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## Prepared Remarks for The Honorable Gregory B. Jaczko Chairman U.S. Nuclear Regulatory Commission at Institute of Nuclear Power Operations (INPO) CEO Conference Atlanta, GA November 10, 2011

Thank you for the introduction, Jim. I appreciate the opportunity to speak with you today at your annual CEO Conference and share my thoughts about the many important issues facing the nuclear industry and the NRC.

Since its founding after the Three Mile Island accident in 1979, INPO's leadership and efforts have made significant contributions to enhancing the safety of the U.S. nuclear industry. Although the NRC and INPO have different roles and, of course, different relationships to the owners and operators of our nation's nuclear power plants, our two organizations have always had a shared focus on and commitment to nuclear safety.

In this past year, since I last addressed the INPO CEO Conference, I have visited six plants, and talked with a number of you in your offices and at the plants. I have met your employees and have been impressed by their expertise, their diligence and their dedication. Without a doubt, we are all working to ensure safety.

Later in your meeting, Admiral Ellis will recognize several nuclear power plants that have demonstrated the kind of strong commitment to safety that should serve as an example for the entire industry. We applaud their efforts, and that of other facilities that have performed well this year.

Today I would like to share with you a few thoughts about the importance of keeping our eye on operational safety while also making a new commitment to resolving long-standing generic safety issues.

In light of the significant challenges 2011 has presented to both the NRC and the industry, this becomes doubly important. We cannot afford to proceed in a "business as usual" manner. Given this year's multiple natural disasters including the Japan earthquake and tsunami in March, which resulted in the nuclear emergency at Fukushima Daiichi; flooding in the Midwest in June; the earthquake on the East Coast in August; and other serious threats, such as hurricanes and tornadoes, nothing was usual about 2011.

Two years ago, in my remarks to you, I stated that a number of pressures – a weakened economy, a decrease in load demand, the development of new reactors applications and potential new construction, and some complacency about the reactor oversight process – could pose a risk of diverting attention from our shared safety and security goals. I warned about the dangers of distraction and complacency. I believe that message, and those cautions, are just as valid today as they were when I spoke to you in 2009.

While many plants have performed very well this year, there are a number of nuclear power plants that have experienced significant safety challenges. Right now, there are two plants in Column Four of the ROP Action Matrix after experiencing safety issues that the NRC views as highly significant. There are also two plants in Column Three, which indicates declining performance. The NRC has conducted a greater number of special inspections in the past year – 19 to date – than at any point in recent memory. These developments, of course, are concerning for the specific plants involved, but we all should be on guard to the possibility that they could be indicative of broader issues for the industry.

Also, there are currently three units in extended shutdowns, two due to circumstances related to external events, and one that was initiated in the process of maintenance activities. Not since the late 1990s have we seen this many units concurrently shut down for lengthy periods.

With all of the important issues before us and the breadth of changes that will likely result from the agency's post-Fukushima safety review, it's all the more critical that we act aggressively to resolve issues that have confronted the NRC and the industry for years.

As we all know, it is far more efficient to handle challenges one-by-one than to keep pushing them to the side and letting them pile up year after year. These are issues that need to be dealt with and sent on their way.

Otherwise, when the unexpected happens – like it did with Fukushima Daiichi – we are faced with a potential logjam. We are dealing with critical new challenges that consume time and resources, while at the same time, we have still not resolved other important, long-standing issues. And this is as true for industry as it is for the NRC.

One area that has been especially challenging is the issue of fire protection. We have grappled with the issue of fire protection in one form or another since the 1975 Brown's Ferry fire opened our eyes to the risks that fire posed to nuclear safety. I was very pleased to see INPO over the past year take strong leadership on the issue and emphasize the importance of resolving fire protection issues sooner rather than later.

