

UNITED STATES
NUCLEAR REGULATORY COMMISSION

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BRIEFING ON RESULTS OF THE AGENCY ACTION REVIEW
MEETING

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THURSDAY,
JULY 11, 2024

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The Commission met in the Commissioners' Hearing Room,
at 10:00 a.m. EDT, Christopher T. Hanson, Chair, presiding.

COMMISSION MEMBERS:

CHRISTOPHER T. HANSON, Chair

DAVID A. WRIGHT, Commissioner

ANNIE CAPUTO, Commissioner

BRADLEY R. CROWELL, Commissioner

ALSO PRESENT:

CARRIE M. SAFFORD, Secretary of the Commission

BROOKE CLARK, General Counsel

NRC STAFF:

SCOTT MORRIS, Deputy Executive Director for Reactor and Preparedness
Programs, Office of the Executive Director for Operations

ANDREA VEIL, Director, Office of Nuclear Reactor Regulation

KEVIN WILLIAMS, Director, Division of Materials Safety, Security, State, and
Tribal Programs,

PATRICK FINNEY, Chief, Reactor Assessment Branch, Division of Reactor
Oversight, Office of Nuclear Reactor Regulation

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

(10:00 a.m.)

CHAIR HANSON: All right, good morning everyone.

I convene the Commission's public meeting to order. Today, the Commission will be briefed on the results of the Agency Action Review Meeting, or the AARM, which was held on May 13, 2024.

The AARM is an integral part of the Agency's process, used to ensure the operational safety performance of nuclear licensees.

The AARM is a means for the agency to review on an annual basis, overall industry trends and the effectiveness of the Nuclear Materials and Waste Program, the Reactor Oversight Process, and the construction of Reactor Oversight Process.

I'm looking forward to the discussion today but before we start, I will ask first if my colleagues have any remarks they'd like to make.

(No audible response.)

CHAIR HANSON: No?

Okay, the discussion this morning will be kicked off by our Deputy Executive Director for Reactor and Preparedness Programs, Scott Morris. Scott, the floor is yours.

MR. MORRIS: Thank you.

Good morning, Chair Hanson and Commissions. I really appreciate the opportunity to be here with you today to discuss as you said, the results of the Agency Action Review Meeting, or as we call it the AARM, that was conducted back on May 13 of this year.

The AARM is governed by, the process of the AARM is governed by the Management Directive 8.14, and provides a structured and repeatable mechanism to evaluate the effectiveness of the NRC's oversight processes during the preceding calendar year.

And the appropriateness of NRC's action to address significant performance deficiencies, or, of individual licensees within the Reactor Safety Program, including reactors under construction.

And, the Nuclear Materials and Waste Safety Programs.

The photo on the slide, which is actually Peach Bottom Senior Resident Inspector Scott Rutenkroger, inspecting cold weather preps.

Next slide, please.

This slide summarizes the objectives of the AARM. Senior Agency management from the Executive Director for Operations Office, the Program Offices, and all four regional offices participated in the AARM, bringing together an extensive base of knowledge and diverse experience.

The staff revised management Directive 8.14 just a little over a year ago to clarify the applicability of the AARM to all categories of licensees.

For calendar year 2023 I'm pleased to report that no individual licensees met the criteria for having significant performance issues as defined in the Management Directive, where it needed to be discussed at this year's AARM.

Since the AARM or AARM serves as part of, in part as a forum to review overall licensee performance trends, the meeting is conducted annually regardless of whether any individual licensees meet the criteria for

discussion.

At the conclusion of this year's AARM, senior Agency management reviewed all of the meeting objectives listed in the Management Directive, and determined that each had been satisfied.

Can I get the next slide, please?

Okay.

So several staff from the program offices are here with me today to speak in more detail about the results of the May 13 AARM.

Andrea Veil, of course, is the Director of the Office of Nuclear Reactor Regulation, or NRR. Andrea will be presenting a resident and reactor inspector program update.

To my left, Kevin Williams is the director of the Division of Material Safety Security, State and Tribal Programs, in the Office of Nuclear Material Safety and Safeguards.

Kevin will be presenting the fiscal year 2023 Nuclear Materials and Waste Safety Program performance and trends analysis.

To Kevin's left is Mr. Pat Finney. He is currently the Senior Resident Inspector at the Hope Creek Nuclear Generating Station, in Region I, and he will be presenting the calendar year 2023 reactor oversight process and construction reactor oversight process self-assessment results.

So with that, I will turn it over to Andrea.

MS. VEIL: All right, thank you, Scott. I'll cover a summary of the resident inspector demographics that were provided with the 2023 ROP self-assessment.

The data is collected annually and reported to the Commission every 3 years. The summary includes recent survey results not previously reported.

I'll also discuss regional inspector staffing, work that is in progress, and future actions. Note that resident program health is now tracked as part of the enterprise risk management.

I really like when we can highlight the staff, so in the photo if we can get the first photo?

We have Waterford resident inspectors Andrew Patz, who is sitting right there, and Drew Childs, inspecting a large turbine casing during an outage.

Next slide, please.

Despite continued focus on fully staffing the resident inspector program, 2023 saw a significant amount of resident inspector turnover; specially, 34 percent.

This percentage is much higher than the normal deviations of between 20 and 25 percent. And the highest that we've seen since 2007.

This chart shows that the most significant driver for turnover was promotions to senior resident, which demonstrates that inspectors are remaining in the program, but it's also a reflection of high senior resident turnover.

Next slide, please.

The senior resident turnover trend tends to be more variable than the residents. An assumption is that senior resident inspectors are more

likely to do full tours, and those tours may have naturally aligned with several positions expiring in the same year.

Despite that, we would not have expected to see so many turnovers so recently after the high turnover in 2020.

This is not necessarily an adverse trend, but the numbers were much higher than we would like in a given year.

Turnover was particularly high in Regions II and IV, for both residents and senior residents. Region I saw typical numbers, and Region III was actually very low. But their 2022 rate was very high.

Similarly, notice the drop in 2021 following the higher numbers in 2020. It appears that inspectors were not interested in moving again so soon after relocating.

This is an important point as we watch for trends in 2024, and consider effectiveness of the retention incentive, and other initiatives.

A prediction for 2024 is that we should see lower than normal turnover at both the resident, and senior resident positions.

With that in mind, we should not declare success until we collect more than one year's worth of data. If we see that numbers remain higher than 25 percent, we may need to consider additional action.

To give you some historical perspective, 2007 saw turnover this high but the difference is the regions had a healthy pool of qualified inspectors available for backfills, and permanent assignments.

That said, you'll see in a moment that the 2007 site staffing metric was affected, but still remained green.

Next slide, please.

As a result of the turnover, we can see the amount of NRC, total resident, and current site experience among resident inspectors, all lowered in 2023.

The relevant non-NRC experience is also down, which indicates a shift in the demographics of our hiring.

As of March 2024, 11 of the 22 current resident inspector development program, or RIDP, participants, were hired directly from college.

And, that includes the nuclear regulatory apprenticeship network participants, or from other industries.

Next slide, please.

Despite the high amount of turnover among our senior residents, there is no discernible trend in experience.

Even though we have many new resident inspectors, there are still many in the program with substantial experience. This shows that we are retaining a core group of seniors with over 10 years of experience.

We focus on knowledge transfer and cross-pollination from more senior inspectors, to the new inspectors.

We also don't use a one size fits all solution, since inspector experiences vary.

Next slide, please.

Now, this is the ROP self-assessment site staffing metric trend over its entire history. And this is sometimes called the Davis-Besse metric.

Specifically, the Davis-Besse lessons learned report, Section 3.353 recommended that the NRC should establish measurements for resident inspector staffing, including the establishment of program expectations to satisfy minimum staffing levels.

It tracks annual resident inspector site coverage percentage. This metric was yellow for the first time in 2022, and continued to be yellow in 2023 with a downward trend.

This data supports the regional and NRR concerns regarding site staffing, and contributed to the justification for the recently implemented resident inspector retention incentive.

Note the dip in 2007, which is the last time we saw significant amount of turnover as I mentioned earlier.

But again, higher staffing in the regions enabled us to address the turnover at that time. But we did stand up a working group in 2008 to look at resident inspector staffing issues.

