its responsiveness to the new context in which we find ourselves. The proffered budget reflects a proposed reduction of 140 full time equivalent employees, and a reduction of \$27.3 million from the FY 2015 submission. I also expect that the NRC's FY 2015 fee rule, which will be published in the coming months, will reflect a reduction in licensee annual and hourly fees that are a result of decreases to account for lower than anticipated staffing needs.

Moreover, in June 2014, the NRC staff embarked on an effort called Project AIM 2020. This project, conducted under a charter established by the Commission, was a collaboration between the NRC's Executive Director for Operations and the Chief Financial Officer, with a purpose to enhance our ability to plan and execute the agency's mission more efficiently while adapting in a timely and effective manner to a dynamic environment.

The project has evolved four high-level goals:

- Right-sizing the agency: the NRC must retain, attract, and develop a diverse group of people with the right skills to accomplish our mission efficiently and effectively;
- Streamlining: NRC processes must be leaner, use resources more wisely, and limit overhead in both mission and support functions;

- Timeliness: the NRC must execute its regulatory functions and make decisions in a more timely and effective manner. When external conditions change, the NRC must respond more promptly in an agile and flexible manner; and
- Unity: The NRC must establish clearer agency-wide priorities that reflect the needs of the Nation and work together with unity of purpose in fulfilling those needs.

The NRC staff recently provided its recommendations arising from Project AIM to the Commission for its consideration. A copy of the report will be made publicly available soon, and the Commission will be briefed by the staff in an upcoming public meeting on the report's recommendations.

Because the Commission has yet to act on the Project AIM report, I cannot offer you insights on the final outcome of the Commission's deliberations. But I can offer several of my own perspectives as I start into this effort. First, the Project AIM report represents a serious effort by the agency's senior management to address challenges head-on. The report contains a number of provocative and potentially impactful recommendations. Second, the report is only one part of the overall set of inputs the Commission is considering when determining what the right course is for the NRC. The Commission must consider many factors as part of its final decision-making process, of which the Project AIM report is but one. Finally, we must be sensitive to the potential effect on morale that such a decision may have the agency's staff. As I said in my opening, the NRC is truly a world-class organization made up of many dedicated individuals committed to the agency's critical mission. It is imperative that in the implementation of the final decision, the Commission and senior management effectively communicate the bases for our decisions and perhaps more importantly, make sure that the staff understands and embraces the need for change.

I look forward to a vigorous and important discussion with my Commission colleagues and the NRC senior staff as we focus on this effort.

Although the agency's workload in many areas is getting smaller, I would be remiss if I did not mention that the agency and industry have expended a significant amount of effort to address the lessons learned from the accident in Japan. I probably don't need to remind you that we are less than a month away from the 4th anniversary of that accident. Both the NRC and the US industry took swift and decisive action to address many of the key lessons learned. Many of these actions are targeted for completion by 2016 when the most significant improvements to plant safety in mitigating potential beyond design basis events. One of my priorities is to see that we do all that we can to meet that goal.

There are many success stories from the NRC's Fukushima lessons-learned effort. In particular I want to emphasize that, due to the extraordinary effort of the NRC staff and industry, a number of significant enhancements to safety have already been implemented today at nuclear power plants. For instance, I recently visited the North Anna nuclear plant in Virginia, and focused on looking at that licensee's post-Fukushima modifications, particularly those designed to address beyond-design-basis accidents. I thought it remarkable the level of planning that has gone into considering what might go wrong, from the color coding of emergency electrical connections, to the stockpiling of extra equipment, and even the acquisition of axes and chainsaws to remove debris that might hamper plant staff in responding to plant conditions.

The NRC and licensees have also invested a substantial amount of time in the reevaluation of flooding and seismic hazards. For flooding, the NRC is reviewing the results of the industry's efforts towards completing these challenging and complex assessments. Staff also is implementing its plan for reviewing the seismic reevaluations from Central and Eastern U.S. licensees, and expects to receive submittals for the three western sites later this spring.

Post-Fukushima rulemaking activities also will continue throughout this upcoming year. Last year, the NRC combined the Station Blackout Mitigation Strategies, Onsite Emergency Response Capabilities, and numerous Emergency Preparedness rulemaking activities into one rulemaking, called the Mitigation of Beyond-Design-Basis Events rulemaking.

I spoke of turning points. There's another one in front of us, and that is in the application of new and advanced nuclear technologies. Small modular reactors and advanced reactor technologies are coming to the forefront as this country seeks more innovative solutions to the technical issues associated with nuclear power. As the regulator of such technologies, and as an agency that gets 90% of its budget from licensee fees, in my view, the NRC is in a challenging position to address the questions regarding the proper regulatory framework for such new technologies.

Since the small modular reactors currently being most seriously considered are based on light water reactor technologies, the agency is well postured to accept and disposition any application that is provided to us. With respect to non-light water reactor technologies, though I am confident that the NRC can effectively manage an application, I do recognize that vendors interested in developing such technologies may be interested in greater clarity regarding the application requirements and the standards for review. The NRC is taking a hard look at this area, but again, without a specific applicant, and with intense pressure on resources and budget, it is challenging for the NRC to be too forward leaning in this area and expend resources on the development of a new regulatory framework.

A Global Community and a Global Responsibility

I recognize that the NRC is part of broader international community, and a quick glance at the agenda for this conference shows that. For many years, the NRC has been collaborating with its international partners, whether through participation in the activities of the International Atomic Energy Agency or the OECD Nuclear Energy Agency, its participation in the Multinational Design Evaluation Programme, or through its bilateral information sharing arrangements with partner countries. These global efforts serve many purposes, but they have a direct and positive impact in the United States and elsewhere.

I think it worth recalling that the regulator and the plant operator share complementary responsibilities for safety. As provided in the Convention on Nuclear Safety, to which every country, save one, that has embarked on a nuclear power program belongs, "Each Contracting Party shall ensure that prime responsibility for the safety of a nuclear installation rests with the holder of the relevant licence and shall take the appropriate steps to ensure that each such licence holder meets its responsibility." Moreover, the regulator is to be given sufficient independence as well as "adequate authority, competence and financial and human resources to fulfil its assigned responsibilities."

I cannot emphasize enough the importance of these words and the responsibility to ensure that they are given meaning in law and in practice. We have seen regulatory reform in Japan to respond to the national assessments of the Fukushima Daiichi accident. Other reform efforts have been undertaken in Korea and the United Kingdom, the latter based largely on the premise that enhancement to the stature and capability of the national regulator was critical if that country was to seriously pursue new nuclear power development. New entrants like the United Arab Emirates have had to face building a national infrastructure, including a competent regulatory authority, from scratch in order to pursue its nuclear energy policy. Again, while you may primarily be focusing on the technical and economic challenges in making the business case for nuclear development, I urge you to be mindful of the need to build confidence in the competence and effectiveness of the national regulator.

In closing, I appreciate the opportunity to share my thoughts with you today in these first weeks of my service as Chairman of the NRC. I wish you a successful conference.