

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

+ + + + +

STRATEGIC PROGRAMMATIC OVERVIEW OF THE
NUCLEAR MATERIAL USERS AND THE
FUEL FACILITIES BUSINESS LINES

+ + + + +

PUBLIC MEETING

+ + + + +

THURSDAY

NOVEMBER 13, 2014

+ + + + +

The Commission met in the Commissioners' Conference Room, 1st Floor, One White Flint North, 11555 Rockville Pike, Rockville, Maryland, at 9:30 a.m., Allison M. Macfarlane, Chairman, presiding.

PRESENT

ALLISON M. MACFARLANE, Chairman

KRISTINE L. SVINICKI, Commissioner

WILLIAM C. OSTENDORFF, Commissioner

JEFF M. BARAN, Commissioner

STEPHEN G. BURNS, Commissioner

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26

NRC STAFF

MARK SATORIUS, EDO

CATHY HANEY, NMSS

LAURA DUDES, NMSS

PATRICK LOUDEN, RIII

BARRY WESTREICH, NMSS

TONY GODY, RII

MARISSA BAILEY, NMSS

P-R-O-C-E-E-D-I-N-G-S

9:32 a.m.

1
2
3 CHAIRMAN MACFARLANE: All right, good morning.
4 All right, welcome our Staff, members of the public, members of
5 industry to the meeting.

6 Today we're going to receive presentations from the
7 NRC Staff on a broad range of activities to do with the Nuclear Material
8 Users and Fuel Facilities Business Lines. So, we're going to do this in
9 two sessions. We're going to have a break in between. The first panel is
10 going to discuss topics related to the Safe and Secure Use of Nuclear
11 Materials, and then we'll have a period of questions and answers from
12 the Commission. And then after the break, the second panel is going to
13 focus on the activities related to Fuel Cycle Facilities, and then we'll
14 have more questions.

15 So, I look forward to our discussion. Let me see if any
16 of my colleagues have any opening remarks? No? All right, then we will
17 go directly to the Staff. I'll turn things over to our Executive Director of
18 Operations, Mark Satorius.

19 MR. SATORIUS: Good morning, Chairman, good
20 morning, Commissioners. Thank you for the opportunity for us to
21 provide the Commission with an overview and a discussion of the
22 strategic considerations associated with the Nuclear Materials and the
23 Fuel Facilities Business Lines, including current activities, expected
24 priorities, near and longer-term projections, and emergent focus areas.

25 Today we're going to start with a discussion of the
26 strategic considerations associated with the Nuclear Materials

1 Business Line, including current activities for the National Materials
2 Program, Business Line priorities, emerging focus areas, and the future
3 of the program.

4 I look forward to any questions that you'll have for us at
5 the completion of the Staff's presentation, and I'll turn this over to Cathy
6 now.

7 MS. HANEY: Thanks, Mark. Good morning. Today
8 what I'd like to do is to do a quick program overview and then we'll talk
9 about the current activities we have going on in this business line. Our
10 focus areas, our future plans, as Mark said, and then we'd also like to
11 highlight the Regional Inspection and Licensing Program for a few
12 minutes.

13 At the table with me today I have Laura Dudes to my
14 right, who's the Nuclear Materials User Business Line lead, and Pat
15 Loudon to Mark's left, who is with us from Region III, and he's actually
16 here representing all the regions that are involved in the Materials
17 Program.

18 Under this business line we draw from many different
19 partners across the Agency. I'd like to highlight those; those being the
20 Office of General Counsel, our Office of Nuclear Regulatory Research,
21 the Office of Nuclear Security and Incident Response, Office of
22 Enforcement, Office of Investigations, Office of International Programs,
23 the Atomic Safety and Licensing Board Panel, and our Office of the
24 Chief Human Capital Officer, and especially there with the technical
25 training staff. So, we do have very broad reaching out across the
26 agency.

1 The Nuclear Materials Business Line represents
2 approximately 22,000 users of nuclear materials across the United
3 States, and about a third of them are engaged in diagnostic or
4 therapeutic uses of radioactive material. A small number are academic
5 facilities or research users, and then the most of them, the remainder
6 are in the radioactive materials for commercial or industrial users, such
7 as radiography gauges, measuring analytical devices and irradiators.

8 The NRC oversees approximately 3,000 of those
9 22,000 licensees, and then the rest come under the regulatory purview
10 of our Agreement States. As always across this business line, our
11 number one priority has been and will continue to be protecting public
12 health and safety, promoting the common defense and security, and
13 protecting the environment. We do this by adhering to the good
14 principles of B- the principles of good regulation, by adhering to the
15 NRC organizational values, and exercising an open and collaborative
16 work environment with all of our partners and external and internal
17 stakeholders.

18 We do this through the efforts of our highly skilled and
19 dedicated Staff located here in headquarters, as well as in the regions.
20 And we work closely with our regulatory partners, including the
21 Agreement States, the Tribal programs, and our other federal partners
22 to implement the National Materials Program. In addition, we work very
23 closely with the Organization of Agreement States who plays a very
24 pivotal role for us in the National Materials Program.

25 And with that quick overview, I'd like to turn it over to
26 Laura, who will discuss our current activities and some future plans.

1 MS. DUDES: Thank you, Cathy. Good morning,
2 Chairman; good morning, Commissioners.

3 So, I think B- may I have Slide 3, please. Okay. So, as
4 Cathy mentioned, the National Materials Program includes the NRC's
5 safety and security oversight of our licensees, and our unique
6 relationship and partnership with the 37 Agreement States, and that's
7 noted by the map and the designation on this slide.

8 First and foremost, our focus is on the safety and
9 security of the byproduct material. And the Program Office supports
10 regional implementation through guidance development, rulemaking,
11 and technical support. And my colleague, Pat Loudon, will talk about
12 regional perspectives shortly.

13 We've made significant progress on the 21-volume
14 consolidated series of licensing guidance referred to as NUREG-1556.
15 This guidance covers many of the types of licensing that's covered
16 under our business line. We have portable gauges, fixed gauges,
17 industrial radiography, medical uses, irradiators, and that doesn't cover
18 B- that's just some examples of these volumes.

19 So, over the past few years the Staff has completed
20 over half of these volumes, a revision to that and provided them for draft
21 and comment. We have actually completed the initial, or the second
22 revision to the documents for the second half of these volumes, and
23 plan to get that done for public comment in 2015, and then hopefully
24 complete this rather large project by 2016.

25 10 CFR Part 37, which is the Physical Protection of
26 Category 1 and Category 2 Radioactive Materials, became effective for

1 NRC licensees in March of 2014, and we issued our Physical Security
2 Best Practices Guide in May 2014. This was issued to our licensees,
3 and Agreement States partners.

4 We are now working with the regions. We are
5 inspecting against the Part 37 Source Security Rule, and we're working
6 with the regions to make sure we have consistent inspection practices,
7 and we apply our enforcement consistently across the program for the
8 new rule.

9 This past year we completed 13 Agreement States
10 program reviews under the Integrated Material Performance and
11 Evaluation Program, including a follow-up review to the State of
12 Georgia, which was placed on probation as a result of an IMPEP review
13 in 2013. The results of our 2014 review informed the Commission's
14 decision to remove Georgia from probation.

15 The NRC's draft Tribal Policy Statement, which is
16 pictured on this slide, is a set of principles established by the
17 Commission to guide the NRC's coordination and consultation activities
18 with Native American Tribes. The Staff has developed an
19 implementation plan for outreach activities through 2016. We've revised
20 the Tribal Protocol Manual, and the Draft Tribal Policy Statement
21 should be published for public comment shortly.

22 Note in the Regulations.gov logo on this slide, our
23 business line also has important rulemaking activities ongoing. This
24 past summer the Staff issued the Part 35 Medical Rule for comment.
25 That comment period actually closes next week. We'll be able to
26 address the comments and provide that paper to the Commission in

1 2015 for final review and approval.

2 We're also leading efforts on 10 CFR Part 20,
3 Standards for Protection Against Radiation. We issued an advance
4 notice for proposed rulemaking in July 2014, and we'll provide the
5 Commission a regulatory basis for that revised Part 20 in December of
6 2015. Next slide, please.

7 So, beyond the public meetings that we have on
8 licensing issues or other regulatory matters, our business line has an
9 extensive outreach program with other organizations with similar
10 functions and missions. We coordinate closely with the Organization of
11 Agreement States, and the Conference of Radiation Control Program
12 Directors through monthly teleconferences, attendance at their board
13 meeting, and, of course, strong NRC participation in their annual
14 conferences.

15 We have good networks established through our
16 Regional State Agreements Officers and our Regional State Liaison
17 Officers. These folks who actually work out in the regions but also
18 coordinate very closely with the Program Office, they assist with routine
19 inquiries, program issues, but more importantly, the relationships that
20 they have established with their state counterparts facilitates timely
21 information exchange and possibly decision making, if we have a safety
22 or security event.

23 We work with the Native American Tribes to facilitate
24 consultation and participation on specific licensing matters before the
25 NRC, but beyond that we're conducting a pilot training program to
26 provide basic health physics training at Native American colleges. To

1 date we've completed two pilot training programs, one in Montana, one
2 in Wyoming, and we have the remaining three scheduled to be
3 completed by March 2015.

4 Our business line has a very diverse group of
5 licensees, and they can be located at a large medical facility in a
6 metropolitan area, a small private community, private practice, an
7 offshore oil rig, a warehouse in Alaska, and any other combination of
8 those things you can think of, you could find one of the licensees under
9 this business line. So because of that, we need to really use as many
10 avenues as possible to reach out to the licensees, make sure they're
11 aware of things that are going on with the regulatory community. So, we
12 have our external website which, again, we try and promote as much as
13 possible. Our quarterly newsletter which we do issue to all the
14 licensees on our Listserver, face-to-face time during inspection and
15 licensing or pre-licensing activities helps encourage people to use
16 these sites. And also participation at professional conferences, such as
17 the National Mining Association, all these things help facilitate
18 information exchange with our licensees.

19 We meet with the Advisory Committee on Medical
20 Uses of Isotopes formally twice a year, but we engage them throughout
21 the year through Subcommittees and teleconferences such that they're
22 able to have early engagement and help inform our regulatory activities
23 that could impact the practice of medicine.

24 And we continue to leverage professional societies,
25 such as the American Association of Physicists in Medicine, the
26 American Society for Radiation Oncology, and the Health Physics

1 Society, and that's naming a few that we've been more active with this
2 year. But we do this to reach a broader set of practitioners and
3 encourage comments and participation in our regulatory process.

4 This year, the Staff conducted poster sessions at
5 several conferences to specifically focus on comments on Part 35
6 Medical Rule and the Part 20 Advanced Notice for Proposed
7 Rulemaking. Next slide, please.

8 I just want to take a moment to highlight some of the
9 management team's near-term focus areas. Internal to the NRC, we've
10 initiated an effort for the NRC's nuclear material users to assess current
11 practices and inspection, licensing, and self-assessment, develop
12 recommendations on best practices such that the NRC is operating
13 under one Material Users Program consistent across headquarters and
14 regions.

15 The focus of this effort will be to consolidate processes
16 and procedures under a single Nuclear Material Users Program plan. I
17 do need to make a note here that I think technically in the application of
18 inspection and licensing all of our Staff qualifies to the same guidance,
19 they use the same guidance and procedures. What the division
20 management really wants to do this next year is, again, consolidate the
21 program under a single governance plan for administrative, so that a
22 license in Region I, Region III, and Region IV looks identical and is
23 processed in a similar manner.

24 The 2014 Radiation Source Protection and Security
25 Task Force Report is pictured on this slide and represents a four-year
26 effort among 14 federal agencies and a representative of the

1 Organization of Agreement States. As we move forward, we need to
2 continue to foster our relationship with our state and federal partners to
3 assure we're working towards common purpose with clear roles and
4 responsibilities in securing the nation's byproduct material.

5 We've already held our first meeting post the Task
6 Force Report with the group, the Task Force to set the stage for
7 interactions, goals, and expectations over the next four years, and we'll
8 continue to do that through our meetings, one of which is actually
9 scheduled early in December. Beyond that, the Staff is developing the
10 implementation plan for the recommendations that were in the 2014
11 report, and we'll be providing that to the Commission in February 2015.

12 The graphic on this slide that highlights the human
13 thyroid represents our activities associated with radioiodine patient
14 release. The Office of Research is conducting a study to develop
15 additional data to inform our decision making on any possible changes
16 to our current patient release criteria, but concurrently the Staff is
17 working to solicit feedback from a broad range of stakeholders, and we
18 want to conduct multiple public workshops so that we can make
19 short-term gains and actions, including guidance development,
20 website, and brochures that highlight best practices for licensees and
21 patients who are dealing with this therapy.

22 We continue to look for ways to enhance our
23 Agreement States Program, including consolidating the Agreement
24 State Policy Statements, assessing the need for more
25 performance-based IMPEP metrics, and this past summer we
26 performed a tabletop exercise with the regions to assess how ready the

1 NRC would be both Staff-wise and procedurally to take back an
2 Agreement State Program if we needed to do so either under
3 emergency conditions for a temporary issue, or permanently if a state
4 would so decide.

5 The tabletop confirmed that yes, we are capable of
6 taking back most of the programs, and the country would be more
7 challenged with a larger program, but we did identify some
8 enhancements to our procedures that could clarify roles and
9 responsibilities, so the Staff is wrapping that work up, and will provide a
10 paper to the Commission in terms of some recommendations and
11 suggestions for the future.

12 Tribal liaison activities continue to be a focus this year
13 as we complete our pilot training program, decide how we'll proceed
14 with future training activities, finalize the Tribal Policy Statement, and
15 continue to establish early interaction protocol agreements with those
16 specific Tribes that may have specific licensing matters they're
17 interested in with the NRC. Slide 6, please.

18 The Nuclear Material Users Business Line is always
19 looking for ways to become more effective and agile in a highly dynamic
20 environment. I believe that once we complete the NRC's Internal
21 Material Users Review that I spoke about on the last slide, I think that
22 will bring B- the program will be poised to be more effective in sharing
23 licensing and inspection resources across the Agency.

24 The rate of change for new technology continues to
25 increase and we will see that rate of change continue in the medical,
26 industrial, and academic uses of nuclear materials. We will need to stay

1 abreast of these changes as they develop and assure we have the right
2 training for our Staff, and we're prepared to respond to new product
3 reviews.

4 Another future activity, currently the NRC has
5 deployed and maintains the integrated source management portfolio for
6 web-based licensing, the National Source Tracking System, and the
7 License Verification System. And all of those are up and running and
8 working in terms of tracking the sources and licensee' ability to perform
9 verifications. But if you look to the future, we're actively pursuing
10 Agreement State adoption of web-based licensing as part of their
11 standard licensing system, similar to the approach the NRC takes. And
12 I think this supports this concept of a National Material Program.

13 The State of Colorado fully transitioned to web-based
14 licensing last year, and through our discussion at the Organization of
15 Agreement States annual meeting in August, we generated a lot more
16 enthusiasm; plus, we followed that up with a series of informational
17 webinars that we completed in the past week or so. From that, we have
18 approximately 20 states that have expressed interest in learning more
19 about web-based licensing.

20 Finally, we're going to focus on knowledge
21 management across the entire National Materials Program. With 37
22 Agreement States, most of the licensees in this country are actually
23 regulated by one of the states. So, in support of providing a consistent
24 and effective approach to licensing and inspection, incident response,
25 the NRC should continue to provide training to all materials regulators.
26 We will look for additional ways to transfer knowledge and work

1 experience between the states themselves across state-to-state
2 borders and with the NRC Staff.

3 We use the latest technology to share operating
4 experience across all of the regulators, provide more training through
5 webinars, online training, and develop mechanisms for on-the-job
6 training through rotational assignments across state and federal
7 borders.