There is no 2014 data because the Commission directed the staff to not conduct the ROP self-assessment that year, while we reformatted the program.

Next slide, please.

For the RIDP, 2020 to 2022 saw a slow increase in participants as we focused our external hiring to get to eight budgeted positions per region.

The numbers at the end of 2023, however, show that we may have reached a plateau of around 20 where the number of staff entering the

RIP equaled, the RIDP equaled attrition.

This is despite a dedicated hiring effort by the regions, who brought in over 60 new RIDP participants over this same period.

The result is a continued trend of very short periods in the regions during which new inspectors complete their basic qualifications.

The reduced number of RIDP candidates has resulted in increased gaps for permanent senior resident, and resident inspector assignments.

As of March 2024, there were 24 personnel in the RIDP. But of those, nine were already selected to go to sites leaving five that are at least basic qualified, and 10 that are still going through basic qualification.

Next slide, please.

We surveyed the residents every six months since December of 2021. Some of the questions are repeated so we can have trending in the survey responses.

One question asked the residents and RIDP members to rate their level of satisfaction with the program on a scale of 1 to 5. The result has consistently been 3.0 for 2 years.

The last survey was conducted in February and that was shortly after the retention incentive was announced.

There was a step increase in satisfaction from 3.0 to 3.38. While admittedly that's small, it was a noticeable jump from previous surveys.

We hope to see satisfaction increase more as residents start to see the retention incentives in their paychecks, which will first happen in

March of 2025.

Next slide, please.

We also asked the residents to provide any written feedback that they wished to provide. Forty-seven provided comments on the most recent survey.

The written text on the left of the next few slides are samples of the anonymous responses that we received from the residents.

The quotes on the right are attributed to the person on the slide, so I wanted to make that perfectly clear.

Six provided generally positive feedback. One resident stated, I was going to get out of the resident inspector program but after this new retention incentive, I will definitely be doing a follow on tour.

Eight responses were specifically focused on relocation burdens and their effect on the desirability of the program.

There are always responses with varying degrees of negative feedback, but with no strong trend or theme.

We usually see suggestions with ways to increase pay, and there were still some of those, but fewer given the retention incentive.

Regarding the last bullet on the slide the full comment was, the resident program is inadequately supported by NRC leadership.

We need more personnel to accomplish the requisite functions, and more support from other business offices that have as one of their core functions, a duty to make our jobs easier and more efficient versus more difficult.

Next slide, please.

In 2019 and 2020 there were significant concerns in the program about promotion potential. In recent years, promotion potential has not been much of a concern, especially when compared to pay and relocation.

But when asked, most resident inspectors say they do not believe there is much promotion potential as there used to be, or as advertised.

So the perception still persists.

With that in mind, we continue to monitor promotions for former residents and I'm happy to say that in 2022, former residents fared very well with 9 promoted to GG-15 positions.

This year we saw the number drop to four, but there were not significant promotion opportunities in the regional offices in 2023.

The previous two senior executive service candidate development program classes had few former residents in them, such as the number of senior executives with resident experience dropped in 2022. But actually increased a bit in 2023.

That said, the most recent class to graduate had six former resident inspectors, and two just accepted deputy director positions in the regions, which are SES positions.

Next slide, please.

I want to now shift focus a bit to regional inspector staffing. Unlike the residents, there is no similar demographic program that tracks regional staffing, and experience.

The information provided here is based on the informal polling

of regional engineering inspection branches.

While regions are able to staff most inspection support internally, and across other regions, about eight contractors and 3-4 headquarters staff are needed each year to fully resource engineering inspections, despite our goal of phasing out contractor support.

Headquarters staff supporting regional inspections used to be somewhat rare. However, more recently it's become a necessity.

While staffing members don't show a vacancy concern, in fact, we have over hires, a number of them, there has been a significant amount of turnover and newer inspectors are still qualified.

Compared to residents, regional inspectors take significantly more on the job and technical training to become an effective inspector.

Even beyond full qualification, it takes additional time before an engineering inspector is proficient at performing specific, specialized inspections.

Regional inspectors have challenges that are different from residents. While they are not required to relocate, they are required to travel more frequently.

And while we discussed the perception among residents that promotion potential is low, it can be even lower among regional inspectors.

While the challenge is not the same as it is for resident inspector staffing such that immediate action is required, the NRR Division of Reactor Oversight, or DRO, and the regions are beginning to place increased attention on this issue.

The regions have over hired into these positions in anticipation of future staffing needs. The issue has also been raised at two recent regional division directors' counterpart meetings.

DRO intends to include regional inspection branch staffing and training, and the Region III audit this fall, and share its findings with other regions so that we can identify and address any common concerns.

And one note on this slide. While the photo is from the resident campaign, Fabian is currently serving as a region-based engineering inspector.

Next slide, please.

We accomplished a lot last year and addressed some resident inspector concerns. Even before we conducted the trust huddle last fall, we proposed the 15 percent retention incentive, with the goal to retain our inspectors and their positions longer, and place less stress on our recruitment sources.

Initial data is sparse but there are some indications it will have an intended effect.

We also had a celebration of 50 years of this vital program. Since 1974 we have stationed resident inspectors at commercial reactor and category I fuel cycle facilities.

We celebrated by highlighting the history and the importance of the program in various ways, including at the regulatory information conference, the regional counterpart meetings, and in social media.

In fact, this slide and the others that you saw are from the

social media campaign.

Finally, I want to talk about next steps. NRR will work with the regions and OCHCO, to ensure effective implementation of the retention incentive, as the first payments come due next year.

We will also assess the effectiveness of that initiative.

We are continuing to monitor the program to see if our predictions hold true. The EDO's office, NRR, and the regions will continue our focus on program health.

In fact, it is a key discussion topic in our quarterly performance review meetings, and it is an enterprise risk.

The resident inspector standing committee will continue its work, sharing best practices and concerns among the regions, and communicating with the residents.

Lastly, we will more closely look at regional inspection staffing concerns and determine if additional action is warranted.

Despite the challenges that I have discussed today, I want to emphasize that we accomplished the baseline inspection program in 2023.

And resident inspectors still provided consistent, onsite presence ensuring reasonable assurance of adequate protection.

I'd now like to turn it over to Kevin Williams.

MR. WILLIAMS: Thank you, Andrea.

I'd like to acknowledge and appreciate Jenny Fisher in my division, who coordinated across many offices and regions to obtain input from the Agency Action Review Meeting, and our supporting Commission paper.

I will give some highlights and insights from our annual Commission paper. I'll be sharing multiple success stories, and I also have photographs throughout the presentation to highlight some of the good work that is being done in NMSS, and in the regions.

Here we have a photo of Kimyata Morgan Butler, and a health physics inspector, Elizabeth Tindle-Engelmann.

They had traveled to a job site in Indiana for an inspection of a licensee's use of a portable nuclear gauge.

Next slide, please.

Our Materials and Weight Safety team assessed the event and enforcement data to look for trends, and to evaluate whether our regulatory programs are working appropriately.

We will share more about the results of this assessment in future slides, but we wanted to conclude up front that the overall health of the Nuclear Materials and Weight Safety Program is good.

From analyzing this data, there were no licensee performance issues identified. Also, there were no NRC program issues or gaps identified, including no generic issues.

In fiscal year 23, there were no Part 21 reports that were relevant to our business lines. Staff assessed the licensees against the performance criteria to determine whether their performance warranted discussion at the AARM. No licensees met this criteria.

In the photo, NRC Decommissioning Inspector Bill Lin, who is in the center with the gray hat, was working alongside NRC contractors at the

decommissioning Zion Nuclear Power Plant, to perform a survey to support license termination.

Next slide, please.

Our program met the performance goals in the agency strategic plan for both safety and security, with no occurrences that met the reporting criteria.

The first strategic goal to ensure the safe and secure use of radioactive materials, was assessed by output-based performance indicators.

This was an area of focus in our annual Commission Report, and we did not exceed any of the performance measures.

Strategic goals 2 and 3 focused on organizational health and stakeholder confidence. Our management team has continued to put a strong emphasis in these areas.

These strategic goals are supported by outcome-based performance indicators, and the annual performance plan and report indicates that we're moving in the right direction.

