UNITED STATES

NUCLEAR REGULATORY COMMISSION

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TODAY AND TOMORROW ACROSS REGION II BUSINESS LINES

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WEDNESDAY,

OCTOBER 30, 2024

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The Commission met in the Region II Office, 245 Peachtree Center Ave NE, Atlanta, Georgia, at 1:00 p.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

EXTERNAL PANEL:

SEAN PATTERSON, Regulatory Affairs & Environmental, Safety, & Health Manager, Honeywell Metropolis Works Facility

ROBERT S. FREEMAN, Chief Growth Officer, Fuel, North America, Framatome Inc.

JOHN WILLIAMS, Senior Vice President of Technical Services and External Affairs, Southern Company

SCOTT HUNNEWELL, Vice President for TVA=s New Nuclear Program, Tennessee Valley Authority

JEFF PLACE, Executive Vice President of Industry Strategy, The Institute of Nuclear Power Operations

SHELLY STANCIL, Georgia State Liaison Officer, Safety and Compliance Supervisor, Georgia Environmental Protection Division

NRC STAFF:

MIRELA GAVRILAS, Executive Director for Operations

MARK MILLER, Deputy Regional Administrator, Region II

LaDONNA SUGGS, Director, Division of Fuels, Radiological Safety, and Security, Region II

TOM STEPHEN, Senior Reactor Analyst, Technical Support and Assessment Branch, Division of Operating Reactor Safety, Region II

WILLIAM TRUSS, Acting Senior Resident Inspector, Vogtle 3&4, Region II

JOHN PELCHAT, Senior Government Liaison Officer, Region II

PROCEEDINGS

1:00 p.m.

CHAIR HANSON: Good afternoon, everyone. I convene the Nuclear Regulatory Commission's public meeting for the purpose of hearing about activities here at the Region II office. I continue to see a tremendous value in hosting public meetings outside of headquarters, and I want to thank Laura, and Mark, and the whole team at Region II for hosting us today, and as always, a big thank you for SECY for making all of this happen and making sure that these meetings run smoothly.

We're going to hear from two panels today. I think we'll just dive right in. The first is a panel of external stakeholders who are going to speak about a wide range of topics from current and future landscapes of the nuclear industry and engagement with NRC regional staff, and then we'll take a short break, and then we'll hear from NRC staff about the various activities here in Region II.

Before we start, I'll ask my colleagues if they have any remarks they'd like to make? Okay, good to have everybody here. We're going to begin first with Sean Patterson. He's the Head of Regulatory Affairs and Environmental Safety and Health Manager for the Honeywell Metropolis Works Facility. Mr. Patterson, the floor is yours.

MR. PATTERSON: Thank you, Chair Hanson. I appreciate the opportunity to speak with you today. My topic for today is the perspective of a Part 40 licensee from idle state to full operations and future perspectives. Next slide, please?

To give a background of the pre-idle state, Honeywell

submitted our license renewal application in February of 2017, and it was accepted by the NRC May of that year.

The announcement to idle the plant due to market conditions was made in November of 2017. A plan was developed to convert the intermediate material to final product, and then remove all of the final product from the process equipment. The UF6 process equipment was maintained in a safe state during the idle time.

The plant removed the rest of the bulk chemical storage that was required over the next six months, and reduced the workforce from approximately 350 to 26 employees. With NRC approval, we relaxed specific requirements of our security order during the idle state. Next slide, please?

Activities conducting during the idle state consisted of receiving, sampling, and shipping uranium ore concentrates. On March 4 of 2020, our NRC license SUB-526 renewal was granted for a 40-year term, and with the renewal came multiple license conditions in the event that the facility would restart. Also during the idle period, we removed five calcium fluoride settling ponds that was an EPA requirement. Next slide, please?

On February 19 of 2021, Honeywell announced a two-year restart plan for the Metropolis facility. A detailed timeline was established, not only to meet our business objectives, but also to meet the NRC license conditions for restart.

A flexible inspection plan was established using core inspection procedures, which included the use of the Smarter Inspection Program that had recently been implemented.

There was excellent communication between Honeywell headquarters and the Region to address the restart license conditions. Region II inspectors would verify and confirm field activities as headquarters would provide document reviews. Region II also conducted a security inspection to ensure that we were in compliance with our security order.

A staggered approach was used to fully implement our emergency response plan. During the restart period, the NRC observed multiple emergency preparedness exercises and conducted multiple inspections. All license conditions were completed in October of 2022, prior to our January of 2023 restart goal. Next slide, please?

The operational plan for the restart was quite complex in which to hire, train, and qualify a workforce that included salary, hourly, and contract workers. A phased approach was implemented to identify key functions needed to evaluate the site condition.

This included inspection and evaluation of infrastructure such as electrical systems and instrumentation, process and fire water systems, and mitigation systems. The same approach was used for the process equipment. Next slide, please?

The site experienced significant challenges tied to the timing of our restart plan. With the country just recovering from the pandemic, we were faced with challenges in staffing, infrastructure support, and supply chain functions. Due to the five-year duration of our idle state, many experienced employees retired or found employment elsewhere. We were able to secure a number of retired employees and short-term contractors to help mentor and assist restart activities.

