

UNITED STATES
NUCLEAR REGULATORY COMMISSION

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MEETING ON STRATEGIC PROGRAMMATIC OVERVIEW OF THE FUEL
FACILITIES AND THE SPENT FUEL STORAGE AND
TRANSPORTATION BUSINESS LINES

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TUESDAY,
MAY 25, 2021

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The Commission met via Videoconference, at 9:00 a.m. EST,
Christopher T. Hanson, Chairman, presiding.

COMMISSION MEMBERS:

CHRISTOPHER T. HANSON, Chairman

JEFF BARAN, Commissioner

ANNIE CAPUTO, Commissioner

DAVID A. WRIGHT, Commissioner

ALSO PRESENT:

RICHARD LAUFER, Acting Secretary of the Commission

MARIAN ZOBLER, General Counsel

NRC STAFF:

DARRELL ROBERTS, Deputy Executive Director for

Materials, Waste, Research, State, Tribal,

Compliance, Administration, and Human Capital

Programs

JOHN LUBINSKI, Director, Nuclear Material Safety and

Safeguards (NMSS)

ALLAN BARKER, Regional State Liaison Officer, Region III

JOSE CUADRADO-CARABALLO, Project Manager, Spent Fuel

and Transportation Licensing Branch

YOIRA DIAZ-SANABRIA, Acting Deputy Director,

Division of Fuel Management, NMSS

JAMES DOWNS, Project Manager, Fuel Facility

Licensing Branch, NMSS

LARRY HARRIS, Senior Resident Inspector, Division of

Fuel Facilities Inspection, Region II

TIM HARRIS, Senior Program Manager, Materials

Security Branch, Office of Nuclear Security

and Incident Response

JESSIE QUINTERO, Chief, Environmental Review

Materials Branch, Division of Rulemaking,

Environmental, and Financial Support, NMSS

CHRISTOPHER REGAN, Deputy Director, Division of Fuel

Management, NMSS

P R O C E E D I N G S

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9:01 a.m.

CHAIRMAN HANSON: Good morning, everyone. I convene the Nuclear Regulatory Commission's public meeting for the purpose of discussing the NRC's strategic considerations associated with the fuel facilities business line and the spent fuel storage and transportation business line.

It's very important to keep the public informed of the Agency's development in these areas of high interest, so I thank all of you for supporting this meeting today and I'm looking forward to a great conversation.

We will hear from two NRC staff panels this morning. First to present are the participants for the fuel facilities business line discussion. Following that, we'll have a short break and then we will hear from the NRC staff panel on the spent fuel and transportation area.

With each panel, we will hold questions until the end and then we'll hear questions from the commissioners to the panel.

Before we start, I'll ask my colleagues if they have any remarks they'd like to make? No? Okay, so with that, we'll begin our first panel. Each panelist will have nine minutes to present.

The first panel will be kicked off by our Deputy Executive Director for Materials, Waste, Research, State, Tribal, Compliance, Administration and Human Capital Programs, that is a mouthful, Darrell Roberts, and then followed by the staff panelists. Darrell, the floor is yours.

MR. ROBERTS: Thank you, Chairman. Good morning, Chairman Hanson and Commissioners. Thank you for the opportunity to discuss and provide an overview of the fuel facilities and spent fuel storage and

1 transportation business lines.

2 Both business lines are effectively implementing their
3 regulatory programs for existing and new technologies.

4 For the fuel facilities business line, we are addressing new
5 fuel types, accident tolerant fuel, advanced reactor fuels, and new facilities.

6 For the spent fuel storage and transportation business line,
7 we are addressing new spent nuclear fuel canisters and storage systems, and
8 the potential for significant commercial spent fuel transportation.

9 Both business lines are focusing on innovating our processes
10 using data analytics and taking advantage of advancements in information
11 technology to support decision making, ensuring risk-informed decision making,
12 and ensuring our people are ready to meet the needs of today and the future.

13 We will start our briefing today with the fuel cycle facilities
14 business line. With me here at the table are John Lubinski, Director of the
15 Office of Nuclear Material Safety and Safeguards or NMSS, Christopher Regan,
16 Acting Director for the Division of Fuel Management in NMSS, James Downs,
17 Senior Project Manager in the Fuel Facilities Licensing Branch in NMSS, Larry
18 Harris, Senior Resident Inspector at the Nuclear Fuel Services Fuel Fabrication
19 Facility in the Division of Fuel Facilities Inspection in Region II, and Tim Harris,
20 Senior Project Manager in the Material Security Branch in the Office of Nuclear
21 Security and Incident Response.

22 And with that, I will turn it over to John Lubinski. Next slide,
23 please.

24 MR. LUBINSKI: Thank you, Darrell, and good morning,
25 Chairman and Commissions. I will now provide an overview of the fuel facilities

1 business line program.

2 The fuel facilities business line regulates the country's fuel
3 cycle facilities, which include six operating enrichment and fabrication facilities,
4 two additional facilities that are licensed with construction pending, and one
5 conversion facility that has idled production and plans to restart operations in
6 2023.

7 The business line is planning for license amendments and
8 new applications to support new facilities and new technologies.

9 Also, the business line regulates licensees that possess
10 greater than critical mass quantities of special nuclear material such as
11 universities and research and test facilities, and supports oversight for material
12 control and accounting, export licensing, special nuclear material security, and
13 implementation of international safeguards that come from U.S. IAEA
14 agreements and bilateral agreements with nuclear trading partners.

15 The Division of Fuel Management or DFM in NMSS was
16 established in October of 2019, and it was the result of a merger of two
17 divisions, the Division of Spent Fuel Management and the Division of Fuel
18 Cycle Safety, Safeguards, and Environmental Review.

19 DFM has the programmatic lead for licensing and oversight
20 activities for both fuel facilities and spent fuel storage and transportation
21 business line activities.

22 Purposes of the merger were to facilitate cross training,
23 sharing of resources, and establishing common practices based on best
24 practices across the two business lines.

25 Regulation of the fuel facilities business line activities is

1 accomplished through effective relationships with our partner offices in Region
2 II. Region II implements the NRC's oversight activities for operating fuel
3 facilities and construction of new facilities, which includes the use of regional-
4 based inspectors and resident inspectors at the Category 1 fuel facilities.

5 Region II and DFM effectively coordinate and communicate
6 on the oversight program, which includes evaluation of program changes and
7 coordination on licensing and inspection issues.

8 The Office of Nuclear Security and Incident Response or
9 NSIR provides programmatic support for security and safeguards activities.

10 The Office of the Chief Information Officer provides support
11 for oversight for secure networks in enrichment facilities.

12 And the business line coordinates closely with other NRC
13 offices and business lines in response to emergent issues such as our
14 response to the public health emergency and to coordinate best practices.
15 Next slide, please.

16 The business line is planning for the future. This includes
17 preparing to safely license new fuel types and facilities to support both the
18 operating and new reactor business line in the areas of accident tolerant fuels
19 and fuels for advanced reactors.

20 As we continue to become a more modern, risk-informed
21 regulator, we are encouraging the use of the Be Risk Smart framework for daily
22 activities and are providing popup seminars to provide staff illustrations on how
23 the framework can be used.

24 For fuel facilities, we have been focusing on early
25 engagement on risk considerations through assignment and alignment

1 meetings and for addressing issues of low safety significance.

2 In domestic and international forums, we continue to provide
3 leadership on fuel facility topics. Most notably, we have had interactions with
4 the Department of Energy and the Nuclear Energy Institute on accident tolerant
5 fuels, and in the international community through the Nuclear Energy Agency's
6 Fuel Cycle Working Group.

7 In addition, we have participated in many forums where we
8 have presented or facilitated discussions with interested stakeholders and
9 members of the public.

10 We are using data to assist us in making decisions regarding
11 our internal programs, and we are using signposts and markers to guide where
12 engagement with external stakeholders is needed.

13 Finally, following the events of 2020, and with the assistance
14 of the Office of Small Business and Civil Rights, the business line has held
15 several diversity and inclusion events in both DFM and the Division of Fuel
16 Facility Inspection in our Region II office.

17 Several staff also participated in the Region II diversity
18 dialogue cohorts during 2020, which was designed to promote diversity and
19 inclusion awareness and provide a forum to discuss diversity topics in a
20 facilitated cohort.

21 These staff now serve as diversity ambassadors within the
22 region and help promote the NRC's diversity management and inclusion
23 program.

24 Last month, DFM hosted a session entitled "How Are You
25 Doing" to provide a check-in with staff on their reflections over the past year

1 and support all staff bringing their whole selves to work. These sessions were
2 to create a space to share experiences, become more aware, and learn more
3 about what we can do to ultimately help ensure we have a more inclusive
4 culture within the NRC.

5 I would now like to turn the presentation over to Chris Regan.

6 MR. REGAN: Good morning, Chairman and Commissioners.

7 Thank you for the opportunity to discuss with you the current licensing and
8 oversight environment in the fuel cycle area. Next slide, please.

9 So, the landscape has changed significantly in the last five
10 years. In 2016, there were 13 major fuel cycle facilities licensed in the United
11 States, eight of which were operating, one under construction, and four with
12 construction pending.

13 The fuel facility business line budget at that time was 136 FTE
14 and six million in contract support.

15 Fast forward to 2021 and we are witnessing a shift due to
16 increased interest in activity associated with new technologies, including ATF,
17 HALEU fuel, advanced reactors, and medical isotope production.

18 While the number of operating fuel cycle facilities slightly
19 decreased, the diversity and complexity of our regulatory activities has
20 increased.

21 We currently have six operating fuel facilities, but we are also
22 proactively engaging with industry's efforts to upgrade their facilities to produce
23 new fuel types, monitoring and communicating with enrichment facilities looking
24 to increase uranium enrichment to support current U.S. light water reactors
25 seeking to extend the duration of operating cycles, and preparing for the

1 anticipated needs for advanced reactors.

2 With this in mind, our fiscal 2021 enacted program budget
3 that supports all fuel facilities activities consists of 74 FTE and 4.7 million for
4 contract support and travel.

5 I'd like to point out some other changes. First, there's an
6 increasing focus on aligning our licensing work with annual fees. Given the
7 decrease in the number of operating fuel facilities in the last few years, there's
8 an increased focus on transparency and clarity in our planning and execution of
9 activities that contribute to the annual fees paid by our licensees.

10 We've made progress in this area, but there's more for us to
11 do. In fiscal year 20, we reduced the percentage of charges to non-fee billable
12 work that were not assigned to a specific activity by 20 percent or more in three
13 core areas: licensing, oversight, and rulemaking.

14 This was accomplished through providing guidance to our
15 business line partners and quarterly monitoring of these expenditures.

16 In August 2020, we completed an effectiveness review of the
17 actions taken to date and which concluded that progress has been made in the
18 tracking, guidance, and awareness of the non-billable work performed.

19 In FY 20 and 21, we held multiple public meetings with the
20 fuel cycle industry to communicate transparency in the activities that comprise
21 the annual fees and their relative priorities, and we continue our efforts to make
22 progress in this area throughout fiscal year 21 and are considering insights
23 gained as we develop future budgets.

24 Although you've heard about the agency's activities to
25 respond to the COVID public health emergency at the September 2020

1 Commission meeting, I'd like to briefly highlight some examples from the fuel
2 facility business line.

3 Notably, we learned from our COVID experience by
4 developing a procedure to provide regulatory clarity and building on the agile
5 teams concept to form a dedicated core group of staff for reviewing expedited
6 relief requests.

7 As a result, the average time for the review of relief requests
8 was less than 30 days at the height of the public health emergency. In late
9 2020, we completed Phase A of an oversight program's lessons learned effort,
10 which evaluated best practices for inspection activities during the initial stages
11 of the public health emergency.

12 Additionally, in April of this year, we issued a charter for
13 Phase B of the effort, where we will further evaluate whether changes to our
14 oversight programs are recommended.

15 And our Region II office established an enlightened working
16 group which is working to provide recommendations on ways to leverage best
17 practices from agency operations during the public health emergency through
18 the benefit of multiple business lines including fuel cycle facilities. Next slide,
19 please?

20 Despite the rapidly changing environment and our continued
21 oversight of operating facilities, we remain focused on safely licensing new
22 technologies.

23 While the type and complexity of these licensing actions is
24 changing, our strong and flexible regulatory framework and long history of
25 operational experience provides a robust foundation that can accommodate

1 these changes.

2 The complexity in our licensing and oversight activities you
3 will hear is a theme throughout today's briefing.

4 For example, the staff recently reviewed and approved a
5 license amendment for one of our fuel fabricators for a methodology to analyze
6 and increase enrichment.

7 The point being our regulatory framework and extensive
8 technical expertise in areas such as criticality control and operational
9 experience applied to this review contributed to its success.

10 Similarly, the staff has examined the current regulatory
11 framework for advanced reactor fuels, and with the information we have today,
12 our experience with the licensing and oversight of existing fuel facilities to date,
13 we've concluded that the current regulations are flexible enough to
14 accommodate the front end of the advanced reactor fuel cycle.

15 However, we continue to assess our regulatory infrastructure
16 and are developing an advanced reactor fuels licensing strategy roadmap to
17 ensure any challenges and necessary actions are identified early to support the
18 first constructed advanced reactor.

19 Regarding partnerships, I'd like to highlight the fact that we
20 are working closely with the Office of Nuclear Reactor Regulation or NRR to
21 provide the fuel cycle expertise for the review of several medical isotope
22 applications that are being considered to ensure safe, reliable U.S. supply of
23 moly-99 for medical purposes. You'll hear more specifics on these licensing
24 reviews from James.

25 At the business line level, we recognize that proactive

1 communication with external stakeholders is critical to ensuring the principle of
2 transparency and the agency's credibility remains steadfast.

3 For these reasons, we continue to host periodic public multi-
4 day fuel facility stakeholders' meetings with the current fleet of licensees and
5 interested public.

6 In addition, we are engaging in extensive pre-application
7 meetings with and have sent letters to both ATF and advanced reactor
8 applicants to clearly communicate expectations for submittal quality and also
9 scheduling needs.

10 Looking internally, our business line is an active contributor to
11 the efforts of agency working groups focused on these emergent technologies
12 and also with medical isotope facilities, and we are ensuring full engagement
13 with the public by working with our partners in NRR on maintenance of the
14 recently updated ATF website and engaging in period advanced reactor
15 stakeholder meetings. Next slide, please?

16 Since the last business line briefing, we have made significant
17 progress in our journey towards becoming a modern, risk-informed regulator.
18 For example, last spring, we completed our holistic assessment of the fuel cycle
19 inspection program, and as of March of this year, we have fully implemented
20 the 44 recommendations from this assessment.

21 Similarly, last spring, the staff completed its review of the fuel
22 facilities program which provided 37 recommendations. These
23 recommendations were prioritized into near, medium, and long-term, and as of
24 today, the nearterm recommendations have been institutionalized and the staff
25 is working to address the remaining medium and long-term recommendations.

1 We are ensuring we inform our program through the use of
2 technology and continuous learning. We are developing dashboards to provide
3 rapid access to information to illustrate programmatic health and to more
4 effectively manage workload across the business line.

5 The dashboards currently under development will not only
6 provide better notification of approaching milestones, but they are expected to
7 enable better accountability through analytics of staff workload and the number
8 of hours associated with specific projects.

9 The dashboard information is expected to be as valuable to a
10 staff project manager, for example, as it would be to a manager. Next slide,
11 please?

12 I'd like to conclude my portion of the presentation by
13 emphasizing the key to our success to date and into the future is our people. In
14 this vein, we continue to focus on enhancing our workforce through strategic
15 workforce planning efforts, as well as knowledge management and mentoring
16 of our staff.

17 To ensure we can support the expected licensing and
18 oversight activities into the future, we factored the skills necessary to support
19 this workload into the strategic workforce planning process or SWP.

20 Using of SWP, coupled with aggressively pursuing staffing
21 actions, we've avoided potential skill gaps. For example, we are doubling
22 encumbering positions to better prepare for expected retirements within the
23 business line, and we have recently hired staff with critical technical skills in the
24 fields of criticality safety and materials engineering.

25 Recognizing the importance of mentoring, and again, given

1 expected retirements and the agency's emphasis on entry level hiring across
2 the business line, we have established division-level mentoring programs to
3 complement the agency's skills-based mentoring program.

4 And we will continue to rely on the mentorship from senior
5 staff, qualification programs, and other in-house training opportunities to
6 efficiently and expeditiously train new hires.

7 And finally, I should mention we have expanded our
8 knowledge management efforts to enhance our proficiency. These efforts
9 include activities such as greater use of Nuclepedia and dedicated fuel cycle
10 topical information seminars.

11 This concludes my comments and I'll now turn the
12 presentation over to James Downs. Next slide, please?

13 MR. DOWNS: Thank you, Chris. Good morning, Chairman
14 and Commissioners. I will be providing an overview of our fuel facility's
15 licensing activities with a focus on our continued efforts to safely license fuel
16 facilities and innovate our program to ensure we are ready to license new
17 technologies such as the fabrication of accident tolerant fuel, which includes
18 new coatings, claddings, and increased enrichment levels for higher burnup;
19 the fabrication of fuel for advanced reactors, such as fuel from tri-structural
20 isotropic particles often called TRISO; the enrichment and fabrication of high-
21 assay, low-enriched uranium, often called HALEU, which may be used in either
22 accident tolerant fuel or fuel for advanced reactors; and the production of
23 medical isotopes.