In this picture, Michael Wutkowski and Michael Reichards, are performing radiation scans during the installation of a new source in the Cobalt-60 Beam Irradiator, equipment used for the calibration of radiation detection instruments, they are at the Naval Surface Warfare Center, Carderock Division.

Next slide, please.

The figure in this slide represents the nuclear materials users events of all types at both the NRC licensees, and agreement state licensees.

For the benefit of the public, agreement states are those

states that have entered into an agreement with the NRC to be the regulator of radioactive material in their respective state.

Agreement states issue radioactive material licenses, and maintain and enforce regulations.

The NRC and agreement states make up the National Materials Program. The trend analysis determined that statistically significant decreasing trends are applicable for both the NRC, and agreement state events.

We concluded that the decreasing trend in event data is associated with the continued work and improvements within the NRC, and agreement states' regulatory programs.

As licensees provide corrective actions for enforcement, their processes have become more robust.

During and after COVID, we asked if the decreasing trend was connected to COVID. As another year of data was added, it was clear that licensees are reporting less events.

The decrease in the events is not connected.

Throughout the years, we have issued meaningful and impactful generic communications. These have allowed licensees to maintain awareness of issues and events that are reported to the NRC.

We have increased program consistency and the communication with the National Materials Program champion chats, which are monthly meetings between the NRC staff and agreement state staff, and bi-weekly meetings which are between the miss director and the board of

organization of agreement states.

As we observe the decreases in events, it shows we are on the right path.

Next slide.

The nuclear materials users had 376 event notifications in fiscal year 23. This is for 17,698 licensees.

In comparison, the fuel facilities had 15 event notifications, and this is for eight facilities.

The Nuclear Materials Users business line has many more licensees than other business lines. We are displaying the results of each business line individually.

Each type of industry has its own reporting requirements, which prohibits a direct comparison of events.

For instance, licensees with low-level waste uranium recovery sites and complex material decommissioning, had no events.

Decommissioning reactors had two events. This is expected given that regulatory framework inconsistent with data from past years.

On this slide, we are featuring a photo of Division Director Anthony Masters, and Senior Fuel Facility Project Inspector Nick Peterka, both from the Division of Fuel Facility Inspection, in Region II.

They are arriving at Global Nuclear Fuels in Wilmington, North Carolina, prior to the landfall of Hurricane Idalia, to provide hurricane coverage.

Next slide, please.

Our annual assessment also includes an evaluation of significant events, called abnormal occurrences.

Earlier this summer, we issued the fiscal year 2023 Abnormal Occurrence Report to Congress. It included 11 abnormal occurrences.

Seven of those were medical events, and one was an overexposure of an embryo, which occurred during a medical procedure. And three events were industrial radiographer cameras.

The number of abnormal occurrences is compared to the number in prior years, is comparable, sorry, to the number of in prior years, and is also a tiny fraction of the millions of nuclear medicine and radiation therapy procedures performed in the United States annually.

This photo has Andy Halloran, an Agreement State Inspector, who works for the Washington office of Radiation Protection, who is performing a radiation survey.

Next slide.

There are no adverse trends in enforcement. Our assessment included the review of significant enforcement actions that were issued to our business lines in fiscal year 23.

Including severity level 2 and 3 violations and problems, confirmatory orders, orders with civil penalties, and a revocation order.

In fiscal year 23, the Nuclear Materials Users had 41 escalated enforcement actions for NRC licensees, and the fuel facilities had three.

In addition to the review it included an annual report, the staff

also included severity level 4 violations and non-citing violations in the Operating Experience Assessments.

The staff issued an information notice last fall to communicate to the licensees, a series of fire safety related level 4, severity level 4 and non-cited violations, which had been identified during NRC inspections at decommissioning nuclear power plants.

Next slide, please.

To assess whether a program meets its regulations, we rely on an Integrative Materials Performance Evaluation Program, or IMPEP, to gauge the health of our nationwide regulatory programs.

The agreement states and the NRC work very collaboratively to enhance the National Materials Program. It's a partnership.

We recently had a periodic review meeting in which an agreement state led the review of the NRC.

This is an enhancement in our collaboration, and our ability to work together remains strong.

Keisha Cornelius, who is the chair of the Organization of Agreement States, participated in this year's AARM meeting.

We are happy to include this representation in the AARM, and in the discussions that occurred there.

The National Materials Program remains protective of the public health and safety, and regulating the use of radioactive materials.

Thirty-five programs remain adequate to protect public health and safety, with four agreement state programs being adequate but needs

improvement.

In this photo, we are featuring an IMPEP team as it performing an exit meeting in New Jersey. Each IMPEP takes a lot of collaboration.

In this photo, we have representation from NMSS, Region I, Region III, the state of Tennessee, and of course, New Jersey.

Next slide.

This past year, representatives from NMSS and the four Regions, collaborated on a self-assessment of the Independent Spent Fuel Storage Installation Inspection Program, for the benefit of the public and its ISFSI is a facility design to store spent fuel on a temporary basis.

The self-assessment concluded that the ISFSI Inspection Program is effective in achieving its program goals.

The self-assessment included an effectiveness review of the enhanced ISFSI Inspection Program, which was implemented in 2021.

The enhanced program took a more risk informed, comprehensive and consistent approach to the oversight of spent fuel storage across the country.

One of the improvements that I'd like to highlight is the qualification of ISFSI inspectors. This change is also relevant to the Office of Inspector General, Special Inquiry Report, which was issued in February of 2023.

This report noted that some inspectors perform inspections of the ISFSI in the 2012 to 2020 timeframe, without all of the training required for

an ISFSI inspection.

These staff members were qualified inspectors who possessed relevant knowledge, considering their training and qualification in related areas.

With the enhancements implemented in 2021, the training and qualification requirements were clarified to bring consistency to the NRC's approach for cross-qualifying reactor and resident inspectors perform ISFSI inspections.

The revised cross-qualification program also eliminated redundancies in the qualification programs, while maintaining quality.

The streamlined approach was used to train several newly qualified inspectors across the regional offices.

The ISFSI Inspection Program was enhanced in other areas, as well. The revision in inspection procedures and priorities has further aided the staff in focusing on high-risk activities, and will benefit new inspectors in guiding their efforts.

In this photo, Health Physicist Nicole Fields is conducting a radiation survey of a dry cask at Big Rock ISFSI. This photo is from a couple years back, but it still fits nicely into the theme of the slide.

Next slide, please.

In summary, I am reporting on a year that had many successes, no adverse trends that required action, and no licensees have met the significant issue criteria.

NMSS and the regions work together very effectively. Our

continued collaboration with the agreement states, continues to be one of our strengths.

The coordination that we do there is resulting in an effective and healthy National Materials Program.

Strengthening community and culture has been a continued focus in both NMSS, and in the regions. And as just one example, I've included a picture of a new style event that NMSS held.

Speed meet and greet. This event focused on professional networking. This was a very nice event that gave staff an opportunity, and chat to get to know each other outside of their projects and work roles.

Now I'll turn it over to Pat Finney.

MR. FINNEY: Thank you, Kevin. I'll be briefing you on the 2023 ROP self-assessment results, plans for the 2024 ROP self-assessment, status of the ROP, and the construction ROP self-assessment results. And the photos on the slide, you see Senior Resident Inspector Paul Cataldo inspect a Ginna-operated valve at the Seabrook Nuclear Power Plant; a Ginna Senior Resident Inspector, Jason Schussler, performing a plant walkdown.

Next slide, please.

The purpose of the self-assessment program is to evaluate the ROP's overall effectiveness. As a key part of this program, we actively seek feedback from all stakeholders, both internal and external, to continue to improve the ROP.

In this photo, Millstone Senior Resident Inspector Justin Fuller is performing an inspection during the refueling outage.

Next slide, please.

The Calendar Year 2023 self-assessment results show that the ROP continues to provide effective oversight of operating reactors after more than two decades of implementation. The ROP continues to be implemented in accordance with the NRC's principles of good regulation and supports the agency's strategic goals to ensure the safe and secure use of radioactive materials and to inspire stakeholder confidence in the NRC.

In the top photo you see License Examiner Cherie Crisden and Chris Lally observing an operator exam at the Peach Bottom Nuclear Power Plant. And below, you see FERMI Resident Inspector John Gewargis performing inspections in the torus.

Next slide, please.

