

UNITED STATES OF AMERICA
U.S. NUCLEAR REGULATORY COMMISSION

REGULATORY INFORMATION CONFERENCE (RIC)
BILL BORCHARDT, EXECUTIVE DIRECTOR FOR OPERATIONS

MARCH 12, 2013

8:30 A.M.

TRANSCRIPT OF PROCEEDINGS

Public Meeting

APPEARANCES

NRC Staff:

Eric Leeds
Director, Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission

Bill Borchardt
Executive Director for Operations
U.S. Nuclear Regulatory Commission

1 PROCEEDINGS

2 ERIC LEEDS: Thank you so much. Now I'd like to introduce the
3 executive director for operations, Bill Borchardt. Mr. Borchardt became the EDO
4 at the NRC in May of 2008. Since joining the NRC in 1983, he has served as a
5 senior site inspector at both pressurized and boiling water reactors and has held
6 leadership positions in the Operating Reactor Program, the Enforcement
7 Program, and the Nuclear Security and Incident Response Program. In August
8 2006, when the Office of New Reactors was created, Mr. Borchardt became the
9 first director of that office. And while in that position, he was appointed as the
10 executive director for operations. Mr. Borchardt graduated from the U.S. Naval
11 Academy in 1978 with a Bachelor of Science in Chemistry and spent five years in
12 the nuclear Submarine Program. Mr. Borchardt.

13 BILL BORCHARDT: Thank you, Eric.

14 [applause]

15 Well, good morning. On behalf of the NRC staff, I'm pleased to add
16 my welcome to this year's conference. I look forward to the many interesting
17 sessions and interacting with many of you over the next several days. And my
18 thanks as always to the Office of Nuclear Reactor Regulation and the Office of
19 Nuclear Regulatory Research, as well as the many volunteers from the NRC
20 staff, who each contribute to these conference's success. Your attendance at
21 this conference is a clear indication to me that you care about our mutual

1 interests and responsibility in the safe and secure use of radioactive materials. I
2 firmly believe that regardless of the organization we each represent, or even the
3 position we take on any specific technical issue, we are all united in the objective
4 in protecting public health and safety and the environment. So, as I begin, I'd like
5 to thank everyone: the NRC staff, the licensees, the state representatives, our
6 international colleagues, the NGOs and all other stakeholders for your daily
7 contribution to our shared objective.

8 My talk this morning is going to provide a high level overview of
9 NRC operations, especially focusing on the last year, and also offer some
10 thoughts on how we can work productively together to ensure public health and
11 safety. 2012 is certainly a busy and productive year. In addition to
12 accomplishing our number one priority, which is, of course, our ongoing licensing
13 and oversight responsibilities, 2012 marked some key steps forward in
14 implementing Fukushima lessons learned and the issuance of the first combined
15 licenses for new reactors at Vogtle and Summer. While it was a year without
16 significant new operational events, it was a year filled with ongoing response to
17 the significant events of 2011, including Fukushima, the Midwest flooding, and
18 the Virginia earthquake. 2011 seemed to be a year dominated by natural events.
19 And while Hurricane Sandy certainly drew our attention in 2012, 2012 was much
20 more a year of event evaluation and near-term lessons learned activities. 2013
21 and 2014, I think, may well be remembered for the policy decisions that could
22 impact the regulation of the nuclear industry for generations to come.
23 Notwithstanding the challenges that we faced in 2012, including the significant
24 resources allocated and dedicated to Fukushima follow-up, the NRC staff was
25 able to maintain focus on the operational safety and security and carry out our

1 domestic responsibilities without any sacrifice in quality. I'm thankful to my co-
2 workers' dedication and commitment to our mission.