24 Each of these new technologies presents the staff with unique
25 safety and security considerations that must be addressed during licensing and

1 inspection.

2 Next slide, please.

3 We continue to build on our rich operational experience to
4 safely and securely regulate fuel facilities, as the number of licensing actions
5 has become more consistent over the past few years, as shown by the chart on
6 this slide. We continue to effectively implement the fuel facility's licensing
7 program by performing timely licensing reviews and successfully achieving our
8 review performance metrics, while also implementing improvements within this
9 program.

10 We continue to successfully navigate the unique aspects of
11 fuel cycle licensing by applying our technical expertise, openly considering
12 alternate views in our decisions, and focusing on effective and risk-informed
13 licensing processes.

14 In fiscal year 2020, we completed a total of 45 licensing
15 actions, nearly the same as fiscal year 2019. While the number of licensing
16 actions remains nearly the same and very stable, the complexity of those
17 actions, however, is increasing.

18 I'd like to highlight some examples of licensing actions
19 completed since our last Commission briefing in December of 2019 for this
20 business line. In March of 2020, the staff issued a 40-year license renewal for
21 the Honey Uranium Conversion Facility in Metropolis, Illinois.

22 Although the facility remains in an idle-ready standby status,
23 earlier this year Honeywell provided the NRC with a letter stating that they are
24 planning to restart operations by mid-2023. The staff is preparing to review any
25 license amendment requests, and DFM and Region II are collaborating to

1 ensure that appropriate controls and oversight are provided during the
2 anticipated restart of the facility.

3 In August of 2020, the staff issued a license amendment for
4 the Global Nuclear Fuels Americas, or GNFA, fuel fabrication facility in
5 Wilmington, North Carolina, which approved their minimum margin of
6 subcriticality for up to eight percent enrichment.

7 This amendment paves the way for future requests from
8 GNFA related to accident tolerant fuels with increased enrichment levels. The
9 staff confirmed that GNFA's existing criticality safety and integrated safety
10 analysis methodologies would remain valid and that GNFA's minimum margin
11 of subcriticality is sufficient to support future processing of enriched material up
12 to eight weight percent.

13 As the fuel cycle industry makes the business decisions and
14 determines the appropriate timing, the NRC staff must prepare for future
15 licensing actions associated with accident tolerant fuel and fuel produced with
16 uranium at higher enrichment levels.

17 In March of this year, the staff issued an exemption and
18 conforming license amendment approving the alternate disposal request for the
19 Westinghouse Fuel Fabrication Facility in Columbia, South Carolina.

20 This licensing action authorized a safe and appropriate
21 method of alternate disposal for certain waste material being stored at the
22 Westinghouse Facility that was generated from day-to-day activities.

23 The approval of the alternate disposal request conserve
24 disposal capacity at licensed low-level radioactive waste disposal sites and
25 ensure that the material is safely disposed of at a state-regulated hazardous

1 waste disposal facility.

2 Currently, the fuel facility licensing staff is leading significant
3 and complex reviews. I'd like to highlight two of these in particular.

4 Since our last Commission briefing in 2019, we have made
5 significant progress in our review of the license renewal for Westinghouse's
6 Columbia Fuel Fabrication Facility. Our interactions with Westinghouse
7 indicate that the licensee has taken actions to address legacy spills and
8 improve site performance.

9 Earlier this year, the staff sent Westinghouse a revised
10 license renewal review schedule, including major milestones for the draft and
11 final environmental impact statement. A licensing decision is expected in
12 February of 2022, and both the NRC staff and Westinghouse recognize the
13 importance of meeting the current schedule.

14 Given the high public interest associated with this licensing
15 action, we have taken the time to enhance our stakeholder outreach. For
16 example, the staff held a February public meeting on the status of the license
17 renewal, and we will continue to seek opportunities to engage local
18 communities regarding the NRC's review.

19 The staff is also currently in the process of conducting the
20 required safety, safeguards, security, financial, and environmental licensing
21 reviews for the license amendment application to support the restart of uranium
22 enrichment operations by the Centrus Energy Corporation at their American
23 Centrifuge Plant in Piketon, Ohio.

24 The U.S. Department of Energy contracted Centrus to deploy
25 a 16-centrifuge cascade for their production of 19.75 weight percent enriched

1 HALEU, demonstrate the capability to produce HALEU with existing U.S. origin
2 enrichment technology, and provide HALEU in the form of uranium hexafluoride
3 for research and development activities.

4 In August of last year, the staff approved an updated package
5 on foreign ownership control or influence, also known as FOCI, for Centrus and
6 its subsidiary, American Centrifuge Operating, Limited Liability Corporation.

7 The staff anticipates completing the remainder of the reviews
8 associated with this licensing action in June of 2021. These are just a few
9 examples of our experience with the licensing and oversight of existing fuel
10 facilities. This experience provides us with a strong foundation that prepares us
11 well for the receipt of expected new applications such as the X-energy fuel
12 fabrication facility for TRISO fuel in August of 2021.

13 Next slide, please.

14 We continue to work on innovation initiatives in the licensing
15 program to prepare us for the future. I would be remiss if I did not mention that
16 one of the primary drivers of change to the business line in fiscal years 2020
17 and 2021 was the COVID-19 public health emergency.

18 Early in the public health emergency, we reached out to
19 industry to ensure open communications regarding the operational impacts on
20 fuel facilities and to get early insights on any regulatory relief that would be
21 needed. We anticipated a surge in relief requests and adapted to it by
22 establishing a core review team and developed a procedure to ensure that
23 information needs were clear.

24 The temporary staff guidance that we issued streamlined
25 reviews of fuel facility licensee requests for regulatory relief, and the document

1 also included provisions on a first-of-a-kind enforcement discretion for fuel
2 facilities.

3 We also developed a public website for all NMSS business
4 lines where we posted information on each relief request and the status of the
5 agency's review. The staff issued eight license amendments and later
6 approved four extension requests that provided regulatory relief requested by
7 fuel facilities for certain safety and security operations that could be impacted
8 by increased absenteeism due to COVID-19.

9 Regulatory relief was also granted for certain exercises, drills,
10 and training that presented a high risk for spreading the virus. Due to the
11 extraordinary efforts by the staff, each relief request was issued in a fraction of
12 the time that is typical for license amendments, while the staff ensured that
13 reasonable assurance of adequate protection of public health and safety was
14 maintained.

15 As we look to the future, innovation has taken the form of
16 infrastructure improvements to our program with the modernization of licensing
17 tools and processes. We are currently making enhancements to web-based
18 licensing to provide additional data and more descriptive milestones that will
19 better align with our licensing metrics.

20 Innovation has also driven us to streamline some of our
21 internal processes through the implementation of the recommendations from
22 our Smarter Licensing Initiative. While both the NRC staff and stakeholders
23 largely consider the fuel cycle licensing program effective, both also recognize
24 that further improvements could be gained.

25 Through this initiative, the staff identified, evaluated, and

1 prioritized the suggestions for improving the fuel cycle licensing program. As
2 previously mentioned, the staff is currently implementing the recommended
3 improvements, some of which will enhance the efficiency and effectiveness of
4 the program while others will continue to promote our principles of good
5 regulation, such as openness, reliability, and clarity.

6 That concludes my remarks. I now turn the presentation over
7 to Larry Harris.

8 Next slide, please.

9 MR. L. HARRIS: Thanks, James.

10 Good morning, Chairman and Commissioners.

11 Next slide, please.

12 The Division of Fuel Facility Inspection, or DFFI, in Region II
13 was able to continue successful oversight of the nation's fuel cycle facilities
14 during the public health emergency. Although there were changes to the
15 methods by which we schedule and perform inspection activities, we were able
16 to maintain reasonable assurance of adequate protection and accomplish the
17 goals of the core inspection program.

18 During calendar year 2020, the inspectors completed 92 of
19 the 100 planned inspections. All core activities were completed except for a
20 limited number of onsite activities at one of our licensed fuel facilities.

21 During 2021, we have implemented approximately 29 of the
22 planned 91 inspections at our fuel facilities. The change in number of
23 inspections planned for this year is in part driven by a limited number of
24 carryover inspections from 2020 and the implementation of the new Fuel Cycle
25 Smarter Inspection Program.

1 Despite changes in the methodology of conducting
2 inspections, the inspectors maintained oversight and improved safety by
3 identifying a variety of issues, some which resulted in identified violations of
4 regulatory requirements at several fuel facility sites.

5 When the initial public health emergency was declared, DFFI
6 worked with the program office to begin establishing processes and guidance
7 for when travel could resume, inspection activities that could be conducted
8 remotely, expectations for resident site coverage, and identifying additional
9 precautions that need to be in place.

10 Guidance was also issued for the nuclear materials and waste
11 program which covered the fuel facilities business line on the application of
12 remote inspections in June of 2020. Headquarters worked hand in hand with
13 Region II office to monitor conditions and communicate any inspection
14 adjustments that were necessary.

15 In the field, Region II has been highly innovative in completing
16 inspections, and developed a very systematic process for evaluating whether
17 and when to complete inspections and communicating and documenting those
18 decisions.

19 Early in the public health emergency, Region II established a
20 transition readiness group, the TRG, which consists of senior leaders in the
21 regional office. Using a developed framework, the TRG, during weekly
22 meetings, determined whether onsite inspections could proceed as
23 recommended.

24 The inspectors conducted three primary types of inspections
25 during the public health emergency. Onsite inspections were conducted when

1 area conditions allowed.

2 Remote inspections were conducted for specific inspection
3 requirements that could be accomplished remotely via a combination of
4 document reviews, telephonic interviews, and subsequent onsite follow-up
5 inspection.

6 The third type of inspection was a hybrid team inspection
7 where some inspectors conducted remote aspects of the inspection while one
8 or more inspectors traveled to the site.

9 An important part of our mission is maintaining event
10 response capabilities. During the public health emergency, we continued to
11 receive and evaluate all licensee event and courtesy notifications. In addition,
12 we maintained gating criteria packages which have evaluated the local
13 conditions in the areas around our sites in case we need to immediately
14 dispatch a reactive inspection team.

15 Additionally, senior resident inspector scheduling was
16 adjusted to safeguard health and safety while maintaining adequate site
17 presence and readiness for event response.

18 One example, the way we risk-informed our decision-making
19 was to accelerate the use of planned inspection procedures for material control
20 and accounting at Category 1 facilities, allowing us to reduce the inspection
21 team size.

22 We continue to actively engage all our stakeholders in our
23 activities, such as assessment of fuel facilities, the development of new fuel
24 facility oversight processes, and other topics.

25 During the public health emergency, we proceeded with all

1 previously scheduled 2020 and 2021 licensee performance review public
2 meetings by conducting them in a virtual format.

3 Next slide, please.

4 We are focused not only on continued oversight of our
5 existing fuel cycle facilities, but Region II has a role and is prepared for
6 additional oversight for restart or startup of facilities. Examples include the
7 planned restart of the Honeywell Metropolis Works, a uranium conversion
8 facility in Metropolis, Illinois.

9 As restart nears in 2023, we will implement inspection
10 procedures as necessary to conduct readiness reviews. Another example is
11 the planned startup and potential expanded operation of the American
12 Centrifuge Plant in Piketon, Ohio. Our inspectors are planning to conduct
13 readiness reviews there for multiple disciplines.

14 Finally, we will assist NRR with shared oversight of the
15 SHINE facility, a moly-99 medical isotope facility in Janesville, Wisconsin.
16 Once the facility is substantially complete, our staff will coordinate with our
17 business line partners to support an operational readiness review of the facility.

18 Next slide, please.

19 We continue to implement a variety of innovations and
20 enhancements throughout our fuel cycle oversight program to increase the
21 effectiveness and efficiency of our organization. Beginning in 2019, a working
22 group was established in the business line to conduct a holistic assessment of
23 the fuel cycle oversight program.

24 As you heard previously, the recommendations from the
25 working group were fully implemented as of March 2021. These will ensure the

1 appropriate focus is applied to inspection areas while determining that a facility
2 is operating safely and in accordance with regulatory requirements.

3 In addition to the recommendations for changes to inspection
4 guidance, the Smarter Inspection Program recommendations also included
5 leveraging existing agency technology through the Reactor Program System to
6 reduce administrative effort, increase readability, streamline documentation of
7 fuel cycle inspection reports, and support future data analytics projects being
8 pursued by the agency.

9 Inspection staff are participating in an NMSS office working
10 group that will enable our oversight activities to become more agile, resilient,
11 and efficient during future public health emergencies and under normal
12 circumstances.

13 We are actively working with the program office on developing
14 a process like the reactor's very low safety significance issue resolution
15 process. This process is currently being reviewed, and if confirmed, will be
16 incorporated into inspection manual chapter guidance for implementation in
17 2022.

18 Next slide, please.

19 We continue to focus on our people through intentional
20 individual talent development. Staff have participated in a variety of activities,
21 including formal training, knowledge management, and on-the-job training to
22 ensure that they are prepared to meet the challenges of oversight of existing
23 and new technologies.

24 Inspection staff also participates in other team-building
25 activities that enhance culture and build trust across the organization. In the

1 areas of knowledge management and cross-training, DFFI staff have been
2 active in improving their current skillsets and expanding them to other areas of
3 expertise.

4 There is a continuance of a series of inspector knowledge
5 management seminars conducted by senior inspectors. The business line
6 continues to conduct integrated counterpart meetings twice a year.

7 In the focus area of teamwork, several fuel cycle inspectors
8 are pursuing cross-training qualifications in the operating reactor and new
9 reactor business lines and support various reactor inspection disciplines. DFFI
10 inspectors, with agency support, will assume several inspection areas that were
11 previously performed by the Department of Energy at licensed enrichment
12 facilities.

13 A combination of on-the-job training and upcoming scheduled
14 training will ensure that the inspectors will have the necessary training and
15 expertise to assume these new inspection areas. In the area of material control
16 and accounting, enhancements to training are being implemented, including
17 quarterly community practice meetings which include a technical training topic.

18 Also, the inspection manual chapter 1247, appendix D,
19 material control and accounting qualification requirements, is being reviewed by
20 assure that the most applicable courses are considered under the qualification
21 program.

22 As mentioned previously, staff continue to support the
23 agency's diversity and inclusiveness initiatives through activities like mentored
24 cohorts. Staff also participate in the Region II desk training, which offered a
25 personal assessment tool to help improve teamwork, communication, and

1 productivity in the workplace.

2 Finally, it should be noted a DFFI staff member recently
3 presented on the NRC women on the global frontline panel, further illustrating
4 the business line's efforts to enhance diversity and inclusion across all our
5 organizations.

6 This concludes my prepared remarks. I will now turn to Tim
7 Harris.

8 Next slide, please.

9 MR. T. HARRIS: Thank you, Larry.

10 Good morning, Chairman and Commissioners. The Office of
11 Nuclear Security and Incident Response collaborates with NMSS in several
12 areas, including licensing and oversight of fuel cycle, spent fuel storage, and
13 decommissioning power reactor facilities, transportation security, and protection
14 of radioactive and nuclear materials.

15 We also provide cyber security expertise and interactions with
16 a variety of licensees, including fuel cycle, power reactors, new reactors, and
17 medical isotope facilities. Today my remarks will focus on NSIR's contribution
18 in the fuel cycle facility business line.

19 Specifically, I will be providing an overview of special nuclear
20 material, or SNM, and security activity supporting fuel cycles and discussing
21 staff's efforts preparing for future -- for the future of new types of licensees in
22 handling material and for leading and supporting international activities.

23 Next slide, please.

24 NSIR staff have supported most of the projects that James
25 and Larry discussed in the areas of physical protection, cyber security,

1 information security, and transportation security, a few of which I'll highlight
2 today.

3 The complexity and diversity of fuel facility security reviews
4 has required NSIR security framework to be flexible and adaptable. For
5 example, NSIR support for Honeywell included reviewing Honeywell's physical
6 security plan as part of its license renewal amendment to ensure compliance
7 with NRC-issued security order, and then later evaluated whether Honeywell's
8 demonstration of good cause to relax certain aspects of those orders during its
9 ready idle period continued to achieve reasonable assurance of adequate
10 protection.

11 NSIR staff was also involved in the February 2021 sale of
12 global laser enrichment from GE-Hitachi to SILEX of Australia and Cameco of
13 Canada. We reviewed the foreign ownership control and influence, or FOCI,
14 aspects of the sale to ensure protection of U.S. classified information.

15 NRC successfully mitigated all FOCI issues associated with
16 this transaction. Part of the mitigation included requiring that an appropriately
17 cleared outside security board member be hired by the companies in order to
18 reaffirm each company's commitment to the NRC and the U.S. Government that
19 all information security commitments are met.

20 In this case, SILEX and Cameco hired former Commissioner
21 William Ostendorff, although I note that NRC regulations do not require a former
22 commissioner for mitigation.

23 Also, in the area of information security, in late 2020, we had
24 to adapt the NRC security framework to adjust to DOE's plans to discontinue its
25 role as the authorizing official of classified networks for NRC category 3

1 enrichment licensees.