There are three elements of the ROP self-assessment program. The first element measures regional and program office effectiveness and uniformity in implementing the ROP. The second element assesses effectiveness of recent ROP changes and evaluates the NRC's response to significant licensee events or declining licensee performance. And the third element performs focused assessments of specific ROP program areas including the baseline inspection program.

We performed self-assessment activities under each of these three elements in 2023. Under Element 1, the staff performed a review of performance metrics, data trending, program area evaluations, and an ROP implementation audit of Region 2.

Under Element 2, we completed an effectiveness review of

the incorporation of safety culture assessment into the ROP and completed items in the ROP lessons learned tracker.

Under Element 3, we completed a revised inspection procedure monitoring and reporting process within NRR's Division of Reactor Oversight and expanded its applicability to other divisions and offices with ROP baseline oversight responsibilities. This photo is of Inspectors Tim Debey, Russ Bywater, and Nathan Brown at the Arkansas Nuclear One Power Plant.

Next slide, please.

For Calendar Year 2023 there were no red ROP performance metrics. Two metrics were yellow and the remaining 15 were green. For context, in Calendar Year 2022, there were two red and two yellow ROP performance metrics.

Analysis of resident inspector site staffing was yellow. As Andrea mentioned earlier, this metric was yellow in Calendar Year 2022 and remained that color in 2023. 2023 drivers were due to a combination of factors including staffing challenges associated with placing permanent residents on insufficient number of inspector-qualified staff to provide backfill during gaps between permanent residents and having limited staff available for short term site coverage. As discussed previously, resident staffing continues to be an area of agency focus.

The SDP completion timeliness for potentially greater than green findings was also yellow. For 2023, the staff identified several contributing causes that led to untimely final significance determinations, but did not identify any themes or common causal factors.

Issuing findings in a timely manner is a fundamental attribute of the SDP and it has been a long-standing metric in the ROP in some form. While this metric has remained yellow since Calendar Year 2020 due to increased focus in this area, SDP timeliness has steadily improved from 33 percent, one of three timely determinations in Calendar Year 2021, to 82 percent, 14 of 17 timely determinations in Calendar Year 2023.

Additionally, as a result of an SDP timeliness review in late Calendar Year 2022, the staff developed five recommendations to broadly improve both the overall SDP and the ROP metric definition of timeliness. Three of those recommendations are complete and the remaining two are expected to complete this year. In Calendar Year 2023, there were no deviations from the ROP action matrix.

Next slide, please.

The three elements of the ROP self-assessment appear again here, reflecting our plans for the program in Calendar Year 2024. In addition to the routine efforts of performance metrics, trending data, and program area evaluations, efforts specific to the ROP self-assessment plan include a triennial focus assessment of both the baseline security SDP and accident radiation monitoring in the emergency preparedness SDP and an audit of Region 3's implementation of the ROP.

Plans for other ROP-related activities include the continued review of insights, trends, and lessons learned in applying the modified ROP to the AP1000 units at Vogtle.

Next slide, please.

There are other updates included in the ROP self-assessment SECY worth mentioning here. In Calendar Year '23, the NRC returned to full implementation of the inspection and oversight program. The working group implemented key recommendations from the COVID-19 Lessons-Learned Working Group report.

In Calendar Year 2022, the Commission approved the transition to a quadrennial or four year engineering inspection cycle, comprised of one comprehensive engineering team inspection and three different focused-engineering inspections. That new quadrennial inspection cycle began on January 1st, 2023.

Staff also continued to enhance ROP data processing capabilities including several changes to the ROP and of cycle dashboard to provide up to date, year round, and implementation of an RPS or a reactor program system upgrade to allow additional inspection tracking and planning features.

In the fall of 2023, the staff completed an ROP data strategy and implementation working group effort that documented best practices and strategic recommendations. Finally, NRC staff are considering how artificial intelligence can be used to improve the NRC's oversight process.

In the SECY, there is also a discussion of the construction ROP for Calendar Year 2023 and the application of a modified ROP for AP1000 units at Vogtle that I will discuss next. In this photo, Fitzpatrick Resident Inspector Jennifer England is inspecting the torus.

Next slide, please.

The construction ROP provides oversight of licensee activities to provide reasonable assurance that facilities have been constructed in accordance with the license and will operate safely. The construction ROP assesses licensee performance and objectively measures quality and safety. For the first half of Calendar Year '23, Vogtle Unit 4 remained under the construction ROP. Vogtle Unit 3 transferred to the ROP in August of 2022 and has been operating commercially since the end of July 2023.

In Calendar Year 2023, the construction ROP was effective in meeting its goals and consistent with the NRC's principles of good regulation. The former Vogtle Project Office and Region 2's Division of Construction Oversight successfully implemented the construction ROP for Vogtle Unit 4 to ensure that the licensee met the requirements of the regulations, the combined license, and the programs for inspection, licensing tests, analyses, and acceptance criteria or ITAAC.

Next slide, please.

On July 28, 2023, the NRC found pursuant to 10 CFR 52.103(G) commonly referred to as the 103(G) finding that the acceptance criteria and the combined license for Vogtle Unit 4 were and the operation of the facility was authorized. The NRC staff issued the 103(G) finding seven calendar days following receipt of the all ITAAC complete notification from Southern Nuclear Operating Company, less than the 17-day goal described in office instructions.

Following the affirmative 103(G) finding, NRC transitioned Vogtle Unit 4 to oversight under the ROP. During the limited time that the

modified ROP has been applied to Vogtle Units 3 and 4, the staff have not yet identified any significant insights, trends, or lessons learned regarding the complement of inspectors or the treatment of non-safety related systems in the baseline inspection program.

In this photo, you see Construction Inspector Brian Griman and Senior Construction Inspector Scott Egli, both at Vogtle Unit 4.

Next slide, please.

In the construction reactor oversight process performance metric report for Calendar Year 2023 which only applied to Vogtle Unit 4, the staff found that the construction ROP successfully met the acceptance criteria for all applicable self-assessment program metrics for 2023. There were no deviations from the construction ROP action matrix during Calendar Year 2023.

As of the end of the year, the Division of Construction Oversight had performed approximately 54,000 hours of direct inspections since the start of Vogtle construction. The ITAAC and programmatic inspection hours were near equal to initial estimates and this overall total is less than the 70,000 total hours estimated for two units.

With the completion of the construction ROP for Vogtle Unit 4, the staff ended inspection of ITAAC as they were no longer applicable. The Division of Construction Oversight staff continued to inspect the operational programs for Vogtle Unit 4 under the ROP until April 26th of this year when Southern Nuclear Company submitted notification of completion of power ascension tests and commenced commercial operations.

This photo is of Branch Chief Nicole Coovert touring Vogtle

Unit 4 with Construction Inspector Luis Colon Fuentes.

Next slide, please.

Throughout Calendar Year 2023, the staff continued to leverage the staff's construction lessons learned initiative which began in 2021 and shared results of the effort both internally and externally. Internally, the staff continued to capture lessons learned in its knowledge resource Wiki Nuclepedia and staff expertise has been shared within NRR as we develop the advanced reactor construction oversight process.

Staff published a publicly-available report on its lessons learned initiative, 10 CFR Part 52 Construction Lessons Learned report in mid-January 2024. Finally, the staff facilitated a comprehensive public meeting in February 2024, to present that report, collect general comments from the industry and the public, and hold discussions regarding content and possible applications of the lessons learned.

This concludes the discussion of a construction ROP. The top photo of this slide is Reactor Operations Engineer Tom Fredette and the bottom is Senior Construction Inspector Raju Patel, both performing inspections at Vogtle Unit 4.

I'll now turn it back over to Scott for our closing remarks.

MR. MORRIS: Thank you, Pat. So in closing, I really want to thank all of the Program Office directors and regional administrators for their active engagement during our discussions at the AARM, along with the staff members who gathered and developed all the data that we used to inform our decisions. Their work to coordinate that meeting and actually support today's

briefing for the Commission was outstanding.

The discussions at this year's AARM reaffirmed at the agency's oversight actions were consistent with our established oversight processes and were appropriate for the safety and security performance demonstrated by our licensees. Our oversight programs continue to be effective and support the agency's strategic goals to ensure the safe and secure use of radioactive materials and to inspire stakeholder confidence.