3 In addition to the Vogtle and Summer combined licenses, we also
4 issued two significant fuel cycle licenses during 2012. In September, we issued
5 a license to GE Hitachi Global Laser Enrichment to construct and operate a
6 laser-based uranium enrichment facility. And in October, the NRC issued a 40-
7 year license to International Isotopes Fluorine Products for construction and
8 operation of a depleted uranium deconversion facility. During 2012, we
9 reintegrated security back into the reactor oversight program public action matrix,
10 moving it from the previously separate security assessment program. We
11 believe that this provides a more holistic representation of licensee performance
12 and is entirely consistent with being an open and transparent regulator. Safety
13 culture has remained a high profile issue since finalizing the policy statement in
14 late 2011. We will continue to pursue a wide range of outreach and educational
15 activities.

16 Our efforts to promote a strong internal safety culture at the NRC
17 complement our external safety culture activities and those of the industry. We
18 intend to remain focused on this important area in the years to come. In
19 November, we issued our final state-of-the-art reactor consequence analysis
20 report. This effort used computer models and simulation tools to estimate the
21 realistic public health consequences of the very unlikely accidents at two reactor
22 sites representing different designs and different containment designs. The
23 project concluded that the populations around the two plants would see only a
24 very small increase in fatal cancer risk if the analyzed accidents occurred. One
25 final accomplishment I'd like to highlight is the new component of our regulations

1 Part 37, which codifies and expand upon the security measures for Category 1
2 and 2 byproduct materials, which are the most risk-significant radioactive
3 materials.

4 Our budget has been relatively flat or declining in the past several
5 years, and currently we're operating under a continuing resolution that's tied to
6 our 2012 budget. A 5 percent sequestration went into effect on March 1st,
7 resulting in a reduction of approximately \$52 million to our full year continuing
8 resolution appropriation. Impacts will include elimination of the grants to
9 universities and minority-serving institutions program, elimination of funding to
10 the new reactor licensing long-term work, reductions in several long-term
11 research activities, delays in infrastructure upgrades and staff training and delays
12 to fuel cycle uranium recovery and spent fuels storage and transportation
13 environmental reviews. The NRC will, however, be able to continue with safety
14 and security mission for existing licensees, including new reactor and fuel cycle
15 facility construction activities. As the chairman mentioned, we do not plan on
16 initiating any employee furlough actions due to the sequestration. NRC staffing
17 peaked in 2011 with just over 4,000 employees. We began 2013 with a little less
18 than 3,800 on board. And even with the tight fiscal constraints, just to make up
19 for attrition, we expect to hire approximately 2,200 new employees. We're
20 focusing on entry level positions as well as critical skill needs in some of the
21 harder to fill areas. And I'm confident that we will continue to improve the
22 diversity of our staff through these new hires.

23 We're very happy to have started to occupy the new Three White
24 Flint North building and are working with GSA to finalize a plan for the
25 reconsolidation of the NRC staff here in North Bethesda. On the IT front, we

1 continue to make improvements to both the public -- for both the public and our
2 staff. For the staff, we're currently transitioning to Windows 7 and Office 2010.
3 And in February, we began a bring-your-own device program to enhance and
4 simplify secure access to NRC systems for all NRC employees who wish to take
5 advantage of that program. For the public and other stakeholders, we continue
6 to increase our presence on social media and look for more and better ways for
7 the public to access information and interact with us when you so desire.

8 On other programmatic issues, as part of the 21st Century
9 Acquisition Program, we're implementing leading practices to, among other
10 things, buy goods and services more efficiently. This approach to contracting
11 maximizes our ability to get the most value for each dollar spent and helps us
12 gain a holistic view of how we are doing on government-wide initiatives, like small
13 business contracting and support the veterans. And finally this year, we
14 deployed the web-based licensing system. And while apparently this system
15 stores all NRC licenses, we expect that eventually it will serve as a national
16 repository for NRC and agreement state licenses.