8 That completes my prepared remarks. I look forward to
9 questions, and will turn it over to my colleague, Pat.

10 MR. LOUDEN: Okay. Thank you, Laura. Good
11 morning, Chairman and Commissioners.

12 As part of the National Materials Program, the
13 inspection oversight of the nearly 3,000 NRC licensees throughout the
14 country is carried out through the coordinated efforts of the Staffs in
15 Regions I, III, and IV, and with the Staff in headquarters.

16 In 2014, we completed over 800 inspections. These
17 inspections included a review of the health and safety aspects of a
18 licensee's program, as well as a review of the source security
19 requirements under the former Increased Controls Orders, and under
20 the new 10 CFR Part 37 regulations.

21 Our inspectors maintain a clear safety and security
22 focus during the conduct of these inspections. The inspections are
23 performance-based, and are typically unannounced. However, we may
24 announce an inspection, as needed, to insure key personnel may be
25 available to follow-up on certain matters. The regions and headquarters
26 work cooperatively together during the conduct of these inspections,

1 and if a need is identified, we will provide resources to help each other
2 out with covering inspections. This helps and allows us to broaden our
3 experience base. It also gets a different set of eyes on a licensee's
4 program, and it also helps improve our overall collaboration.

5 Observations and findings as a result from these
6 inspections are shared through our frequent counterpart calls, and with
7 our in-person meetings.

8 A key aspect of the inspection program is our response
9 to events or situations which require further review. We refer to these as
10 reactive inspections, and we conducted a number of these during the
11 last year. One noteworthy reactive inspection that highlighted the
12 cooperative elements of our program was an inspection in response to
13 an event in Alaska where radiography was being conducted without the
14 appropriate controls being in place.

15 The team formed to review the circumstances
16 surrounding this was led by Region IV, and the team was comprised of
17 Staff from multiple regions, and from headquarters. As a program, we
18 complete our inspection activities in a timely manner, and the
19 associated enforcement aspects as a result of these inspections are
20 shared and discussed amongst headquarters Staff and with the regions
21 for both awareness and consistency with the enforcement policy. Next
22 slide, please.

23 Licensing activities for the Materials Program are for
24 the most part completed in the regional offices. Our highly trained and
25 skilled license reviewers are given an important and unique authority;
26 that being to grant the use of radioactive materials to prospective

1 licensees, to review changes to and renewals of existing licenses. This
2 task is not taken lightly, and our reviewers work diligently to insure that
3 a thorough understanding of licensee's intended use for the material is
4 obtained. This is completed in part through frequent dialogues with the
5 licensee, and for new applicants with pre-licensing site visits. Over the
6 past year, we completed nearly 2,000 licensing actions.

7 Our license reviewers and inspectors have been very
8 active in the working groups formed as Laura had referred to with the
9 NUREG-1556 activities. The revisions of this NUREG are focused on
10 adding clarity to the application process, provide expanded guidance,
11 and include a discussion on safety culture. These revisions should
12 improve the quality of the initial applications and gain efficiencies in the
13 overall process.

14 Our licensing activities cover a full range of categories
15 of radioactive material usage. One noteworthy accomplishment in the
16 last year was the licensing of a new emerging technology in the medical
17 field. A new imaging device that combines magnetic resonance imaging
18 with radiation therapy techniques was licensed following a thorough
19 review and pre-licensing visit. Following the issuance of the license and
20 an initial inspection, the licensee subsequently used the device to
21 successfully treat patients this year at a hospital in St. Louis, Missouri.

22 Our licensing activities have also been very active in
23 the area with our Master Materials licensees. A Master Materials
24 licensee is a federal agency that uses radioactive materials at multiple
25 facilities. A Master Materials license is a multi-site license that ties the
26 licensee to a framework of internal oversight for licensing, inspection,

1 event response, and enforcement and allegation follow-up for that
2 facility. All of this is done in accordance with NRC regulations,
3 requirements, and policies. The three agencies holding Master
4 Materials licenses are the U.S. Navy, the U.S. Air Force, and the
5 Department of Veterans Affairs.

6 This last year, a significant milestone was
7 accomplished with the issuance of revised Letters of Understanding to
8 the Air Force and the Department of Veterans Affairs. These revised
9 Letters of Understanding had the clarity and specificity to gain a
10 common understanding of the NRC's expectations and requirements of
11 the two respective Master Materials licensees.

12 I'd also like to mention, as some may recall, significant
13 efforts have been applied over the past years to strengthen our
14 relationship with the Department of Veterans Affairs, and I'm happy to
15 report that we have successfully sustained a very effective working
16 relationship. Next slide, please.

17 Our continued focus areas going forward will include
18 getting more consistency with respect to the inspection and licensing
19 processes. As Laura mentioned, a Nuclear Materials Users Best
20 Practice Working Group is underway, and it is chartered to evaluate
21 procedures, processes, and products with the end goal to achieve
22 better consistency between the regions and with headquarters.

23 Another area of continued focus will be with respect to
24 our strong support of the Agreement State Program. Our regional State
25 Agreements Officers play a day-to-day vital role as a main interface
26 with our Agreement State partners. Further, Region I headquarters

1 licensing and inspection staff consistently support the program by being
2 team members on the Integrated Materials Performance Evaluation
3 Program reviews, and support Agreement States with technical
4 assistance, when needed.

5 Finally, we will continue to focus on maintaining critical
6 skills for our Staff. Associated with this effort is a focus on knowledge
7 transfer. Our inspection and licensing Staff are comprised of a broad
8 range of experienced professionals, and a priority is placed on
9 capturing and sharing knowledge and experiences. We're also looking
10 at ways to expand our public outreach. For example, in Region III we
11 plan to partner with our Reactor Programs counterparts on certain
12 community outreach activities where we plan to present information
13 regarding the Nuclear Materials Program.

14 That completes my presentation. Thank you. To you,
15 Mark.

16 MR. SATORIUS: And we're ready for questions.

17 CHAIRMAN MACFARLANE: Okay, great. All right. I'm
18 going to start off, and let me start with Part 37. So, this is a renewed
19 regulation newly implemented. I understand that one state is already in
20 compliance. is that correct?

21 MR. LOUDEN: That's correct, Ohio has implemented.

22 CHAIRMAN MACFARLANE: Okay. And do you know
23 what the timeline is for other states to be moving along?

24 MS. DUDES: Yes. Well, we have a couple of states in
25 the queue. We have, I believe it's Wisconsin that's already doing it by
26 license conditions, but it's the expectations that all states will be in full

1 compliance within three years or 2016.

2 CHAIRMAN MACFARLANE: Okay, great. So, we're
3 moving along on this. And you said that we just had a task force
4 meeting.

5 MS. DUDES: Yes.

6 CHAIRMAN MACFARLANE: Anything you want to
7 share from that meeting, any new areas of focus, old areas of focus?

8 MS. DUDES: Well, the Task Force really B- we
9 looked at the charter and revising our charter, not radically, but just to
10 be reflective of how maybe the end game would look, and how differing
11 views would be expressed. And then just, you know, we throw some
12 ideas out there. In fact, at the time we talked a little bit about the draft
13 legislation from the Senate Subcommittee, but we didn't get a lot of
14 discussion, open discussion on that, so it's really focusing on the
15 charter, and then the implementation plan that the Staff plans to
16 provide. And I think going forward, we're going to have to make that
17 Committee a little bit more strategic and focused, rather than onesies
18 and twosies action items.

19 CHAIRMAN MACFARLANE: Right. Right. Good. Well,
20 I'm glad you have that plan in place. And I'm glad B- it sounds like things
21 are moving along. We are paying attention to this issue, and exercising
22 our efforts as an independent regulatory agency in this area. Good.

23 All right. You guys talked about so many issues, so I'm
24 going to go all over the place here. So, patient release, jumping to
25 patient release. I know there was just a public meeting here B-

26 MS. DUDES: Yes.

1 CHAIRMAN MACFARLANE: B- that the Staff held on
2 patient release, and I wonder if you could share with us some of the
3 topics, the main messages that the Staff heard from the discussion,
4 from public discussion.

5 MS. DUDES: Well, and correct me if I'm wrong, but it
6 was actually an internal meeting. It was a RES seminar here, but we did
7 invite speakers. It was well attended, 75 Staff members participated.
8 We had Peter Crane, we had Dr. Zanzonico, and then two of the newer
9 Research's contractors that we're going to be working with going
10 forward.

11 I think it was an open exchange of dialogue. Not
12 everybody agrees with everyone's opinion, but it was professional, and
13 the Staff will continue to move forward. That gives us an opportunity to
14 listen to multiple opinions about where we can proceed.

15 Ironically, there was a follow-up letter to the
16 Commission on this, and I think the piece that I look at there is sort of
17 converging on what guidance, whether it's the National Radiation
18 Protection Standards or NCRP, the National Congress. There's an
19 acronym associated with it, but it was referenced in the letter. So, to
20 bring those B- that piece of guidance and Dr. Zanzonico's B- some of
21 his earlier recommendations forward for consideration in our future
22 public workshops would be useful.

23 CHAIRMAN MACFARLANE: Right. Well, I encourage
24 you to continue to reach out and get a variety of views on that topic,
25 because they're out there.

26 MS. DUDES: Yes. And we do have a patient advocate

1 on the Advisory Committee.

2 CHAIRMAN MACFARLANE: Who is very good. I was
3 very impressed.

4 MS. DUDES: And she's very good. Yes, absolutely,
5 and she likes to B-

6 CHAIRMAN MACFARLANE: Did she take part in that?

7 MS. DUDES: Yes.

8 CHAIRMAN MACFARLANE: Oh, good.

9 MS. DUDES: She was here, and she recognizes where
10 we need B- we can make early progress by trying to do guidance and
11 development of more uniform information, so she speaks up often in
12 our meetings.

13 CHAIRMAN MACFARLANE: Good, good.

14 MS. DUDES: So, we appreciate her, and the addition
15 that she has the right name, which is Laura Weil, helps quite a bit.
16 Okay.

17 CHAIRMAN MACFARLANE: Yes, I mean, I still B- I
18 don't know if you recall when we met with ACMUI, but I mentioned that,
19 you know, one of my sources of frustration is going and getting
20 whatever scan, or going with my mother and getting whatever scan,
21 and the technicians can never tell you what dose you're getting. I finally
22 found a technician who could tell me a dose for a CT scan. It was the
23 first one. And, nonetheless, I think there's more work that needs to be
24 done there.

25 Okay. So, you also mentioned that you're maintaining
26 or trying to maintain awareness of new technologies that are on the

1 horizon so that you're prepared in the event that they submit license
2 applications for certification, et cetera. So, can you discuss any new
3 technologies that you see on the horizon that you think might present
4 particular challenges for the Staff?

5 MS. DUDES: Well, I will turn that question over to Pat,
6 but I will tell you that as they come over or come up, like a ViewRay
7 which was a medical device that came up maybe a month or two ago,
8 but B- oh, more than that. So, we share B- partner with the states to
9 have the manufacturers and the distributors come in and provide
10 training both to NRC Staff, and the state staff. We use the Organization
11 of Agreement States meeting to have a panel session on these types of
12 technologies so you're sharing it. And the manufacturers and
13 distributors are willing to come in and teach, because they need to
14 teach practitioners how to use it, so the staff participates in that so they
15 can see the different aspects of radiation protection that might be
16 different for this device.

17 MR. LOUDEN: All I would add is that using the
18 ViewRay as an example, I mean, I don't have one currently that's on the
19 horizon to name, but using that as a reference, it is very B- there is very
20 lengthy time so the more we can identify and work up front with either
21 states, or the users, or a developing technology and interface with them
22 the better, so that's a focus that we certainly have because there is an
23 extensive amount of time, it takes well over a year in many cases to be
24 able to get to a point of licensing such an item.

25 CHAIRMAN MACFARLANE: Okay. Let me turn to
26 web-based licensing now, another issue. You guys are really all over

1 the place. I'm impressed with the amount of work that you do, and you
2 stay on top of it all, so kudos to you.

3 So, you mentioned that B- I think you mentioned that
4 there's some state legislative and infrastructure issues that may
5 challenge states' adoption and participation in web-based licensing.

6 MS. DUDES: Well, yes. So, they participate now when
7 it comes to the Category 1 and Category 2 sources B-

8 CHAIRMAN MACFARLANE: Right.

9 MS. DUDES: B- and the licensing. Moving forward,
10 this is sort of getting them to issue their licenses out of WBL, and that
11 we're all using the same servers to do that.

12 CHAIRMAN MACFARLANE: Right.

13 MS. DUDES: So, when you talk to the states they'll say
14 well, we can't do that because we have a fee system, or we have some
15 privacy rules. But, truthfully, at the last meeting of the Organization of
16 Agreement States in August, we had Colorado, it was almost like a
17 support session from the State of Colorado and the State of North
18 Carolina, who said B- sort of debunked some of the myths about how
19 you can actually transition your program onto WBL, Web-Based
20 Licensing, use it, and then actually export the data for your
21 state-specific activities of billing, and export it back into maybe a
22 different program that the state would use, because they also often
23 have machine x-ray and mammography under their purview, as well.
24 So, I think that was very helpful in getting the states to say well, maybe
25 we can work with this. And as I said, having 20 states being actively
26 participating in our follow-up webinars, we're hoping to move a few

1 more states onto this.

2 CHAIRMAN MACFARLANE: It seems to me that it
3 might be helpful to try to work this at another level, which is at the
4 governor's level. Do we do that?

5 MS. DUDES: We haven't worked it at the governor's
6 level. We have B- Darren Ash had sent out a note to sort of the IT CIO
7 type counterparts at the state to encourage people to adopt the system.
8 And we can. I think, you know, we B- the senior management SES goes
9 out to the Integrated Materials Program evaluation meetings to do the
10 exits, so we try and encourage that with the senior managers that come
11 to those exit meetings as something we should look at.

12 CHAIRMAN MACFARLANE: It just seems to me that
13 we could benefit as an Agency if we try to connect more with governor's
14 offices. And one way to do that instead of being overwhelmed by the 50
15 governor's offices right off the bat is to work through the National
16 Governors Association, and then there are subgroups within that that
17 you can work with. So, I would really encourage the Staff to start
18 developing those relationships. I think it will help when we have
19 challenges with Agreement States, because I think governors B- my
20 personal experience has been that sometimes governors are really
21 unaware of what's going on.

22 MS. DUDES: I think you're right. And actually with the
23 merge B- the particular B- the liaison group that works the National
24 Governors Association has now come under this division, as well. They
25 haven't done much recently, but in the past they were active, so we're
26 looking as we sort of try and stand up the liaison functions to do more.

1 CHAIRMAN MACFARLANE: Right, okay. And just in
2 my last few seconds, just kudos to you for all the interactions and
3 reaching out you do, especially in areas of Tribal work and that kind of
4 thing. I think you guys are doing an excellent job. I encourage you to do
5 more, but I think you're doing an very good job there.

6 MS. DUDES: Thanks.

7 CHAIRMAN MACFARLANE: On to Commissioner
8 Svinicki.

9 COMMISSIONER SVINICKI: Good morning. I think I'll
10 begin, Laura, a little bit where you left off. You mentioned an aspect of
11 the merger of FSME and NMSS, and I know that the Staff intends to
12 address this more explicitly on the next panel. But you've talked a little
13 bit about Tribal outreach, you talked a lot about Agreement States,
14 things that impact them.

15 One of the Commission's concerns in approving the
16 Staff's proposal to merge the two offices was that we have clear
17 communications with all of the various stakeholders and partners that
18 we work with on these programs. Did you have any confusion or
19 negative feedback that you received from any of the constituencies that
20 you all work with in terms of what's happening with NRC, and was it
21 B- do you think we were able to make it fairly seamless for external
22 partners?