Finally, I want to use this opportunity to say thank you to all of our inspectors. Some of you have been pictured in the slides that you've seen today. We have recognized and appreciate that you're on the front lines of the agency's oversight mission. Our inspectors play an absolutely critical role in ensuring that the agency meets its important mission as an independent safety and security regulator and we greatly appreciate their contributions.

Thank you for this opportunity today and we look forward to your questions.

CHAIR HANSON: Thanks, Scott. We'll begin questions this morning with Commissioner Crowell.

COMMISSIONER CROWELL: Thank you, Mr. Chair. Thanks to all the panelists today for a good presentation. I try to take it as a good sign that we're here just as staff today and not with our licensees. I don't believe that's because we're missing anything. I think it's hopefully a reflection of implementing our program and processes appropriately.

I'm going to start with some questions about the resident inspector program and they're kind of broad, so probably directed towards

Andre and Scott, but Pat, I would encourage you to chime in with personal or more granular experience on any of this stuff.

I guess, first of all, I'll say the challenges related to resident inspector are unique at some level, but they're not challenges that are necessarily exclusive to resident inspectors. There's others. Regional inspectors face similar challenges and there's a variety of unique positions around the NRC that require looking at things differently for the importance of the role and for retention and recruitment.

So in preparing for today's meeting, I came across a SECY that was from before my time here in 2019 and I don't actually know if it got across the finish line, but I was -- both Commissioner Wright and Commissioner Caputo were here at that time and voted on the SECY and one common theme I saw in their votes was a request or encouragement to look at other federal agencies for best practices.

Can you give me some sense of what -- did that happen and what came of that? What have we taken from others or learned from others that were implemented at the NRC for the resident inspector program?

MS. VEIL: Yes, we have looked at other federal agencies. I think post-pandemic there's a change, I think, across the board, let's just say that. Most of our residents realize that in-person presence is the norm, but if you ask them, they'll ask for extra flexibility. We're seeing that across the board with federal agencies.

2019 was a little bit -- it was definitely before my time in this role, but my understanding is from the benchmarking that we have done, we

have some unique challenges, but the challenges that were common, we are starting to address and have addressed from that 2019 period. One is the 15 percent retention that we talked about. Others was total compensation package being increased. There are all kinds of initiatives even for spouses of residents and there's a whole lot more that I'm sure Scott wants to talk about.

MR. MORRIS: If I could just add, DOE, Department of Energy, they have an analogous position to the residents. They call them site reps or facility reps. I recently had an opportunity in New Orleans to meet with that group of people and we had a really interesting conversation about some of the -- and there is a lot of commonality. I mean in many of these sites that they go to are remote, like ours. And they expressed to me some of the same challenges. But I'm not as familiar with the benchmarking activities that were done post-2019.

COMMISSIONER CROWELL: I would be interested at some point, if you don't have it today, whether that compares in our benchmarking, has been done post-COVID as well as just pre-COVID, and what's different or changed. I'm sure some of that's ongoing as well, but it's always good to look at other agencies and see what's working for them that works for us, rather than creating something new out of whole cloth.

Somewhat contrary to that comment right there, I have one idea that I've heard a few times since during my tenure at the NRC that I haven't necessarily seen reflected in outcomes from brainstorming on resident inspector incentives and that's whether senior resident inspectors should be able to be GG-15s, either supervisory or nonsupervisory, or have them be SLs

or something like. It seems like an easy way to solve some of the issues out there.

Has that been looked at and why or why was it deemed feasible?

MR. MORRIS: Thanks for the question. We did look at it and in fact, and I hope we get an opportunity to talk about the action, some of the other actions that came out of the trust huddle that we had last September. We took 11 action items coming out of there and that was one of them, among other related ones. I'm just digging through my notes here to see if I could find - - but essentially, as my recollection -- I'll just go on my memory. The idea of moving senior residents to 15 positions was deemed untenable for a bunch of reasons. And that was -- and I can't remember all the details, but that's ultimately where we came out and I might have to ask for help on that.

But there was -- you know, it goes to pay this -- there are pay disparities that then are introduced because you've done that with other individuals. What's also -- just looking purely at the classification guides that are established. When you look at the specific functions of every position, we do this for every position in the agency. There's a classification guide that says that OCHCO does that says these functions equal this pay grade.

COMMISSIONER CROWELL: Sure, but there's exceptions to everything and the host of other incentives for the resident inspector are exceptions to many of the norms and it just seems like we're creating a lot of incentives that kind of add up to what may be easily accomplished in more flexibility with allowing the GG-15 role. I'm sure there's a

management/nonmanagement issue here, but one of the reasons I raise this is because I have concern that the only way for resident inspectors to get into a management role or a GG-15 pay band is either go back to the region or go to headquarters and that's --

MR. MORRIS: Two other items and thanks for that. So two other items as you were talking entered my mind. And one is when the tour is over, if the individual is a 15, they're going to have to encumber a 15 position somewhere else in the agency. They're not going to take a reduction in grade. That would be a disincentive.

And then -- I already lost the other one. But there was another. Oh, gosh.

COMMISSIONER CROWELL: Has SL been looked at for --

MR. MORRIS: I don't think we looked at SL. I'm looking over at Phil and Russ and I don't think we looked at that.

COMMISSIONER CROWELL: We can continue the discussion with my colleagues after this meeting, but I just wanted to get to Kevin, too.

MR. MORRIS: With the incentives that we've already have put in place including the relocation and now the retention, in addition to the special pay scales, et cetera, the total compensation -- there's still a total compensation limit for federal employees and some of our 14s, senior residents now, with all those incentives are already bumping up against those total compensation limits. And so it doesn't necessarily translate --

COMMISSIONER CROWELL: You can't have all of it. I

agree, but I'm just saying if those incentives -- you can accomplish the cumulative effect of a lot of the incentives now through a simple --

MR. MORRIS: I understand. I understand.

COMMISSIONER CROWELL: We'll come back to it.

MR. MORRIS: Thank you.

COMMISSIONER CROWELL: Kevin, there's a lot I want to talk to you about. I'm not going to have time to talk about all of it, so I'm going to just try to do a little bit of ISFSI inspection issues here.

I have struggled to understand the OIG report on this and what either went sideways or didn't go sideways and how it's been rectified. Was there a prior lack of clarity in guidance or whatever direction was needed clearly saying that inspectors, ISFSI inspectors needed to have certification to inspect those facilities, not just -- so resident inspectors can do that?

MR. WILLIAMS: I'll start and maybe -- I may have to have John Lubinski come up and talk through this, but in looking in the IG report, the whole thought in terms of why we thought the resident inspectors were capable of doing that is because they had the expertise. They were quite capable of their -- of doing those types of activities.

You can also look at in terms of the procedures that we need to shore that up and those are where I think we landed, was hey, let's add some clarity to our procedures to ensure that they're qualified to do that, if they have the experience, and they have the capability to do that. I think that's where we were kind of talking across there.

COMMISSIONER CROWELL: Okay, and I see John over

there. I'm happy to hear from him, too. I mean we have pretty clear guidelines in this agency that need to be certified to use the bathroom down the hall, so I don't know like where this got missed.

John?

MR. LUBINSKI: Thank you, John Lubinski, Director of the Office of Nuclear Material Safety and Safeguards. In clarifying your question, Commissioner, you're referring to the report that issued it. OIG came out with the finding earlier that said we needed to ensure that ISFSI inspectors were qualified. And then the most recent report that came out questioned whether or not we actually implemented the recommendations. I think from a communications standpoint and that's your question of expectations, the way we implemented those expectations is the way we do in other areas as well is where we give inspectors credit for certain activities that they've already been qualified to do and making a judgment of whether they're qualified to work in another program.

In the cases that occurred in this report, the inspectors were already qualified as resident inspectors or reactor inspectors in the area. In most cases, they were resident inspectors and therefore, had all of the qualifications to perform what was essential to sites, looking at heavy loads, looking at welding procedures, looking at all the processes that were key and essential to performing inspections of the ISFSI operations. Judgments were made by their supervisors that that was an equivalent level of expertise. Where the expectations weren't clear is the documentation of that and having clear documentation that a one-for-one was done from the procedure to the

qualifications of the individuals and maintaining records of that.