17 Most plants continue to perform well, and we see no statistically
18 significant adverse trends in our annual assessment of industry performance.
19 We expect and anticipate industry to maintain a good overall level of
20 performance. However, at the same time, we continue to gain valuable insights
21 from our collection and review of operating experience. For example, in 2010,
22 there have been an increase in the number of events that have become
23 significant when an actual initiator was complicated in unexpected ways by
24 equipment failure or inappropriate operator response. And while not statistically
25 significant, this trend is noteworthy and shows how cascading impact of multiple

1 deficiencies following an expected initiated event could challenge the defense-in-
2 depth concept.

3 Despite positive fleet-wide performance, there have been
4 significant issues at several individual plants and other facilities over the past
5 year. These remain areas of substantial activity for us. For example, at the San
6 Onofre Nuclear Generating Station, they experienced unusual wear on recently-
7 replaced steam generators. This has generated significant public and
8 Congressional interest. And we will not allow restart of this facility until safety is
9 assured.

10 Since December of 2011, Fort Calhoun has been under an
11 enhanced oversight of inspection manual Chapter 0350 for plants in a shutdown
12 condition as a result of significant performance or operational concerns. This
13 was due to significant regulatory findings and a significant operational event,
14 which was an electrical breaker fire, and in 2011, the Missouri River flood that
15 occurred. The NRC established a special oversight panel to coordinate our
16 activities associated with addressing and overseeing the improvement of
17 performance issues at Fort Calhoun. At Vogtle and Summer construction sites,
18 NRC Region 2, and the headquarters Office of New Reactors, have been
19 working effectively on the challenges. We have a solid oversight program in
20 place and both the NRC and the licensees are identifying problems and issues to
21 be addressed at the appropriate threshold. The inspections that we've
22 conducted over the past couple years have prompted licensees to take timely
23 corrective action, and in some we're verifying that the licensees construct the
24 facilities according to the approved design and licensing basis, using quality
25 practices and materials. The Honeywell uranium conversion facility in

1 Metropolis, Illinois shut down May 9th of last year after a post-Fukushima
2 inspection identified that uranium hexafluoride and hydrogen fluoride releases
3 could be larger than assumed in the licensee's emergency plan. We've issued a
4 confirmatory order which is in place that requires Honeywell to take specific
5 actions to evaluate and address the identified issues.

6 I recognize that the power reactor industry faces a wide range of
7 challenges, such as the cumulative impacts of regulation and implementing the
8 Japan lessons learned. But the bottom line is that safety cannot be
9 compromised. The NRC's safety philosophy has not changed and the industry's
10 responsibility to conduct activities safely has not changed either. Evaluating the
11 events at Fukushima, developing the lessons learned and implementing the
12 physical and procedural improvements at U.S. facilities has been of the highest
13 priority, second only to the day-to-day safe operation of our licensees.

14 There are three basic principles that guide our actions relating to
15 Fukushima lessons learned. First, to not distract from our number one priority,
16 which is the day-to-day safety of operating reactors and other licensees; to not
17 displace higher safety benefit work; and third, while schedule is important, it is
18 ultimately more important that we do it right the first time. All operating reactors
19 have been ordered to implement mitigating strategies to restore or maintain core
20 cooling containment and spent fuel pool cooling in response to extreme natural
21 events that result in the loss of power -- of all power at the plants. These
22 strategies incorporate the use of the flex approach, which is designed to address
23 critical problems encountered at Fukushima by ensuring that one, they can deal
24 with the initial phase of the event using installed equipment; and second, that
25 additional equipment, pumps, and power sources, are stored in multiple on-site

1 locations for use when the installed systems are no longer available; and third,
2 that there is emergency equipment stored in secure off-site locations to support
3 the long term needs of a damaged reactor power plant. Licensee plans for
4 implementing this approach are being reviewed by the staff as we speak.