In my view, the history of fire protection is not a model for how the NRC should develop or articulate new rules, nor for how the industry should approach their implementation. In 2004, the NRC took a significant step forward towards resolving this important issue with the development of the risk-informed, performance-based NFPA 805 approach. Drawing on risk insights, it allows licensees to undertake a comprehensive evaluation of their fire safety issues and employ a broader range of measures to address vulnerabilities than under the agency's traditional prescriptive requirements. In that way, it better enables licensees to take advantage of everything we have learned about fire safety over the years – whether it relates to how fires can start, how they can spread, or how those risks can be addressed.

Because of the safety benefits of the NFPA 805 approach, I have long held the view that the NRC should have adopted this rule as a mandatory requirement. Instead, the Commission decided to pursue, with the NFPA and the industry, a voluntary alternative to the agency's prescriptive requirements. Due to that decision, the most we have been able to do is to encourage licensees to invest the necessary resources and adopt the NFPA 805 approach. Approximately half of the 104 operating reactors have chosen this option.

But even with the licensees for the 48 reactors that voluntarily indicated that they planned to adopt the NFPA 805 rule, we have not been able to make the progress that we had expected and wanted to see. At this point, after seven years of extended enforcement discretion and more delays than I can recall, only two licensees – for a total of four reactors – have completed the transition.

In April, the Commission approved a staggered approach for NFPA 805 license amendment request reviews, and just seven licensees committed to providing license amendment requests to transition to NFPA 805 by the end of fiscal year 2011, which ended on September 30. Of those seven, five licensees have submitted their requests and two are overdue. So, even though we provided additional time, in my view, the response has been disappointing, to say the least.

Fire protection has clearly added logs to the waiting pile of longstanding issues, and I call on licensees to press ahead now with the work that is necessary to complete their transition to NFPA 805.

Another long-standing issue is GSI-191, concerning the potential for blockage of boiling water reactors' (BWRs) suction strainers and pressurized water reactors' (PWRs) containment sump screens, due to debris accumulation. This safety issue was first identified as a result of NRC-sponsored research around 1979. The operators of BWRs and PWRs began to address the issue by installing larger strainers, but in the late 1990s, new concerns were raised for both BWRs and PWRs. And here we are, many years later, and we are still working to close out this issue. Forty-eight of the 69 U.S. pressurized water reactors have demonstrated that their sumps will not clog, and the Commission has directed the agency's staff to continue working with industry to perform additional testing and formulate a path forward by mid-2012.

I will mention just one additional generic safety issue, and that is GI-199, the updates to seismic hazard estimates for the Central and Eastern United States. After holding several public meetings with industry and other stakeholders, the NRC staff has prepared and will issue a generic letter to licensees in late December to obtain plant information that will be used in a regulatory assessment of this issue. The seismic study especially resonates since the Fukushima Daiichi accident and the August earthquake on the East Coast, and it is crucial that we move forward in completing this work in a timely manner.

We must resolve these long-standing issues so that we can direct our time, attention and resources to other important safety work. The logs are piling up. We cannot afford to have these issues languish any longer, adding to the backlog, and impacting our ability to move forward with other important safety matters.

As we seek to learn and apply the lessons from Fukushima, it's important that we not repeat mistakes from the past. We must not fail to make decisions and to move forward in effectively implementing changes that are needed for the protection of public health and safety. The Fukushima accident is clearly one of the most significant events in the history of nuclear power. It is critical that we take prompt, decisive, and effective action to make the needed safety changes.

The agency's Near-Term Japan Task Force, which was established on March 21, 2011, was directed to review the insights gained from the Fukushima accident and make recommendations to the Commission for enhancing reactor safety. Within 90 days, the Task Force reported back to the Commission with a comprehensive set of 12 safety recommendations that they believe are needed to strengthen nuclear safety.

These recommendations touch on a broad range of important safety areas from the loss of power to earthquakes, flooding, spent fuel pools, venting, and emergency preparedness. The Task Force's recommendations include proposed new requirements for nuclear power plants to reevaluate and upgrade their seismic and flooding protection, to strengthen their ability to deal with the prolonged loss of power, and to develop emergency plans that specifically contemplate the possibility of events involving multiple reactors. In the report, the Task Force emphasizes that strong NRC oversight is essential in addressing these challenges.