2 In this case, staff from NSIR, NMSS, OGC, OCIO, work
3 closely to examine the impact of NRC assuming those duties from DOE. As an
4 outcome, the NRC assumed the authorizing official function, with the chief
5 information officer agreeing to a six-month interim authority to operate.

6 This interim authority gives staff time and the opportunity to
7 address some of the logistics of bringing this function in house.

8 The last point I'd like to make on this slide relates to the
9 oversight function. NSIR is chartering a task force to conduct a holistic
10 assessment of the fuel cycle facility security inspection program for the purpose
11 of enhancing the effectiveness and efficiency of the program inspections.

12 This task force will focus on security oversight and will
13 complement the safety inspection efforts of the Building a Smarter Fuel Cycle
14 Program Working Group that Larry spoke of earlier.

15 Next slide, please.

16 New types of licensees and materials are driving innovation of
17 NRC's security program. New fuels to support advanced reactors and some
18 accident tolerant fuels are using higher enrichments than the existing light water
19 reactor fuel and different fuel forms, including metal fuels.

20 Using the Be RiskSMART approach, the staff is using a risk-
21 informed analysis to determine the need and scope of supplemental security
22 measures for these new facilities. These analyses consider the material
23 attractiveness, such as form, dilution, and quality of material, related to
24 improvise nuclear security -- I'm sorry, related to nuclear -- related to and
25 provides nuclear device risk and proliferation risk, as well as specific design

1 features of the facility.

2 The staff is working to develop additional guidance and
3 information to clarify expectations associated with the protection of category 2
4 quantities of SNM.

5 For the last several years, staff has been actively engaged --
6 engaged stakeholders, both fuel facility and advanced reactor parties, and
7 conducted pre-licensing meetings on security and safeguards requirements.

8 These discussions involve prospective medical isotope facility
9 applicants, enrichment facilities, which are seeking to enrich uranium at higher
10 levels, fuel fabrication facilities that are seeking to manufacture fuel using up to
11 20 percent enriched uranium, and other stakeholders having potential
12 involvement with advanced reactor technologies.

13 For example, staff met with both SHINE and Centrus in pre-
14 application engagements to help them understand expectations related to the
15 protection of SNM, and NSIR is evaluating the need for supplemental security
16 measures above the existing regulatory requirements at these two different
17 facilities.

18 Different supplemental security measures were considered for
19 each facility, given the unique aspects of the facility operations and different
20 material attractiveness to ensure adequate protection of public health and
21 safety.

22 The early pre-licensing engagements have been very
23 successful thus far. Further, staff continues to interface with the interagency,
24 principally the Department of Energy and the National Nuclear Security
25 Administration, to ensure appropriate NRC awareness of material attractiveness

1 and SNM protection issues associated with HALEU material.

2 Next slide, please.

3 In international engagements, NRC continues advocating for
4 an appropriate regulatory structure for the security of facilities and protection of
5 SNM and radioactive sources and supporting the U.S. Government aim to
6 enhance global nuclear safety and security.

7 The NRC requires an export license for nuclear material and
8 fuel to ensure that all U.S. obligated SNM exported to foreign countries for
9 peaceful purposes is adequately protected. We assure that an appropriate --
10 we ensure that appropriate protection in other countries is maintained through
11 our participation in periodic interagency physical protection bilateral
12 assessment visits, which use INFCIRC 225 as basis.

13 These physical protection evaluations are consistent with the
14 Atomic Energy Act, the Nuclear Non-Proliferation Act, and NRC export
15 regulations. These allow for bilateral information exchanges with the host
16 country and the U.S. Government.

17 The International Atomic Energy Agency, or IAEA, is currently
18 evaluating potential revisions to its top-tier nuclear security series documents.
19 Of the greatest interest are possible changes to INFCIRC 225, which is the
20 internationally recognized physical protection standard for the protection of
21 SNM.

22 INFCIRC 225 is referenced in NRC export licensing
23 regulations, and U.S. 123 cooperation agreements. Countries receiving or
24 already holding U.S.-obligated SNM must provide protection at least as
25 comparable to the recommendations in the current version of INFCIRC 225.

1 NSIR is supporting the Office of International Programs to
2 ensure that any changes apply a level of protection commensurate with the risk.

3 Staff also participates in consultancy meetings, including supporting IAEA
4 guidance documents in the area of nuclear security for nuclear and radioactive
5 material.

6 In this interactions, staff shares its experience and
7 knowledge, benefits from international partner perspectives, and promotes
8 enhancing global safety and security while ensuring consistency with NRC
9 practices and regulations.

10 And, finally, another significant international activity is a
11 review of the convention on the physical protection of nuclear material, or
12 CPPNM. The CPPNM and its amendment are the only legally binding
13 international instrument in the area of physical protection of nuclear material.

14 The convention is a nation-level document, which the U.S. is
15 a signatory. NSIR staff is supporting the Office of International Programs in
16 preparing for the first review conference of the amended convention that will be
17 held the week of March 28, 2022.

18 This concludes my presentation, and I will turn it over to
19 Darrell.

20 MR. ROBERTS: Thank you, Tim. And also, thanks to John,
21 Larry, James, and Chris, for their presentations.

22 And with that, Chairman, that concludes our prepared
23 remarks this morning, and I will be happy to answer any questions you may
24 have.

25 CHAIRMAN HANSON: Thank you, Darrell. I appreciate that

1 very much. And thank you to the staff for your presentations. We will begin this
2 morning with Commissioner Wright.

3 COMMISSIONER WRIGHT: Thank you, Mr. Chairman.
4 Thank you very much.

5 And thank each of you for your presentations today. It's good
6 to be here in person again and see your happy faces and to hear from each of
7 you as well.

8 So we are heading back to normal. That's a good thing. I
9 can't be more grateful or happy myself, so I'm excited about it. And during this
10 whole time I have continued to be impressed with our agency, with our staff,
11 and our stakeholders as well, at how we have continued to do our important
12 work and to give and get feedback on all of the things before us during what
13 has been a very challenging year-plus.

14 So with that, I am looking forward to getting some feedback
15 on some questions I have and hearing the discussions on the questions of my
16 colleagues as well.

17 So, Chris, I think I'm going to start with you. You mentioned
18 the close coordination and communication with Region II's Division of Fuel
19 Facility Inspection on the development of the Smarter Inspection Program and
20 the agency's response to COVID.

21 So I'm going to start with you, but I'd like to hear Larry -- his
22 thoughts, too, if he has some. So, in general, how do you ensure that there is
23 effective coordination and communication between the Division of Fuel
24 Management and Region II's Division of Fuel Facility Inspection on fuel facility
25 issues?

1 MR. REGAN: Thank you, Commissioner. That's a great
2 question. You know, we are -- we are lucky in this regard that Region II is the
3 only office -- the only regional office that we have implementing our oversight
4 program.

5 So it's much simpler in order to be able to communicate
6 directly with them and coordinate with DFFI in Region II.

7 We have many avenues that we coordinate and communicate
8 with the region. We participate and join their -- the DFFI periodic or weekly
9 division meetings. We have periodic engagements at the management level. I
10 myself coordinate and speak on a routine basis with the director of DFFI.

11 When it comes to oversight activities, there is also a periodic
12 engagement that we have with the region to coordinate those activities.

13 And then just in a general sense on some of the initiatives,
14 like you mentioned the Smarter Inspection Program, that effort was a
15 collaborative effort with participants in the working group, not only from
16 headquarters but also from the regional office. It was a real tag-team effort to
17 move that effort forward in a joint -- joint participative effort that we worked on
18 together.

19 So there are many ways where we are really in lock-step with
20 what the region is doing regarding implementing the program.

21 And I think I heard an interest from you from hearing from
22 Larry on his perspective. So I will turn it over to Larry, if you'd like to share your
23 thoughts on how we work together between the program office and the
24 inspection crew in the region.

25 MR. L. HARRIS: Thank you, Chris. Yes, just a few thoughts.

1 Just to echo the previous comments, there are certainly regular interaction
2 between headquarters elements and the corresponding elements in the region.

3 Particularly at the staff level, you heard about management aspects, but at the
4 staff level we interact regularly and we have scheduled meetings to discuss
5 issues of concern, potential licensing issues, and how those impact us in the
6 inspection aspects.

7 And certainly staff, both at headquarters and in the region,
8 participate in these activities that were mentioned and also participate in regular
9 standing activities like our integrated counterpart meetings every year. So we
10 are constantly in touch.

11 COMMISSIONER WRIGHT: Okay. Thank you. So, Chris, I
12 wanted to follow up a little bit more. You mentioned the staff's efforts to risk-
13 inform its reviews. How are you ensuring that the appropriate resources are
14 applied to issues of low safety significance?

15 MR. REGAN: So the LSSI are issues of low safety
16 significance effort that we -- that we are working on. And I would start off by
17 saying that, you know, the LSSI effort is not something unique to the fuel
18 facilities business line.

19 We had stood up a working group to look at the issues of low
20 safety significance across all of the business lines in NMSS. And this working
21 group, you know, we do dedicate some efforts or resources to that working
22 group. It was -- you know, we share the resources and the effort with our other
23 business lines.

24 As far as, you know, resourcing the effort specifically, so we
25 have, you know, a plan in multiple stages where we walk through phases. We

1 have implemented it essentially, the first phase, where we looked at some --
2 issuing some guidance. We have run through a pilot exercise to test that
3 guidance and screening criteria in that guidance, and we are continuing to
4 dedicate effort -- dedicate resources to put that concept -- LSSI concept into
5 implementation.

6 I trust I responded to your question. If you have additional -- if
7 you would like for me to expand, please let me know.

8 COMMISSIONER WRIGHT: No, that's fine. Thank you so
9 much. But I'm still going to stay with you and Larry here, if you don't mind.

10 So both of you discussed the actions that the staff took to
11 address the inspection program during COVID, including remote inspections
12 and increased offsite document review during hybrid inspections. My
13 understanding is that there has been differing feedback from licensees on the
14 success of this process, with some thinking that it greatly improved efficiency
15 and should continue after the pandemic ends, and others finding it to be a
16 hardship, possibly because of the additional reviews they needed to perform
17 before providing documentation digitally.

18 I'd like to hear your perspectives on this, and I'd also like to
19 know how the staff will consider this differing feedback when deciding whether
20 to continue to practice post-COVID.

21 MR. REGAN: Thank you, Commissioner. That is a great
22 question.

23 Larry, I will turn it over to you to provide some specifics, but I
24 will provide just some quick overview.

25 So, Commissioner, you are correct, and in a way we learn

1 through our engagements with industry when we were soliciting feedback on
2 the -- on their thoughts on use of remote inspections. But there were some
3 interesting viewpoints of some supportive, some thought there was value, and
4 some had reservations about the effectiveness of use of remote inspections.

5 And I would dare say that that perspective of those that had
6 reservations was driven because of -- driven by the security implications. You
7 know, when we come to fuel cycle facilities, they have some unique security
8 requirements, access to materials, written materials, documentation. May not
9 be amenable to use of -- or remote inspections.

10 So there were some reservations about the effectiveness of
11 use of remote inspections for fuel cycle facilities. We are in the process of
12 assessing the -- holistically the use of remote inspections, you know, at the
13 business line level and across the nuclear materials and waste safety programs
14 in NMSS. We call it our Phase B assessment.

15 And this will look at all aspects of implementing our oversight
16 programs moving forward into not only normal operations but also potential
17 future emergencies.

18 And, of course, one of the key aspects of that is, you know,
19 what does remote inspection application look like under any of those scenarios,
20 you know, be it hybrid, be it just simple use of remote inspections, or, you know,
21 the real value of, you know, ensuring that we have boots on the ground, in-
22 person inspection activities for what we consider those critical aspects.

23 Larry, did you have any additional thoughts that you could
24 share on the use of remote inspections and the hybrid inspections at the fuel
25 cycle facilities? Because I believe you have some good thoughts.

1 MR. L. HARRIS: Thank you. I would, again, echo what you
2 said, that, yeah, there is a plethora of views across the fuel cycle community
3 about the desirability of our doing remote or hybrid-type inspections.

4 I think particularly for the sites that have more sensitive types
5 of information that, as Chris said, have to go through an extensive review of
6 paperwork that may be requested, and then get that into an electronic reading
7 room. They found it to be a burdensome.

8 And also, I did hear some comments from some licensees
9 that in some ways questions that could have readily been answered with a, you
10 know, quick question/answer kind of thing actually would take the process of
11 maybe multiple questions, multiple answers, and multiple documents again.

12 But other sites that are able to communicate information
13 without as many restrictions did appreciate the, I think, efficiency and
14 effectiveness of it.

15 I think going forward, personally, personal opinion, the remote
16 and hybrid inspections are another element that we can hang in our tool belt to
17 use to readily make sure that we respond to the situations that are before us
18 and maintain that reasonable insurance that we all want to strive for.

19 Thank you.

20 COMMISSIONER WRIGHT: Thank you both for your answer.

21 Mr. Chairman, I yield.

22 CHAIRMAN HANSON: Thank you, Commissioner Wright.
23 That was astounding. That was within seconds of your time.

24 Thank you very much to the staff this morning for your
25 presentation. I was reading with some interest the -- it was included in the

1 background material for today's meeting -- the licensing plan for -- or the project
2 plan for licensing accident tolerant fuels. And I had some questions about that
3 document this morning.

4 And I guess these questions are primarily for Chris Regan
5 and James Downs, although I welcome anybody else who would like to jump in.

6 In that document, it mentioned that NRC is reviewing the existing regulatory
7 infrastructure and identifying needs for additional analysis capabilities and any
8 unique skillsets among the staff.

9 And this was from 2019, so I'm curious to know if the staff has
10 completed that review and what kind of conclusions or recommendations did
11 you -- did you find.

12 MR. REGAN: So thank you, Chairman, for the question. I'll
13 start off, and then I'll turn it over to James for perhaps elaboration on some
14 specifics.

15 So, you know, our current assessment is is that based on
16 what we know today, we have not identified any gaps in our regulatory
17 framework. And as you heard in our presentation, we believe we are ready to
18 review any applications to fabricate advanced reactor fuels and ATF for the
19 near-term designs that we're aware of.

20 I did mention that we have a strategic roadmap that we are
21 developing. This roadmap will do exactly -- you know, kind of identify those
22 future challenges that we don't necessarily have on our radar at the moment, or
23 at least don't have clarity on that, to ensure that we are ready for any gaps that
24 we may identify in the future.

25 As far as the resources and the critical skills, you know, we do

1 have a wonderful tool available to us in the strategic workforce planning area,
2 which allows us to do those or like facilitates our ability to do environmental
3 scans, looking at signposts and markers on what we see coming, for exactly
4 that purpose, to ensure that we have the necessary skillsets in our staff to
5 handle those licensing activities that may be coming our way.

6 You know, I'll just give an example. You know, we talked
7 about the need for and the value of the expertise in the area of criticality --
8 criticality analyses and assessment. And we have been doing -- you know, we
9 had a lot of -- we've had a lot of focus on not only looking at that skill within the
10 business line, but also in the sharing and leveraging of that skillset across the
11 agency, with folks -- with folks in the Office of Nuclear Reactor Regulation, and
12 also often in other offices and other business forms as well.

13 So, Larry, would you like to elaborate on any specific details
14 you can offer?

15 MR. L. HARRIS: I believe you meant James in this case.

16 MR. REGAN: Oh, sorry. James. Larry is on my screen, so,
17 yeah, sorry, James.

18 MR. DOWNS: Yeah. So, Chris and Chairman, the only thing
19 that I really could add to what -- kind of echo what Chris said, you know, a lot of
20 the infrastructure, you know, doing these licensing reviews for new
21 technologies, obviously it's in place. It comes down to having the right
22 resources, the people available, and we have got that through our partners and
23 other offices, as well as, obviously, the technical experts with our own office of
24 NMSS.

25 And then having the processes in place, and, you know, as

1 much as these technologies are new, the processes to actually go through and
2 review -- perform the technical reviews associated with them are very similar to
3 the existing processes that we have had all along for our licensing action.

4 So, again, I echo what Chris said. I think we're in a pretty
5 good place with all that.

6 CHAIRMAN HANSON: Thank you. Thank you to both.

7 Chris, I'm glad you mentioned -- you brought up the notion of
8 a roadmap, and I was intrigued in the project plan about the development of
9 roadmaps coming out of the phenomena identification ranking table exercises
10 for individual fuel concepts, basically.

11 And recognizing that I understand the first part, if you will, was
12 conducted in 2019 for chromium cladding, but how many other PIRT processes
13 or exercises have been conducted so far? And are there any results or kind of
14 common threads through those that you'd be interested to share? And how is
15 that shaping up as a process for NRC to be ready to license these concepts as
16 applicants come through the door?

17 MR. REGAN: Thanks, Chairman, for the question. I'll start off
18 and speak at a high level. You know, we work very closely with our partners in
19 the Office of Nuclear Reactor Regulation, both in the areas of advanced
20 technology fuel, ATF, and advanced reactor fuels. You know, we do have
21 these roadmaps, as you refer to.

22 And although I mentioned one specific for fuel cycle facilities,
23 and also for activities associated with transportation and fresh fuels, and also
24 the back end of the fuel cycle, which I think you'll hear about later this morning,
25 these roadmaps are really -- you know, they serve two functions.