5 The NRC ordered BWR reactors with Mark I and Mark II
6 containments to ensure a reliable hardened vent system is in place to relieve
7 containment over pressure conditions that might hinder the cooling of the reactor
8 core. The NRC also ordered operating reactors to enhance spent fuel pool level
9 instrumentation to ensure operators are aware of the condition of the spent fuel
10 pool following an extreme external event. The NRC required each reactor
11 licensee to conduct lockdowns of its facilities to ensure protection against the
12 design basis flooding and seismic events. The reports related to these
13 lockdowns were submitted last November and are available on the NRC website.
14 Issues identified during the lockdowns are being corrected through licensee
15 corrective action programs and their resolution is being monitored by the NRC
16 inspection staff. Recognizing that in many cases the design basis conditions
17 were established decades ago, the NRC required licensees to reevaluate the
18 seismic and flooding hazards at each site using present day methods and
19 updated information. We have also initiated a rulemaking for proposed changes
20 to the station blackout requirements and on-site emergency response
21 requirements.

22 The NRC continues the assessment of the various additional
23 issues, the so-called tier two and tier three items to determine what, if any,
24 additional actions the NRC might need to take to address the lessons learned
25 from the Fukushima accident. The sharing of information with our international

1 colleagues and the industry's cooperation and support for thoroughly examining
2 the implications of the accident, including undertaking independent analyses,
3 should give all of us confidence that we are on an appropriate path and the most
4 important issues are being identified and are being addressed.

5 There are some other major issues and current activities that the
6 staff is focusing on, including the use of vendors and contractors by licensees to
7 provide expertise in certain technical areas. And this will continue to receive
8 close regulatory oversight. Although I believe that there's clear understanding of
9 the licensees' responsibilities for the quality of all technical work, including
10 licensing submittals, recent experience indicates that some Part 50 Appendix B
11 oversight of vendors by licensees may not be adequately implemented in all
12 cases. Recent problems with the technical quality of some safety analysis
13 submittals have resulted in schedule delays and issuance of 5054(f) requests for
14 information. It's worth noting that the 2010 International Atomic Energy Agency
15 integrated regulatory review service mission that was conducted here at the NRC
16 questioned whether requirements were adequate in the vendor oversight area.

17 Regarding a related activity, new construction inspection, we have
18 completed ITAAC and other programmatic inspections to provide assurance that
19 the licensees have effective QA, corrective action programs, ITAAC
20 management, and procurement oversight. The inspections that we've identified
21 to date have included facility construction deviations from the approved and
22 certified design, construction code violations, and manufacturing deviations from
23 the design requirements. As a result, the licensees have undertaken self-
24 assessments to ensure that construction is in accordance with the licensing
25 basis. This has resulted in the delays in some projected activities. And as a

1 result of multiple inspection findings during the first year of combined license
2 implementation, the licensees have strengthened their oversight of their
3 contractual partners. I don't think we should be particularly surprised of
4 identifying some issues since this is the first time we've built a new facility in
5 many years in the United States. And I'm confident that while we're on a steep
6 learning curve, we are, in fact, really on a learning curve and expect smoother
7 progress to occur in the near future.

8 The chairman has addressed waste confidence. The only point
9 that I would like to reiterate is that the staff's -- the technical staff's review of all
10 licensing action is continuing without any changes in schedule or technical
11 content while we address the waste confidence issue. The one thing that may be
12 held up until it is resolved fully is the issuance of license renewals or new
13 operating licenses.

14 Finally, we continue to derive great benefit from a full range of
15 international activities and from interaction with our international regulatory
16 colleagues. Key among those activities is the post-Fukushima coordination,
17 including the Convention on Nuclear Safety extraordinary meeting that was held
18 last summer that focused on the lessons learned from the Fukushima accident.
19 Another important international activity occurred in December when the NRC
20 convened the first ever International Regulatory -- Regulators Conference on
21 Nuclear Security. Looking ahead in 2013, at our request, a group of international
22 experts put together by the IAEA's International Physical Protection Advisory
23 Service will be coming to the United States. They will conduct a peer review of
24 our nuclear security program, compare it to international guidelines and
25 internationally-recognized best practices, and make recommendations for

1 improvements. As with the integrated regulatory review service mission in 2010,
2 we request these visits to demonstrate our strong commitment to nuclear safety
3 and security, continuous improvement, critical self-assessment, and information
4 sharing with the international community.