The Task Force's recommendations have now undergone two additional reviews – one by the NRC staff and another by the Advisory Committee on Reactor Safeguards (ACRS). Through these efforts, we have benefited from the insights and perspectives of industry leaders, nuclear safety and environmental groups, and the public. In several public meetings, the Commission itself has heard directly from a diverse array of these stakeholders.

The NRC staff review of the Task Force's recommendations was completed less than a month ago. That review endorsed nearly all of the Task Force's recommendations, and laid out a detailed plan for prioritizing and implementing them. The staff review also identified several additional issues for consideration beyond the Task Force's recommendations, including

measures related to spent fuel storage and emergency planning. At the Commission's direction, the staff will be looking at the Task Force's first recommendation regarding the overall structure of our regulatory framework separately from actions that could be initiated without delay. In the most recent voting paper before the Commission, the staff proposed to initiate actions under the premise of assuring or redefining the level of protection of public health and safety that should be regarded as adequate in accordance with the back fit rule.

The ACRS completed the first major part of its review two weeks ago. In its review, the ACRS endorsed all the Task Force recommendations that it has had the chance to examine thus far, and – like the staff – also proposed additional steps beyond the Task Force's recommendations. In endorsing these measures, the ACRS emphasized that in its expert view none of those steps would be negated by any new information we might receive about the Fukushima accident. Although we will certainly learn more about the accident, I agree with the ACRS that we have the information we need to move forward in developing and implementing new requirements based on the lessons we've learned so far. The Commission looks forward to soon receiving the ACRS's views on the other recommendations.

Of course, as we acquire more information about the accident, we will determine whether there are any additional lessons to be drawn. The Commission established a longer-term review specifically for this purpose – to examine those issues for which the Task Force did not have enough information to provide recommendations. That longer-term review is underway, although not yet complete.

On Thursday, October 20, the Commission directed the agency's staff to begin immediately implementing – partially or fully – five of the safety recommendations from the Task Force. These recommendations cover issues including the loss of all A/C electrical power at a reactor (station blackout), reviews of seismic and flooding hazards, emergency equipment and plant staff training. The Commission also set a goal of completing station blackout rulemaking within 24 to 30 months from now, and to strive for completion of all actions in response to the lessons learned from Fukushima within five years – by 2016.

The NRC staff, as well as the ACRS, has done a tremendous amount of work on Fukushima-related issues. But while a great deal of work has been done, the Commission still has much work ahead. Many of the Task Force's recommendations call for the development of orders or rules – which would take some time to develop and implement. For those recommendations, the agency must conduct the necessary analysis, develop the technical basis, and take other steps before promulgating the new requirements. That process may take weeks or months for an order, or potentially years in the case of a new rule. And it is only after this process is complete that the industry will be required to make the necessary safety changes to the equipment and procedures at their plants. Given those timeframes, I believe it is all the more important for the Commission to move forward swiftly.

At the end of a speech, I often find myself talking about transparency and openness. These attributes are part of our formal NRC Organizational Values, and they are integral guiding principles in everything we do, both internally and externally. After the challenges we have faced over the past year, and the bright spotlight that has been shined on nuclear regulation, nuclear safety, and nuclear power plants by the Congress, the media and the public, I believe it has never been more important for both the NRC and the industry to be accessible and open, and to make sure that all of our stakeholders understand what we are doing and why we are doing it.

I would like to leave you with one other thought. There has been a lot of discussion over the past several years about cumulative impacts. This generally refers to the complications and costs of regulatory requirements. There is another cost though, that is also cumulative, and one that I hope you will ponder.

And that is the cost of not getting things done, the cost of letting the logs pile up, assuming that at some point they will either go away or take care of themselves. Then the unexpected happens – like Fukushima – and the stream is overburdened to the point of logjam. Let's commit to resolving issues that have been lying by the side of the stream for years. Let's clear the way so that we can effectively navigate whatever safety challenges the future may hold.