1 One, they serve a function of, you know, ensuring scheduling
2 and milestones are amenable to what the industry's interests are, their timelines
3 are, but also to ensure that we have the appropriate focus on any challenges or
4 issues that may be identified early enough, such that they don't become
5 problematic for supporting the technical and licensing reviews.

6 As far as the specifics and the PIRTs, these phenomena
7 identification and ranking tables, I can't necessarily -- I apologize. I can't speak
8 to them off the top of my head. I know that there are a couple that we have
9 undertaken, and maybe I'll look to James to see if you can help with any
10 specifics.

11 MR. DOWNS: No, Chris. I apologize also. I don't have that
12 information at my fingertips.

13 MR. REGAN: Okay. Thank you.

14 MR. LUBINSKI: If I could, if you don't mind, Chairman. As
15 we continue to move forward, as Chris said, we are working very closely with
16 the Office of Nuclear Reactor Regulation, because we definitely have a shared
17 role here.

18 As we look at our PIRTs from the standpoint of our licensing,
19 we are really looking at the safety of the facility itself and what it's doing in the
20 production of fuel. That has to do with the enrichment as well.

21 When you talked about already the chromium coated, the
22 aspects of safety when it's in the reactor were something that was identified
23 very much from the PIRTs. And that has to do with really the reaction that is
24 within the reactor itself. We would then reengage in those types of issues after
25 fuel -- after the fuel is used and then would be in a storage area.

1 So we do have right now one more PIRT, but that's on the
2 spent fuel performance, and that's really in the storage and transportation area.

3 But from the standpoint of any additional on the front end of the process, no,
4 we don't have any additional findings.

5 CHAIRMAN HANSON: Yeah. Thank you, John. I appreciate
6 that. I think that distinction is important for this conversation.

7 But I did want to just have one kind of quick follow up on that,
8 though. Because of the -- you know, the highly integrated, I think, and
9 optimized schedule associated with this project for licensing ATF to kind of
10 meet a nominal timeline of 2023, are those PIRTs within NMSS on schedule?

11 MR. LUBINSKI: Thanks, Commissioner. I will jump in here.
12 So we are on schedule for what we need going forward from the front end of the
13 process. As I said, the additional PIRT that we're looking for in FY23 really is in
14 the spent fuel performance, so that's after it goes through the reactor.

15 So we have completed the activities we need on the front end
16 of the process from the standpoint of being able to license the front end of the
17 fuel facility, which would include the enrichment and the safety and
18 environmental protection associated with the fabrication.

19 And then, in '23, we would complete that PIRT in '23, but
20 that's really at the -- for NMSS perspectives, the back end of the process from a
21 spent fuel standpoint.

22 So, you know, the short answer is, yes, we'll complete all of
23 our activities on the front end.

24 CHAIRMAN HANSON: Okay. That's great. Thank you.

25 I think I'll stop there. Commissioner Baran?

1 COMMISSIONER BARAN: Thanks, Chairman. Thank you all
2 for your presentations.

3 John issued a memo in February regarding NMSS
4 inspections, including those for fuel cycle facilities. The memo discusses
5 several topics, one of which is the extension of inspection intervals based on
6 good performance, which is addressed in current inspection procedures.

7 I'd like to understand this practice better. Have any fuel cycle
8 facility inspections been performed with reduced frequency based on a
9 determination that the licensee was a high performer?

10 MR. LUBINSKI: I can start with that, Commissioner, since
11 you referenced me signing the memo. The memo itself discusses
12 consideration of extensions of inspections for performance, was in our
13 inspection procedure for nuclear materials users, and would not be applicable
14 to fuel cycle facilities.

15 We do have, in the procedures for fuel cycle facilities, whether
16 you would have deviations and could have deviations. The memo talks
17 separately about whether you would be adjusting schedules based on other
18 factors.

19 While in the fuel facility area, there may have been some
20 adjusting some hours, Larry Harris did mention there was only one facility for
21 which we did have to extend some of the inspections into 2021. We took
22 several factors into that, a multitude of factors, and I can let Chris or Larry talk
23 about the factors in that specific decision.

24 But the answer to whether it's applicable to just for good
25 performance, the answer is no, that's not part of the program. And none of the

1 inspection adjustments were made solely based on licensee performance.

2 So, Chris, did you want to talk about the one deviation that
3 was documented?

4 MR. REGAN: Yeah. I can -- I can elaborate a little bit on
5 that. So, you know, what John alluded to as far as the evaluation that was
6 performed regarding the minimum number of hours that was required for
7 completion of the inspection that resulted in the deviation, so -- so they looked
8 at the total of hours. And I say "they."

9 You know, we looked at the total number of hours in a
10 calendar year associated with that particular facility, looked at the types of
11 inspections that were implemented, whether it was onsite or remote, conducted
12 in a year, the risk significance associated with the portions of the procedures
13 not completed, any of the program changes resulting from implementation of
14 the smarter inspection cycle, because keep in mind that this was in calendar
15 year 2020, which would have been under the old inspection program.

16 But we also had the benefit of the knowledge and experience
17 of implementing the Smarter Inspection Program that was started in January of
18 2021. So there was opportunity to leverage some of the knowledge that we
19 gained through that exercise. Plus, the current status of the corrective action
20 program, and also, you know, the communications between the NRC and the
21 licensee.

22 And, you know, part of that outcome was is that, you know,
23 we were able to still determine that there was reasonable assurance of
24 adequate protection of the facility, but did look at a few areas that we would
25 continue -- we would add or look at in calendar year 2021 to ensure that we

1 fulfilled the intent of those inspection requirements that we deviated from in
2 calendar year '20.

3 COMMISSIONER BARAN: Thanks, Chris. And so it sounds
4 like that's more of a COVID-specific situation, and it wasn't that deviation wasn't
5 primarily based on the idea that that particular licensee was a good performer.

6 MR. REGAN: That's correct.

7 COMMISSIONER BARAN: Okay. And then, John, I know
8 this may be kind of going a little bit beyond the business line, but you
9 mentioned, you know, materials users. Are there any examples of NMSS
10 inspection intervals being extended based on a licensee being considered a
11 high performer in those areas?

12 MR. LUBINSKI: So thank you, Commissioners. As Chris said
13 earlier, sometimes we are talking about questions in one business line. We try
14 to have consistency across all of the NMSS business lines.

15 Currently, within the inspection manual chapter for nuclear
16 materials users, we do have a provision that talks about on the completion of an
17 inspection. So when you're looking -- after you complete your first inspection,
18 and we're looking at the next interval, you could consider whether or not the
19 performance of the licensee was such that you may extend that frequency out
20 of doing the inspection.

21 Now, again, those inspection frequencies are on the order of
22 one year, two years, three years, or five years, and also currently have an area
23 of flexibility where it allows plus or minus a certain percentage, whereas even a
24 five-year inspection could go out to six years.

25 The intent of that was to make those kind of determinations in

1 more the normal type environment, if you will, not during a public health
2 emergency, and making that decision at the time of that inspection for influence
3 the next inspection and your inspection planning years out to say, "We did
4 consider performance and use that to determine when the next interval should
5 be."

6 The reason for the memo is that during the public health
7 emergency we did not want to have a look back and have people use that as a
8 backward-looking justification to now say we are going to use that
9 determination for extending inspection intervals during the public health
10 emergency because that was never the intent of that provision. That provision,
11 again, is only in the nuclear materials users and is not in fuel facilities, spent
12 fuel storage and transportation, which are the items we are going to talk about
13 today, nor in our decommissioning area.

14 COMMISSIONER BARAN: Okay. Thanks, John.

15 Well, I'm glad to hear that this provision, though it's in there,
16 hasn't been used to reduce inspection frequency. I'm not convinced that
17 reducing inspections for licensees that have performed well in the recent past is
18 a good idea.

19 Baseline inspections are meant to apply to all licensees,
20 regardless of performance. Meeting all regulatory requirements for a few years
21 doesn't change the underlying risk profile of a facility. We all know that
22 performance can be cyclical, and labeling a licensee a high performer, if that
23 were to be done, sounds like it could be pretty subjective.

24 I'd like to ask about a few of the specific facilities discussed in
25 your presentations. Larry, you mentioned that Region II will work with NRR to

1 provide oversight of the SHINE moly-99 medical isotope facility in Wisconsin
2 once construction is substantially complete.

3 Can you talk a little more about what that operational
4 readiness review will look like, and do you have a sense of the likely timing?

5 MR. L. HARRIS: Yes, Commissioner. Thank you for that
6 question. We -- the facility is projected to be largely or in an operational state in
7 the second half of 2022. And from an operational readiness review standpoint,
8 there would be, you know, multiple programs that would be reviewed in terms of
9 their readiness to proceed. That would include environmental protection,
10 transportation, nuclear criticality safety, MC&A, emergency preparedness,
11 radiological protection, and others.

12 And then when they became fully operational, DFFI in
13 particular would probably be looking at regularly supporting nuclear criticality
14 safety and material control and accounting at that facility.

15 Thank you.

16 COMMISSIONER BARAN: Thanks. Larry, you also noted
17 that the Honeywell Metropolis uranium conversion facility is ramping up activity
18 for a restart in 2023. What inspections and operational readiness reviews will
19 Region II be conducting there?

20 MR. L. HARRIS: Thank you. Again, there will be several
21 procedures that will be utilized in their readiness review. Of course, this is a
22 planned restart, a little bit -- a little bit different. But, nonetheless,
23 environmental protection, management oversight and training, and also a
24 review related to security-related orders would be a topic that would be within
25 the readiness preview.

1 Then we would transition probably fairly quickly over to the
2 core inspection areas.

3 COMMISSIONER BARAN: Thanks. X-energy has indicated
4 that it plans to submit an application for a TRISO fuel fabrication facility in
5 August. Can someone provide us with a brief overview of the timing and
6 content of that licensing review?

7 MR. LUBINSKI: Chris, do you have information on the timing
8 of that review and receipt of that application?

9 MR. REGAN: I do not. I was going to ask if James could
10 perhaps elaborate on the X-energy application timeline.

11 MR. DOWNS: So, Chris and Commissioner, thank you for
12 that question. To my knowledge, we don't have a hard-and-fast timeline yet.
13 Again, we are looking back to see what the -- I believe it was August of this
14 year is when they will be coming in.

15 Typically, an application like this, you know, you will have --
16 obviously, there's a significant environmental review that will be associated with
17 it that often becomes, you know, kind of the long pole in the tent so to speak,
18 and that -- you know, an application like this can take several years to look at.

19 I don't have it at my fingertips, so I don't have a hard-and-fast
20 timeline at this point.

21 COMMISSIONER BARAN: Okay. Yeah. I was more
22 interested in just a general overview of, you know, whether we had heard
23 August was the likely submission timeframe, and then, if so, kind of the
24 overview of what our review would look like and the kind of general timeframes
25 associated with that.

1 But we can follow up if -- if we don't have that information at
2 hand. Given that, you know, if August is really the case, that's only a few
3 months away. We just want to make sure we have an understanding of that.

4 MR. REGAN: Commissioner, I can elaborate that we do have
5 -- we do have a standard timeline for reviews of that type. It's roughly on the
6 two years, 24 months, once we have actually accepted the application.

7 So if you were looking at an application in the August timeline,
8 then two years from that would put us out into the end of 2023 for completion
9 and review, if we apply our standard framework for licensing reviews of that
10 type.

11 COMMISSIONER BARAN: Okay. Thank you.

12 Thanks, Chairman.

13 CHAIRMAN HANSON: Thank you, Commissioner Baran.

14 Commissioner Caputo?

15 COMMISSIONER CAPUTO: Thank you, Chairman.

16 I would like to add my appreciation to what David said earlier
17 about just being glad that we can finally gather together, and that CDC
18 guidelines now being what they are, we can finally gather as a commission
19 without our masks on and see each other and meet in person.

20 So I look forward to the day when we can actually do that and
21 see the staff here with us. But in the meantime, I want to express my
22 appreciation to the staff for both the onsite and remote inspection work during
23 COVID. The staff struck an important balance by taking appropriate
24 precautions while conducting oversight and focusing inspection efforts on those
25 activities that are most important to safety.

1 So thank you very much for your commitment and dedication
2 throughout the public health emergency.

3 Chris and Larry both mentioned the smarter fuel cycle
4 facilities initiative and the Smarter Inspection Program. Chris discussed the
5 very low safety significance process a fair amount.

6 But, James, you mentioned how the staff is currently
7 implementing some recommended improvements in the licensing program.
8 Could you please give me an example or two of those improvements?

9 MR. DOWNS: Sure. Thank you for that question,
10 Commissioner. So overall the licensing program report was divided into three
11 categories: near-term, mid-term and long-term. Some of the near-term items,
12 you know, were some of the interoffice -- I'm sorry, the divisional procedures
13 that we're currently working on.

14 Mid-term were items that could take a little bit more resources
15 to complete, and longer term items maybe had less of a priority and potentially
16 even more resources required. And the longer term, we're looking at
17 documents such as guidance documents, job aids, lessons learned. And,
18 again, another reason those are kind of long-term is because the staff is
19 sensitive to potential challenges in accomplishing those recommendations.

20 So we don't want to dive into something and produce a
21 product that misses the mark. So we are really taking our time to prioritize and
22 make sure we've got the adequate resources to produce those products.

23 COMMISSIONER CAPUTO: And so this work, which
24 certainly I would agree is transformational, is it being derived from more or less
25 regulatory experience and a better use of risk information?

1 MR. DOWNS: To a point. You know, a lot of it comes from
2 recommendations from our stakeholders, both internal and external to the
3 agency. And then we did apply some risk considerations as far as, you know,
4 where we could get the biggest bang for the buck, some of the low-hanging
5 fruit, those sorts of things. And that's how that prioritization came to be.

6 COMMISSIONER CAPUTO: Okay. Thank you.

7 Larry mentioned material control and accounting
8 enhancements with regard to training. And I just want to note that a recent
9 inspector general report noted the need to get staff qualified for material control
10 and accounting positions in a timelier fashion.

11 Larry or John, was this a shortcoming of the strategic
12 workforce planning program that failed to identify the need to get additional staff
13 qualified? Or was there some other factor at work?

14 MR. LUBINSKI: Thank you, Commissioner. I'll start, and
15 then I'll turn to Larry and Chris.

16 You know, the short answer is no, we didn't see this as a
17 shortcoming. It's something that we clearly had identified. We clearly today do
18 have the sufficient resources to perform material control and accounting. As we
19 have gone through strategic workforce planning, we continue to identify the
20 needs we have in that area.

21 In the future, if we do end up having some folks leaving the
22 agency, that was really where the need would be. And we had already
23 identified areas, as Larry said, to look at our training programs and qualification
24 programs to make sure they are adequate for the needs going forward, and to
25 make sure that we are starting to get folks trained up in those now, so that they

1 can -- so that they can backfill behind the folks that are leaving.

2 So it was really more of a -- as we look forward to the future,
3 whether or not we would need additional resources and folks in that area, and
4 we believe we are accounting for that.

5 COMMISSIONER CAPUTO: Okay. Thank you. John, I am
6 going to stay with you. We've heard a fair amount this morning about the better
7 use of risk information, process improvements, and efficiency gains. And I
8 really do commend the staff for taking initiative in these areas.

9 However, there wasn't necessarily a lot of detail. John, have
10 you tracked the results of these improvements with metrics to verify that you're
11 actually seeing the gains that you anticipate?

12 MR. LUBINSKI: So thank you, Commissioner. There is a
13 couple things in that question there from the standpoint of tracking. Number
14 one is, when you start to look, you are tracking both the improvements that you
15 had as well as the benefit you are going to get.

16 And I'm saying improvements from the standpoint of maybe
17 training up folks and being able to evaluate whether or not the efficiencies
18 you've realized are there.

19 I'd say in most of the areas where you're looking at oversight
20 we have not -- we just started to implement, right? So we don't have enough
21 data to say, are we really starting to see what we expected to see, especially as
22 we're starting to do it in a more modified way of oversight.

23 From the standpoint in the licensing area, I think that's an
24 area where we're starting to look at, again, as we implement those changes --
25 and I'm going beyond the smarter licensing here, and, again, I'm going maybe

1 beyond the fuel facilities programs and saying that it really comes in our
2 documentation on the front end of what we expect to see in the Be RiskSMART.

3 So, in some ways, it is put on a program basis, where we
4 would look at a program, but in many cases it's using the Be RiskSMART to
5 look specifically at whether it's a licensing action and what kind of benefits we
6 expect to get out of that licensing action as we continue to go forward, as well
7 as the risk that is evaluated, or it could be maybe in a rulemaking-type area.

8 And we're documenting those on the front end through the
9 use of our Be RiskSMART framework, and then it's too early to say what we're
10 doing on the back end as far as the implementation. But we do plan to put
11 some metrics on the back end to try to determine, are we actually seeing the
12 overall risk-benefits that we expected when we did our analysis on the front
13 end.

14 COMMISSIONER CAPUTO: Okay. But that ends up I think
15 creating a bit of a challenge. If you don't have the metrics in place yet, then you
16 can't necessarily have a good idea of what your baseline is. So once you are
17 measuring to determine your progress, you won't necessarily be able to tell
18 because you don't know where you started from.