5 I would now like to shift gears for a few minutes to discuss how
6 each of us, the NRC staff, the licensees, the NGOs, members of the public, can
7 constructively contribute to our shared objective of public health and safety.
8 From time to time, there are certainly high profile events that potentially -- with
9 potentially significant safety or security ramifications that impact what the industry
10 and the NRC must do in response. In these emergent situations, such as the
11 accident at Fukushima, the NRC and the industry must respond promptly and
12 effectively to the problems or potential problems at hand. However, it isn't our
13 attention to these matters alone that drives our success in fulfilling our mission to
14 protect public health and safety, promoting the common defense and security,
15 and protecting the environment. Rather, I believe it's the unwavering attention to
16 detail in carrying out the full range of day-to-day activities that our work requires.
17 If we don't regularly and conscientiously attend to these baseline activities, we
18 will not succeed in our mission. The nuclear technology requires a focused
19 attention to detail, an uncompromising commitment to safety, and a relentlessly
20 questioning attitude. There is no routine work in this business. Today's work,
21 whether it's a design calculation, writing a procedure, doing a regulatory review,
22 or taking a position on a policy matter, are important matters that may have a
23 safety impact years in the future. As the chairman alluded to her visit, which I
24 was -- attended to Fukushima, there is no more stark reminder of a decision we
25 make today that could have an impact 15 or 20 years in the future. So, it's that

1 baseline work that we need to maintain our very strict and close attention to. To
2 succeed, we obviously need to be technically competent and have adequate
3 resources. Beyond that, a strong nuclear safety culture, organizational values,
4 and the NRC principles of good regulation form a solid foundation upon which
5 our important collective work can be accomplished in a truly constructive manner.

6 I suggest that if we all aspire, and I mean all the parties in this
7 room, to these kinds of principles and values that we can enhance our ability to
8 protect the public health and safety. We have a long history and numerous
9 examples of how individuals and organizations representing different
10 perspectives can work together to make a positive contribution. I also suggest
11 that we must each actively choose to approach our work with a set of values and
12 principles that provide a firm foundation for our own behavior. At the NRC, our
13 core organization values guide every action that we take, including our
14 interactions with the regulated communities and all stakeholders. Values like
15 these are not unique to the NRC, and I would expect that each of you in your
16 organizations have a comparable set of values. We seek working relationships
17 where all parties act with integrity, interacting in a manner that is trustworthy,
18 reliable, ethical, and unbiased. We adhere to the value of service to the public
19 and others affected by our work. We all need to listen to one another to be
20 accountable to the important work that we do. We also value openness in our
21 communications and decision-making. We seek to promote transparency and
22 participation in our work and we expect others to be forthright in return. All
23 stakeholders need to share a commitment to public health and safety. We must
24 all be diligent and vigilant in carrying out our separate responsibilities.

25 The existence of the Institute of Nuclear Power Operations, for

1 example, I believe signifies an important commitment to safety on the part of the
2 nuclear industry. We expect your cooperation and need to offer ours in the
3 planning, management, and performance of our work. We can disagree with one
4 another without being disagreeable. Excellence in our individual and collective
5 actions is critical. There are no small tasks when dealing with the nuclear
6 technology. Finally, we must act with respect for the public and others who are
7 affected by our work, act with professionalism at all times. Guided by our values,
8 our principles of good regulation focus on ensuring safety and security while
9 appropriately balancing the interests of the NRC stakeholders, including the
10 public and licensees. Independence: Nothing but the highest possible standards
11 of ethical performance and professionalism should influence our regulations.
12 However, independence does not imply isolation. Final decisions must be based
13 on objective, unbiased assessments of available information and must be
14 documented in a -- with the reasons explicitly stated. Openness: Nuclear
15 regulation is the public's business and it must be transacted publicly and
16 candidly. The American taxpayers, the rate-paying consumer, and licensees are
17 all entitled to the best possible management and administration of regulatory
18 activities, and therefore the principle of efficiency. Clarity: The regulations should
19 be coherent, logical, and practical. Agency positions should be readily
20 understood and easily applied. And reliability: The regulations should be based
21 on the best available knowledge from research and operational experience.
22 Once established, regulations should be perceived to be reliable and not
23 unjustifiably in a state of transition. Under these principles, our success and your
24 success are intertwined. As such, your thoughtful comments, technical analyses,
25 and other feedback are important contributions to our efforts to fulfill our mission.