23 MS. DUDES: Yes, and I think B- and you might want to
24 jump in here, but we haven't really received feedback yet from the
25 partners, but I know Cathy was out at the Organization of Agreement
26 States along with Mike Weber and other senior managers, Pat and I,

1 Cindy Pederson was there, as well. And I think that one of the key
2 messages at that meeting, and to all meetings where we're interacting
3 with the stakeholders is, if you see something, say something; meaning
4 if you're not getting the service, or that you're seeing a decline in some
5 of that, I think all of our senior managers have made themselves
6 available, as well as the division management to clearly try and head
7 something off at the pass. And we try and sort of take the temperature
8 when we're out working with these different groups, as well.

9 COMMISSIONER SVINICKI: Okay, that's very helpful.
10 Thank you, and thank you all for focusing on that. Again, I don't think we
11 presumed there'd be an issue, but we certainly wanted to have a radar
12 up if anything was falling between the cracks, or a group felt like it was
13 unclear who their contact was, so I appreciate the focus on moving that
14 forward.

15 Looking more a bit at program execution, this is a
16 business line discussion. In some areas of Agency work, we have
17 developed some licensing backlog, so I appreciate the presentation on
18 licensing for this community of users.

19 Is there any backlog that is tracked and is B- are the
20 efforts to B- I know we use the term consolidate the activities, or have
21 one program plan under which licensing, inspection, and enforcement,
22 so there was kind of good coherency across the regions in how this was
23 done. Does that focus come, or rise from any concern about the fact
24 that there is an approach to those activities that might vary across the
25 regions depending on the user, or is this just more of a continuous
26 improvement project?

1 MR. LOUDEN: Let me answer a couple of your
2 questions, Commissioner. From the standpoint of the backlog, we B- all
3 the regions monitor on an ongoing basis what are pending, and we all
4 have our operational metrics that we meet, and we do very well on
5 monitoring and maintaining a very manageable and expected backlog.
6 So, from my perspective, I think we have very tight QA/QC on that on an
7 ongoing basis, so you won't see a large backlog throughout the
8 program.

9 From the standpoint of what we've talked about with
10 respect to the best practices piece, I look at it as an improvement,
11 continuous improvement really gaining some alignment. The things we
12 were talking about say with respect to documentation, or the way or
13 format by which we may have a license set up, those are the types of
14 things we're looking at right now.

15 I think we've got the process piece pretty well down
16 amongst the regions and with headquarters on how we execute our
17 new applicants, our renewals, and we manage our pending, what we
18 call pending licensing actions so that they're very manageable.

19 COMMISSIONER SVINICKI: Would it be a fair analogy
20 to say that in power reactor space the Reactor Oversight Program and
21 the ARM give a great discipline to regional administrators getting
22 together and looking at consistency and coherency in application of the
23 regulatory framework, and that this effort is somewhat of a structuring of
24 similar mechanisms that will allow there to be a guaranteed consistency
25 in the application of the program?

26 MR. LOUDEN: Yes, that's the way I would phrase it.

1 COMMISSIONER SVINICKI: That's fair. Okay.

2 MR. LOUDEN: Yes.

3 COMMISSIONER SVINICKI: Thank you.

4 MR. SATORIUS: Commissioner, if I could just add one
5 thing to Pat's answer to you, and that was in my time in the regions, we
6 would go through ebbs and flows, all the regions would, where they
7 might find themselves short a couple of reviewers, and they would
8 share work back and forth oftentimes. And many of the regions would
9 take their inspectors and co-qualify them as license reviewers so that
10 they were B- more dexterity so that you could move them across lines,
11 and also across regions.

12 COMMISSIONER SVINICKI: Well, I wanted to inquire
13 B- I did hear and didn't want to overreact to some concerns. I think it
14 maybe had more to do with the circumstance with Georgia's program,
15 or something where there were concerns that maybe if the NRC had to
16 take a program back from an Agreement State that there would be a
17 significant setback to things that were in process with that Agreement
18 State.

19 You talked about your tabletop and looking at B- of
20 course we have, and I'm not surprised to hear, Laura, that NRC has the
21 competency to take back a program because, of course, we have our
22 own licensees so there would be some surprise there if we didn't have
23 the right capabilities and competencies.

24 I think the question for me becomes how would we
25 adjust to that quickly? Mark, I think you've kind of mentioned it in that
26 there can be some sharing and spreading of workload. That's a

1 B- maybe as we think about Project Aim, and agility and flexibility, that's
2 a unique feature of this particular programmatic area that's beneficial, is
3 the ability to shift work. The cross training I think is very beneficial that
4 you just mentioned that inspectors can be cross trained to do some
5 licensing work.

6 I do think, though, if there were a need to take back, as
7 Laura mentioned, particularly a large Agreement State program on
8 short notice, we would, of course, have some adjustment. And there
9 would, of course, I think be some backlog or delay to the in-process
10 reviews that were taken back from a state, so I don't think you've given
11 us any information that's surprising there. But I do appreciate that we're
12 looking at it.

13 And I think the tabletop is interesting to do in that it can
14 bring to light maybe administrative barriers or things that we could, if we
15 recognize them in advance, we could begin to address, and then that
16 enhances our state of preparedness if we would need to take
17 something back.

18 And speaking of Agreement State programs, you did
19 give an update on the number of IMPEP reviews, the reviews we do,
20 again, with other Agreement State participants, looking at state
21 programs. In 2008 with the downturn in the economy, a number of the
22 state programs were set back, lost staff, lost budget. Is there anything
23 now in 2014 in terms of the reviews we've done, are we seeing any
24 trends? Are we seeing an increased vibrancy in Agreement State
25 programs from the setbacks that they experienced in 2008 or 2009, or
26 do we see vestiges still of recovering from those decreases in budgets?

1 Laura, just at a very high level.

2 MS. DUDES: I think it runs B- goes across the board.
3 And this is why staffing and training is something that's looked at in the
4 IMPEP process. We've seen some states come up with new and
5 innovative ways to work within their legislator to get higher salaries.
6 We're seeing that in several states. We also encourage them when
7 we're out there that the NRC can get engaged and get an EDO level
8 letter out if they're challenged with resources.

9 I don't know if I can say I see a trend. It's always a
10 challenge for the states. At the meeting in August when the program
11 manager gets up and talks about what he pays his entry-level folks, I
12 mean, I think you see the NRC Staff's just jaw drop and trying to wonder
13 how they can sustain these programs. But there are B- they are sharing
14 practices across some of the Radiation Control Program Directors, too,
15 to sort of help them, say well, how did you navigate, and sort of
16 advocate for higher salaries?

17 In some cases, a state I was just in, they have to wait
18 until somebody has actually made an offer to try and take their
19 individual, and then they can use that as a mechanism for retention. I'd
20 like to see more attention focused on that because they do collect fees,
21 and that they could probably be better at it. But I don't see a trend right
22 now.

23 COMMISSIONER SVINICKI: Okay, that's helpful. I
24 don't know if I dare say this, but I guess I will. you know, I started my
25 public service career in state government, and I think my starting B- and
26 granted this was a long time ago, but it wasn't 100 years ago, but when

1 I started with a state agency I made \$17,000 a year. And I'm kind of
2 smiling because I felt so rich. You know, you're fresh out of college, and
3 I felt like I more than amply provided for all my needs with that. But yes,
4 states certainly have that disadvantage. And then the other thing I hear
5 consistently from the Organization of Agreement State Partners is
6 when they get someone extremely valuable participate in training
7 maybe we provided, other training that they provide, they have a hard
8 time with retention. So, in many cases it's not attracting very young
9 staff, it's retaining the corporate knowledge and the skill sets of people
10 that they have. And I'm not sure what to do about that, but I do
11 appreciate your mention of the training. If there's one thing that I have
12 heard in every single meeting that I've held with OAS representatives, it
13 is how they value having slots in training, and we B- if we ever B- if they
14 lose access to that, it would be a real setback for them. So, thank you.
15 Thank you, Chairman.

16 CHAIRMAN MACFARLANE: Okay. Commissioner
17 Ostendorff.

18 COMMISSIONER OSTENDORFF: Thank you,
19 Chairman. Thank you all for your presentations.

20 Mark, I want to address this first comment really to you
21 as Executive Director for Operations. I think these business line
22 meetings are extraordinarily helpful for the Commission. We get our
23 different SECY papers, COMSECY's that come up that have a
24 particular flavor of a policy issue, or a challenge, or something that
25 requires a Commission decision, but the normal routine function of the
26 Agency is not necessarily highlighted to the Commission other than

1 through these business line meetings. So, when Pat said 2,000
2 licensing actions for materials last year, over the last year, it's good to
3 have that perspective. So, that's just one example among many of the
4 things that have come out already in your presentations today, so I
5 encourage you at the EDO level to continue to enforce, not enforce but
6 to encourage these, because I think they're very helpful for the
7 Commission.

8 MR. SATORIUS: I agree, and I'm glad to hear that
9 they're falling on fertile ears.

10 COMMISSIONER OSTENDORFF: Yes, they are.
11 Thank you. Just a slight comment before I forget it. I agree with the
12 Chairman's comment on the National Governors Association as being a
13 potential target audience for communicating concerns on state
14 budgetary support for Agreement State programs, so I just wanted to,
15 before I forget it, mention that I agree with that comment.

16 Let me comment, and the Chairman got into this a bit, I
17 want to also talk about the radiological source security through a couple
18 of different lenses here. And, first, starting off with the Radiation Source
19 Protection and Security Task Force, I add my thanks to those of the
20 Chairman for those of you who worked on that and your team. I know
21 there's many people throughout the Agency, and I will make a comment
22 that B- and I'm going to ask Laura to give me some feedback on this. Is
23 my sense that amongst I think 14 interagency partners, is that right 14?

24 MS. DUDES: Yes.

25 COMMISSIONER OSTENDORFF: That how the NRC
26 does business, and how we do public meetings, and engage

1 stakeholders, that was perhaps a new topic or something they were not
2 familiar with prior to this process, or maybe not. Can you comment on
3 that?

4 MS. DUDES: I don't B- I think some of them were very
5 familiar. I mean, I think the Department of Energy is very familiar with
6 what we do. These Source Protection meetings are not public, they're
7 just for the agencies. How we do business, again, I think the more
8 B- the ones we interact with more, like DHS which we've done after
9 B- and Security and DOE are more aware.

10 COMMISSIONER OSTENDORFF: Okay.

11 MS. DUDES: I'm not sure if I'm getting to your issue,
12 though.

13 COMMISSIONER OSTENDORFF: Well, I've had
14 B- you know, along with others on the Commission have had some
15 discussions with NNSA where I used to be an official a few years back,
16 and it seemed like at times that there was a revisiting of how we do
17 business under the Administrative Procedures Act for rulemaking, how
18 we have public engagement, public comment periods, Federal Register
19 notice, those kinds of B- just part and parcel of how we do business. I
20 did not sense that everybody was necessarily familiar with that.

21 MS. DUDES: Yes, okay. Now I understand exactly
22 what you're asking. Yes. Yes, I think not all of the agencies. But, again,
23 DOE has B- on the energy side, EPA. I mean, we work with them all the
24 time on rulemaking processes, and it's out in the public. There's a lot of
25 discussion. On our Part 20 rule we're working with EPA and other
26 agencies now. I think some other folks may not have been as clear on

1 that's the approach we take.

2 COMMISSIONER OSTENDORFF: I have personally
3 observed, again as other colleagues at this table have, a lack of
4 awareness of how the Advisory Committee on the Use of Medical
5 Isotopes advises the NRC Staff and the Commission, and how we
6 navigate B- walk a fine line between being aware of the practice of
7 medicine and aware of the use of medical isotopes in the practice of
8 medicine without us saying how to practice medicine. So, I think that the
9 Advisory Committee on the Medical Use of Isotopes is one that I
10 specifically mention as an area that I think we need to continue to
11 highlight externally how that Committee functions and what its purpose
12 is, because I don't think everybody understands that, neither on Capitol
13 Hill, nor some of our other Agency partners.

14 I want to also thank the Chairman in this meeting for
15 her leadership of the Task Force, and for her willingness to, quite
16 frankly, go out on a limb a bit, and to highlight in the cover letter sent to
17 the White House and to Congress the fact that there was not complete
18 consensus on all issues. I thought that was a significant important step
19 that the Commission can completely support it, but I think it's important
20 to highlight that other agencies who do not necessarily understand how
21 we regulate, at the end of the day we have the Atomic Energy Act
22 jurisdiction to regulate these issues, not other agencies. And I think
23 sometimes it's important to take a strong, clear position, and I applaud
24 the Chairman for having done that in the transmittal letter.

25 Pat, I know B- I'm going to shift over real quick staying
26 with source security, though. Part 37, I know it's just recently been out

1 there in the streets. Any quick look, any initial response as to how it's
2 being received, implemented, et cetera? Any comments you'd care to
3 make?

4 MR. LOUDEN: Sure, of course. This year I would say
5 we've B- in Region III, I can speak to what we've seen. We've reviewed
6 probably about 35 of our 80 licensees which fall under Part 37. What
7 we're seeing is a number of things, and it's more in the subtleties of the
8 changes between the increased control orders and then some of the
9 other things that came up with respect to say the trustworthiness and
10 reliability, the depth of that, how to establish proper procedures and
11 infrastructure. Those are the types of findings we're seeing. The bigger
12 safety-significant items, I think we were solid on. We had a couple of
13 go-arounds under the increased controls with inspections, so I think we
14 had that squared away.

15 I will note that one item that has come up in multiple
16 regions has been a general awareness of B- and we spent quite a bit of
17 time and more of an educational and informational aspect on this, is
18 some licensees not realizing that, you know, what these subtleties
19 were, and that there was truly a difference. There are some actions that
20 needed to be taken between the increased controls and the Part 37, so
21 I will highlight that as one thing that I find rather interesting that is
22 common amongst the regions that we are addressing. And we're
23 looking at ways to better get the B- we've discussed with Laura's staff
24 on ways of B- you know, what are some other ways to get the
25 information out there, some generic communications, whatever they
26 may be. But that's what we're seeing right now.

1 COMMISSIONER OSTENDORFF: You do plan to take
2 some steps to share this broadly?

3 MR. LOUDEN: Yes, it's in conversation.

4 COMMISSIONER OSTENDORFF: Okay, good, good.
5 Looking at the Regional Administrator leadership over there to my left,
6 and very pleased to see Vic, and Cindy, and Mark there.

7 I want to just comment. A reactor comment made, and
8 I think either Laura's or Pat's briefing, I can't remember who it was, but
9 basically the regional and state liaison officer function that is performed
10 across the board, I think I have never heard anything but very positive
11 comments on what your folks are doing in those areas when I meet with
12 licensees, or with NGOs, or with community groups. I think of the Prairie
13 Island Indian Community when I've met with them, very strong, positive
14 relationship, Ron Johnson and his team with Region III folks. I know
15 that's replicated across the board, but I think that's just a really
16 important program, and I want to thank you all for your leadership in
17 making that a continued strength of the Agency.

18 The final comment I want to make is, Pat, you
19 mentioned the Veterans Administration. I remember maybe in
20 2010-2011 when Mark was the Region III administrator here at the table
21 for an Agency After Action Review Meeting to look at licensee
22 performance, and we were dealing with the Veterans Administration
23 prostate brachytherapy treatment issues four years ago. And I think at
24 that time we were all pleased with the initiative that Region III had taken
25 to provide some coaching and mentoring to the VA as to how to get
26 better here. And I'm pleased to hear that that is still going on. I think

1 B- could you say a few words about any current focal points for that
2 particular relationship?

3 MR. LOUDEN: I think the success of it has been, and I
4 was working with Mark on this when we started a few years back. It's
5 really about establishing a relationship, and for us, and I want to
6 mention Patty Pelke who's behind B- sitting right here. She's the Branch
7 Chief for the Materials Licensing Branch, and she's been a cornerstone
8 on this throughout that whole time frame.

9 It goes back to just living the NRC values, and respect,
10 and coordination, and cooperation, and really reaching out and
11 communicating in an effective way, which B- and getting a common
12 understanding of each other's needs and stresses on what is being
13 called upon each organization.