19 MR. LUBINSKI: I'm sorry if I miscommunicated that. Yeah.
20 In many of those cases, we are making that assumption on the front end as far
21 as what the baseline is on a specific licensing action and what our expectations
22 are as we continue to move forward or on a specific change.

23 So it doesn't necessarily become one program metric if you
24 will. It becomes more specific to the type of action you are trying to implement.

25 COMMISSIONER CAPUTO: Okay. But I'm still a little bit

1 confused. Are we changing first and then establishing metrics later?

2 MR. LUBINSKI: The metric would be part of the Be Risk
3 framework on the front end, because you are already making -- as part of the
4 framework --

5 COMMISSIONER CAPUTO: Okay.

6 MR. LUBINSKI: -- itself, you are starting to account for what
7 those benefits are. So you're establishing that metric at that time for that action.
8 And then you are measuring against it on the back end.

9 COMMISSIONER CAPUTO: Okay. Can you give me an
10 example or two of those metrics?

11 MR. LUBINSKI: Unfortunately, I -- I cannot. I don't have that
12 at my fingertips. I apologize.

13 MR. REGAN: Commissioner, could I maybe --

14 COMMISSIONER CAPUTO: Please.

15 MR. REGAN: So one of the things, if we look at -- and maybe
16 this is -- this might be an example to help. So in the smarter inspection area,
17 you know, we -- part of that effort was informed by risk insights. And, you know,
18 that has some fairly discrete and specific measures as far as implementation of
19 the program, not only from a timeliness standpoint, from a number of
20 inspections, hours, resources, et cetera.

21 So if we wanted to use that as an example of looking at, well,
22 we applied our risk insights to streamline and look for efficiencies in our
23 implementation of the oversight programs, we would be able to assess the
24 effectiveness of that program at the -- after a year's worth of implementation to
25 see just how well application of those risk insights and the robustness of that

1 program, how effective that was after the first year of implementation.

2 So that may be an indicator and a measure of the -- you
3 know, the success of where we have applied risk insights.

4 COMMISSIONER CAPUTO: Okay. And I'm pleased to hear
5 you talk about a metric for efficiency, but I assume another metric would also
6 make sure that you have not seen any erosion of safety under that new
7 framework.

8 MR. REGAN: Absolutely. Yes.

9 COMMISSIONER CAPUTO: Okay. And with that, I am out of
10 time. Thank you.

11 CHAIRMAN HANSON: Thank you, Commissioner Caputo.

12 With that, thanks to the staff for a very good discussion.
13 Thanks to my colleagues.

14 And we're going to take a five-minute break. We'll reconvene
15 at 10:35. Thank you, everybody.

16 (Whereupon, the above-entitled matter went off the record at
17 10:29 a.m. and resumed at 10:36 a.m.)

18 CHAIRMAN HANSON: Welcome back, everyone. The meeting
19 will recommence now with the second NRC staff panel on the NRC's strategic
20 considerations associated with the spent fuel storage and transportation
21 business line.

22 I think this discussion is timely as it complements our early
23 February Commission meeting on the dry cask storage and transportation
24 regulatory framework.

25 With that said, we will be led off once again by our Deputy

1 Executive Director for Materials, Waste, Research, State, Tribal, Compliance,
2 Administration, and Human Capital Programs, Darrell Roberts.

3 Again, Darrell, the floor is yours.

4 MR. ROBERTS: Thank you, Chairman. Good morning once
5 again, Chairman and Commissioners. We will now, as the Chairman indicated,
6 provide an overview of the spent fuel storage and transportation business lines
7 -- line.

8 We will be building from the information you heard in February,
9 as the Chairman mentioned, this year when the staff briefed the Commission on
10 spent fuel storage and transportation topics and related research activities.
11 Many of the themes we will discuss are similar to those discussed in the
12 previous meeting, although the activities are different.

13 This is an expected and intentional result of agency-wide
14 strategic direction and the bringing of these two business lines under one
15 management structure when the prior divisions were merged, as we discussed
16 in the earlier panel.

17 Joining me today are, again, John Lubinski, Director of NMSS;
18 Yoira Diaz, Acting Deputy Director of the Division of Fuel Management, NMSS;
19 Jose Cuadrado, Project Manager at the Spent Fuel and Transportation
20 Licensing Branch, NMSS; Allan Barker, a regional/state liaison officer in Region
21 III; and Jessie Quintero, Chief of the Environmental Review Materials Branch,
22 Division of Rulemaking, Environmental, and Financial Support, NMSS.

23 And with that, I will turn the presentation over to John.

24 MR. LUBINSKI: Thank you, Darrell. And, again, good morning,
25 Chairman and Commissioners. I will be sharing some aspects of the spent fuel

1 storage and transportation business line and how we are planning for the
2 future.

3 Next slide, please.

4 We continue our commitment to the principles of good regulation
5 and our focus on our people. We have accomplished numerous activities
6 geared towards fostering a positive work environment, staff development
7 through knowledge management and cross-training, managing cultural and
8 organizational changes, enhancing our decision-making processes, and using
9 data to effectively manage the work of the business line.

10 We have also continued our proactive engagement with internal
11 and external stakeholders. Success in any of the activities that you will hear
12 about today require strong partnerships and collaboration with our internal
13 partners. We continue to have close and routine coordination with our internal
14 stakeholders.

15 We participate in recurring coordination calls with all four regions
16 to discuss items of interest. We routinely collaborate on event and inspection
17 follow up. We meet frequently with partner headquarter offices to discuss
18 workload activities, successes and challenges, lessons learned, coordination on
19 cross-cutting issues, and to maintain open lines of communication. And we
20 conduct townhall meetings where inspectors are able to share best practices.

21 This collaboration was especially true as we responded to the
22 public health emergency and when we evaluated changes to our oversight
23 programs. Over the last year, the list of external stakeholders with whom we
24 are engaging has continued to grow as more interest surrounds the
25 management of spent fuel with longer storage times and the increase in the

1 amount of spent fuel being stored.

2 More stakeholders are participating in our public activities, and
3 more federal, state, local, and tribal partners have expressed interest in our
4 activities. These interactions are integral to ensure we have all of the
5 information and insights necessary for decision-making on those specific
6 applications and our licensing oversight and response framework for shipment
7 of radioactive materials, including spent nuclear fuel.

8 Finally, as we prepare for the future environment, we understand
9 the need for early engagement with a regulated industry to better understand
10 their plans as routine loadings and long-term storage activities continue.

11 We are anticipating some workload impact if the consolidated
12 interim storage facilities are licensed, including licensing near-term approvals
13 and subsequent amendments, construction oversight for new facilities, and a
14 potential large-scale spent fuel transportation campaign.

15 In addition, we anticipate continued research and licensing
16 activities related to the transportation of fresh accident power and advanced
17 reactor fuels and transportation and storage of spent fuels.

18 I would now like to turn the presentation over to Yoira.

19 Next slide, please.

20 MS. DIAZ-SANABRIA: Thanks, John.

21 Good morning, Chairman and Commissioners. It is a pleasure to
22 be here today to talk about the programmatic aspects of the current licensing
23 and oversight environment in the spent fuel storage and transportation business
24 line.

25 Next slide, please.

1 Our current workforce holds many years of experience and
2 institutionalized knowledge. The pictures on this slide are some of the many
3 faces of the way people are supporting this program. We are leveraging the
4 expert knowledge as we continue to develop a workforce that will be
5 responding to the challenges of the future.

6 We also continue to remain focused on ensuring our people
7 have the right training, skills, and ability to accomplish the important work in
8 front of us. We use the interpretive workforce planning process that aids us to
9 better respond to the dynamic environment that affects our work and identifying
10 skill gaps and worker trends.

11 For example, as more spent fuel is moved into dry storage
12 casks, it provides more opportunity for reviewers and inspectors in the field to
13 exchange expertise, creating more synergy among the licensing and oversight
14 programs.

15 Over the course of the last year, transfer of critical areas and for
16 training of our people became imperative to the success of our program. Many
17 members of our organization and companion offices combined forces to
18 develop a comprehensive training plan that covers multiple programmatic
19 areas.

20 We institutionalized this effort by creating Wikipedia pages
21 because this is something needs to be a focal point for us.

22 We have also started a knowledge management campaign to
23 promote the development of additional Wikipedia pages on critical topical
24 areas.

25 Over the last 18 months, our main focus was promoting a

1 positive work environment. Because it's reason for you to perform better,
2 exceed expectations, achieve goals, be self-motivated, and work more
3 efficiently. We accomplish this by continual dialogue about the importance of
4 our mission, the commitment to our strategic goals, and by fostering a trusting
5 environment where divergent views are encouraged and respected.

6 Next slide, please.

7 We continue to embrace the transformation to ensure our
8 programs are enhanced as environments keep evolving. Most of our
9 endeavors are becoming more transformative-driven by the advancement and
10 growing experience of the industry we regulate.

11 We recognize that these evolving scenarios could be
12 challenging.

13 We can also say that we with the capabilities of our people, our
14 reliable regulatory framework, and our analytical tools, we will continue to
15 advance our regulatory footprint, making it more efficient without reducing its
16 effectiveness on safety and security.

17 Our ability to effectively adapt to changes, improved our
18 commitment to safety during the public health emergency. During this time we
19 enhanced our communications with the licensees by conducting weekly calls
20 ensuring that we understood the impacts on their activities. And their safety
21 and security was effectively maintained in their facilities. Our inspection
22 program was able to transform and adapt to the circumstances by doing
23 inspections remotely whenever possible, limiting the time and staff onsite to
24 ensure the safety of our inspectors without compromising our mission.

25 A change in our landscape also includes anticipating our

1 regulatory roles for a possible increase in commercial transportation of the
2 spent nuclear fuel until interim facilities are licensed and subsequently
3 constructed. The staff is completing a review of our transportation program,
4 including interactions with federal planners such as the Department of
5 Transportation in the overall regulation of the spent fuel shipments. The review
6 team is completing its efforts and expects to report on its results this year.

7 As we continue our team interest on transformation in each of
8 these, we are also focused on the continued safe storage and transportation of
9 the spent fuel as it stands today. We keep monitoring any involvement in aging
10 phenomena and research development for long-term storage. The substantial
11 progress we have made in all these activities is due to the staff's commitment to
12 safety, and due to the openness of the regulatory process around industry and
13 public engagement.

14 Next slide, please.

15 In keeping with the expectations to become a more modern risk-
16 informed regulator, we have made progress in many facets of our program. For
17 example, the development of a risk tool providing guidance to reviewers to
18 incorporate risk-informing concepts right at the beginning of a licensing action.
19 This tool helps to ensure the level of effort and depth of the licensing review are
20 commensurate with the risks to better focus reviews on safety-significant items.
21 Consistent with our principles of regulation, we recently made these tools and
22 staff items publicly available.

23 We recognize that risk concepts transcends programmatic areas.
24 Within the storage and transportation oversight area, we implement the
25 recommendations for the independent fuel storage installations, or ISFSI,

1 inspection program enhancement efforts. One of the main objectives was to
2 develop a clear, more risk-informed and consistent approach as per the four
3 NRC regional offices, focusing the ISFSI program on areas most important to
4 safety. This effort included the incorporation of more risk-informing concepts on
5 team inspections and guidance.

6 To date, all revising section manual chapters and inspection
7 procedures have been issued. The enhanced ISFSI inspection program was
8 effective January of this year.

9 Last year we constantly adjusted inspection schedules and
10 replaced some onsite activities with remote inspections, until the most risk-
11 significant activities continue to receive the appropriate oversight.

12 We are also revising inspection guidance measuring those
13 oversight experiences to provide accessibility in the inspection program to
14 conduct remote inspections where it was deemed appropriate. Guidance was
15 developed addressing inspections during pandemics, epidemics, and other
16 widespread illnesses or diseases. This guidance applies a graded approach to
17 meet oversight objectives, which allows for deferring or rescheduling plant
18 inspections, changing periodicity, adjusting inspection efforts, leveraging
19 means, while seeking to maintain as much of the normal inspection program as
20 possible.

21 Next slide, please.

22 In our program we have adapted to technology so that we work
23 smartly, connect readily with our partners, and make data-driven decisions. For
24 example, as part of responses to the public health emergency and the
25 expanded telework we had to rethink some of the ways we made additions. We

1 stepped up our use of information technologies to advance our process. We
2 used information technology tools the agency provides such as Microsoft Team,
3 were a key to support remote inspections activities.

4 In addition, we are piloting the use of mobile 2-in-1 devices in
5 inspections. NRC inspectors at headquarters and the regions are participating
6 in this pilot using these devices to conduct onsite activities.

7 We are anticipating the continued use of IT tools to conduct the
8 most effective and efficient inspections in the spent fuel storage and
9 transportation program.

10 Our program is on a path to success for using data to drive
11 inspections, including information systems and data consolidation. Over the
12 course of the year, we developed the historic transportation information
13 management system, or STIM. This is an application under NRC web-based
14 licensing system used to manage our workload for spent fuel storage licensing
15 and transportation activities. This system allows us to better anticipate potential
16 schedule and resources challenges, and that means better agility of our
17 decisions.

18 Complementary to STIM, we also embarked a more
19 sophisticated use of the analytics. For example, creating stations or
20 dashboards using programs like Power BI and Tableau. These dashboards
21 used strategically serve to monitor the overall performance of the business line.

22 We could track agency metrics, assessing the health of projects, and gain
23 additional insight on budget execution.

24 We are realizing that the use of modern information technologies
25 will continue to propel us to the future.

1 Thanks for your attention. This concludes my presentation. I will
2 now turn it over to Jose Cuadrado.

3 Next slide, please.

4 MR. CUADRADO-CARABALLO: Thank you, Yoira.

5 Good morning, Chairman and Commissioners. I will be
6 discussing some of the recent accomplishments in the areas of licensing,
7 certification, and rulemaking for the spent fuel storage and transportation
8 business line, the status of the NRC staff review of the two consolidated interim
9 storage applications, and the activities and initiatives that we are implementing
10 to prepare for the future and enhance our progress.

11 Next slide, please.

12 Throughout the past 18 months, the staff continued to ensure
13 safety through successful implementation of our licensing and rulemaking
14 activity. Despite the challenges that we encountered during this very
15 unconventional time period, we continued to effectively and efficiently conduct
16 licensing and certification reviews, and issue licenses for spent fuel storage
17 facilities, and certifications for transportation packages and spent fuel storage
18 cask systems.

19 During the past fiscal year, we completed 69 licensing actions;
20 47 of those were transportation certificate approvals, and 22 of those were
21 storage licensing and certifications, which included two storage facility
22 renewals. The number of spent fuel storage licensing and certifications actions
23 increased substantially relative to the previous year.

24 This increase in storage licensing was driven by multiple
25 extensions and regulatory relief request received in response to the COVID-19

1 public health emergency, by the renewal of the Rancho Seco and the Humboldt
2 Bay ISFSI licenses, and by the completion of several amendments to dry
3 storage cask design for use at the commissioned reactor sites. In addition,
4 during the fiscal year we received a record number of storage license and
5 certificate renewal requests, which are currently undergoing detailed NRC staff
6 review.

7 During this past year, the business line completed a number of
8 significant licensing actions. These include expedited reviews of several
9 storage cases to support decommissioning activity, and a number of
10 transportation cases that support the shipment of accident-tolerant fields, or
11 ATFs. Examples include the approval of changes to the Westinghouse travel or
12 spent fuel transportation package to authorize a shipment of fuel assemblies
13 filled with chromium and aluminum oxide, and with enrichments of up to 7
14 weight percent of uranium-235.

15 The staff also issued a revision to the GE 2000 transportation
16 package to authorize the transport of iron-chromium-aluminum, or FECRAL,
17 lead cast assemblies.

18 We also approved amendments to the dry storage cask systems
19 of the three main vendors -- Holtec International, NAC International, and TN
20 Americas -- to support the decommissioning activities at several U.S. reactor
21 sites.

22 Another significant accomplishment during the past fiscal year
23 was the completion of the proposed rule and draft implementation guidance to
24 harmonize NRC transportation regulations and 10 CFR Part 71 with IAEA
25 standards and U.S. Department of Transportation regulations. These proposed

1 revisions ensure that we have a consistent regulatory framework for the
2 domestic and international shipment of radioactive materials.

3 I would now like to discuss the progress and status of the NRC
4 staff's review of the consolidated interim storage facility applications, or CISF.

5 During the past 18 months, the staff made substantial progress
6 towards completing the safety, security, and environmental reviews of the two
7 CISF applications. The application submitted by Interim Storage Partners, or
8 ISP, seeks to construct a facility in Texas, while the application submitted by
9 Holtec International seeks to construct a facility in New Mexico.

10 For the ISP CISF review we are currently close to completing the
11 final safety evaluation report where we also published a Draft Environmental
12 Impact Statement in May of 2020. And we are currently on target to publish the
13 Final Environmental Impact Statement by July of this year, 2021, and to issue a
14 licensing decision shortly thereafter.

15 For the Holtec environmental review the staff also published its
16 Draft Environmental Impact Statement in early March of 2020, and is currently
17 waiting responses from the applicant related to the safety review before it
18 announces a new date for publishing the Final Environmental Impact
19 Statement.