1 We have long accepted that a strong nuclear safety culture is
2 important to the operation of nuclear facilities. I believe that it's no less important
3 to the operation of the regulatory process. Everyone in this room and every
4 organization represented here has an obligation to participate in the regulatory
5 process in a manner that is consistent with the principles that I've outlined this
6 morning. We, the NRC staff, will hold ourselves accountable to the appropriate
7 behaviors, and we expect no less from anyone else. With shared commitments
8 to the values, principles, and a strong nuclear safety culture, the NRC and the
9 regulator community need to work both together and independently to
10 successfully complete our baseline activities. Beginning last fall, for example,
11 we've been working closely with INPO in aligning on common language for safety
12 culture traits so that both the NRC and the industry will be speaking the same
13 language in discussions surrounding safety culture. This effort followed the
14 NRC's issuance of the policy statement in June of 2011. Similarly, when working
15 independently, industry needs to be proactive about ensuring technical
16 excellence in providing the NRC with timely, accurate, and complete input that
17 supports the NRC activities in accomplishing our mission.

18 In closing, let me reiterate that we need to focus on our day-to-day
19 safety and security responsibilities in addition to things like the lessons learned
20 from Fukushima. In doing so, we must work closely together. We must work
21 honestly with each other to continue to maintain our shared record of success in
22 ensuring protection of public health and safety and protection of the environment.

23 Thank you.

24 [applause]

25 ERIC LEEDS: Bill, we don't have a lot of time, but we have time for

1 a couple questions. So if you will, if sequestration continues, what would be the
2 impact on the contractors who provide technical assistance to the staff and would
3 that impact the waste confidence rule work that the staff is undertaking?

4 BILL BORCHARDT: Well, the waste confidence rule is a very high
5 priority activity, so I think I can say with a fairly high degree of confidence that
6 sequestration would not impact that activity. Regarding the impact on
7 contractors and individual activities, there's no organization that I'm aware of that
8 can take a \$52 million cut and not have an impact eventually. What we are trying
9 to do is identify those activities that are longer-term activities that don't impact
10 current day safety security issues. There will, without a doubt in my mind, be
11 schedule delays, perhaps even the deferral of the initiation of some work moving
12 out if the sequestration were to last for a long time. The individual contractors
13 and individual licensees over the next several weeks will be contacted by Eric's
14 project managers or by the Office of Administration contract managers to provide
15 specific details as we gain a more clear understanding of the impacts.

16 ERIC LEEDS: All right, Bill, one more question. Regarding the
17 state-of-the-art reactor consequence analysis, will the results be used to inform
18 and perhaps reduce requirements for accidents based on the more realistic
19 consequences and results?

20 BILL BORCHARDT: I think I would consider that -- the study
21 results of that to be one element of the fabric of all of the inputs that really
22 considered by the staff in developing recommendations and then one of the
23 many factors considered by the Commission as they make policy decisions on a
24 wide range of issues. So, this is -- this report is not the final answer. It will not
25 be the sole basis upon which any action is taken, but it is an important input into

1 that regulatory process.

2 ERIC LEEDS: Thank you.

3 [applause]

4 Thank you so much, Bill. All right, at this time we're going to take a
5 networking break, give you an opportunity to browse around the technical posters
6 and tabletop presentations. Please get back here for your seats at 10:30 and
7 we'll continue. Thank you.

8 [Whereupon, the proceedings were concluded]