As we continue to move forward, we maintain that in the program where the managers can use those types of past qualifications to make judgments. In going forward, we added some additional requirements to the program as well, to make sure that there's some consistency. And at this point all of the regions are implementing it in accordance with the new program. It helps.

COMMISSIONER CROWELL: It does. Previously though, was this an issue across all regions?

MR. LUBINSKI: So the issue was as the IG pointed out, was more prominent in Region 2. The reason we believe it was probably more prominent in Region 2 is most of the other regions had more stand-alone ISFSIs, ISFSIs at decommissioning sites where Region 2 did not have the independence. So they had a lot of this being done by resident inspectors who already were at the site. They were collocated so there was more a heavy reliance on those folks, as well as some of the attrition that occurred within that region. But we looked at this collectively across all regions. As we made changes to the program, we involved not only the management but the inspectors of all four regions in the development of the new inspection program, as well as the revisions to the qualification program.

COMMISSIONER CROWELL: And you're now fully confident that there's consistency amongst all the regions?

MR. LUBINSKI: Yes.

COMMISSIONER CROWELL: Great. Thanks. And I thank

my colleagues for indulging me with this time.

CHAIR HANSON: Thank you, Commissioner Crowell. Thanks, everyone for being here and Pat, you're the stand-in this morning, so I'll thank you, along with all the other resident inspectors and the engineering inspectors and others that we have to travel around the country and do the important oversight work of this agency every day in locations near and far, in your case a little nearer than far, but still deeply appreciated for your service and everyone else's in the resident inspector corps and so many others.

With that, I do want to kind of pick up on where Commissioner Crowell started on the resident inspector program. And I guess, you know, Andrea or Scott, I don't remember which one of you mentioned that the health of the resident inspector program is tracked in the enterprise risk management tracker thing. Okay. But based on the slides, I don't actually have a good sense. Is the program healthy or not? And how does that roll up on a monthly basis? And what does all this kind of add up to? I can't tell.

MS. VEIL: So we definitely have challenges and what we started to do in the Division of Reactor -- the DRO, NRO, DRO Division, is look at data analytics and try to figure out if we can predict future trends, internal trends, so we can get ahead of some of the gapping. So the program is getting healthier. That's the way I will put it. I would not say that the program is healthy right now because we have all of this evidence and all of this data to show that we have challenges with staffing. We have people from headquarters, folks that work for me that go backfill. So the program is getting healthier. We hope to look at the data in a year to see if the incentive is

helping, but we have challenges and it's not healthy right now. The program is getting healthier.

CHAIR HANSON: I mean I think it's important and if you go back to the 2019 SECY, I'm glad Commissioner Crowell brought that up, right? I know I've said on a number of occasions that the expectation, at least for me and I think some other commissioners have said this as well, that the resident inspector program be healthy and robust, not just -- that's not just an expectation of the two of you, but also of our regional administrators. And go make it so and come see the Commission if you need assistance, right?

So I think part of my issue as I look at these, as I look at the slides and I go through the presentation, it feels like we're continuing to kind of - - as we used to say in consulting, paint the problem six different colors, right? And so we've got -- I didn't know that had 11 action items coming out of the trust huddle, but fundamentally, I'm looking at this and going okay, what's the plan, right? And what treatments need to be applied and how much time do we need to wait to understand the effectiveness of those treatments? So great, we did the retention incentives. Okay. But at least in briefings that I've had with the folks who are monitoring the health of the resident inspector program going back a couple of years, right, we knew that it was more than just money, right? That it was support from headquarters. That was one of the comments in here. It was about promotion potential. It was about all these other things. So we've done one thing, but what's the plan? I come away from this and I don't know what the plan is.

MS. VEIL: So we've done a number of things and we will

continue -- we need to continue to monitor and do more, obviously, but the SES CDP was one action. We have a number of SES -- we realized in the last class, they didn't have a lot of residents in it. There were six in this most recent class. And two just got their SES position. So that was a known item that we looked at and said we need to move forward.

We're continuing to look at a number of things and it does seem like it's just piecemeal, but everything matters cumulatively. When you look at residents, the fact that they may have kids in school and they don't want to move, so every regional administrator can use their authority to on a case-by-case basis look at that resident inspector and see what they need to do for that tour. You can extend that tour. So there are ways that individuals are being -- compensated is the wrong word, but their individual needs are being taken care of, but we're at this program office and as the EDO, are looking at more broad items that we can do. And as I said, usually it takes a year to really get trending on specific things. We set the incentives at a year so that we can have more data and understand what we're looking at in terms of whether or not the retention incentive has made a difference.

MR. MORRIS: Thanks, Andrea. So, I'll just start with saying when I first came to my current position about a year and a half ago, I set five objectives, key objectives that I personally wanted to focus on and I thought was important to the agency, and one of the five was the health of the resident inspector program.

And so, something I've taken on as a personal, high personal interest and have worked with my direct reports, including Andrea and the

regional administrators, to continue to, A, understand what the issues are, and B, what are we actually going to do, and three, how are we going to hold ourselves accountable, right?

So, the first thing I learned or became evident that I didn't fully appreciate when I was a regional administrator at the time, and it probably has to do with the timing of COVID and when we exited it, but the residents told us they felt underappreciated, right.

And there were a lot of reasons why they felt that way, and I won't enumerate them here in the interests of time, but that was huge, and then, so the first thing, one of the first things we do is we need to reinvigorate, or not reinvigorate, but get a better understanding of the why behind that.

And so, a couple of things that we did, including, I think Pat mentioned, or maybe it was Andrea that mentioned the standing committee that we've had since August of 2022, which is led out of NRR and supported by the regions, that focuses continuously on the health, and recruitment, and retention issues associated with the resident program.

The trust huddle was another big one. It was an opportunity to listen. It was a four-hour session, myself, Andrea, all of the regional administrators to just listen, and then at the end, capture what we thought we heard and get validation that we heard what they had to say was correct, and then develop this action item list that, as I said, is 11 items long.

But we couldn't do all of them all at once, so when we asked what's the most important, what we were told was compensation is most important. That is it. So, that's where we spent our initial energy was to work

on the compensation issues, whether it had to do with adjusting locality pay, or the now this relocation, I'm sorry, retention incentive.

But that was just the beginning. We're also looking at the end of tour telework. I've got -- I mean, I can certainly share this list with you, but there are flexibilities in telework. There's --

CHAIR HANSON: Okay.

MR. MORRIS: It's a whole range.

CHAIR HANSON: Yeah.

MR. MORRIS: Andrea mentioned supporting the spouses, et cetera, so.

CHAIR HANSON: Yeah, thank you. Look, I think that, you know, something like a listening session is probably important, but at least for myself, and at least in conversation with my colleagues, right, when we go out to the sites, we sit down and, you know, I make it a point either at the beginning of the day or the end of the day to talk to resident inspectors about what's working in the program, and what isn't, and what can we do better, and so on and so forth.

And I would guess that some of the things that I've learned have been, are probably on your list. So, you know, how that happens or not is, you know, how you learn those things, but I can certainly tell you that the underappreciation part and the -- I mean, it's startling, right? I mean, the inadequately supported by NRC leadership. That's a big deal.

MR. MORRIS: Huge.

CHAIR HANSON: And it should be clearer to the

Commission what you all are doing about that because, you know, when I go, and I've repeated back to people when I go to the regions and when I talk to resident inspectors that hey, it's not just about the money, it's about feeling supported from the region, that the regions and headquarters have their backs when they need to go on maternity or paternity leave, or they need to go do a rotational assignment, or they need to be away for a weekend because they want to go, you know, they need to go to a family member's wedding, right? I mean, it's like that's pretty basic stuff and we should have an answer for how specifically we're addressing that.

MR. MORRIS: And we do, and I can share it with you, certainly.

CHAIR HANSON: We don't have to get into the details, but again, I think this is --

MR. MORRIS: I agree with everything you just said.

CHAIR HANSON: I think this is, you know, really important, and I'm glad, but just, you know, and one last thing, and I mean this affectionately and very respectfully, that having the trust huddle is not an accomplishment. It's part of the process, right?

And it's important to get feedback, but actually putting things in place and addressing the action items that came out of the trust huddle, those will be accomplishments, so let's track those, okay? Thank you. Commissioner Wright?