20 For the Holtec safety and security review, this past March the
21 staff notified the applicant that it would not complete its safety review by its
22 previously announced date of May 2021. The applicant made changes to the
23 design of the facility in its application that require more information before staff
24 can complete its review. Just this past week, staff issued a second request for
25 additional information discussing this information.

1 Once the applicant indicates when it will respond to this request,
2 the staff will issue a new schedule for the completion of its review, and the
3 publication of the final safety evaluation report and the Final Environmental
4 Impact Statement.

5 The staff recognizes the high level of interest and relevance that
6 both CISF reviews elicit, and have undertaken comprehensive efforts to inform
7 stakeholders about the CISF licensing process, the status of its reviews, and
8 the important safety, security, and environmental protection role that we have
9 as independent regulators.

10 During the last 18 months, the staff has proactively held
11 meetings and responded to requests from numerous stakeholders, including
12 members of Congress and their staff, other federal agencies, elected officials
13 from state legislatures, officials from state government agencies, tribal
14 governments, as well as local county and city government officials.

15 Next slide, please.

16 In addition to the substantial recent progress and
17 accomplishments in licensing and rulemaking, we are also preparing for the
18 future by leveraging our performance-based regulatory framework, and
19 enhancing our program to further risk-informed items. We will seek to
20 accomplish this goal by continuing to implement innovative approaches that
21 further risk inform the spent fuel storage and transportation licensing program.

22 Part of our strategy for preparing for the future is through our
23 continued support and preparation for the future transportation of accident-
24 tolerant fuels and advanced reactor fuel types. We have proactively engaged
25 with industry to communicate necessary regulatory timeliness related to ATF

1 and advanced reactor fuel transport, and continue to encourage future
2 applicants to engage us in pre-application communication.

3 We will continue to communicate and participate in relevant fora
4 with spent fuel storage vendors and licensees, transportation packaging
5 vendors and manufactures, logistics service providers, as well as relevant
6 federal, state, and local government entities with transportation responsibilities.

7 This, to ensure that we remain apprised of future developments that may
8 increase the number of storage licensing and transportation certification
9 requests that we may receive in the future.

10 I want to highlight that we have been working on numerous
11 improvements in this program for several years. We have completed many of
12 them, and we are continuing to work on them.

13 For example, we made significant progress enhancing our
14 regulatory approaches by implementing more risk-informed thinking in the spent
15 fuel storage dry cask program. Most recently, we hosted approximately 10
16 public workshops where we engaged with industry and the public to discuss the
17 path forward and regulatory approaches to enhance five critical technical areas.

18 This effort was also done in parallel with the activities associated with the NEI,
19 or Nuclear Energy Institute White Paper titled "Defining Spent Fuel
20 Performance Margin."

21 We expect return on investment from these enhancement efforts
22 on staff level of effort by having more efficient reviews, possible reduction on
23 the number of amendments, increasing the predictability of our reviews, and
24 institutionalizing a more modern risk-informed thinking through revisions in our
25 guidance.

1 It is worth noting that in our most recent interaction with the
2 industry we received feedback that these efforts have shown concrete progress
3 towards enhancing the regulatory process, and have demonstrated the NRC's
4 capabilities as a more modern regulator.

5 Now I would like to share with you some of the accomplishments
6 on these activities.

7 In 2020, we finalized an amendment to the Standardized
8 NUHOMS System certificate that implemented the graded approach pilot. We
9 are glad to report that we received -- we have received additional requests for
10 implementation of the graded approach to three other additional dry storage
11 cask system certificates from Holtec International and from TN Americas. The
12 storage systems seeking to implement this graded approach, which are the HI-
13 STORM 100, the HI-STORM FW, and the NUHOMS COS System combined for
14 the largest number of loaded and deployed canisters at power reactor sites,
15 and are also the most frequently amended.

16 We expect that this next implementation of the graded approach
17 criteria will continue to support our effort to focus our reviews on safety, and to
18 yield review improvements and efficiencies for NRC and industry.

19 Another example is the adoption of topical reports for dry storage
20 cask safety analysis. Currently, the staff is close to issuing a safety evaluation
21 report for the first topical report or thermal analysis which was submitted for
22 NRC review and approval in early 2020. We expect to receive a second topical
23 report for dry storage cask shielding analysis very soon.

24 The adoption of these topical reports will provide flexibility for the
25 vendor and general licensee to make changes without the need to request

1 approval of individual certificate amendments, while ensuring the protection of
2 public health and safety.

3 One last thing I would like to reflect is on the work done by the
4 staff over the past years regarding spent nuclear fuel storage renewals.

5 The staff conducted an assessment of its then-existing renewal
6 framework to prepare for a significant wave of incoming spent nuclear fuel
7 storage renewals. That assessment resulted in the revision of existing
8 guidance, and also in the creation of new review guidance and inspection
9 instructions. As a result of those efforts, the cost of renewal reviews has
10 approximately been halved, and the duration of these reviews has decreased
11 from approximately 48 months when we started to 26 months right now.

12 As we get closer to the end of this wave of storage renewals, the
13 staff will once again seek to apply its continuous learning principles to assess
14 the effectiveness of its now existing renewal framework, and continue to
15 consider ways to further risk inform its activities in this area.

16 That concludes my remarks. I will now turn it over to Allan.

17 Next slide.

18 MR. BARKER: Thank you, Jose.

19 Good morning, Chairman and Commissioners. Thank you for
20 the opportunity to discuss with you state and tribal outreach related to the
21 regulation of spent nuclear fuel.

22 Next slide, please.

23 The regional state liaison officer or RSLO role is opportunity-
24 driven within a dynamic environment focused on representing the agency. The
25 dynamic environmental factors include geographical, political, and cultural

1 influencers, along with natural disasters such as hurricanes and floods. The
2 RSLO effectiveness is grounded in our ability to build relationships. It is
3 through a relationship that the RSLO can communicate the agency's safety
4 mission.

5 The RSLO role is the best job in the agency. It delivers unique
6 interaction to governmental counterparts, including local, states, agreement
7 states, and tribal nations that desire to understand our safety mission and roles
8 and responsibilities. As an RSLO, we are the first point of contact for
9 governmental counterparts. But, we have an entire agency of support on call.

10 Spent nuclear fuel is a topic of interest for all governmental
11 counterparts, from the governmental technical staff seeking to understand the
12 safety of spent nuclear fuel storage to the emergency management official
13 questioning the future transportation of spent nuclear fuel by rail through their
14 state's jurisdiction.

15 From my RSLO field work, this broad interest is alive and
16 thriving. Our RSLO effectiveness in building relationships relies on integrating
17 the agency's spent nuclear fuel program with our liaison outreach. The spent
18 nuclear fuel program staff provides our technical information, which we use as
19 conversational briefings through an agency relationship with governmental
20 counterparts. The health of these relationships will be maintained by
21 understanding that each one of us represents the agency, and we have a part
22 to play.

23 As I reflect on my field work, I want to say thank you to the spent
24 nuclear fuel program for the part it played. Additionally, I want to thank the
25 Native American Advisory Committee for honing my skills of valuing diversity

1 when building relationships.

2 Next slide, please.

3 The RSLO state outreach is guided by procedure FL-100,
4 Regional State Liaison Officers Program. The Division of Material Safety,
5 Security, State and Tribal Programs manages the State Liaison Officer
6 Program. The State Liaison Officer, or SLO, Program was established in 1976
7 upon recommendations from the National Governors' Association and other
8 state organizations for the NRC to improve coordination and communication
9 with the states. Under this program, each governor appoints an individual to
10 serve as the state's primary liaison to the NRC.

11 Within each regional office, the RSLO implements the SLO
12 Program by facilitating communications between the NRC and state relative to
13 NRC activities. RSLOs maintain communications with the governor-appointed
14 SLOs, other state and local officials, and with federally recognized tribal
15 governments affected by or interested in NRC activities. The RSLOs are part of
16 the regional organization. The regional administrator's expectations will guide
17 the RSLO outreach. The regional administrator's expectations will be the ones
18 that really set the course.

19 The RSLO's familiarity with regional priorities and headquarters
20 licensing communication needs, as well as state, local, or federally recognized
21 tribal governments' specific issues enabled them to integrate effectively across
22 the agency.

23 RSLO tribal outreach is coordinated through interactions with the
24 Nuclear Materials Safety and Safeguards Tribal Liaisons, who are the agency
25 resource for tribal activities. In addition, the agency's Tribal Policy Statement

1 guides our activities and provides the framework for the agency's engagement
2 with federally recognized tribes.

3 On January 9th, 2017, the agency published its Tribal Policy
4 Statement of Principles to guide the government-to-government interactions
5 with American Indian and Alaskan Native tribal governments. The agency's
6 need to development this guidance was in response to an increase in the
7 number and complexity of consultations between the NRC and federally
8 recognized tribal governments.

9 The Tribal Policy Statement provides guidance to ensure
10 consistency across the agency. It underscores the NRC's commitments of
11 conducting outreach to tribal governments and engaging in timely consultation,
12 and to coordinate with other federal agencies. The agency's expectation is that
13 all program and regional office consultation and coordination practices will be
14 consistent with the Tribal Policy Statement.

15 The Tribal Policy Statement is centered on six principles. The
16 foundational principle is that the NRC recognizes the federal trust relationship
17 and will uphold its trust responsibility to Indian tribes. This specific principle is
18 the basis upon which we build relationships.

19 The Tribal Policy Statement is a roadmap providing direction.
20 But how is tribal government outreach accomplished?

21 I return to the RSLOs' grounding statement: our ability to build
22 relationships.

23 For tribal government outreach there is nothing more important
24 than building relationships. But I believe it begins with a commitment, a
25 commitment to learn the specific tribe's cultural protocols, to focus on listening,

1 to extend patience, to serve tribal governments respectfully, and to recognize
2 that Native American culture extends across generations, not years.

3 Next slide, please.

4 For the past decade-plus, I have realized best practices for state
5 and tribal government outreach. These best practices have all have an aspect
6 of relationship building. I offer my learning for awareness and as an opportunity
7 for application.

8 Relationships building occurs over time through simple deposits.
9 When you begin to care, relationships can form. Over my 12 years of tribal
10 government outreach, a PowerPoint presentation has never been used. Be
11 proactive to serve, not reactive to address.

12 Challenge yourself to identify what does success look like.
13 Capture the next decade of best practices.

14 I conclude my presentation with a final thought. The RSLO
15 represents the agency by building relationships. The RSLO's effectiveness
16 relies on everyone's contribution. From the Spent Nuclear Fuel Program to
17 resident inspectors in the field, I am assured that the NRC's mission will be
18 delivered.

19 I will now turn it over to Jessie.

20 Next slide, please.

21 MS. QUINTERO: Thanks, Allan.

22 Good morning, Chairman and Commissioners. Today I will
23 highlight some of the work the staff and the Environmental Center of Expertise,
24 or COE, has accomplished since it was formed, including examples of how we
25 have supported the fuel facilities and spent fuel storage and transportation

1 business line.

2 Next slide, please.

3 The COE has been operating for 20 months. And in that time we
4 have completed over 10 Draft or Final Environmental Assessments and EISs.
5 We have consulted on a dozen projects under the Endangered Species Act.
6 We have held over 20 public meetings to gather comments. And we have
7 responded to over 12,000 comments received on our need to document.

8 Staff completed its office sunset in April and concluded that the
9 COE had met its objective. We centralized environmental review functions. We
10 improved ability of staff to meet changing workload demands. And we
11 enhanced knowledge management.

12 In addition to maintaining our mission work, as the COE was
13 formed the staff began consolidating our processes. The staff also came up
14 with ideas on how to improve the environmental review process based on our
15 years of experience and expertise.

16 Public engagement is a crucial aspect of our environmental
17 review. And due to COVID and the response and the needs of the local
18 communities, the COE staff adjusted its approaches and increased efforts to
19 keep the public informed and gather their comments.

20 Next slide, please.

21 The COE continues to look for ways to improve its processes
22 and documents. The staff created the toolbox, a sharepoint-based living tool
23 for environmental staff which replaced multiple handbooks.

24 The toolbox is accessible to the entire agency and has its own
25 Nucleapedia page.

1 We developed a NEPA handbook which describes the
2 environmental review process and can be used to inform staff and managers
3 about how the NRC implements its Part 51 regulations.

4 The staff also created a consolidated qualification program that
5 outlines basic environmental knowledge requirements, as well as business line
6 role or resource area-specific modules.

7 In addition to the consolidation effort, the staff also took on
8 several transformational initiatives. A small team of COE staff identified ways to
9 streamline the environmental review process based on technical expertise and
10 lessons learned. The COE staff are considering several ideas focused on
11 NEPA documents, processes, and public outreach.

12 One idea is related to the format of our EISs, and it is currently
13 being piloted in three EISs under development, each within a different business
14 line. The goal is to improve the conciseness and readability of our EISs. We
15 are consolidating multiple related discussions into a single chapter. This will
16 help reduce the level of effort and resources needed for peer review, technical
17 editing, and legal review.

18 We also believe that this will make the resource-specific
19 information easier for the general public to find and understand.

20 Another way the staff is trying to transform environmental
21 reviews is through rulemaking activities, such as the categorical exclusions,
22 advanced notice for proposed rulemaking, and the Part 51 transforming the
23 NRC's environmental review process rulemaking plan.

24 I would also like to highlight that these rulemaking activities are a
25 great opportunity for two COEs within the Division of Rulemaking and

1 Environmental to work collaboratively. It is easier for staff, along with the Office
2 of General Counsel to reach alignment on technical topics.

3 Next slide, please.

4 Public outreach and engagement are an official part of our
5 environmental review process. There are two specific times that we seek public
6 input: during scoping, and following issuance of the Draft EIS and, in some
7 cases, the Draft Environmental Assessment. The public health emergency
8 created challenges in how to inform the public of our environmental needs and
9 gather comments.

10 For the two consolidated interim storage facility reviews we were
11 able to travel to the sites and host in-person scoping meetings. However, due
12 to state restrictions on gatherings and travel constraints, we were unable to
13 hold in-person public meetings for the Draft EISs. Instead, we held a series of
14 virtual public meetings to receive public comment.

15 The staff were committed to increasing its effort to inform the
16 public about opportunities to comment. The staff advertised the meetings and
17 comment periods in newspapers, radio stations, and by direct mailings, via
18 email listservs, and on NRC's social media platforms.

19 The comment period for both EISs were also extended to 180
20 days. We applied the lessons learned from the first Holtec public meeting, such
21 as using video capabilities in the subsequent meetings. We were able to have
22 translation services for non-English speakers and the hearing impaired so that
23 these community members could provide comments on the record.

24 As the NRC evaluates public meetings in a post-COVID
25 environment, the COE continues to believe in the importance of visiting a site

1 and engaging in person with the local communities and tribes. While virtual
2 meetings might be a good way to gather comments on generic EISs, such as
3 the one for a reactor license renewal or advanced reactors, other projects may
4 be better served by in-person local meetings.

5 Another aspect of our environmental review is our engagement
6 with Native American tribes. And I want to share a few examples of how we
7 carried out meaningful engagement with a tribe.

8 For the Holtec environmental review, staff consulted with 11
9 tribes under Section 106 in the National Historic Preservation Act. Four tribes
10 attended a site visit to view potential historic and cultural resources. For the
11 ISP review, staff consulted with 7 federally recognized tribes.

12 During scoping for the Church Rock environmental review staff
13 held public meetings in the local area and met with members of the Navajo
14 Nation, including participating in potlucks held in local families' homes.

15 For the Draft EIS, the NRC opened a 45-day comment period
16 and held two virtual public meetings. However, after those meetings it became
17 evident that the community needed more time to review the Draft EIS. The
18 comment period was extended to 195 days, which ends this week.

19 We did not restrict the comment period, though. In close
20 coordination with the Navajo Nation PA, the NRC engaged in a much more
21 focused dialogue with the community. The staff conducted one-on-one calls
22 with the community members closest to the site, answering their questions and
23 noting any potential comments they might share on the Draft EIS. The staff
24 pre-recorded three radio programs that were broadcast in both English and
25 Dine, the Navajo language.

1 The staff also held a third virtual public meeting in the evening,
2 which included a question and answer session, in response to requests from
3 the local community.

4 The staff set up a toll free phone line that the public can call and
5 record their comments. The message for incoming callers is in both English
6 and Dine.

7 The staff also ran full-page ads in the local newspaper this week
8 providing information about the project, the EIS, and how to comment.

9 For my last example I want to highlight how time spent
10 developing a relationship with the Prairie Island Indian Community allowed for a
11 constructive process on a recent licensing review for the expansion of the
12 Prairie Island ISFSI.

13 Previous agreement between the NRC and the Prairie Island
14 Indian Community acknowledged their areas of special expertise: historic and
15 archeological resources, socioeconomic planning, and environmental justice.
16 All the staff had intended to hold in-person writing sessions with the tribe. We
17 had to move those, and had to be conducted virtually due to the public health
18 emergency. Notwithstanding, the use of relationship building led to a
19 productive virtual working session.

20 A third aspect of our public outreach engagement is the
21 consideration of environmental justice and the staff NEPA review. The result of
22 the NEPA review help inform the decision-maker when deciding whether to
23 approve a licensing action.