14 Once we got through that and we had a common
15 understanding of our roles and responsibilities, I think we then began to
16 prosper on that, and we've continued that.

17 COMMISSIONER OSTENDORFF: Well, I commend
18 you for your work in that area, and for continuing to work on that. I think
19 perhaps the coaching and mentoring aspect has other applications
20 elsewhere, so thank you for your work there. Thank you, Chairman.

21 CHAIRMAN MACFARLANE: All right. Commissioner
22 Baran.

23 COMMISSIONER BARAN: Thank you. Laura, I want to
24 start with a few questions on the Tribal Policy Statement and the
25 Implementation Plan there. My understanding is the implementation
26 plan is going to be coming to the Commission in the near future. Can

1 you talk a little bit about what we can expect to see in the
2 implementation plan?

3 MS. DUDES: Sure. Well, the challenge with giving you
4 guys the exact dates in this meeting was everything was being
5 developed ahead of time, so I think within the next couple of weeks all
6 of the products that came out of the August 2014 request from the
7 Commission will be up to you.

8 In terms of the implementation plan, really it talks about
9 roles and responsibilities of the offices. It provides a level of resources
10 in terms of what activities we may be doing to actually get boots on the
11 ground with particular Tribes, and also work within the NRC to not just
12 be a liaison function, but liaise on specific licensing actions because we
13 have environmental reviews going on in multiple offices, and so we
14 want to make sure that we continue to coordinate so that we're seen as
15 one Agency with liaison and licensing-specific activities. So, that would
16 be the implementation plan.

17 The Protocol Manual is being revised to sort of indicate
18 Staff's B- expectations of Staff as they perform these activities. And, of
19 course, the Policy Statement itself has the guiding principles for how we
20 will interact.

21 COMMISSIONER BARAN: On the revision of the
22 Protocol Manual, what is the extent of the interactions with the Tribes
23 on that in terms of getting their thoughts on it? Who have you reached
24 out to, and how are those Tribes selected?

25 MS. DUDES: All right. So, that's specific Tribes. I'm
26 going to have to go to my lifeline in the well.

1 MR. FIRTH: This is James Firth, the NRC Staff. With
2 the Protocol Manual we've gone out similar to the Policy Statement to
3 all the Tribes and made it publicly available. We've had interactions with
4 Lake Yukon River Intertribal Coalition. We've had interaction with
5 Robert Holden of the NCAI, so there's been a range of different
6 interactions. We've also been going out to the NCAI conferences where
7 we've had a booth. We've had a booth at this most recent one, as well,
8 where we've had copies and information for the Tribes and the
9 participants trying to engage them one-on-one. And we've also had
10 booths at the RIC to get that audience, so we've tried a different range
11 of approaches. And when we go out to the training sessions and the
12 other things, generally we have copies available, so we try and use that
13 wherever we can. So, it's guidance for the NRC Staff, but we're trying to
14 get input from the Tribes, as well.

15 COMMISSIONER BARAN: Right. And how has the
16 reaction been, has it been positive to this effort?

17 MR. FIRTH: The reaction on the last draft that had
18 gone out for comment was very positive. They really appreciated the
19 steps that we were taking on doing that. We don't B- it's not been
20 published in terms of revisions based on the most recent revision, so
21 they were interested to see how that reaction is, because there are
22 some changes that have been made that are a little different than what
23 the tribes might be expecting. So, there may be some challenges there
24 in terms of how they see, what they comment on, how it's been
25 translated into the Protocol Manual.

26 COMMISSIONER BARAN: Great. And, Laura, or

1 whoever, can you just give us a sense of how the Policy Statement and
2 the Implementation Plan will impact, as you mentioned, the
3 licensing-specific project level? What impact are those documents
4 going to have on the interactions on say a uranium recovery project?
5 What is going to look like in concrete terms?

6 MS. DUDES: Well, I'll start, and then if you want to
7 jump in, James. I mean, I think the Policy Statement is really just a set
8 of principles. It's a high-level guidance which should establish how the
9 NRC Staff approaches these issues. How it will change specific
10 licensing actions? I'm unclear on that, although I do think that if we train
11 our Staff and move forward on roles, and responsibilities, and
12 expectations, also allows for maybe early protocol agreement so that
13 when you're looking at historical preservation and the NRC is
14 understanding that maybe we have different definitions for when
15 licensing action begins. But if there's any work being done, we want to
16 make sure we're communicating as best as we can with specific Tribes,
17 and giving them the opportunity to participate as early as possible. So,
18 Tribe-specific protocol agreements I think would be helpful.

19 MR. FIRTH: Okay, and James Firth, NRC Staff, to
20 elaborate. The Implementation Plan covers a range of things. One is,
21 as Laura mentioned, the Protocol agreements which is intended to
22 engage the Tribes early before licensing action begins so that any
23 consultation in the Section 106 for the uranium recovery licensing might
24 occur a little more smoothly, and we may get their involvement a little bit
25 earlier.

26 The Implementation Plan also addresses near-term

1 challenges, so one of the challenges that the NRC has is that with the
2 change in the definition of preconstruction, our involvement has come
3 later on certain activities, including uranium recovery. So, we've had
4 FERC come in and make a presentation talking about some of their
5 licensing where they've brought in Tribes earlier in the process. So,
6 we've been trying to learn from other agencies. And the Implementation
7 Plan looks at some of the questions about how can we get the Tribes
8 involved earlier with uranium recovery licensing.

9 COMMISSIONER BARAN: And Commissioner
10 Ostendorff mentioned the Regional State Liaison Officers, what
11 involvement do they now, and will they have in the future, you know,
12 with respect to the Tribes?

13 MS. DUDES: Well, they primarily are working with the
14 reactor community on emergency preparedness and a few other
15 issues, but talking with our Branch Chief, and I don't know if Jim is going
16 to still be out there, but Paul as we're looking for how we're going to be
17 implementing some of these activities. Some have Tribal liaison
18 functions, or there are some Tribes that have sort of an interaction
19 function comparable to a SHPO, which I'm trying to B- the State
20 Historical Preservation Officer, so they have Tribal historical
21 preservation officers. So, if there's relationships that we can use the
22 State Liaison Officers in those areas, we would do that, as well.

23 MR. FIRTH: James Firth, NRC Staff. We have, for
24 example, a very strong relationship with the Prairie Island Indian
25 Community, so the RSLOs in Region III are going out and meeting with
26 the Prairie Island Indian Community. In Region II with some of the

1 reactors we've identified that sometimes have expressed concern that
2 the sirens B- they don't hear the sirens, even though that they're within
3 the area that they should expect to hear them. So, some of the RSLOs
4 in Region II are looking at getting involved on the Tribal, and also
5 starting some of the outreach there. So, it hasn't necessarily been a
6 focus earlier in terms of their activities, but as we're increasing our
7 Tribal outreach, it's increasing, and there's going to be some variability
8 from region to region, but I think we can expect that their involvement
9 will be cooperative with the other things that we're doing.

10 COMMISSIONER BARAN: Okay, thanks. I just want to
11 turn a minute to patient release. My understanding is that there's going
12 to be a Federal Register notice to request information from the public.
13 And I was just hoping you could talk a little bit about that, what the
14 status of that is, and what you're hoping to get from that public request
15 for information?

16 MS. DUDES: Yes. So, the Federal Register notice will
17 be sort of encompassing some of the specific items in the
18 Commission's SRM on this topic, asking questions about practices with
19 patient release. And I believe you asked me about the time frame?

20 COMMISSIONER BARAN: The status.

21 MS. DUDES: Yes, the status. Okay, so that's being
22 developed. Actually, our senior lead person on this project, Donna-Beth
23 Howe, has provided the draft FRN and the comments to our patient
24 advocate representative, Laura Weil, and one of the doctors on the
25 ACMUI to sort of look at the questions that are in there to make sure
26 that we're covering the topics that they think need to be addressed. And

1 then we have to go through the process, and that will require us to go
2 through OMB clearances and other sort of administrative issues. But I
3 think we're within a month or so of beginning that OMB process, or at
4 least giving OIS an early draft to start looking at the document.

5 COMMISSIONER BARAN: Great. I'll stop there, thank
6 you.

7 CHAIRMAN MACFARLANE: All right. Commissioner
8 Burns.

9 COMMISSIONER BURNS: I've got to get used to
10 these mics. I want to thank you for the presentations. It's a good
11 reintroduction to me to the Materials Program, which I worked many
12 years. I actually found it very interesting, I should say particularly in the
13 enforcement area because there are a lot of interesting characters that
14 were involved.

15 MR. SATORIUS: There's still a few out there.

16 COMMISSIONER BURNS: Yes. But I want to follow-up
17 on a question Commissioner Ostendorff asked about the Master
18 Materials licenses. And when I was here before, that was during the
19 period with the VA, you know, serious incident with the VA.

20 What I'd like to understand, too, is did the Staff identify
21 what I'll call structural changes or areas of focus for B- in the materials,
22 those Master Materials licenses themselves that B- coming out of that
23 experience in terms of how the license is structured, or assurance of
24 B- that certain things are being addressed?

25 MR. LOUDEN: I'll address that. There was a Lessons
26 Learned done that reviewed some of the outcomes from that, and from

1 my recollection the most significant one had to do with how a Master
2 Materials licensee, how the project manager's level of engagement and
3 involvement impacts the program, and the depth of knowledge and the
4 communication frequency that the program manager has relative to
5 understanding possible deficiencies in the program, or gaps in the
6 program that need to be addressed. That's the highlight point that I
7 recall from that particular Lessons Learned.

8 COMMISSIONER BURNS: Okay, so it wasn't
9 particularly the content of the license or what we put in it.

10 MR. LOUDEN: No, not that I recall.

11 COMMISSIONER BURNS: I know, I think, Laura, you
12 may have mentioned in terms of at least B- I guess we're at an ANPR
13 stage with Part 20, Advanced Notice of Proposed Rulemaking. Where
14 B- and granted not assuming outcomes on this, but where would this
15 effort bring us with respect to the international community?

16 MS. DUDES: Well, I think as we are trying to move
17 towards revising Part 20 to be more reflective of the International
18 Congress on Radiation Protection or Radiological Protection. I believe
19 it's ICRP 103 that was issued which changed some international
20 standards, so that's part of the discussion that we're raising. That's why
21 we did the ANPR, and that's why we're having the public interaction.
22 So, I think it would bring us more in line with the international
23 community.

24 COMMISSIONER BURNS: The other issue that was
25 mentioned was safety culture in the context of Materials licensees. And
26 given the diversity of licensees, what does that look like in here

1 because you have everything from a hospital, and I generally hope that
2 hospitals are well managed, have sort of established programs given
3 medical culture, et cetera. you have everything from that to the
4 well-logger who's out on the prairie, out in the mountains, wherever the
5 oil and gas is, out on his or her own, so what does that B- how does the
6 Staff look at this issue of safety culture in that context? What did you
7 intend when you mentioned that?

8 MS. DUDES: Well, and I think, Pat, you can give some
9 perspectives about the day to day interactions, and the inspectors. But I
10 think I had -- the Office of Enforcement had issued a safety culture
11 survey to NRC and Agreement State licensees. We got some
12 preliminary results on that. I mean, I think the positive was we got 700
13 responses and most of them were aware of our Policy Statement. But
14 then you think about the implementation of safety culture, and I think it
15 varies across the different uses of the materials, and the centers where
16 it's being practiced, the size, breadth, and scope of the different
17 licensees. It's not that the inspectors don't keep trying, and the states,
18 as well. I mean, the states have adopted the principles, and I've seen
19 some brochures at certain states where they're really B- they have their
20 inspectors out there pushing safety culture. So, it's one of those things
21 that you're never done on, and you just keep working it. But I think the
22 results probably vary across the community.

23 MR. LOUDEN: Yes, they do. And it's very much, as
24 you mentioned, Commissioner. You know, you go into a big medical
25 facility, they've pretty much got a good handle on what safety culture is,
26 the concept. There are other things going on there. You go the next day

1 to maybe a gauge user or a radiographer, it's a whole different matter.
2 So, that's a challenge, and that's really what B- you know, to highlight
3 what our inspectors do, and the way they go about their business. I
4 mean, to be able to take that diversity of view and then address it in an
5 effective manner, you know, you may have B- in the morning you may
6 have a discussion with folks at a medical facility that have a very mature
7 program and having that, and then in the afternoon you'll be sitting there
8 one-on-one B- and the approach is this. And I know our inspectors do
9 this, is for the one-on-one types, you know, you make it personal.
10 You've got to make it real. You have to have a sense that they B- you
11 know, not a concept, not a philosophy. What does this really mean?
12 What impact does it have for me? What does it have to my friend? What
13 does it have to my family, some are family members in the company, so
14 you make it as real as possible, and then you start to get in. And that's
15 where I see that it's most effective, is to through those dialogues right
16 there, and that's what our inspectors do every day when we're out
17 there.

18 COMMISSIONER BURNS: Okay, thanks.

19 MR. LOUDEN: Yes, sir.

20 COMMISSIONER BURNS: One of the other things,
21 and I think, Pat, you mentioned it, too, is efforts of community outreach.
22 And particularly in the materials area, I think that's interesting. I'd like to
23 hear a little bit more what types of things you are trying to do.

24 MR. LOUDEN: Well, what we're looking at is, you
25 know, in the reactor side we have the end-of-cycle meetings, and we
26 meet, the annual meeting somewhere around the reactor facilities. So,

1 the thought is, and we're going to do this here in the next coming cycle,
2 is sometimes those meeting we have either poster sessions or other
3 types of outreach of activities going on in the community there.

4 Well, you know, we're going to join in with that and
5 have a table, a section where we talk about, you know, the Materials
6 Program. I mean, for example, in Michigan if we're outside of one of the
7 sites in Michigan, that's one of our states. I can sit there and we can talk
8 to the folks, you know, in the area that we have licensees at, and we
9 can really make it personal and relate. You know, someone may not
10 have a direct understanding of relationship to maybe what's going on in
11 the power plant, but you find there's a much larger percentage of local
12 folks that probably have some affiliation with either some type of heart
13 diagnostic procedure, or a cancer treatment, or something like that. So,
14 again, trying to make it real, and educating and understanding, and let
15 people know what we really do out there. That's the idea.

16 COMMISSIONER BURNS: Good, good, sounds good.
17 I take it, and even from afar as I read some of this about buying things
18 on Amazon, not Amazon, eBay, and also some challenges in terms of
19 what would otherwise be exempt material or exempt items, or exempt
20 material B- I guess really exempt material coming into I presume like
21 consumer items and things like that. Can you elaborate on what we're
22 trying to do with that B- trying to do there in terms of sort of securing
23 what we think is the proper framework and controls on that? I know this
24 issue of consumer products goes back a long time. I remember working
25 on blue topaz, I think in the 1980s.

26 MS. DUDES: And it continues, we have pendants, we

1 have K-tape, we have wristbands that have special ions that make you
2 stronger, and they're out there. We've put up B- we're trying to
3 approach this in multiple ways because it's a vast amount of stuff, and
4 it's coming through various ports, and through the internet. So, NRC
5 has put up a blog, you know, to start talking, start the dialogue with the
6 community.

7 First and foremost, we haven't seen anything that we
8 think is a safety impact on any individual in this country. However, in
9 some cases if it comes into a state and it reaches a certain quantity,
10 then it may per our regulations need a distribution license. So, in that
11 case we'll work with the state, if it's a state licensee, or the NRC to send
12 them a letter indicating that this B- you need to stop distributing this
13 material, or get the radioactive material which is small quantities out of
14 it. There's another approach, so that's the ones that we work with the
15 states on, knowing what's coming into the site.

16 The transfer of information, or the Amazon and eBay
17 issues of Tritium watches or small trinkets that may have traces of
18 Tritium light up in it, we're working actually with OGC to try and figure
19 out if there's a way that you can get notices to pop up or sort of inform
20 people where B- that they're buying something that may require a
21 license if they're going to sell it again, and use broader solutions
22 because the Staff trying to do these issues one by one is not the best
23 use of our resources given the minimal to no safety significance.

