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## **“Timely Renewal – NRC at 40” Remarks of NRC Chairman Stephen G. Burns**

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Good morning and thank you Bill [Dean] for the introduction. I would like to take the opportunity to say good morning to my fellow Commissioners, NRC staff, industry representatives, members of the public, and distinguished national and international guests. Please accept my personal welcome and thank you for participating in the NRC’s 27<sup>th</sup> Annual Regulatory Information Conference, affectionately known as the RIC. Before I move on, I’d also like to acknowledge the Executive Director for Operations and the staff that have organized and volunteered to support this event and extend my appreciation and gratitude for their efforts.

As Bill indicated, I retired from the NRC in 2012 after a nearly thirty-four 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 Organisation for Economic Co-operation and Development’s (OECD) Nuclear Energy Agency (NEA) as the head of Legal Affairs. I was then nominated and confirmed as a Commissioner of the NRC in November of 2014. 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 want to reflect a little today on where we have been, but more importantly look forward to where we are going.

This year, the NRC is commemorating the 40<sup>th</sup> anniversary of its creation. 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 September 11,

2001, and, more recently, our response to the 2011 Fukushima Daiichi accident. Also significant have been changes in the agency's processes and the efforts to strengthen and make more coherent the regulatory paradigm: the evaluation of operating experience, the backfit rule, development of the framework for emergency planning and preparedness, the adoption of safety goals, the maintenance rule, security enhancements, and establishment of the Principles of Good Regulation. These events and efforts all maintain special importance to this day.

Despite these many changes and challenges, it is worth noting that the basic organizational and institutional framework of the NRC has been relatively 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. And as we look to the future, there are certain aspects of the NRC that will remain unchanged, namely our commitment to ensuring that civilian uses of nuclear energy and radioactive material do not pose a threat to the public health and safety or the common defense and security.

So, the NRC is now 40. What does this mean? Although some might consider this the time for a mid-life crisis, I see it as an opportunity for the agency to not only reflect on where we've been, but also to look forward to where we're going. As many of you know, the Atomic Energy Act sets the initial licensing period for a nuclear power reactor at 40 years, but allows for renewals of those licenses. Perhaps it is apropos, then, to think of the NRC as it reaches its 40<sup>th</sup> year as reaching its own "timely renewal" period. Surely, the environment in which we find ourselves today suggests not only that we reflect on the journey of the last 40 years but also that we refresh and renew in a timely and purposeful way our perspective on the road ahead.

Over the last decade and a half, we have seen the NRC go from an agency with just over 2,700 employees in the year 2000, to one with approximately 4,000 employees in 2010, to just over 3,700 employees currently. Going forward, it is incumbent on the Commission to ensure that the NRC's organizational structure is "right sized," so that the agency has enough personnel to perform its mission and be an effective regulator while still being accountable to the American people and prudent in our expenditure of resources. So how might we do this?

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 initiated as a collaboration between the NRC's Executive Director for Operations and the Chief Financial Officer. The purpose of the project is to identify ways to enhance the NRC's 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 AIM 2020 report represents a serious effort by the agency's senior management to address transformational and organizational challenges head-on. The report, which is currently under review by the Commission, contains a number of potentially impactful recommendations.

In the first decade of this century, the agency grew significantly. Primary drivers for this growth included the need to enhance security and incident response in the wake of the terrorist attacks in 2001 but also to prepare for projected growth in the use of nuclear power in the United States. As you know, the economy suffered a significant crisis in 2008 that had a lingering impact. 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. The previous forecast in growth that led to the NRC's increase in staffing has now been

adjusted downward in response to changes in the nuclear industry that have resulted in fewer new nuclear power plants and earlier decommissioning of some existing plants. These adjustments, in turn, are prompting the NRC to adapt its structure, workforce and regulatory processes to achieve the agency's safety and security mission in an era of constrained resources. 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 NRC must reposition itself to function as an even more effective and efficient regulator in this new environment, while retaining the capability to respond in an agile manner to a range of possible futures.

However, this repositioning cannot be characterized merely as an across the board reduction in staffing, resources, or regulations. Although the forecasted wave of new reactor licensing did not happen as anticipated, the NRC's workload increased in other areas. For example, we've seen the agency's – and the industry's -- response to the Fukushima Daiichi accident, the unexpected decommissioning of several reactor units, as well as other areas of workload increases, such as cyber security, preparing and reviewing licensing applications for medical isotope production, and small modular reactors. Additionally, the NRC is readying itself to receive and review reactor renewal applications that could propose an extension of an existing reactor's life beyond 60 years. The NRC has also initiated an effort to stabilize and improve the agency's existing reactor amendment licensing backlog through reallocation of resources from lower priority work and an expanded use of contract support. Although we do not anticipate complete resolution of the backlog this fiscal year, the agency is making progress. Accordingly, 40 years following its creation, the NRC's adjustment of its organization, while necessary to remain an effective and efficient regulator, will also need to be well thought out and carefully implemented.

Now, for just a moment, let us step back and consider how we get to where we need to be. The goals of Project Aim 2020 are to improve efficiency in accomplishing our safety, security, and safeguards mission by: retaining, attracting, and developing a diverse group of people with the right skills to accomplish our mission efficiently and effectively; streamlining NRC processes to be leaner, using resources more wisely, and limiting overhead costs in both mission and support functions; executing our regulatory functions and making decisions in a more timely and effective manner; responding promptly in an agile and flexible manner when external conditions change; and establishing clearer agency-wide priorities that reflect the needs of the Nation.