COMMISSIONER WRIGHT: Thank you, Chair, and good morning to each of you. Thank you for the time it took for you to prepare for

today, and this is an important meeting. It's very interesting. There's a lot -- the resident program is very important and special to, personally important to me.

And I appreciate the Chair's comments and Commissioner Crowell's. I'm going to get on the same path in a minute, but I'm going to go a different way, okay? I really think that it's important that we have structured ways for evaluating the effectiveness of the NRC's oversight process, and this is an opportunity for us to discuss that.

Self-assessment coupled with meaningful metrics is crucial. That's why Commissioner Caputo and I authored, jointly authored a communication last year on the need for measuring NRC success with the right metrics, metrics that matter, provide us the data and the information that we can act on, and I'm not sure that we're there yet on that.

As I've mentioned before, this is a really exciting time to be in nuclear. The prospects of new and advanced reactors are more concrete than ever and demand is clear, and it's our job, the NRC's job, to enable the safe use of nuclear power, and we need to be accountable to all our stakeholders while we do that and clearly communicate metrics for our regulatory activities.

You know, it aligns with our principles of good regulation and it's going to help the agency identify innovative improvements as needed, as well as inspire confidence in our ability to meet this very important moment in time.

So, thank you for providing the information that you have today and for what we're going to be doing going forward, and I encourage you and us as an agency to continue to monitor and to make improvements in our

people, our programs, and our processes.

And as I mentioned earlier, I really appreciate hearing about the resident inspection program, so I'm going to start with questions there. Andrea, I'd like to come to you first. You know, on slide seven, you talked about the average number of years of resident inspector experience at the NRC, and that number's been trending down over the last several years. And the Chair kind of spoke a little bit to those dashboards, and the importance, and the information we're really kind of looking for, right?

It looks like the average number of years that our residents spend at the NRC is about four and a half according to this slide. To me, this means our program is useful, not young, because it's a mature program, but youthful, and a lot of people apparently came in either right before or during COVID, right?

So, you know that I've traveled a lot in doing my resident for a day program, so I've had the chance to talk to a lot of residents, and I like to ask them what it takes to be a good resident and how you learn those skills, and so this is the path I was telling you I'm going to go different on.

I've had resident inspectors, still do, on my staff since I've become a commissioner, and they've given me more valuable insights on what it takes than really someone who hasn't been there. They've all consistently told me that in some ways learning the technical aspects of the job is the easy part.

We've got the TTC, and they do a great job and have a lot of folks already, you know, they have the technical knowledge when they begin as

residents, whether -- you know, also they could be from the Navy. They could be from a different job at the NRC or have an engineering degree of some type.

What's not so easy is to learn the soft skills, right, of being a resident. How do you interact with the licensee on a daily basis? How do you know who to talk to at the plant to get the real story on an issue? What do you do when the site VP says something isn't a problem, but somebody at the working level tells you that it is?

How do you get a sense of when you need to engage the region or NRR for technical support or on a particular issue, right? All of these things are the things that I don't think you can learn in a classroom, right?

And what I've heard from residents is that the best way to learn these skills, you might even call them instincts, is to observe them firsthand, right, and from a senior resident who has been in the field for a long time. You watch them do their job, you ask them questions, and eventually, you're able to learn those skills yourself, right? That proves that experience matters, and you only gain that over time. It seems like, even though you say that ten years some of the people have been there, but it seems like we've lost a lot of the experience, okay, in the senior ranks, and your dashboards show that, and that's a lot of learning that we've lost. So, my question to you is what are we doing about that? What are we doing to get our newer residents that type of learning opportunity and build that instinct quicker?

MS. VEIL: Yes, and I'll answer and try to stay brief, but I want to give a little bit of context on the number of residents and kind of the experience levels.

So, if I recall correctly, there are about eight resident inspectors that have more than 20 years' experience, about six that have about 15 years, and about nine that have ten years, so all together, it's about a quarter of the resident force that have over ten years' experience, but you're correct, there are 44 inspectors that have less than two years' experience, so that's where you're seeing the averages.

So, one of the things that you said that's so important is that you can't just rely on classroom training, right? So, some of the things that the regions are doing and NRO, I mean NRR, not NRO, are doing is there are liaisons that help folks that are qualifying in the regions that serve as a conduit between them and management to kind of learn that, like you said, the soft skill, and kind of how to be an inspector.

There's also retired annuitants that are being brought back to work with the newer inspectors. There's the really, really good inspector, quarterly inspector newsletter that's been, forever has been coming out. It's got practical experience in it, and trivia, and can you find the deficiency-type things in there?

But one of the kind of biggest new programs that has come out is the competency-based qualification. It's enhanced and it's being moved into full implementation now, and what it is, is it looks at individuals' competencies and their knowledge.

So, instead of just sitting down for classroom instruction, because they may not need that, it looks at what they need, and it gets you two things. It gets you qualification quicker, and it also gets you more tailored

experience so that people can enter the field with more experience than they had when they started and then continue to learn that experience.

There's Nuclepedia. There's all kinds of things that we use, but you're exactly right. And then the other program I'll put a plug in for is NRR DRO does a weekly knowledge management session that gets recorded every week. Anybody can participate in it. And so, those are just some of the ways that we try to get to what you described.

MR. MORRIS: There's no substitute for experience and time in the job, and apprenticeship is one of the key ways we do that, right? And I can tell you from my own personal experience as a resident and senior resident inspector, the most impactful person that I've ever had the privilege to work with at the NRC was my first senior resident inspector.

COMMISSIONER WRIGHT: And I've heard that.

MR. MORRIS: Absolutely, one hundred percent.

COMMISSIONER WRIGHT: Yeah.

MR. MORRIS: And Pat might have some insights.

COMMISSIONER WRIGHT: Yeah, and I'm going to come to Pat about that, yeah.

MR. FINNEY: Yeah, so I agree with Andrea. You know, I wrote down to myself the CBQ. We are implementing this now that the pilot is over, so this will be a new manual chapter qualification that will replace the C-1 manual chapter 1245 for residents, but the goal there is to get them out in the field quicker and get them qualified.

Post that qualification, then they can go back and address

some of the maybe the not more pertinent things, but it's very field intensive, right, to get them out there and exposed to the things that you alluded to, and then we do have the KT sessions.

And the only other thing I was going to acknowledge was during the Region II ROP implementation audit, one of the strengths that we recognized in Region II was they had post tour, post resident tour persons dedicated to mentoring in their location. Forgive me, I think it was one of the Florida plants, but that was a recognized strength, so.

COMMISSIONER WRIGHT: Yeah, you mentioned the word exposure. Exposure doesn't replace -- it doesn't make experience, right? And the execution, that's what we're really looking to get to, but you want the execution to be done with someone who knows, you know, by someone who really knows what they're doing and why they're doing what they're doing, right?

So, one, I welcome. It's your first Commission meeting where you've had to present, right? Congratulations on your decision to go back to be a senior resident inspector. I don't know if that came with a pay cut or not, but we're glad that you're there because we need good seniors and we need people who are passionate about what they do, and obviously, your decision to do that indicates that that's a love of yours.

So, you know, I encourage anybody who is here in the room today, you know, if you're passionate about something like that, get involved in it. You know, you've got good people who can shepherd you and teach you, and then we're here to support any way we can. So, thank you so much.

CHAIR HANSON: Thank you. Commissioner Caputo?

COMMISSIONER CAPUTO: Good morning. Thank you all for being here. Thank you, Pat, for coming and contributing. Kevin, it looks like you're skating free without questions today.

(Laughter.)

COMMISSIONER CAPUTO: And I don't know that I'm going to be any different, but it's not a reflection that the Commission doesn't value the work of your division and the assessments that have gone over the year, the work that they continue to do in inspection space and reviewing procedures, and looking for ways to improve. So, thank you for all of your leadership, and for the hard work of your staff and all of the inspectors that support the program.

So, I'm going to mention something today that hasn't been discussed yet, but I'm also going to end up asking about resident inspectors as well. But I'm going to start by mentioning since the action review meeting on May 13, President Biden signed the ADVANCE Act into law, and in the Act, Congress emphasizes the need for the NRC to become more efficient, including directing that we modify our mission statement.