24 COMMISSIONER BURNS: Yes. And I guess just to
25 B- so I understand, in terms of the import issue, is part of the issue that
26 these products B- basically, we're more restrictive in the U.S. than we

1 might be elsewhere B-

2 MS. DUDES: Absolutely, yes.

3 COMMISSIONER BURNS: B- with respect to what
4 the products are? Okay.

5 MS. DUDES: Yes.

6 COMMISSIONER BURNS: Thanks.

7 MS. DUDES: Yes.

8 CHAIRMAN MACFARLANE: Okay. Any further
9 questions? No? All right. Then I thank the first panel, thank you very
10 much for the discussion, all your contributions. And we will have a short
11 break while the next panel ramps up.

12 (Whereupon, the above-entitled matter went off the
13 record at 10:49 a.m., and resumed at 10:57 a.m.)

14 CHAIRMAN MACFARLANE: Okay, great. Ready?
15 Then we are going to start the second half of the meeting, and we're
16 going to hear from the Fuel Facilities Business Line, and I will turn
17 things over to Mark Satorius.

18 MR. SATORIUS: Good morning again, Chairman and
19 Commissioners. The purpose of this meeting is to provide the
20 Commission with a discussion of strategic considerations associated
21 with the Fuel Facilities Business Line, including current activities,
22 expected priorities, near and longer-term projection, and emerging
23 focus areas.

24 The Fuel Facilities Business Line has a long history of
25 success due to the hard work exhibited by the Office of Nuclear
26 Materials Safety and Safeguards, as well as key partner offices, such

1 as the Office of Nuclear Security and Incident Response, and Region II.
2 So now I'll turn over to Marissa who will start the Staff's presentation.
3 Marissa.

4 MS. BAILEY: Thank you, Mark. Good morning. I'm
5 Marissa Bailey. I'm the Director for the Division of Fuel Cycle Safety,
6 Safeguards, and Environmental Review in the Office of Nuclear
7 Material Safety and Safeguards. And I'll be giving an overview of the
8 Fuel Facilities Business Line, some of our major licensing and
9 rulemaking activities, as well as some of our guidance development
10 activities.

11 After my presentation, Tony Gody, the Director for the
12 Division of Fuel Facilities Inspection in Region II will discuss fuel cycle
13 oversight. Barry Westreich, the Director for the Cyber Security
14 Directorate in the Office of Nuclear Security and Incident Response will
15 discuss cyber security. And then finally, Cathy Haney will talk about the
16 future of the program. Slide 12, please.

17 The Fuel Facilities Business Line supports the NRC
18 mission by developing and implementing the licensing, oversight,
19 rulemaking, and incident response programs for fuel cycle facilities.
20 This program is primarily implemented by the Office of Nuclear Material
21 Safety and Safeguards, the Office of Nuclear Security and Incident
22 Response, and Region II.

23 The business line has three main priorities. Our first
24 priority is to insure safety, security, and environmental protection
25 through effective oversight of operating facilities and facilities under
26 construction, and through effective management of our licensing

1 actions, and our other regulatory activities.

2 Our second priority is to support the U.S.
3 Government's nonproliferation objectives, and that's by implementing
4 international safeguards at selected NRC facilities, and also by
5 holistically implementing the requirements for material control and
6 accounting, information security, physical security, and import/export
7 control.

8 And our third priority is to maintain open and effective
9 communications with our stakeholders with respect to our approaches
10 on emergent issues, as well as our other various regulatory activities.
11 Slide 13, please.

12 The Fuel Facilities Business Line regulates 13
13 commercial conversion, enrichment, and fuel fabrication facilities in the
14 United States. Eight of those facilities are operating, one is under
15 construction, and four are licensed with construction pending. We also
16 regulate a number of Part 70 licensees that possess greater than
17 critical mass quantities of special nuclear material for research, testing,
18 and also homeland security applications.

19 In licensing, we process about 100 actions per year.
20 One recent major licensing action is the decertification of the Paducah
21 Gaseous Diffusion Plant which is shown on this slide. At the other end
22 of the spectrum we're currently reviewing a license amendment to
23 significantly expand the operations or the capacity of another
24 enrichment plant, and that's the URENCO USA facility. That's a gas
25 centrifuge facility that's also pictured on Slide 13. And we're working to
26 extend the construction authorization for the mixed oxide fuel

1 fabrication facility, and extending that for another 10 years.

2 Looking ahead to 2015 and 2016, we expect a number
3 of licensing actions to stay fairly level. Most of these will be license
4 amendments, but we are expecting one 40-year license renewal
5 application from Honeywell, which is the third facility that's shown on
6 Slide 13. And potentially, one application for a new enrichment facility in
7 the 2016 time frame.

8 We also continue to monitor industry plans for new
9 types of reactors because that could lead to new types of fuel
10 fabrication processes.

11 In terms of generic issues, we are continuing to
12 follow-up on Lessons Learned from the Fukushima Daiichi nuclear
13 accident. In August, we published for public comment a Draft Generic
14 Letter on the Treatment of Natural Phenomena Hazards. The 90-day
15 comment period ended just last week, and our next steps now are to
16 evaluate the comments, then go before the Advisory Committee for
17 Reactor Safeguards and the Committee for Review of Generic
18 Requirements, and we expect to issue the final Generic Letter in Spring
19 2015.

20 In the area of guidance development, we are updating
21 our Standard Review Plan for fuel facilities, and we're also participating
22 in the American Nuclear Society effort to develop a standard for
23 integrated safety analysis.

24 We're also developing guidance on chemical
25 exposures at fuel cycle facilities, including developing a practical
26 approach for establishing quantitative standards for dermal and ocular

1 chemical exposures. And we plan to issue that draft guidance for public
2 comment in the January time frame.

3 In rulemaking, we continue to work on consolidating
4 and risk-informing the regulations for material control and accounting,
5 so about this time last year we published for comment the proposed
6 rule to amend 10 CFR Part 74, and we received a very large amount of
7 comments on that proposed rule. The most significant comments were
8 related to the cost estimates for implementing that rule, and so based
9 on these comments we are updating the cost estimates in the
10 regulatory analysis. We're also reevaluating the applicability of the
11 backfit rule. We expect to publish the Part 74 final rule about a year
12 from now.

13 We're also working to enhance the security
14 requirements for fuel cycle facilities, as well as the Fitness for Duty
15 requirements for their security officers. And to that end, last summer we
16 published for public comment a draft regulatory basis for both the Part
17 73 and Part 26 rulemakings. And the comment period for that ended
18 last month, and we are now in the process of evaluating those
19 comments, and also evaluating the next steps for those rulemaking
20 activities. Slide 14, please.

21 So, there are numerous regulatory activities within the
22 Fuel Facilities Business Line, and this slide shows just some of those
23 activities. Consistent with our third business line priority, we are actively
24 seeking stakeholder involvement in these activities, although we
25 recognize that our stakeholders, like us, have limited resources. So, to
26 that end we have established a process for managing the cumulative

1 effects of regulation. This process involves numerous interactions with
2 the fuel cycle industry, as well as with the public to get their feedback on
3 the scope, the timing, as well as the drivers for our regulatory initiatives.

4 We also maintain what we call an integrated schedule
5 which we B- which is available on our public website. And the integrated
6 schedule is essentially a Gantt chart that gives an at-a-glance look at
7 the major activities, major regulatory activities in the Fuel Facilities
8 Business Line. It shows their major milestones over the next four years.
9 And we use the integrated schedule to coordinate the activities, and
10 also sequence of timing of milestones so that when possible we can
11 avoid pinch points. We also use this to focus efforts on our most
12 impactful activities to evaluate whether we should be adding, shedding,
13 or adjusting the milestones, and also to facilitate communication and
14 coordinate interactions with our stakeholders.

15 And that concludes my part of the presentation. I'll now
16 turn it over to Tony Gody.

17 MR. GODY: Thank you, Marissa. Good morning,
18 Chairman, Commissioners. The NRC's Fuel Facility Oversight Program
19 plays a key role in insuring the safe and secure operation of fuel cycle
20 facilities. Collaboratively, Region II, NMSS, NSIR, the Office of
21 Enforcement, and the Office of Investigations continue to demonstrate
22 a clear focus on safety and security through inspection, enforcement,
23 and investigation. Our oversight and enforcement has contributed to
24 the safe and secure licensee performance through a number of means.

25 I guess the first topic is facility design. We insure that
26 these facilities are adequately designed, maintained, and operated to

1 insure that high consequence events are highly unlikely, and that
2 intermediate consequence events are unlikely. For example, as
3 Marissa indicated earlier, our Natural Phenomena Hazard Inspections
4 at selected fuel facilities found documentation weaknesses associated
5 with the facility design capabilities assumed in their integrated safety
6 analyses. One fuel facility had an immediate safety issue. That facility
7 shut down, and they implemented modifications to improve their
8 seismic capability. The remaining facilities have unresolved items in
9 inspection reports which will be addressed when the generic
10 communication is issued.

11 Two, in the area of safety culture. Confirmatory orders
12 in the past have required licensees to improve safety cultures where
13 issues or events had notable safety culture implications. For example,
14 in 2010 the NRC issued a Confirmatory Order to Nuclear Fuel Services
15 following a number of events that had safety culture implications. To
16 date, Nuclear Fuel Service has implemented sweeping changes to their
17 safety culture program, and has demonstrated a commitment to sustain
18 safety culture performance. An NRC inspection is planned for
19 December with safety culture experts to assess whether or not this
20 licensee has implemented sufficient performance improvement to close
21 the order.

22 Three, our oversight indicated or identified needed
23 improvements in the reliability of material control and accounting
24 programs. Our interaction with the industry resulted in increased
25 management engagement and program implementation, increased
26 trending of MC&A, Material Control and Accounting results, reduced

1 alarms, and improved methodologies for conducting inventories at each
2 facility.

3 The fourth area, our focus on what constitutes an
4 effective fuel facility problem identification and resolution program has
5 caused the industry to focus on the same. A consistent and predictable
6 problem identification and resolution program is the foundational
7 cornerstone for good licensee performance, and an improved NRC
8 oversight program. To facilitate this improvement, the NRC has issued
9 a regulatory guide that describes at least one example of an acceptable
10 program.

11 Five, our inspectors continue to focus on the reliability
12 and redundancy of items relied on for safety, and continue to identify
13 issues in that area.

14 Six, information security. We've identified a number of
15 issues with information security implementation at facilities. It has
16 comprised the largest contributor to NRC reactive inspections since
17 2013. The transition of information security inspections to the regional
18 office will occur in January, and the program has been developed,
19 qualification cards have been developed, and it continues to be an area
20 of focus for all of us. Slide 16, please.

21 Our oversight of fuel facilities continues to be
22 implemented in a high quality manner with an agile, capable, and
23 flexible workforce. The foundation for maintaining this team is
24 embedded in professional engagement at all levels. Our inspectors
25 believe in the NRC mission. They want to go a great job in
26 implementing that mission. They understand the need for professional

1 development, and they understand the need for continued
2 improvement. And clearly understand the need for collaboration and
3 team work while maintaining independent viewpoints.

4 Inspector professionalism implemented consistently
5 through predictable and reliable inspection program is our primary
6 focus. Each inspector undergoes a rigorous qualification process, is
7 encouraged to continuously learn, is expected to exhibit NRC core
8 values, and is expected to be an expert in their areas of focus.

9 Each inspector is encouraged to implement several
10 different inspection procedures within the areas of expertise and
11 qualifications. For example, a criticality safety inspector may wish to
12 expand his or her areas of expertise into facility operations, or plant
13 modification inspections. A health physicist may wish to conduct
14 environmental waste or emergency preparedness inspections, and are
15 encouraged to complete those qualification cards.

16 In December of 2013, the Division of Fuel Facility
17 Inspection was reorganized into two Projects Branches and a Safety
18 Branch. The reason for doing this reorganization was to focus on two
19 branches on projects and develop expertise in the integrated safety
20 analysis area, and the Safety Branch would focus on professional
21 expertise in areas of material control and accounting, criticality, safety,
22 and radiation protection. Next slide, please, Slide 17.

23 A number of key oversight improvements are currently
24 being implemented. These include the application of risk and inspection
25 planning, and enforcement, and the development of a corrective action
26 program standard for the industry. We routinely employ knowledge of

1 the facilities' integrated safety assessment during our inspection
2 planning, and for evaluating inspection findings utilizing NRC Manual
3 Chapter 2606 entitled, "Assessment of the Change in Risk Resulting
4 From a Violation at a Fuel Facility."

5 Recall that when the Reactor Oversight Program was
6 revised, part of the NRC safety basis was that the power industry was
7 mature, and identifying and resolving their own problems with
8 consistent and predictable thresholds. Currently, fuel cycle facilities
9 have a wide range of corrective action programs that while often
10 acceptable, have a wide range of outcomes.

11 The NRC's development of this corrective action
12 program standard in NRC Regulatory Guide 3.75 will serve as the
13 foundation for the fuel cycle industry's transition to the revised oversight
14 process. One licensee has already adopted that regulatory guide and is
15 allowed to B- were allowed to implement the enforcement guidance for
16 non-cited violations as a result of that.

17 Currently, we are fully engaged in the development of
18 the revised fuel cycle oversight program. Specifically, we are currently
19 focused on developing cornerstones for the Commission's review.
20 Improving the efficiency and the reliability, and predictability of NRC
21 oversight of the fuel cycle licensees, the development and the
22 implementation of the revised fuel cycle oversight process is very
23 important. Thank you.

24 The next presenter is Barry Westreich, Director of
25 Cyber Security Directorate.

26 MR. WESTREICH: Thank you. Good morning. I'm

1 going to talk a little bit about our efforts in the cyber security area for fuel
2 cycle facilities and the need for potential requirements.

3 As you know, and you've been briefed in other
4 settings, there is a persistent sophisticated and dynamic threat and the
5 recently issued National Cyber Threat estimate confirmed a lot of those
6 activities, and took a focused look at cyber security, and concluded that
7 the threat to computers, networks, and industrial control systems
8 continue to grow as the industry becomes increasingly more reliant on
9 digital technology.

10 NRC licensees and other critical infrastructure
11 providers face a general threat, an ongoing general threat from cyber
12 security, but more recently a significant development has been focused
13 malware targeted at ICS industrial control system components. This
14 was first seen with Stuxnet in 2010 which, as we know, targeted an
15 enrichment facility. And more recently, Dragonfly and Black Energy are
16 malware that's been in the news just this week, both target industrial
17 control systems. So, the intelligence community continues to assess
18 that ICS industrial control systems will continue to be under increased
19 risk of compromise. Next slide, please.

20 As was discussed in the roadmap paper, cyber security
21 roadmap paper, SECY-12-0088, the Staff evaluated the need
22 B- discussed evaluating the need for cyber security controls at
23 licensees within this business line to protect vital functions. And the
24 functions that we're concerned about are security, safety, emergency
25 preparedness, and material control and accounting functions, which is
26 different from what we've done in reactors, adding the material control

1 and accountability function.

2 The Staff in that paper stated that we tried to work
3 toward voluntary efforts and if we couldn't come to some alignment and
4 agreement, we might consider orders. Since that time, we've
5 established a working group. It was established in 2011, and we've
6 worked diligently with a diverse group of licensees that Marissa
7 discussed to consider basic cyber security requirements to insure an
8 effective cyber security program is established for the protection of
9 those vital functions.

10 The Staff's goal was to develop a cyber security
11 program that included the following functions, and these are similar to
12 what we did with power reactors; establishing a cyber security team,
13 providing cyber security awareness training to staff, establishing a
14 cyber security incident response capability, performing a baseline
15 assessment of digital assets performing vital functions, establishing a
16 portable media control program and isolating digital assets that perform
17 those vital functions.