That's a tall order. The Commission must consider many factors as part of its final decision-making process about how to move forward into the agency's future. We are sensitive to the potential effect on morale that such decisions may have on the agency's staff. The NRC is a world-class organization made up of dedicated individuals committed to the agency's critical mission. It is imperative that in the implementation of the Commission's decisions we effectively communicate the bases for our decisions and perhaps more importantly, make sure that the staff understands and embraces the need for not just change, but the right kind of change.

However, although important, the Commission's deliberations that come out of Project Aim 2020 represent only one aspect of addressing the NRC's future. Focusing on the here and now, the NRC recently proposed its FY 2016 budget to Congress. The budget proposal shows that the NRC already anticipates leaner resource requirements. Our budget for the next fiscal year reflects the NRC's efforts to respond to the new context in which we find ourselves. The proffered budget demonstrates the NRC's commitment to operate more effectively.

Because we are largely a fee-based agency (and yes, I expect the upcoming fee rule for FY 2015 to reflect an overall reduction in licensee annual and hourly fees), industry projections of planned activities have been, and will continue to be, an important input to NRC resource needs and a driver of NRC costs. The NRC relies in large part on industry's projections of future licensing workload in order to inform our strategic planning and budget formulation to ensure that we are not an impediment to enabling the safe and secure use of nuclear materials and facilities, as permitted under the Atomic Energy Act. We need industry's help in providing accurate and timely projections so that the NRC may properly budget for future work.

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 Fukushima Daiichi accident in Japan. Tomorrow, March 11, marks the 4-year anniversary of these events. Both the NRC and the U.S. nuclear industry took swift and decisive action to address many of the key lessons learned from that event. Due to the extraordinary effort of the NRC staff and industry, a number of significant enhancements to safety have already been implemented at nuclear power plants, and the vast majority of the most safety-significant actions are targeted for completion by the end of 2016. One of my priorities is to see that we do all that we can to meet that goal. The NRC's lessons learned initiatives have and will continue to result in significant safety improvements at U.S. nuclear power plants. NRC is committed to bringing the remaining enhancements to timely closure.

The Fukushima Daiichi accident also underscored the importance of international cooperation in promoting nuclear safety around the world, in countries with well-established nuclear power programs as well as in "newcomer" countries. My recent experience at the OECD NEA demonstrated the benefits of co-operation through joint research agreements and developing consensus standards as well as through commitment to the effective implementation of international agreements in the field of nuclear energy. The NRC engages frequently with our international counterparts to aid us in carrying out our safety mission.

As many of you know, a Diplomatic Conference was held in early February 2015, at the International Atomic Energy Agency in Vienna, Austria, related to the Convention on Nuclear Safety (CNS), to which the United States is a Contracting Party. Although there were initially different approaches to how best reflect the Contracting Parties' commitment to nuclear safety, the Contracting Parties ultimately adopted unanimously the Vienna Declaration on Nuclear Safety. The Vienna Declaration is intended to strengthen each Contracting Party's commitment to nuclear safety in the wake of the Fukushima Daiichi accident through principles for implementation that are intended to prevent accidents, and to mitigate radiological consequences if an accident occurs. Under the three principles of the Vienna Declaration, new nuclear power plants are to be designed, sited, and constructed consistent with the objective of preventing accidents during commissioning and operation; comprehensive and systematic safety assessments are to be carried out periodically and regularly for existing facilities during their lifetime; and national requirements and regulations to address these principles are to take into account the relevant IAEA Safety Standards and other good practices. The NRC will continue to work with its counterparts to ensure these principles are given meaning, as we have already done through the safety enhancements adopted in this country since the accident.

As we now stand at the beginning of the NRC's next decade, we expect to see small modular reactor and advanced reactor ("Generation IV") technologies that may come before us for evaluation

and licensing approval. The NRC is willing and able to work with industry, the public, and the international community to develop a framework more appropriate for the new technologies. The NRC's Office of New Reactors is making progress on several fronts and is staying abreast of industry's commitment to advanced reactor designs. For example, we have undertaken for review a recent report developed in cooperation with the Department of Energy on General Design Criteria for non-light water reactors.

Because most small modular reactors being considered are based on light water reactor technologies, the agency is well postured to accept and disposition applications based on these technologies. 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; however, without a specific applicant, and with intense pressure on resources and budget, it is challenging for the NRC to be too forward-leaning and expend significant resources on the development of a new regulatory framework.

To come full circle in looking back and looking forward, I'd like to close by observing that for the past 40 years the NRC has accomplished a great deal by working with industry, the public, and other stakeholders. I have been fortunate enough to have been here for more than 34 of those years and I have had the privilege of working with many dedicated colleagues and have seen the agency achieve success in difficult times. The one constant is that the committed professionals that make up this agency have always endeavored to ensure that the NRC fulfills its mission to protect people and the environment.

That said, and looking forward, I am equally fortunate to be here at the beginning of the NRC's next forty years. The agency is poised to meet the challenges that the future will bring, all the while ensuring the continuity of our mission. But we will need the help of all of you along the way, for the job of ensuring the continued safety of civilian uses of nuclear material is a responsibility that belongs to all of us.

Thank you and I wish you a successful RIC.