The Act uses the word efficient and efficiency 21 times, and the word timely another 15 times. Section 507 of the Act, quote, improving oversight and inspection programs, requires us to provide a report to Congress next year that, quote, identifies specific improvements to nuclear reactor and materials oversight and inspection programs to maximize their efficiency, end quote.

While the Act only became law last week, I note that the plans

for ROP self-assessment on slide 31 seemed to focus on effectiveness and do not examine efficiency. I look forward to the staff's modifying such reviews of the inspection oversight programs to align with congressional expectations.

While the Agency may be regarded as effective in its oversight, clearly based on the review and the results that we're hearing today, there is clearly a view that we are not necessarily efficient or timely.

Andrea, under your predecessor's leadership, the staff proposed a number of enhancements to the ROP. Staff later withdrew those recommendations, reevaluated their bases, and resubmitted modified recommendations to the Commission, including a reversal of one of those recommendations. That seemed to be based on a shift in staff opinion rather than any new information or analyses.

As I have noted before, U.S. operating reactors together have thousands of years, of reactor years of operating experience. The Nuclear Energy Institute produced an analysis demonstrating how the agency had dramatically improved its safety performance over decades, according to every NRC and INPO performance indicator.

With that experience and safety improvement comes a highly refined understanding of the technology and a wealth of risk information, yet the agency's action review seems to neglect positive trends and focus on looking at negative trends in performance.

To continue, our accident sequence precursor program states that, quote, licensee risk management initiatives are effective in maintaining a flat or decreasing risk profile for the industry, and also states the number of

precursors identified remain at historically low values.

So, with regard to oversight and inspection programs, the ADVANCE Act specifically directs the agency to, quote, maximize the efficiency of such programs through, where appropriate, the use of risk-informed, performance-based procedures, expanded incorporation of information technologies, and staff training. How do you envision implementing this direction given the advancement of risk insights and longstanding performance improvement demonstrated by the industry?

MS. VEIL: We agree that there's been a longstanding trend of safety improving, and I think an opportunity is something that Pat talked about with the significance determination process and more timely decision making.

We can take risk insights or whatever it is that we may be looking at, and take the best available information that we have and make decisions a lot quicker, so we're not getting metrics that are yellow. That's a timeliness aspect of it, and I do see the STP as an opportunity to get better.

The other things that we continuously do with the ROP is look at what information we have and try to adjust what inspection samples. Every region administrator and also inspectors have that autonomy to look at what samples that they're selecting for that particular day or what they're looking at for the baseline inspection, and they can inherently use risk insights and change what they're looking at.

I think what's important is we've been looking at the ADVANCE Act even before it was signed into law, and now that it has, we need

to really codify and write down what it is that we're going to do, plan, and look at ways to show and demonstrate that we are using risk insights and we're trying to get more timely with oversight and inspection.

COMMISSIONER CAPUTO: I'll acknowledge the two that you mentioned, but I would respectfully suggest that those are small aspects. I clearly think that Congress expects us to strive harder to accomplish more significant outcomes than just that. So, I hope the review that you anticipate is far more innovative and thorough in looking at ensuring that the reactor oversight, given the decades of experience we have since implementation of the program, does, in fact, align with our principles of good regulation, and that the regulatory activities are consistent with the risk reduction that it's achieving.

With regard to the resident inspector program, the gap in the data on slide nine resulted from Commission approval to cease reporting for a period of time on some of the resident inspector metrics. This was done over the objection of then Commissioner Svinicki.

In her vote, she wrote, and I quote, to a person, every single regional administrator accounts to me in our routine meetings the ongoing challenges associated with this area of staffing, and by my observation, filling these positions does not seem to be getting any easier.

Furthermore, it is a position described in every single NRC press release announcing the selection of resident inspectors as, quote, the agency's eyes and ears, end quote, in conduction of safety oversight at nuclear power plants.

Consequently, it's essential to keep the Commission's attention on this matter through routine reporting. If the report on demographics is eliminated, the staff should submit annually a compilation of four high-level summaries, one from each region containing the number of resident inspector positions turned over that year and the number due to turn over in the coming two years, the number of qualified candidates who applied for each opportunity that arose and their relevant years of experience, and the number of resident inspectors currently serving under an extension of time and how long those extensions are expected to exist before mandatory rotation can be accomplished.

That was an observation for 2015. Sadly, her observations are still ongoing challenges for the resident inspector program. It's becoming clear that the financial incentives that have been put in place to date have not ameliorated the program. And while the trust huddle was conducted last year, if I understand it correctly today, the incentive that you all are putting in place will not be in place until 2025, which is a two-year span.

Based on conversations I've had, like the Chairman mentioned, we all have conversations with the residents, I've had anecdotal conversations where resident inspectors, senior resident inspectors with considerable experience advise newer employees not to pursue a career as a resident inspector because the number of career opportunities within the agency that require resident experience has shrunk, and that there are plentiful opportunities for a career path and career development that do not require resident experience.

They also note that the predecessor program to the NRAN program used to require time spent at a plant, which the current program makes it an option, so we are not necessarily exposing all of our incoming employees to what life is like working as a resident, which I believe is a missed opportunity in terms of recruitment.

So, I believe the staff should provide a report with the elements described by Commissioner Svinicki, and also report on the number, locations, duration, and cost of temporary resident inspector placements which are done to compensate for delays in assignment of permanent resident inspectors.

As commissioners, we continually emphasize how we value our residents. I believe our leadership and management positions would benefit from a greater complement of personnel with resident experience. So, Scott, have you or the senior management team looked at qualifications for management positions or senior non-supervisory staff positions to determine how resident experience could improve the qualifications of someone to hold those positions?

MR. MORRIS: Yeah, thank you for question, and what I would say is we had numerous conversations at my level and amongst the office directors and regional administrators who are engaged in the resident program to talk about not only acknowledging the challenges -- some of which can't be overcome, right, and I won't go into those in detail, but they existed even when I was a resident inspector 30 years ago, so they're just the realities of the job.

But what we have also tried to do, and have, and shared, I try to share it every opportunity I can, including with the summarizers and the NRAN-ers earlier this week, to talk about the value of that experience and how it sets -- it doesn't guarantee. There's nothing magic about the resident inspector experience that is absolutely -- or there's no position outside of resident inspectors that absolutely mandates that someone have resident inspector experience.

That being said, being a resident inspector provides enumerable opportunities to learn broadly about what this agency does, why we do it, why we do it the way we do it, gives them opportunities to really work on some of the softer skills, right, that really have set people up.

I think we've got something like 25 or 30 percent of the most senior executives in this agency are former senior residents, including myself, and what we trace that back to is these soft skills that were mentioned earlier. It's your ability to assess, interact, communicate.

And you get so much experience doing that as a resident because you're in the field with one or two other individuals at a site with 500 or 700, and you're trying to -- and you learn discernment. You learn discretion.

You learn how to apply risk insights very early in your career if you're like me who started as a resident inspector, and those are the skills that really propel people to the next level, to greater opportunities.

It's not that there's positions that we've defined to say in order to encumber this position, the individual must have had resident -- that's not the case, but there are clearly positions, especially in leadership positions or senior

staff positions, SL positions where those skills, particularly the softer skills, really become brought to bear in a very important way.

And so, I would leave it at that, but there are -- we have not -- the short answer to your question is we haven't carved out specific positions that say, you know, as a matter of course, you have to have resident experience to encumber that position.

COMMISSIONER CAPUTO: Well, I think the staff should examine how that was done in the past and how there were positions that required resident experience, because I understand you may be emphasizing the softer side, but I would also suggest that these residents on a daily basis are discriminating based on relative risk and risk significance, and that is a practical experience that I think the agency would strongly benefit from in a range of positions.

So, I think the staff should examine how to develop career path opportunities that value resident experience, and make the resident inspector positions more attractive. This should include considering expanding resident inspector experience requirements for additional positions, either in senior management or senior non-supervisory staff positions. Thank you.

CHAIR HANSON: Thank you, Commissioner Caputo, and thanks again to everyone for being here today, and thanks for the good discussion and, of course, the briefing on the results of our May 13 agency action review meeting. Thanks to my colleagues for your questions and comments, and with that, we are adjourned. Thank you.

(Whereupon, the above-entitled matter went off the record at

11:33 a.m.)