18 In the interactions with the industry stakeholders, they
19 agreed that a voluntary program was preferable to issuing security
20 orders, and this year they informed us that they're implementing a
21 voluntary program that addresses some portion of the six actions that
22 I've just described. Industry also indicated that if any cyber security
23 requirements were developed that rulemaking was the more
24 appropriate process given the difficulty of the technical issues, and that
25 it allows broader stakeholder interaction.

26 So, the working group since 2011 has engaged in

1 significant effort to understand the use of digital technologies at the
2 various fuel cycle facilities, and consider the potential consequences of
3 a cyber attack on those facilities.

4 They also considered the Lessons Learned from
5 power reactor cyber security programs, and we recognize that unlike
6 power reactors, these facilities are very diverse, and have varying
7 levels of safety and security significance. So, in the Staff's interactions
8 with industry we modified the proposal that we've been working on
9 based on information obtained. Some of these activities included
10 multiple meetings with licensees to discuss the issues and
11 consequences, classified threat briefings, and we had the cyber
12 security workshop with the industry to bring more awareness to the
13 threat and potential vulnerabilities, assess the potential consequences
14 of a cyber attack and developed the graded consummate based
15 approach which is based on facility type, development of a
16 consequence-based screening tool to identify digital assets that are in
17 scope, and development of implementation guidance and development
18 of effective alternatives to some controls.

19 So, the Staff has developed an options paper which is
20 currently in the concurrence process seeking Commission guidance
21 and direction, and you should be seeing that in the next several weeks.
22 And that concludes my remarks.

23 MS. HANEY: Thanks, Barry. Good morning, again. I'll
24 conclude this presentation, started the other one, and end with the last
25 speaker on this one. So, within the Fuel Facility Business Line, we are
26 enhancing the program infrastructure, as you heard from previous

1 speakers today. We're also looking at aligning roles and responsibilities
2 to utilize all of our resources and to adapt to a changing environment in
3 the fuel cycle, the front end of the fuel cycle.

4 With the merger of the Office of Nuclear Material
5 Safety and Safeguards and the Office of Federal and State Materials
6 and Environmental Management Programs it helped us to reach this
7 better alignment of resources to assure that NRC is maintaining high
8 quality licensing actions, oversight, and the program itself is at the
9 highest level that it possibly can be.

10 It also supports increasing leadership of generic and
11 emergent issues within the fuel cycle facilities, what's referred to also as
12 operating events. And we have carefully integrated the functions of both
13 offices to utilize the synergies between the Staff expertise to bring the
14 Staff functions closer together, as well as in the different functional
15 areas that you've heard about today.

16 The strategic alignment of resource, inspection
17 resources, criticality, material control and accounting, and information
18 security in Region II will result in an enhanced regional inspection
19 program, and with more comprehensive inspections under the Fuel
20 Facilities Business Line. This realignment of resources will help to
21 further refine our roles and responsibilities, and allow us to focus our
22 areas on enhancing programmatic oversight in the business line area.

23 In the face of changing construction plans and evolving
24 technologies, we continue to review the regulatory structure,
25 anticipated critical skill sets and resource management and allocation
26 to better insure that NRC is prepared to license and provide oversight

1 for the future domestic fuel cycle. If we move to the next slide.

2 The last subject that I'd like cover is that we plan, and
3 we will be continuing to fulfill our international obligations. We fill a very
4 important role in support of the United States Government's
5 international agreements and foreign policy objectives, and we're
6 prepared for any future expansions in this area.

7 The NRC provides a key role in the U.S. Government
8 process for implementing a variety of international agreements and
9 treaties. We're working with international counterparts to exchange
10 information, expertise, operating experience, and ongoing research to
11 recognize and respond to emerging technical issues, and also to
12 promote the best safety and security practices. The Fuel Facilities
13 Business Lines helps to insure the NRC is collecting appropriate data,
14 providing necessary facility access to international organizations, and
15 exhibiting NRC leadership in the international community as a number
16 one priority under this Fuel Facilities Business Line.

17 We also internationally continue to support NRC's
18 participation in a number of working groups, formal committees, and
19 other ad hoc initiatives that support the broader U.S. Government's
20 nonproliferation objectives and policies.

21 While the future impact of the International Atomic
22 Energy Agency safeguards within the United States is often driven by
23 external stakeholders and events, our program is structured so that we
24 are prepared to work to facilitate any current activities, as well as any
25 new activities that may result depending on the selection of eligible
26 NRC-licensed facilities. And with that, I'll turn the presentation back to

1 Mark.

2 MR. SATORIUS: I'll just turn it back to you. We're
3 ready to go with questions.

4 CHAIRMAN MACFARLANE: Okay, great. Thank you.
5 All right. I'm going to start off with cyber security, to the degree to which
6 you can answer.

7 You know, I hear a number of people say that well, you
8 know, cyber security for fuel cycle facilities, it's not such a big deal.
9 There's no real safety threat with the potential for offsite releases, so
10 really why do we have to do anything? This is not urgent. So, what's
11 your response?

12 MR. WESTREICH: Well, I mean, I think there's a B- it
13 depends on the fuel cycle facility. Right? There's a range of fuel cycle
14 facilities from the Category 1 that have pretty highly enriched uranium
15 source which we need to protect from theft and diversion, as well as
16 sabotage, and to the lower consequence facility. So, I mean it really
17 B- that's why we looked at a consequence-driven approach, so we'd
18 have more requirements for these more critical facilities that have more
19 of an onsite and offsite risk and consequence, and less for the ones that
20 have less of a consequence.

21 I think all of them could B- you know, even the low
22 enrichment facilities have some level of onsite consequences that we
23 may want to consider.

24 CHAIRMAN MACFARLANE: So, is safety the only
25 reason to do cyber security regulations? No? Why not?

26 MS. HANEY: In the fuel facility area, one of the areas

1 that we focus on is our information security for purposes of
2 nonproliferation.

3 CHAIRMAN MACFARLANE: Yes, exactly.

4 MS. HANEY: And when we step back and look at some
5 of the systems and processes that are in place, and we look at our
6 international treaties and agreements, and obligations, and look
7 domestically and internationally, I think we do need to consider cyber in
8 this area. And as Staff has been approaching this project back from
9 very early on when the working group was formed, we've looked at
10 safety, security, and under security really has been the information
11 security aspect.

12 CHAIRMAN MACFARLANE: Yes. Personally, I think
13 that the MC&A piece of this is the most important, and we have to make
14 sure that there aren't any vulnerabilities.

15 MS. HANEY: Yes.

16 CHAIRMAN MACFARLANE: So, good. All right. Let's
17 talk about Honeywell, one of my favorite subjects. It became one. I
18 didn't even know it existed before I got here. So, they're planning on
19 requesting a 40-year license renewal. We don't have B- so, for fuel
20 cycle facilities they're not like reactors, they don't get half the time for a
21 renewal, they get another full tranche?

22 MS. BAILEY: Actually, it's up to a 40-year license
23 renewal, so we could make the determination that a renewal period
24 that's less than 40 years is appropriate.

25 CHAIRMAN MACFARLANE: When did that facility
26 come on line?

1 MS. BAILEY: 1958, '57 time frame.

2 CHAIRMAN MACFARLANE: Okay. So, 40 years is
3 pushing a century then. Yes, okay. So, have we licensed other types of
4 facilities for 40-year time periods?

5 MS. BAILEY: Yes, we have.

6 CHAIRMAN MACFARLANE: What?

7 MS. BAILEY: We have B-

8 CHAIRMAN MACFARLANE: Relicensed.

9 MS. BAILEY: Renewed. I'm sorry, we've renewed the
10 license for Global Nuclear Fuels for 40 years, not 40 years, but NFS
11 was recently renewed for a 25-year period. But basically back in the
12 2008-2009 time frame, the Commission approved granting 40-year
13 renewals, or up to 40-year renewals for fuel facilities that have a robust
14 integrated safety analysis.

15 CHAIRMAN MACFARLANE: Okay. So, for a facility
16 that was originally licensed in 1957, if Tony is right, and he's probably
17 right, does that mean that the design basis that was established then
18 could be extended for basically almost a century? Is that reasonable?

19 MS. BAILEY: I think we would have B- given the state
20 of knowledge for the facility and the site parameters, I think license
21 renewal is a good time to assess the safety basis and the licensing
22 basis. That is what a license renewal is all about.

23 CHAIRMAN MACFARLANE: You want to weigh in?

24 MR. GODY: I agree. Recognize every one of these
25 facilities do have Aging Management Programs.

26 CHAIRMAN MACFARLANE: Yes.

1 MR. GODY: So, they understand pipe thickness, and
2 wall thickness, and they take actions necessary to insure that their
3 original margins that they were designed to are maintained. But I agree.

4 CHAIRMAN MACFARLANE: Okay. Let's talk about
5 natural hazards, the Confirmatory Action Letter you guys mentioned.
6 So, are Part 40 and Part 70 facilities licensed to the same magnitude of
7 natural hazards? So, for same periods of seismic return or flooding
8 probability?

9 MS. BAILEY: No, it's specific to the site.

10 CHAIRMAN MACFARLANE: And why is that?

11 MS. BAILEY: So, there's no design criteria in either
12 Part 70 or Part 40 that says you have to license your site according to
13 this B-

14 CHAIRMAN MACFARLANE: Right, so now we're
15 B- so, let's take the seismic piece. Okay? So, now for the Central and
16 Eastern U.S. plants, we've asked them to do a re-analysis. Are we
17 doing the same for the fuel cycle facilities, and should we, or are we
18 going to have those fuel cycle facilities use ancient geologic data?

19 MS. BAILEY: So, fuel cycle facilities are the facilities
20 that are regulated under Part 70, and actually the two facilities under
21 Part 40 which have a commitment to maintain an ISA, an Integrated
22 Safety Analysis. They are required to annually to continually update
23 their Integrated Safety Analysis. And that includes updating it based on
24 any changes to the operations of the facility, any changes to processes,
25 and also any changes to your knowledge about the site parameters.
26 You know, has the data changed, do you have more data? So, the

1 regulation and the license commitment B- the license conditions
2 basically require fuel cycle facilities to update their ISAs if there's new
3 knowledge on seismic requirements, for example.

4 CHAIRMAN MACFARLANE: So then they are
5 because there is new knowledge.

6 MS. BAILEY: We would expect them to take a look at
7 their Integrated Safety Analysis, and if there's new information about
8 site parameters that changes that Integrated Safety Analysis, we would
9 expect them to incorporate that into their ISAs.

10 CHAIRMAN MACFARLANE: So, you say expect, but
11 that doesn't tell me that that's a requirement.

12 MS. BAILEY: It's a requirement in the ISA to update
13 your ISA.

14 CHAIRMAN MACFARLANE: So, are they going to do
15 this or not?

16 MS. BAILEY: We would have to take a look at that, yes.

17 MR. GODY: A good example is if a licensee assumes
18 that a building remains in tact following a seismic event, and their ISA
19 reflects that that building doesn't contribute further to an accident or to a
20 sequence. We would expect them to have adequate design
21 documentation to show that the assumption that the building would
22 remain in tact for a seismic event would, indeed, remain in tact for the
23 licensing basis seismic event.

24 CHAIRMAN MACFARLANE: Okay, the licensing basis
25 seismic event.

26 MR. GODY: Which is B-

1 CHAIRMAN MACFARLANE: But this is, again, you
2 know, if the geologic knowledge has progressed, you're working off of
3 ancient knowledge.

4 MR. GODY: As inspectors always do, as we regulate to
5 what the license is issued, so it would have to be a licensing action to
6 adjust that input.

7 MS. BAILEY: And for these facilities, the licensing
8 basis is based on what's in the Integrated Safety Analysis, so the
9 Integrated Safety Analysis needs to be updated, and it needs to be
10 current, and it needs to be reflective of the actual B- if we're talking
11 about natural phenomena hazards, it needs to be reflective of the actual
12 credible natural phenomena events at that site.

13 MS. HANEY: And, Chairman, if I can add, the fuel cycle
14 Staff works very closely with the operating reactor and the new reactor
15 side of the house, so the seismic experts on both sides of the house are
16 talking to each other. As new information would become available to the
17 Agency, whether B- whichever side of the business line it came in
18 through, that information would be shared. And then Marissa and Tony
19 would take that information, and if there was a significant change that
20 would cause them to question the licensing basis, we do have the
21 regulatory framework and ability to go in and relook at those licensing
22 bases. And we would do that, and I think that was evidenced with what
23 happened, I guess it was really two years ago, three years ago with the
24 Honeywell facility, where we actually went back and looked at their
25 licensing basis, and by the virtue of what we were doing with C-- as a
26 result of the post-Fukushima activities, that licensing basis was

1 changed.

2 CHAIRMAN MACFARLANE: Right. No, that's a good
3 story. I'm just concerned about the other facilities. You know, as a
4 geologist, I'm not just thinking about the New Madrid Seismic Zone, but
5 I'm thinking about the Charleston Seismic Zone.

6 MS. HANEY: And that's B- as that information would
7 come into the team here, we would consider that, and the project
8 managers or our seismic experts are considering what impact does this
9 new information have on any specific facilities in that area. And then
10 that would go back into the technical evaluation on whether a change at
11 another facility would be made, also.

12 CHAIRMAN MACFARLANE: Okay. I will stop there
13 and turn to Commissioner Svinicki.

14 COMMISSIONER SVINICKI: Well, good morning, and
15 thank you, again. I'll begin with a couple of observations, and then
16 explore a couple of issues with you.

17 The first has to do with the discussion of cumulative
18 effects of regulation. I was sitting and thinking to myself, Marissa, that
19 there aren't very many things in life that we can be sure of, but the one
20 thing that our Commission can be pretty sure of is when we appear
21 before our Oversight Committee in the U.S. House of Representatives
22 we will be presented at some point with a dizzying chart that has a
23 tremendous number of NRC actions that are underway, and I want to
24 really commend you and those working in the Fuel Cycle Business Line
25 for contributing to that dialogue. It might sound like I'm being a little bit
26 cynical about it, but I think that this is a demonstration of our authentic

1 commitment to knowing that at times stakeholders are a bit
2 overwhelmed with the number of parallel activities going on. And then
3 we want to receive high quality input and comment on things that we put
4 out, and if they've got their same experts occupied on something else, I
5 know you've indicated we try to de-conflict this, where we can. Of
6 course, we have to get done the things that we have to get done, but I
7 think that this is just a demonstration of the fact that we work very
8 sincerely on that. So, I want to credit you all.

9 We talk about it a lot on the reactor side and the chart
10 we tend to be confronted with is on the reactor side, but I think that this
11 is a solid demonstration of what we're trying to do there in the fuel cycle
12 facilities. It is a smaller community of practice, so I think on both sides of
13 the table there are experts that we have to kind of spread across the
14 various issues that we're working on, so thank you for that.

15 And, Cathy, I appreciate that you talked a little bit more
16 about the merger between the two organizations, FSME and NMSS. I
17 would ask you that in the proposal that Staff put forward and then the
18 Commission made some, I think, very modest adjustments to the
19 structure, is there anything immediately that you think that we got
20 wrong, we didn't see something right there either on the Staff's
21 proposal, or the Commission's minor tweaks to the structure? Does it
22 seem to be workable?

23 MS. HANEY: It seems to be working quite well. I think
24 we're six weeks into the merged organization, and Scott Moore, my
25 Deputy, and I are going back and forth between the buildings. We each
26 have two offices now, and it's a way of getting out and being able to see

1 people, our staff on a daily basis, and to be able to hear if there are any
2 concerns. So, some minor concerns with the geographical differences
3 present a bit of a challenge but that will be resolved in the early spring
4 when Three White Flint Staff moves over to the other building.

5 We've gotten down and spoken with B- at the Branch
6 level with Staff to kind of hear if there are any concerns. Again, you
7 know, there might be some little concerns out there and tweakings that
8 need to be made. We will at the end of the year provide an annual
9 report B- well, not an annual report, but a report at the end of the year.