24 The Commission's policy statement on the treatment of
25 environmental justice matters and NRC regulatory licensing actions requires

1 NRC staff to determine if a proposed licensing action could result in
2 disproportionately high and adverse human health or environmental effects on
3 minority and low income populations.

4 Environmental justice issues encompass a broad range of
5 human health and environmental effects. The staff's review considers the
6 interrelated social, occupational, cultural, historical, and economic factors that
7 could amplify the natural and physical environmental effects in the proposed
8 action on minority and/or low income populations.

9 Scoping provides an opportunity for representatives of potentially
10 affected minority and low income communities to identify issues and concerns
11 with the proposed action.

12 Under NEPA, the identification of this disproportionately high and
13 adverse human health or environmental effects on minority and/or low income
14 population does not automatically preclude a proposed action from going
15 forward, nor does it necessarily compel a conclusion that a proposed action is
16 environmentally unreasonable. Rather, the identification of such an effect
17 should heighten agency attention to alternatives, mitigation strategies, and
18 monitoring needs expressed by the affected community or population.

19 An example of how public outreach and environmental justice
20 are integral to the environmental review process is the Westinghouse Fuel
21 Fabrication Facility by featuring an all NEPA review. The staff made a decision
22 to prepare an EIS after concluding that a finding of no significant impact could
23 not be reached in light of the uncertainties revealed by results from onsite
24 sampling and monitoring data gathered under a consent agreement with the
25 State of South Carolina.

1 Comments previous received from the local community, which
2 included environmental justice populations, highlighted their concerns about
3 legacy spills and leaks, and uncertainty about the migration of groundwater
4 contamination. Their comments have helped focus the scope of the Draft EIS
5 that staff is currently preparing.

6 Project managers continue to frequently field calls and emails
7 from various community stakeholders such as the NAACP and a local chapter
8 of the Sierra Club. Environmental justice populations were identified during
9 preparation of the draft environmental assessment and, therefore, the Draft EIS
10 will include a detailed analysis to determine if they're a disproportionately high
11 number of impacts.

12 The staff has received the Commission's recent requirements
13 memorandum, which has directed the staff, among other things, to review the
14 adequacy of the 2004 policy statement.

15 In conclusion, the COE has been successful in fulfilling the
16 Commission work, including support for the fuel cycle and spent fuel storage
17 and transportation business line. It continues to consolidate innovative
18 processes, and maintains a focus on public and tribal outreach and
19 engagement.

20 With that, that concludes my presentation, and I will turn it back
21 over to Darrell.

22 Thanks.

23 MR. ROBERTS: Thanks, Jessie.

24 And before I turn it over to the commissioners for questions, I do
25 want to thank these panelists, John, Voira, Jose, Allan, and Jessie, as well as

1 express my appreciation to the staff in general who have over the last several
2 years modernized and adapted to the dynamic environment, and continued to
3 make the program the success that it is.

4 Also, I would like to thank the people at the table today, and
5 everyone who helped us prepare for this briefing.

6 And with that, I will turn it over to the commissioners.

7 CHAIRMAN HANSON: Thank you, Darrell.

8 Again we will start with Commissioner Wright.

9 COMMISSIONER WRIGHT: Thank you, Mr. Chairman.

10 And, again, thank the panelists for their presentations. This was
11 a very interesting panel.

12 So, John, let's start with you. I am very pleased to hear about
13 the improved collaboration and partnership with NRR in the regions and the
14 sharing of best practices. As you know, myself, among others, have raised
15 concerns about there being silos of information and practices in the projects
16 you discussed today. So, your efforts to break down those silos and open lines
17 of communication and develop relationship, they do help us be a more effective
18 and efficient regulator. So, thank you and to your team.

19 So, I'd like to hear a little bit more about the specifics. Can you
20 give me a few examples of best practices being shared across business lines
21 for more efficient and effective licensing or inspection activities?

22 MR. LUBINSKI: Thank you, Commissioner.

23 One of the examples we talked about earlier was the low safety -
24 - low significant safety issue resolution process. That's one where we worked
25 very closely with NRR. That could hit on the licensing side as well as the

1 inspection side.

2 So, that's an area that from a focus standpoint I think is providing
3 more benefits in different areas. On the reactor side it was very much in the
4 area where the licensing basis may not have been as clear, and then being
5 able to take a look to determine how much, how much effort should be put into
6 following up on issues.

7 We adapted that in the materials side issue earlier. We think in
8 the spent fuel storage and transportation we can learn a lot more from what
9 was already done on the reactor side because there's much more similarity in
10 things the way we write our licenses in COC or as we start to adapt other
11 programs like nuclear materials it may be more in the enforcement side and the
12 way we look at enforcement activities.

13 So that's one area that impacts both.

14 From the standpoint of from oversight, clearly during our
15 response to COVID we were involved in daily meetings with NRR, NSIR, and
16 the regions to talk about what our response would be in continuing to move
17 forward, our use of remote inspections, learning from each other on how we
18 were doing remote inspections, and then also learning from the standpoint of
19 the way we were going to handle licensing actions.

20 In our largest area, in NMSS, the nuclear materials users, we
21 saw that area as an area that would see the most coming in from the standpoint
22 of types of release that may be asked, or just based on the fact that there were
23 so many licensees and many of them were more negatively impacted by the
24 COVID experience.

25 We were able to share, actually, with NRR what we did in the

1 web-based licensing area. And they are doing much of that right now, and
2 putting electronic features into their licensing requests and their release. So,
3 that coordination has worked both ways.

4 And then when we talked about accident-tolerant fuels and
5 advanced reactor fuels, we talked in the earlier presentation how that's
6 impacted the fuel facilities, but we have been arm in arm with them looking at
7 the transportation aspects as well, whether it's on the fresh fuel end or the
8 spent fuel end, and what is needed to continue to look at transportation or those
9 types of activities.

10 So, the plan that was talked about for accident-tolerant fuels and
11 reactor fuels has been something that, that again we've learned from each
12 other.

13 So I hope that's responsive to your question.

14 COMMISSIONER WRIGHT: Yes. Thank you so much.

15 And I'm going to fast forward now to Allan and to Jessie. I really
16 found this really real interesting because, Allan, personally I resonate with Slide
17 37 related to the tribal liaison program.

18 I agree, it's so true that when you care, relationships can and do
19 form. The decade-plus part of the title also hits home because I, myself, have
20 had more than a decade of relationship building with representatives of the
21 Prairie Island Indian Community through work as I did formerly as an economic
22 regulator at the state level, and as chairman at the time with the Nuclear Waste
23 Strategy Coalition, whom I know you know about.

24 So, it's truly been an honor and a privilege to work with Prairie on
25 a government-to-government level and to get to know several of them

1 personally. I've learned so much, and I appreciate and care, because the care
2 part's important, about the important perspectives that they have.

3 I'm grateful to be able to continue to build on these relationships
4 here as an NRC commissioner today. And as you pointed out so well in your
5 presentation, again it reminds me of just how seriously the NRC takes its
6 responsibilities in this area. And really appreciate the important work that you
7 and our other regional state liaison officers do.

8 Allan, yours and other efforts in building those relationships were
9 very evident to me when we met with Prairie Island a couple of years ago, if you
10 remember, and in the successful interactions with them on their ISFSI review.

11 So, it's wonderful to come to the NRC and see that type of
12 interaction continuing at the federal level, and the value that this agency, that
13 our agency puts on those relationships.

14 And, Jessie, I really appreciate her on top of everything else in
15 her presentation, she's a Clemson girl. And one of the many proud members of
16 greater Clemson club at the NRC.

17 So, Jessie, you mentioned some methods we've been exploring
18 to increase our outreach, such as radio broadcasts in tribal languages,
19 interpreters at public meetings, and proactive outreach at the start of projects.
20 So, for you and Allan, if you could take a second, do you have any
21 recommendations on how we can continue to improve our outreach?

22 And are there any non-traditional methods that you would
23 recommend that we might look at?

24 MR. BARKER: Jessie, I can begin with that. Okay, I'll go ahead
25 and begin then.

1 Commissioner Wright, I thank you again for your kind words.
2 And I do remember that meeting, a greet and meet with the tribal council. I
3 think that that probably is the essence of how I want to answer this question is
4 that I don't have a traditional way in mind right now, but I think if we would focus
5 on involvement outside of looking at outcome.

6 The involvement you did with being there at the meet and greet
7 with the Prairie Island Community Tribal Council was a time type of
8 commitment. However, it was being involved at that level and sharing who our
9 agency was with really no accountable outcomes. I think if we would really
10 focus on involvement with tribal nations we can learn some non-traditional ways
11 to foster a better type of outreach and a better relationship.

12 So, I think active listening and really looking at the focus on
13 involvement with that tribal nation, and not so much concern about the outcome
14 of what that meeting happened. Because building relationships takes time, and
15 I think a lot of times active listening is the best way to connect with this tribal
16 nation, and also with a state government. Any type of outreach you're doing to
17 build relationship is that commitment of involvement, looking for how we can
18 involve that government counterpart.

19 Jessie, I'll turn it over to you.

20 MS. QUINTERO: I totally agree with what Allan said. And if we
21 are able to build a relationship with the tribes and with communities before we
22 come in on a NEPA review and asking for scoping comments, or if we have that
23 relationship already and they understand NRC process, I think that's a great
24 practice.

25 I think it's also important to tailor our outreach to the community.

1 It's definitely not a one-size-fits-all. And so determining how best to tailor that
2 outreach to that specific community and their needs.

3 For example, for Church Rock it was a commenter during one of
4 our first public meetings who said you should consider radio. It's a good way to
5 reach the community. And so we heard that comment and we acted on it.

6 And we talked to the staff of the Navajo Nation EPA who
7 suggested I wouldn't just do a single one, maybe consider a series. And so
8 that's what we did. And so I think it's very important to listen to the community
9 on how we can best engage with them.

10 And I also agree, again, emphasizing engaging as early as
11 possible. So, with that early outreach we can learn, you know, are there other
12 languages spoken, are there special needs or community characteristics that
13 we should consider in our planning.

14 So, again, it's early and community-specific outreach.

15 Thanks.

16 COMMISSIONER WRIGHT: Thank you. Thank you very much.
17 I've got less than a minute, probably enough time to do another question, Mr.
18 Chairman, so I yield back.

19 CHAIRMAN HANSON: Thank you, Commissioner Wright. I feel
20 your pain. I have more questions than I have time as well, so.

21 I want to thank the staff for their presentations this morning. I
22 think the spent fuel business line and transportation business line is a routine
23 focus of a lot of external attention on the agency. Right? Spent fuel storage
24 facilities at reactor sites, the potential for consolidated interim storage facilities,
25 et cetera, there really aren't a lot of other issues at the agency that get quite the

1 attention of the public the way this one does.

2 And I'm encouraged by a number of things that I heard, certainly,
3 like Commissioner Wright, the focus on public outreach and the importance of
4 communications and relationships building. And I want to thank the staff for
5 their efforts on that.

6 Certainly it seems the Church Rock example is a very good one
7 and some creative things. But also, the efforts that the staff made during the
8 public health emergency to extend public comment periods and really make
9 sure that we were, you know, receiving all of the feedback from all sectors in
10 the review of the interim storage facility applications and other efforts, I really
11 want to commend the staff.

12 I also want to, one of the other things that I heard as a theme
13 throughout this is the use of data. That's something I've talked about before,
14 and the importance of that. And it's important, I think, on a couple of fronts.

15 You know, in this area, maintaining public trust is critically
16 important. It's important through the communications aspect, as I explained,
17 but also through the data aspect where we're making our data more transparent
18 to the public, and making sure the public knows what we know about the
19 performance of our licensees in storing and transporting spent fuel. But it's also
20 important for our own purposes so that when we talk about the ISFSI inspection
21 program enhancement effort that that effort is actually achieving its aims.
22 Right?

23 Commissioner Caputo made a very good point about
24 benchmarking and then measuring against that benchmark in the previous
25 panel. And I think Commissioner Baran made a very good point about making

1 sure that our enhancements efforts are actually enhancing our knowledge and
2 our understanding of performance and safety over time. And the nexus of
3 those things is really the measurement and the data that we have.

4 And where we're enhancing our efforts, that we're actually
5 making progress, that we're making sure that we're continuing to have
6 adequate knowledge about performance to make, to make sure that we're
7 effective in protecting the public and the environment.

8 So, with that I want to turn and ask Yoira a couple of questions.
9 There was an -- you mentioned in your presentation you said, for example, we
10 made significant progress enhancing our regulatory approaches, implementing
11 risk-informed thinking in spent fuel storage dry cask program, with particular
12 enhanced five critical technical areas.

13 Could you say more about that effort? And when you talk about
14 enhancing or risk informing, exactly what we're talking about there?

15 MS. DIAZ-SANABRIA: Yes. Thanks for the question.

16 I can provide some of the overarching concept of what we're
17 doing on the risk informing our licensing process in the spent fuel in the
18 storage, in storage in particular.

19 So, we had a development of a risk tool that looks at the different
20 components level and the significance of the components commensurate to the
21 significance for safety. So, when we looked at that, we evaluated what is the
22 significance of that component into the determination of the safety of the issues
23 in total.

24 So, the risk tool evaluated these things in a very strategic
25 manner, and very qualitative. It looked at a graded approach on how to

1 evaluate the components and how that at the end of the day will show a level
2 commensurate to the safety of -- commensurate to the risk of the component.

3 I totally want to defer to Jose, who has in particular the five
4 critical areas. The thermal criticality and shielding, he probably can be able to
5 provide some examples for how the risk tool was implemented on those critical
6 areas.

7 MR. CUADRADO-CARABALLO: Yes. Thank you, Chairman, for
8 your question.

9 So, yeah, I mean, those were the main areas: criticality, safety,
10 thermal analysis, shielding materials, and structural. So, in essence, the risk
11 tool asked us, you know, before we started the review, look at the request that
12 is being considered. What areas are being modified? And then assess the
13 significance of each one of these changes, and then tailor our review rigor to
14 how significant is that change.

15 So, those are the main areas that are being focused and
16 targeted, you know, when we look at, you know, these efforts, the risk-informed
17 review.

18 The important thing is that we start at the beginning, that we
19 don't get deep into the review to then figure out that the change is not as safety
20 significant as the work. And so that, you know, we consider resources, and we
21 can import more of those resources to the areas that are higher contributors to
22 safety.

23 CHAIRMAN HANSON: Okay, thank you very much for that.

24 I just want to ask about the assessment of transportation
25 program readiness. Is that still in process? Could you give us an update on

1 that?

2 And, you know, what interactions with stakeholders are you
3 planning on that? I mean, next to spent fuel storage, probably spent fuel
4 transportation is a close second in terms of public interest. And while an awful
5 lot of outreach efforts have been located at the Department of Energy, certainly
6 the NRC and the Department of Transportation have significant roles to play in
7 communicating about this.

8 So, could you kind of just give us an update there and talk about
9 public outreach?

10 MS. DIAZ-SANABRIA: Yes. So, for the transportation readiness,
11 right now the working group is looking -- this is divided into three phases.
12 Phase 1 is to assess existing regulations on the guidance on those interactions
13 with internal or external stakeholders.

14 Phase 2 is to compile a report that provides a report of the
15 assessment on Phase 3 to prepare implementation that will consist with the
16 conclusions and recommendations that the staff, the working group provided.

17 In terms of the interactions we have with our partners, in this
18 case the Department of Transportation, we have engagements with them. And
19 also want to make reference of what the interactions with have with the states
20 and tribes. These are very important into the whole process as we move on
21 into looking at how the transportation requirements are established.

22 These interactions with the federal government and the
23 transportation are really, are so important because as we move over with
24 shipping packages across the state line, these interactions with the different
25 communities become critical for us to be so informed as what are the needs of

1 the different communities, as well as what are the potential additional
2 interactions we need to have with the federal and state partners.

3 CHAIRMAN HANSON: Thank you.

4 Just one last quick question on that. I appreciate the level of
5 outreach there.

6 You know, any tour of an American city knows that those
7 transportation corridors, particular rail corridors and highways often traverse
8 environmental justice communities. So, is there going to be a special focus as
9 part of the outreach on that?

10 MS. DIAZ-SANABRIA: I would have to defer that question to
11 either Allan or Jessie.

12 MS. QUINTERO: Hi. So this is Jessie.

13 So, if there is a licensing action with any review associated, then
14 we would do an environmental justice analysis with that environmental review.

15 MR. BARKER: I can also share that as I work with tribal outreach
16 and tribal governments I can also share that information to our agency, what
17 the opportunities are for participation. That would be something that would fall
18 into the RSLO role.

19 MR. LUBINSKI: If I could also, Commissioner, John Lubinski
20 here. From a tribal outreach, we do participate in meetings which have many
21 tribal nations participating.

22 They're very active right now in providing us comments as we
23 continue to move forward, including how we are going to consult on shipments
24 of spent fuel in the future and how we're going to continue to communicate with
25 them in going forward.

1 And then, of course, as we go through the completion of our
2 readiness review, a big aspect of that is going to be the outreach to the local
3 communities so that they have an understanding of what the overall shipments
4 are and what the roles of the state and locals are as compared to the NRC and
5 the Department of Transportation. As you said, we work very closely with them.