10 COMMISSIONER SVINICKI: A status.

11 MS. HANEY: A status on how things are going.

12 COMMISSIONER SVINICKI: Okay.

13 MS. HANEY: And then just recently this week, I met
14 with all the Branch Chiefs, and just saying that I'm B- really a similar
15 question to what you asked me, is I'm not hearing any significant
16 concerns, but again I'm not in my office every day, or not out walking the
17 hallways. Is there something I'm not hearing that you are because
18 you're my eyes and ears. Can you share it with me? And, again, some
19 minor concerns, IT-related, website-related.

20 COMMISSIONER SVINICKI: Okay, but clearly falling
21 in B-

22 MS. HANEY: But nothing B-

23 COMMISSIONER SVINICKI: B- kind of
24 implementation shakeout space as opposed to a fundamental structural
25 flaw in what we did. Okay.

26 MS. HANEY: Nothing organizational.

1 COMMISSIONER SVINICKI: Thank you. And I'm sure,
2 as you've just indicated, you'll continue to keep your ear to the ground
3 on that, and I look forward to the report on how the implementation
4 went, the kind of status report.

5 Tony, I want to mention on revised fuel cycle oversight
6 that if we look back maybe five, six years, I've asked a lot of tough
7 questions about that process along the way. And what my concerns
8 were rooted in at the beginning of the process was that maybe it would
9 take the form of a kind of shallow mimicry of what we do on the reactor
10 side of saying hey, that structure works good, cornerstone, significant
11 determination process, and we're just going to lift that up and slap that
12 right down over there on facilities that as a class are very diverse even
13 amongst themselves, and then certainly are very different than
14 reactors.

15 I want to basically acknowledge and commend that
16 although I think that was a legitimate worry in the intervening years as
17 I've looked at what's happening, I'm not seeing that kind of rigid mindset
18 manifest. As a matter of fact, I've heard, and you can correct me if I'm
19 wrong, but looking at things like significance determination process,
20 there may be acknowledgment that having something highly structured
21 is not really called for, or would not be a good fit, or wouldn't be good
22 use of NRC resources to develop such a thing. So, you know, I basically
23 credit we're worried about something, and we've gone about it in a
24 much smarter way. I just wanted to acknowledge that, and I didn't know
25 if you wanted to give any reaction.

26 MR. GODY: Thank you.

1 COMMISSIONER SVINICKI: Okay. That's a good
2 answer. On the issue of cyber, I appreciate the Chairman's engaging
3 Barry, and Cathy, you gave a little bit of an answer there, as well.

4 I've been talking about the issue of potential orders
5 with Mr. Wiggins. I don't know if he left the room, Jim Wiggins, and
6 others now for at least a couple of years, and I actually agree with the
7 answers that Barry and Cathy gave. And to me, they are the absolute
8 case of why rulemaking is adequate here. The Staff has failed to
9 convince me in the last two years that orders are called for. Orders and
10 rulemaking are fundamentally different things, and the profound irony I
11 think of discussing the need for orders for a couple of years is, it's proof
12 positive that you should engage in rulemaking because orders, to me,
13 are the short-circuiting of the disciplined process that the Administrative
14 Procedure Act, that our fundamental development of regulatory basis,
15 notice and comment, all of those things B- it's a little bit like a distance
16 runner, you know. If you increase B- or a sprinter, if you increase the
17 height of the hurdles you increase over time, you make a better and
18 better athlete out of the runner. And in my view, and I've been here a
19 while, and people can ask for an appointment to talk me out of this, but
20 it's my view that the key foundation of why NRC is seen as the gold
21 standard around the world, and that the respect that this Agency has,
22 and our regulatory framework again that people seek to emulate in
23 countries around the world, is because we have made sure that our
24 hurdles are high enough that we have the most disciplined, thorough,
25 meticulous, deliberate process for promulgating new requirements. I
26 think that's the gold standard we have, and that's why we have the

1 respect that we have. There is no hasty considerations of issues in this
2 Agency. And I have been a broken record starting about a year out from
3 Fukushima that our Steering Committee should be sunsetted. That we
4 needed to go back to the Committee to Review Generic Requirements,
5 that we needed to get back to what Congress likes to call the regular
6 order, because I am concerned that over time, if we have enough of the
7 short-circuiting of our traditional process, over time then we aren't quite
8 the thorough, disciplined, deliberate regulator that we used to be. And I
9 often tell people I'm not a big believer in legacies or having personal
10 priorities, but one of my commitments is I want to leave an NRC that is
11 every bit as excellent as the NRC that I joined in 2008. And so, I only
12 have a couple of minutes left. I love B- we listened to your
13 presentations. I guess you got to do the listening, and I got to do the
14 talking, but I have to tell you that I'm ocular and dermal.

15 We've received a letter from our General Counsel,
16 excuse me, Margie Doane has received a letter from the General
17 Counsel of the industry trade group, NEI, that has challenged whether
18 or not backfit is applicable here. Backfit to me is one of those hurdles
19 that we have in our way, and while it could be viewed I think on a
20 superficial level as a mere impediment to regulating, I see the backfit
21 rule as a key element of excellence in regulating. And I have concerns
22 about the backfit issues that have been raised. I will merely say that I
23 hope that they will considered very, very thoughtfully. I think that the
24 industry has put forward a strong case, and that again I think that an
25 erosion in our thoroughness and discipline may well begin with backfit.
26 That's why I'm ever vigilant to challenges that we receive on the notion

1 of backfit, so I have 34 seconds left, if anyone wants to be terrifically
2 energetic on those two issues. Otherwise you can just say noted, and
3 we can move on to Commissioner Ostendorff. Cathy, you're looking like
4 you want to B-

5 MS. HANEY: I'll do the noted.

6 COMMISSIONER SVINICKI: You'll do the noted.

7 Okay, all right. Thank you, Chairman.

8 CHAIRMAN MACFARLANE: All right. Commissioner
9 Ostendorff.

10 COMMISSIONER OSTENDORFF: Thank you,
11 Chairman. Thank you all for your briefs. Tony, a demonstration of the
12 implementation of principles of good regulation for clarity, thank you.
13 Your acknowledgment earlier was a clear communication.

14 MR. GODY: Thank you.

15 COMMISSIONER OSTENDORFF: I've got several
16 things that I wanted to either ask questions about or comment on. I'm
17 going to start with Marissa, and this gets into the Part 74, Material
18 Control and Accounting.

19 You mentioned you received a large number of
20 comments in the context of cost estimates. What was the general
21 nature, was it the cost estimates were high, low, what B- you didn't
22 really tell us what B-

23 MS. BAILEY: I think the general nature, we were far
24 apart. Our cost estimates and the cost estimates that the industry
25 essentially provided were pretty far apart, and generally our's were low.

26 COMMISSIONER OSTENDORFF: Okay.

1 MS. BAILEY: So, we're taking a look at that.

2 COMMISSIONER OSTENDORFF: Okay. And you
3 mentioned something about reviewing the applicability of the backfit
4 rule. Could you expand upon that?

5 MS. BAILEY: Not too much, unless I can phone a
6 friend who is here. But maybe I'll just do that, I'll ask Pete to expand
7 upon it.

8 COMMISSIONER OSTENDORFF: And while he's
9 coming to the stand, my concern is the Commission has previously
10 provided direction to the Staff on this.

11 MS. BAILEY: Right.

12 COMMISSIONER OSTENDORFF: And I thought the
13 Commission direction, I thought was pretty clear in the Commission
14 action on the prior SRM in Material Control and Accounting. I'm trying to
15 understand what was not clear about the Commission direction?

16 MS. BAILEY: Well, I'll ask Pete to answer that.

17 MR. HABIGHORST: Okay, Chairman and
18 Commissioner, Pete Habighorst, MC&A Branch Chief. Yes, the
19 direction from the Commission was clear, and what Marissa mentioned
20 as far as the backfit analysis on the draft rule was the Commission
21 direction was certainly to seek comments on the analysis of the new
22 rules that were being proposed outside of the two-person rule. And
23 those are the comments that we received from the industry, one of the
24 19 that were talked about, and the working groups went through that
25 process to relook at the backfit reviews that were done on the new
26 rules, and working with OGC. It's still with the General Counsel to are

1 these new rules and the basis appropriate? So, it's really a response to
2 public comments on the draft rule related to the quality of the analysis of
3 the backfit.

4 MS. HANEY: Could I add one more thing to that?

5 COMMISSIONER OSTENDORFF: Please, please.

6 MS. HANEY: I think really what we're trying to convey
7 is that we did look at, ask, request comments as the Commission
8 directed, because the Commission was clear with regards to backfit on
9 the rule.

10 So we did receive comments back from our external
11 stakeholders, from the public, on that. And what we're doing is
12 seeking to understand what was behind what the commenters were
13 telling us, not what the Commission was telling us, so that we could
14 clearly understand how the fuel facilities, for example, their views on
15 why it was a backfit.

16 So we just -- not, not yes or no, why it was a backfit, but
17 truly understanding the components of it that made it the backfit.

18 COMMISSIONER OSTENDORFF: Okay, that's
19 helpful, I feel better now.

20 Because we spent a lot of time discussing this in pretty
21 significant detail, and Commissioner votes on this exact precise topic
22 as far as the applicability of backfit and the two-man rule issue, and I
23 know that staff had some disagreements with the Commission, but the
24 Commission made a decision in this area, and I encourage you going
25 forward, if there's other questions about the Commission direction,
26 please come to the Commission and ask for that clarification.

1 MS. HANEY: It was clear --

2 COMMISSIONER OSTENDORFF: Okay.

3 MS. HANEY: -- and now we're just evaluating the
4 comments and trying to understand them.

5 COMMISSIONER OSTENDORFF: Thank you for
6 that clarification. Okay, thank you.

7 Tony, I want to go to you. You made a comment
8 about the wide range of corrective action program results for fuel cycle
9 facilities about "does not produce consistent and predictable results,"
10 and some of the comments about variability of how things are done.

11 I don't want to -- and this is not intended as a lecture,
12 but I am going to make some comments here from my own personal
13 experience, which is fairly significant in this area.

14 When I was captain of a submarine over 20 years ago,
15 there were a hundred attack submarines and 18 ballistic missile
16 submarines and about 8 nuclear cruisers and a bunch -- 11 nuclear
17 carriers, for about 160 operating reactors, because some of these, you
18 know, plants have more than one reactor, some of these ships.

19 So I went from a very standardized approach, the
20 Naval Nuclear Propulsion Program -- then fast forward, retired in 2002,
21 went in 2007 to be Principal Deputy at the NNSA dealing with all one of
22 a kind facilities in the nuclear weapons complex, and even within one
23 facility, you'd have very different material-type concerns, and we're
24 talking -- let's talk plutonium, for instance.

25 The JASPER Facility, the Nevada Test Site, had some
26 very specific features, plutonium hazards, that were unique to that

1 facility, and nowhere else was that found.

2 And so, now coming to NRC, I see our operating
3 reactors reactor oversight process for 100 reactors, a lot of
4 commonality of risk and so forth, very standard type issues.

5 But that's not the case for our fuel cycle facilities. And
6 so I was a little bit -- not maybe concerned, maybe I am trying to throw
7 out a caution -- you can try to force fit too much of a standardization for
8 one of a kind facilities, you end up sub-optimizing safety regulation.

9 So I'll stop right there to give you a chance to respond
10 to that, but I was struck by some concerns I had about your comments,
11 that I want to make sure I better understand where you're headed with
12 this.

13 MR. GODY: Well I agree that the fuel facilities are
14 very different. But, for example, the Category III facilities handle the
15 same material. They have many of the same types of processes.

16 They might accomplish the processes a little bit
17 differently, but what we're talking about is establishing a minimum
18 standard for which issues can be evaluated, the risk can be evaluated,
19 the significance of those issues and the types of corrective actions or
20 investigations that are going to be implemented to evaluate those
21 issues.

22 For example, at one facility you may have a piece of
23 equipment that failed, and that equipment failed and it released six
24 pounds of UF₆, and it had a release of 1.2 pounds of hydrogen fluoride
25 gas.

26 With the consistent, predictable corrective action

1 program that the NRC endorses, one can anticipate that the licensee
2 would look at this particular failure in light of the fact that it had a release
3 of material with some potential public consequences, that they would
4 have done a full root cause analysis on the failure, and not an apparent
5 cause analysis on the failure.

6 What we see is those thresholds from facility to facility
7 are a little bit different. And when we would -- we conduct our
8 inspections, and we enter this facility with an assumption that we think
9 they're going to do a root cause analysis, and we find that they just did a
10 brief apparent cause, it creates issues.

11 Our inspection program allows us to do our own root
12 cause, which is very unusual for the fuel cycles, and the reason we
13 have that tool in our inspection program is because of the fact that we
14 don't necessarily always have predictable and consistent outcomes on
15 issues, and resolving issues.

16 And when we come across the licensee that has not
17 done a root cause analysis, we may employ that inspection procedure
18 and do our own.

19 So I'm talking from the perspective of consistent and
20 predictable evaluation of issues at facilities.

21 COMMISSIONER OSTENDORFF: You can stop
22 right there. That's helpful, it was not clear to me where you were
23 headed with this particular issue, and I think having some predictability
24 as far as licensee response, based on incidents, root cause analysis,
25 expectations, and our notifications, et cetera, is appropriate.

26 I just want to make sure that we're not trying to force fit

1 -- you know, you made some comments about consistent corrective
2 action program results. I think we need to be very careful about that,
3 because there's a huge difference, huge difference, I said it twice
4 intentionally, between the risk posed by a Cat I facility, as far as the
5 materials at risk there, and the one by a Cat III facility. And I think that
6 distinction needs to be recognized up-front.

7 MR. GODY: I agree with that.

8 COMMISSIONER OSTENDORFF: Okay, thank you.

9 Second time, I want to comment just very quickly, I
10 agree with some of the issues that Commissioner Svinicki raised on
11 cyber security. I have been hearing about this much-anticipated cyber
12 quote paper coming up for, I think it's two and a half years now.

13 And I, you know, we did a cyber rule for nuclear power
14 plants, and so I share some of the concerns, and again as refreshed,
15 we have a public meeting, I'm not criticizing it, we have a public meeting
16 today to throw this out without the Commission having the benefit of
17 seeing any paper on it.

18 So from a timing aspect, it's a little bit awkward as a
19 Commissioner because I don't know what you're looking at, but I agree
20 with Commissioner Svinicki, I want to take a good fresh look at this.
21 Yet I've been hearing this for a long period of time, haven't seen
22 anything come to the Commission to really articulate what the basis
23 would be for orders. So I look forward to hearing that.

24 Last thing, in the 20 seconds I have left, Cathy, I
25 appreciate your mentioning the international engagement. I will just, I
26 can't help but comment, for perhaps in the context of radiological

1 source security that we discussed a little bit at the first panel, that a
2 non-proliferation objective of the United States government does not
3 necessarily equate to a regulatory standard for the NRC.

4 So I'm reacting to one of your slides there. Okay,
5 thank you. Thank you, Chairman.

6 CHAIRMAN MACFARLANE: Okay, Commissioner
7 Baran?

8 COMMISSIONER BARAN: Thank you. Barry, can
9 we go back to cybersecurity for a couple minutes?

10 I know there are limits on what you can say in this
11 setting, and I also know that the answer to this question probably differs
12 among the different fuel cycle facilities, but can you give us a general
13 sense of how many digital systems are present at the fuel cycle facilities
14 where there is a potential vulnerability?

15 MR. WESTREICH: Well, you know we went out and
16 did a number of site reviews. We did one round of site visits to review
17 the digitization, if you will, and then we went back to look at
18 implementing more consequent-to-base parts, so we did kind of a
19 broad look.

20 And from our review, there's a fair number of digital
21 assets, controlling all aspects of the process, programs, IROFS, MC&A
22 programs, and they're very, items relied on for safety.

23 So there's a fair amount at the facilities that you can
24 look at for potential vulnerabilities.

25 COMMISSIONER BARAN: Okay. And you
26 mentioned in your presentation that the industry had agreed to at least,

1 to a voluntary program that addressed at least a portion, the five or the
2 six, issues that the staff had.

3 Can you talk a little bit more about that, the -- from your
4 point of view, the adequacy of what the voluntary program is covering
5 and what they're not covering?

6 MR. WESTREICH: Yes, they, well they had
7 consistently volunteered for a number of the items that the staff was
8 looking for.

9 The areas that we were focused on that they had some
10 disagreements related to really how you protect yourself from the
11 networks. Because these plants are fairly digitized and they have a lot
12 of network connections.

13 That's one area that we were looking for some kind of
14 ability to protect yourself from the networks, and they were reluctant to
15 do that, a lot because it's a fairly substantial amount of effort based on
16 how digitized they are and how the connections are in place. It may
17 require a fair amount of effort to actually do that.

18 MS. HANEY: Commissioner, if I could just add, it is
19 unfortunate that the paper is not in front of the Commission, the staff's
20 recommendation.

21 We have been working over the years to develop a
22 paper that lays out many options for addressing cyber, you've heard
23 them speak to the orders, we've talked about rulemaking. We've also
24 talked about just relying solely on the voluntary initiatives.

25 And over the years, what staff has been hearing from
26 the fuel cycle facilities as well as from the Nuclear Energy Institute is

1 really that we need to focus on what are the consequences of a cyber
2 event, recognizing that not all fuel cycle facilities are the same, and then
3 also what the threat is.

4 So in staff's developing this paper, we've tried to
5 address all those concerns, and to put really the complete story on the
6 table for the Commission's consideration.

7 And some of the -- the answer to your question, really,
8 you'll find in some of the references that we provide in the paper where
9 NEI is describing their voluntary initiative that they would be looking to
10 go forward with in the interim until a rulemaking, or just if we were to just
11 stay with the voluntary initiative.

12 So that information will be made available to the
13 Commission in the near future.

14 COMMISSIONER BARAN: Great, well I look forward
15 to it.

16 Turning to the natural phenomenon hazards generic
17 letter, I guess this is a question for Marissa and Tony, can you talk a
18 little bit -- my colleagues may be more aware of this, but can you talk a
19 little bit more about the generic issues that were identified?

20 You talked a little bit about kind of schedule and
21 process, but I'm curious a little bit more on the substance, what are the
22 generic issues there that it --

23 MS. BAILEY: In summary -- well, let me go back a
24 little bit. After the Fukushima event, we, as Tony mentioned, we
25 conducted inspections of selected fuel cycle facilities to assess their
26 ability to mitigate severe natural events.

1 And generally, except for that one facility, Honeywell,
2 we found that the facilities were sufficiently prepared to prevent the
3 consequences of credible events at the facility.

4 But we also found, generically amongst the fuel cycle
5 facilities, that there was perhaps a breakdown in the assumptions that
6 they were using in their Integrated Safety Analysis.

7 In other words, their assumptions for considering
8 natural phenomena events and whether that was credible or not was
9 not clearly documented.

10 So how they were treating natural phenomena events
11 and their decision to either screen that out or not wasn't clearly
12 documented.

13 So that's really what the generic letter is trying to get to.
14 It's trying to get information from the licensees on how did you treat
15 natural phenomena events in your Integrated Safety Analysis, what
16 were your assumptions, and what were your assumptions and the basis
17 for those assumptions in screening out some of those natural
18 phenomena events?

19 Tony, did you want to add to that?

20 MR. GODY: Just a little. The one facility where we
21 decided that there was a safety issue, when the inspectors walked
22 through that facility, what they saw, and to make it real, is that where
23 you would expect to see a support on a piping, or next to a valve, there
24 was no support.

25 So the presumption that the facility could withstand a
26 500 year earthquake didn't make sense, when you walked the plant

1 down and you saw that the facility didn't have some equipment in place
2 that you would expect.

3 COMMISSIONER BARAN: And what -- obviously, on
4 the reactor side post-Fukushima, there were the walkdowns and
5 inspections. I mean, what were the lessons learned from that side that
6 have been applied to your efforts here?

7 MS. BAILEY: I'll let you answer that one.

8 (Laughter.)

9 Okay, let me get it started. It's different personally.

10 I mean, I think that one lesson learned, which is why
11 we're doing the generic letter, is that it's important to clearly document
12 the basic assumptions that you're making in your Integrated Safety
13 Analysis, because the Integrated Safety Analysis really formed a
14 foundation of a licensee's safety program.

15 And if you don't understand those basic assumptions
16 that are being made as to why you're screening out certain event
17 hazards, then it's difficult, sometimes, for us to take the appropriate
18 regulatory action.

19 So that's one lesson learned. I think the other lesson
20 learned, and maybe it's not a lesson learned that I'm particularly proud
21 of as part of the agency, is that when we conducted the inspections, for
22 one facility where we found an immediate safety significant issue, we
23 took action, and, you know, got that facility to a better place, and we
24 were able to, commensurate with the safety significance, defer work on
25 the generic issue until we addressed the facility with the one safety
26 significant issue.

1 MR. GODY: Yes, the biggest thing we adopted from
2 the lessons learned from the reactors is when a reactor found that their
3 facility was designed to Earthquake X, and then the re-analysis showed
4 they needed to be designed to Earthquake Y, they employed margin
5 analyses for seismic events to the facility.

6 And Honey -- the facility that had a safety issue did the
7 same thing and hired the same contractors that the reactor licensees
8 are using. So the use of that seismic margins analysis is similar to
9 what the reactors have done.

10 COMMISSIONER BARAN: And when Chairman
11 Macfarlane was talking about this issue earlier of new information,
12 particularly in a seismic area over the decades that's been developed, I
13 was struck a little bit by the response seemed to be, well, we're going to
14 consider all that as it kind of comes to us.

15 And it sounded kind of passive, and I just wonder
16 whether it is that way. Is the staff actively seeking out the new
17 information to incorporate that into your work, or does someone have to
18 bring it to you for something to happen?

19 MS. BAILEY: We are actively seeking out that
20 information. I think in this case, we're trying to be systematic about it,
21 and seeking it out through a generic letter.

22 COMMISSIONER BARAN: Okay. Great. And
23 turning just for a minute to MOX, I know no one can predict the future of
24 the MOX program or facility, but can someone walk me through a little
25 bit of what the inspection program there currently looks like?

26 Right now, there is still some construction activity

1 there, right, and so there's --

2 MR. GODY: Right. MOX is a fairly unique facility.
3 They have committed to 10 CFR Part 50, Appendix B, which means
4 they're implementing a full quality assurance program at that facility.

5 So our inspection programs are focused on ensuring
6 that the facility is being constructed in accordance with the design, and
7 where we identify differences, that those are analyzed and resolved.

8 COMMISSIONER BARAN: Okay. And if the
9 program, or the project, does go into cold standby, what is the result
10 then, or effect on your oversight there? Is there anything, or is it -- ?

11 MR. GODY: I think it's too early to say.

12 COMMISSIONER BARAN: Okay.

13 MR. GODY: Right now, we are -- we do have our
14 inspection presence, we are inspecting the facility commensurate with
15 the work that's ongoing, but it is too early to say whether or not we'll
16 have --

17 COMMISSIONER BARAN: Fair enough. Okay,
18 thank you.

19 CHAIRMAN MACFARLANE: Commissioner Burns.

20 COMMISSIONER BURNS: Thank you. Thanks,
21 and again, thank you for the reintroduction to this aspect of the
22 materials program in the fuel cycle area.

23 I noted in some of the background notes, in a couple
24 instances, we've had issues with the licensees in terms of, either, I'm
25 not sure the right term is the quality of submittals or the completeness of
26 submittals.

1 Looking particularly, and I think in the LES
2 circumstance, but also I was interested in the Vallecitos circumstance --
3 is there -- and part of that, although the prime responsibility rests with
4 the license applicant to provide a high quality application that's
5 responsive to requirements and all -- have we thought about what our
6 licensing, in terms of our licensing process, or are there things about it
7 that might help to address some issues like that?

8 MS. BAILEY: I think that we are working to put a little
9 more discipline in our licensing process. There has been a lot of
10 activity over the last five years, so a lot of lessons learned.

11 So for example, over the last five years, we reviewed
12 and licensed four new facilities. We also oversaw the renewal of four
13 or five facilities, and, you know, one of them was a 40 year renewal, and
14 then others were like a 20 year renewal and a 10 year renewal.

15 So from all of those licensing activities, there was a lot
16 of lessons learned. And one of the things that it sort of revealed to us
17 is that there needs to be a little bit more discipline in our licensing
18 process, and more predictability, perhaps.

19 So we're taking that lesson learned, and that's the
20 driver for us updating our standard review plan, which is currently out
21 for public comment -- actually, the public comment period just closed.
22 So we're updating the standard review plan to implement some of those
23 lessons learned.

24 We also have an internal document called the
25 Licensing Handbook which is a living document, but we've updated that
26 to also incorporate some of the lessons learned, and try to put more

1 discipline in our licensing process.

2 And then the other biggest lesson learned is the
3 acceptance review of the application, in that perhaps our bar was a little
4 bit too low in accepting an application.

5 We basically discovered that if we accepted an
6 application that had significant gaps in it, then the review process
7 becomes extended. You end up with multiple rounds of RAIs.

8 And so we're trying to be a little bit more rigorous in the
9 acceptance of the application and making sure that the application is
10 complete so that we could begin a review, and they checked off
11 everything that the regulation requires for an application to have.

12 COMMISSIONER BURNS: Okay, thanks. One of
13 the other things -- let me just focus on the Vallecitos circumstance for a
14 moment -- because it was interesting, this is a circumstance where we
15 have a license renewal, but we're also pursuing a confirmatory order
16 with respect to security matters, and to some extent, there are -- well, I
17 understand, I understand the Vallecitos facility -- but I'm trying to
18 understand, you don't need to talk about the particular matters, but I'm
19 trying to understand process-wise, because again, normally I think of a
20 licensing process if I need to deal with particular, you know, what the
21 license is going to look like.

22 And if that license is going to change, that's going to be
23 dealt with in that process. So I don't know if these are issues that are
24 independent of when we make a decision, or what.

25 And as I say, I'm not asking anybody to talk about
26 sensitive information.

1 MS. BAILEY: Yes, I'll try to respond to that at a high
2 level.

3 The GE Vallecitos license is up for renewal, it's been
4 under timely renewal for a couple of years now.

5 There are two things that have kept us from accepting
6 the renewal application, two major things.

7 One was the adequacy of the information for the
8 financial decommissioning plan, and the other was the documentation
9 for the physical security plan.

10 And so those two things, we're trying to pursue before
11 we can accept the application.

12 In terms of physical security, it's a pretty unique facility.
13 It doesn't fit the mold of other facilities. And so we are trying to make
14 sure that -- and so it doesn't specifically fit in any set of the regulatory
15 requirements.

16 So we're trying to make sure that given the type of
17 material that's at the facility, that it has documented the right physical
18 security plan. And we are pursuing different vehicles for doing that,
19 and one of them would be through an order.

20 COMMISSIONER BURNS: And that would be
21 because there is a necessity to deal with that --

22 MS. BAILEY: Yes.

23 COMMISSIONER BURNS: -- in advance of deciding
24 other issues.

25 MS. BAILEY: Yes. But once -- but that's sort of part
26 of our acceptance, is whether we can align with the licensee on what is

1 the right type of physical security requirements for that facility, and how
2 do you document those?

3 COMMISSIONER BURNS: Okay, thanks, Marissa.

4 One of the things that I think we noticed is that much of
5 the activity in this area seems to be affected by the market for uranium,
6 and facilities that maybe a couple years ago were sort of plugging along
7 apace, now sort of post that -- what challenges does that present to you
8 as staff, in terms of your own staffing, you know, readiness and being
9 able to respond to changes in the environment?

10 MS. BAILEY: Two areas. One is licensing. It is a
11 challenge in terms of maintaining the right level of licensing staff, and
12 the right level of licensing expertise.

13 We're in a different place today than we were a couple
14 years ago.

15 A couple years ago, there were lots of new applications
16 in place. This year, we're about 100 steady, not looking at really too
17 many new applications, and so the staff level has come down, and
18 we've had to adjust to that.

19 I think one of the biggest challenge areas is in
20 construction oversight, where we did staff up anticipating that there
21 would be three or four facilities under construction, and that work hasn't
22 materialized.

23 MR. GODY: Yes, it's one area that -- I think we
24 demonstrated a good agility when we realized that the construction
25 plans weren't going the way we budgeted. We returned FTE to the
26 Program Office and allowed the Program Office to use that -- utilize that

1 FTE for other safety-significant work.

2 With respect to your statement about budgeting and
3 the lower cost of uranium, we're very keen on making sure that the
4 licensees don't let that impact safety focus and security focus at their
5 facilities. We haven't seen any impact of that.

6 MS. BAILEY: And so I'd just like to add to that, that
7 when we did reduce the resources in the business line because the
8 work hadn't materialized, those resources were redirected to other NRC
9 activities.

10 COMMISSIONER BURNS: So essentially, you think
11 you have the tools you need to manage that, in this circumstance?

12 MR. SATORIUS: It's not just in this program, our
13 business line, it's across the business lines, and trying to figure out,
14 based on letters of intent or other communications, what certain
15 companies think they're going to be doing in a couple years.

16 And so we staff up to deal with that, and then it doesn't
17 really happen. So it's throughout several business lines.

18 COMMISSIONER BURNS: Okay. Thank you,
19 Chairman.

20 CHAIRMAN MACFARLANE: All right. I am going to
21 ask just a couple of quick additional questions.

22 You know, I support the staff's efforts in addressing the
23 dermal and ocular exposure standards to chemicals. So just a couple
24 quick questions on that.

25 Are there data or studies that we can use to draw upon
26 to develop exposure standards for the limited set of chemicals?

1 MS. BAILEY: Yes, there are existing data from the
2 chemical industry, and also from international sources --

3 CHAIRMAN MACFARLANE: Okay, that's very
4 helpful. That makes that work easier.

5 So, and practically speaking, what would incorporation
6 of standards into a facility's ISA actually mean?

7 MS. BAILEY: It would mean that, per regulation, they
8 would have to establish quantitative standards for chemical exposures
9 for all pathways.

10 CHAIRMAN MACFARLANE: So would this result in
11 significant changes to their processes?

12 MS. BAILEY: We don't think so.

13 CHAIRMAN MACFARLANE: No, okay. So not such
14 a big deal, really, in the end.

15 And have you heard from plant workers themselves on
16 this topic, whether they need -- they think they need these standards?

17 MS. BAILEY: I don't know that we've specifically
18 heard from plant workers on these topics, but the reason that we are
19 pursuing this issue are because of events that occur --

20 CHAIRMAN MACFARLANE: That occurred.

21 MS. BAILEY: -- in 2005 time frame.

22 CHAIRMAN MACFARLANE: So there is a need,
23 absolutely a demonstrated need.

24 MS. BAILEY: Yes.

25 CHAIRMAN MACFARLANE: Okay, great, great.
26 That's it.

1 Anybody else with additional questions?

2 COMMISSIONER SVINICKI: Yes, I would just note, I
3 don't know how much outreach you've done to workers, but I was at the
4 Westinghouse Columbia fuel cycle facility last week, did a Q&A with the
5 workers on the production floor, they strongly with me questioned the
6 need for requirements in this area.

7 So you might want to reach out to them and get that
8 feedback directly.

9 CHAIRMAN MACFARLANE: Okay. All right.
10 Nothing else. All right, then, I thank you all very much for the
11 discussion, for all the information.

12 We really appreciate it. I think you heard that we
13 really appreciate that update from all of us, and thank you again for all
14 your hard work. And the session is adjourned.

15 (Whereupon, the meeting went off the record at 12:12
16 p.m.)

17

18

19