6 So that will be part of our communication and outreach that's
7 addressed through our readiness review.

8 CHAIRMAN HANSON: Okay. Thank you. And thanks to my
9 colleagues for letting me use a little extra time. Commissioner Baran.

10 COMMISSIONER BARAN: Oh, well, thank you for your
11 presentations. I want to start where the Chairman ended, which is with
12 environmental justice.

13 I'm excited that a few weeks ago the Commission unanimously
14 tasked the staff with performing a systematic review of whether environmental
15 justice is appropriately considered and addressed in the Agency's programs,
16 policies, and activities.

17 My expectation is that the staff will consult with a broad range of
18 stakeholders and develop recommendations to improve how the Agency
19 pursues environmental justice.

20 We should be asking tough questions about the way the Agency
21 has traditionally operated. We need to take a fresh look at our adjudicatory
22 procedures, environmental reviews, and current environmental justice policy
23 statement from 2004.

24 I also believe we should seriously consider establishing an
25 advisory committee on environmental justice.

1 This systematic review is a big endeavor. But I'm optimistic that
2 we can achieve significant, tangible results on environmental justice.

3 Now, Allan, hearing the ideas and perspectives of tribes is going
4 to be critical to this effort. And this question really builds on the conversation
5 you and Jessie had with Commissioner Wright earlier.

6 How do you think the staff taskforce can most effectively engage
7 the tribes to seek their input and suggestions as part of this environmental
8 justice effort?

9 MR. BARKER: I'm going to begin by saying that the point or the
10 words when I hear underserved communities is also a point of not being
11 exposed to a knowledge or background of our agency. And I believe that you
12 need to look at one of my strengths I provided was be proactive to serve, not
13 reactive to address.

14 So, as Jessie has mentioned before, I think it's really important
15 to our agency is to do the early involvement of outreach and involvement of
16 what our agency is and to learn what that tribal nation has as their priorities.

17 If you think about tribal nations, they think, like we said,
18 generations not years. So they look at generations before their own generation
19 and the generation under.

20 If we would explore what those critical parts of and, you know,
21 which will link to environmental justice, we could bring out those items and
22 really serve that community well.

23 But I always approach underserved community in the ideal
24 maybe they've never been, you know, been touched by our agency. So it goes
25 again. I'll share it that way. And then I believe also Darrell will have some

1 comments.

2 MR. ROBERTS: Thanks, Allan. I think you handled it very well
3 in terms of the specific question regarding how we might best engage tribes as
4 part of this effort to respond to the SRM.

5 I would just add to that that we've already set up the steering
6 committee for overseeing this effort in response to the SRM, Commissioner.

7 We have a team that's being set up currently as we speak being
8 led by a couple of very capable executives that we are very happy with and
9 confident that they'll be able to incorporate some of these thoughts, these
10 aspects of engagement with the tribal nations that Allan spoke to so eloquently
11 and that Jessie spoke to in terms of our general approach to environmental
12 justice.

13 So it will be a multi-office effort, including NRR, NMSS, OGC,
14 SBCR. We'll have some regional aspects involved with the state, or the RSLO,
15 regional state liaison officers. And so it will be a cross-agency effort to address,
16 as you indicated, a very important effort to respond to the SRM.

17 COMMISSIONER BARAN: Thanks, Darrell. That's terrific.

18 During the past year or so during the pandemic, some
19 inspections in this business line and others have been performed remotely out
20 of necessity. I see that as a temporary measure that made sense during an
21 extremely unusual and challenging public health emergency.

22 I think we all appreciate the value of and need for in-person
23 safety and security inspections, whether it's the ability to walk down safety
24 equipment, talk informally with licensee employees, observe operations
25 firsthand, or the intangible but very real effect of having inspectors with an NRC

1 hard hat visible around the facility.

2 Technologies that allow inspectors to monitor some facility
3 conditions remotely can be valuable tools but should not take the place of in-
4 person inspection.

5 NMSS is conducting a COVID-19 oversight assessment. I
6 generally think it makes sense to perform a lessons learned review from this
7 period.

8 But I am concerned that the Phase B Working Group charter
9 includes an effort to identify what inspection areas in each program are most
10 suitable for remote inspection from this point forward.

11 John, can you tell us more about what the working group will be
12 looking at when it comes to remote inspections?

13 MR. LUBINSKI: Thank you, Commissioner. So we will be
14 looking overall, and as you said, which areas. You know, that area could be
15 very little depending on the type of facility we're talking about or it could be
16 pretty broad.

17 As you heard during the last presentation, there were a lot of
18 mixed views from the regulator community on that, as well as the inspectors in
19 our community. So, as we continue to look forward, we're only going to take
20 out the best practices that we believe continue to enhance our work.

21 Will we ever go to a fully remote inspection? I seriously doubt
22 that. Even during the pandemic, there were many inspections in this area,
23 spent fuel storage and transportation, that were done on site, pouring of a pad
24 for an ISFSI as an example. Something you really can't look at afterwards.
25 You have to look at it along the way.

1 And we did those inspections during the public health
2 emergency. We were able to schedule appropriately. We were able to protect
3 our people appropriately getting to the site and being at the site.

4 So, from a scope standpoint, we're asking to look at what are the
5 areas that we found to be effective, which are not, and then how do we build on
6 them.

7 For the areas that were effective, we also area looking at are
8 there additional tools that could help, two-in-one devices as you're going after
9 the plant so that maybe an inspector out at the site has more access to IT
10 equipment that gives them better access to people back in the office.

11 So, rather than sending three or four people to an inspection,
12 we're sending one or two people. And the remote part is really the part of folks
13 that may have had a limited scope look and could do most of their work either
14 by being out on site or looking at things across video.

15 But we've set no goals right now for that to say how much should
16 be remote, how much should be on site.

17 We see the value of continuing to have people on site. And we
18 will continue to have people on site as we move forward. But they're really
19 looking at what the best practices are.

20 You had asked specifically about inspection. But when I look at
21 this, I'm going to go to something Jessie talked about earlier, as well as what
22 we talked about in general about our programs.

23 There are a lot of things that worked very well during the public
24 health emergency, our remote communications, being on teams like this for this
25 meeting.

1 So I look at it from the standpoint of how we do our routine work,
2 how we're doing it from a licensing standpoint, as you said, and how we're
3 doing it from an inspection standpoint, and then the same thing for our public
4 outreach.

5 Now, what we want to do is only pull forward those things that
6 provided a benefit. And we're not saying we're trying to re-baseline to the way
7 we were during the pandemic. What we're saying is let's take those best
8 practices, only if they're effective, and move them forward.

9 So I just wanted to share a little broader than just the inspection
10 side.

11 COMMISSIONER BARAN: Okay. Well, I think that's helpful.
12 Am I correct in assuming that NMSS is moving back to in-person safety and
13 security inspections as conditions permit, talking about more the present tense?

14 MR. LUBINSKI: In the present tense, yes, we are continuing to
15 get out to the sites. As the environments allow for inspectors, they are getting
16 back out to the sites and not performing as many remote inspections. But that
17 tool is still there. I think Larry said during the last presentation, right, another
18 tool to have in your tool belt. It is there going forward.

19 So, to say that we're going to be right back to the area where we
20 did it exactly the way we did in February of '20, I would say we're moving that
21 direction, but that's not necessarily the goal that it's going to be exactly done
22 that way. We can still continue to use some of the remote tools that we have if
23 they are appropriate.

24 COMMISSIONER BARAN: Okay. But going forward kind of
25 thinking big picture, as we enter this post-COVID new normal, whenever we get

1 to that point exactly, is the default going to be in-person inspection?

2 MR. LUBINSKI: Well, I think from a default standpoint, when you
3 say default, default would be looking at our programs and saying you have to
4 have some presence on site. Okay. As I said, I don't believe we would ever be
5 there. I think that's your starting point.

6 And then as you're doing your inspection planning and making
7 determinations based on what you've learned coming out of COVID and what
8 we're going to learn out of the Phase B, you can continue to implement those
9 on a case-by-case basis as we continue to move forward.

10 In other words, we're not going to wait until the Phase B is done
11 to say you can't do any remote inspections and you revert back to your
12 February of 2020 type way of doing inspections.

13 You continue to move forward on a case-by-case basis, again,
14 making sure that we're continuing to meet our inspection, guidance on our
15 inspection procedures and continuing to make sure that we do have an onsite
16 presence and have onsite inspectors.

17 COMMISSIONER BARAN: Okay. Well, thanks, John. I'll be
18 watching this effort closely, because I'll be honest, I have real concerns about
19 entertaining the idea of increased use of remote inspections in normal times.

20 You know, what counts as effective in the midst of a pandemic
21 emergency is one thing. Whether that's as effective as having people on site is
22 really a different question.

23 And in my view, in-person inspection should be the rule, and
24 remote inspection should be the rare exception in normal times.

25 When I talk to inspectors, when I talk to regional managers, they

1 emphasize that in-person inspections are really superior to remote inspections.

2 And they have real world examples of issues that inspectors found in person

3 that would not have been detected remotely.

4 So I think we need to be really cautious about calling something

5 that we did in an emergency a best practice and then applying that broadly

6 going forward. I think that could be a real problem.

7 Technology is great. But it's not, from my point of view,

8 something that replaces having folks on site. Thanks.

9 CHAIRMAN HANSON: Thank you, Commissioner Baran.

10 Commissioner Caputo.

11 COMMISSIONER CAPUTO: Thank you. I'm going to follow on

12 a little bit to Commissioner Baran's line of questioning.

13 John, I'm assuming as you do this Phase B work and do this

14 evaluation of trying to strike the right balance between remote inspections and

15 onsite that you will be consulting inspectors and regional employees on their

16 real world experience in gathering that data as part of your evaluation. Is that

17 correct?

18 MR. LUBINSKI: Yes, absolutely. It's not just in this program.

19 It's going to be in multiple programs as we do that. We are consulting not just

20 regional management but the inspectors themselves.

21 And much of the focus that we've had at our town hall meetings

22 has been on the conduct of remote inspections and what is effective and also

23 what is not effective. And then even some of that that was effective was not

24 efficient. So, again, if it's not efficient, we're not going to continue to do that.

25 And if I can respond to the last point that Commissioner Baran

1 made, we wholeheartedly agree and we have definitely heard that from
2 inspectors that onsite presence is essential as we continue to move forward.

3 So, again, we're not trying to move towards saying no onsite
4 presence, and that there are certain things that you just have to be on site for
5 and you would find, you would not find if you were not on site.

6 So, yes, Commissioner, we are involving the inspectors that
7 have been through the inspections during COVID and prior to COVID to get
8 their lessons learned.

9 COMMISSIONER CAPUTO: Thanks. Jose, in your discussion
10 of accomplishments, you talked about a graded approach pilot. You mentioned
11 topical reports to address safety analyses and the work done to prepare for the
12 wave of ISFSI renewals resulting in significant efficiency gains, all while
13 ensuring public health and safety.

14 I just want to recognize that this clearly reflects a lot of initiative
15 and hard work on the part of you and your team. And I commend you for it.
16 Job well done. I really --

17 MR. CUADRADO-CARABALLO: Thank you.

18 COMMISSIONER BARAN: -- really appreciate the hard work.

19 And, Allan, I was fascinated by your talk about best practices. I
20 am a huge fan of our advisory committees that we have at the Agency that
21 really do a lot I think to raise cultural awareness and a lot of contributions in
22 terms of discussions on diversity inclusion. I'm a huge fan of those groups. I
23 really appreciate the vibrant and thought-provoking discussions whenever I can
24 participate.

25 So I really appreciate how you gave a shout-out to the Native

1 American Advisory Committee. And I want to take a moment to just thank them
2 for what they have done to support you and help you hone your skills and raise
3 that cultural awareness.

4 And I have to say I have one particular question. You mentioned
5 how in your 12 years you have not used a PowerPoint presentation. Could you
6 just elaborate for us on why, because that seems like a particularly detailed and
7 unique observation?

8 MR. BARKER: Thank you very much for the kind words,
9 Commissioner, on the Native American Advisory Committee. And also, thank
10 you for your question.

11 I've held true to that commitment, personal commitment,
12 because when you do a one-on-one tribal government outreach, you have to
13 have face-to-face dialogue. And I believe that a PowerPoint will distract from
14 that face-to-face dialogue, which will then distract away from the relationship
15 you have built.

16 I have found that there's no subject area from a ISFSI relicensing
17 to whatever it is that's complex enough that you need to have a PowerPoint for.

18 And if you could sit down and face people face-to-face, provide dialogue, and
19 with the ideal that you're sharing genuine dialogue with integrity, it builds the
20 trust, it builds the respect, and it provides where we stand as an Agency for a
21 tribal nation.

22 COMMISSIONER CAPUTO: Thank you. Certainly in the office
23 environment that we have we utilize a lot of PowerPoint presentations as
24 communication tools.

25 But I think it's important for folks to hear why in your particular

1 working environment it's, it can be a distraction that takes you away from that
2 cultural sensitivity and focus on the individuals that you're communicating with
3 and their needs.

4 And I really appreciate you for having that level of detail and that
5 cultural sensitivity. I think that's a big reflection of the dedication that you have
6 for your job and to those relationships that you clearly hold dear. So thank you
7 very much.

8 MR. BARKER: You're very welcome, Commissioner.

9 COMMISSIONER CAPUTO: Yoira, you talked about using data
10 analytics and modern information technology to monitor the overall performance
11 of the business line. Can you talk a little bit about any improvements that
12 you've observed in using that information?

13 MS. DIAZ-SANABRIA: Thanks for the question. The data
14 analytics that we are developing in the storage and transportation, also on the
15 fuel facility, is with respect to establishing platforms on the web-based licensing
16 where we can schedule, see the schedules and see the trends of the schedule.

17 So a few things happen and efficiencies that we're gaining with
18 that is how we use that information in our day-to-day operations.

19 For example, we have meetings where the project managers and
20 the branch chiefs discuss the status of different projects, discuss the potential
21 areas that require elevating issues, because there may be pending issues that
22 may not be resolved on a timely manner. So that shows a little bit more
23 transparency on how we evaluate those issues and more management
24 oversight to that.

25 In addition to the platforms that we're using on web-based

1 licensing, we are also looking at creating some reports, as I mentioned, the use
2 of batch work for budget execution. Ending that I would say that we've been
3 using those reports or we're trying to use those reports to help us formulate the
4 future budgets and also for preparing ourselves for the meetings that we have
5 internally related to QPR, the quality performance reviews that we have
6 internally.

7 COMMISSIONER CAPUTO: Thank you. Jessie, you talked at
8 length about environmental justice. And like Commissioner Baran, this is an
9 issue that I think is very important and I expect to dedicate a fair amount of
10 attention to going forward.

11 And one of the comments, as you made the observation that the
12 Commission's policy statement on the treatment of environmental justice
13 matters, you mentioned that policy statement.

14 And, you know, I recognize that that policy statement is from
15 several years ago. But I'm also guessing that the way the staff implements that
16 policy statement has probably not been static.

17 Does the staff customarily recommend improvements or
18 revisions to our current practices if they identify shortcomings or areas for
19 improvement?

20 MS. QUINTERO: For our reviews for environmental justice
21 reviews in NEPA, we do follow pretty closely to the policy statement. It outlines
22 how we do the review.

23 First you identify the population of low income or minority
24 populations. Then we, then you have to evaluate the impact, if there are any
25 impacts, and then determine if those impacts would be disproportionately felt by

1 the low income or minority populations.

2 And so I think where we've been able to do different things is
3 how we figure that out, you know, how we go into the community and determine
4 if there's patterns or special circumstances in the community that might cause it
5 to feel a disproportionate impact. So I think overall we've followed pretty closely
6 to the policy statement.

7 COMMISSIONER CAPUTO: Thank you. Yes, I'm not doubting
8 whether you follow the policy statement closely. I was expecting that just
9 practices and exactly what you described.

10 The nature of how you go about identifying these communities
11 and interacting with these communities and the nature of how you assess the
12 impacts has probably grown over the years. And thank you for identifying that.

13 And with that, I will stop as my final question.

14 CHAIRMAN HANSON: Thank you, Commissioner Caputo.
15 Thank you to my colleagues. Thank you to the staff, Darrell and John and your
16 teams, for the presentations, all of the information today.

17 You know, as we emerge from the public health emergency, you
18 know, we're sitting here maskless in Rockville. What a pleasure it is to see
19 everyone's faces for the first time in a long time in person.

20 You know, as we're emerging like, not completely unlike Brood X
21 cicadas here in the Washington area, flapping around a little bit, spreading our
22 wings and enjoying the sunshine, it is a great reminder today of the staff's
23 presentations how dedicated and professional and creative they have all been
24 during these last 15 or 16 months in accomplishing the mission.

25 And acknowledging that not all the practices that we've

1 undertaken during this time will continue or should continue, we have learned a
2 lot. And I look forward to seeing the variety of ways in which the staff
3 incorporates those lessons learned into our practices and knowledge going
4 forward.

5 And I just want to appreciate once again and thank the staff
6 across the Agency for really the significant accomplishment in achieving our
7 mission during these really kind of unprecedented times.

8 So, with that, I'll bring the meeting to a close. Thank you all
9 again.

10 (Whereupon, the above-entitled matter went off the record at
11 12:05 p.m.)