The extended duration of the idle period also played a part in the loss of existing boilers and higher than expected attrition rates for electric motors and mechanical pumps. Specialized vendors such as vessel coating contractors and industrial refrigeration mechanics were also difficult to obtain at this time.

The supply chain function was perhaps the largest obstacle, with long lead times on specialty items. There were lead times as long as 14 to 16 months on metals and raw materials.

Carbon products were difficult to secure due to some of our previous vendors had discontinued our needed items or completely changed the markets. The Metropolis team overcame these challenges and began full operation in 2023. Next slide, please?

Honeywell made significant capital investments by repairing or replacing over 1,000 piping circuits and over 100 vessels for restart. The plant also seismically upgraded various other support structures such as our administration building and laboratory. New structures were also added as an operations center that was a central control room and a new boiler house. Next slide, please?

The site community engagement committee supports many community programs and organizations, such as school drives, charities, and food pantries. We are initiating a community awareness committee to keep local residents and officials informed of plant activities. Metropolis is now at pre-idle staffing and operating 24/7 with full capacity expected within the next few years.

Earlier this month, Honeywell announced a spinoff of the

advanced materials business into a new publicly traded company. The spinoff does include the Metropolis site and a number of other facilities. This new company creation is targeted for late 2025 or early 2026. No other information is available at this time, but Honeywell will keep the NRC updated as we proceed through this process.

For NRC opportunities, Honeywell would like to encourage the NRC to continue pursuing the Smarter Inspection Program and also continue the efforts to, I'm sorry, continue the efforts for the annual fee transparency and predictability. Thank you.

CHAIR HANSON: Thank you, Mr. Patterson. Next, we'll hear from Bob Freeman. He is the Fuel Chief Growth Officer for North America for Framatome.

MR. FREEMAN: Good afternoon and thank you for the opportunity to speak. Next slide? I'll start off with the current state. Framatome was licensed in 1969. We received our 40-year extension in, I think, 2008 or '09. We make PWR and BWR fuel. We serve about 30 percent of the U.S. market, with some exports to Taiwan and Japan.

We have very strong, experienced regulatory staff. We were an early adopter of the performance-based regulation, which I think you all know turns into the integrated safety analysis approach. And from a performance standpoint, 16 years of good LPR reviews. We're pretty happy with that. The last level IV was about eight years ago.

We have good standing with the state and local regulators, excellent standing with the community, the Richland community, Richland city, Benton County, et cetera. And we're very proud that our operation is

environmentally sound. It's very green.

All of our materials are either discharged to municipal sewage levels, sold externally, or reprocessed internally. That makes us in a very good position right now for the community and what's going on with climate change. Everyone's very happy with our process from that perspective.

And we've invested in the plant. One thing that we haven't done is ignore and let it age. Since 2000, when Framatome took over the Siemens Power Company organization, we've invested over $10 million a year in keeping the facility up and running. We welcome people to come out and benchmark us and see the operation from being compared to our competitors. Next slide, please?

So, ongoing planned activities, we submitted a license amendment request in September 2024. This is for a, to increase our enrichment up to ten percent and add a TRISO, advanced reactor TRISO fuel line. That LAR has been received but not commented on yet, and I think it's still in that period of review.

We have a second license amendment planned for November of this year, which is where we're going to move our overall license for the whole site up to 6.5 percent so that we can improve the operation of light water reactors. And we have won, we are one of the many that have won the DOE HALEU award, so we're anticipating that in about a year from now, you'll see a third license amendment request from us on moving to a Category II facility.

So, the first operation is a small operation within the

existing licensed site, the second one is to change the overall licensed site, and the third one will be to build additional. So, next slide, please? This should hopefully give you some context.

If you start in the upper left-hand corner designated as A, that is our partnership with the USNC. They have a full pilot production line for the TRISO fuel, so they have established how to make it at full scale.

We are then going to take that and move it out to the Richland, Washington facility, and when that second license amendment is approved by you all, we'll begin to make TRISO fuel up to ten weight percent under Category III.

Item B up there with the arrow shows an area of our factory where we are prototyping moving from UO2 to UF4 to metal for another advanced reactor player.

Our logic throughout this whole process I'm going to explain is to de-risk what's coming forward, to actually take all of the systems that we've used historically for 50 years and scale them appropriately for the higher enrichments, test them out, and then move onto inserting them in the new Category II facility.

So, within the Category III, we're going to be using depleted natural material to prove everything out, get all of our systems up and running, get all of the support things in place, and completely prototype it at scale so that when it's time to move it, it will be very, very simple.

Item D, E, and F up there is what we're envisioning to be the new HALEU facility directly adjacent to our Category III, different fence line, different security. You've going to start with a deconversion plant,

followed by a metallization plant, followed by a TRISO plant.

The size of those buildings will depend on the growth of the industry. We won't immediately make something that big. We will progressively expand as needed. Next slide, please?

And as far as potential considerations or suggestions, you know, we've been in business for 50 years. We run our site through programs and methods like exclusion of, you know, moderator, and spacing, and material control accountability.

So, we would hope that when licensing comes for the new Category II plant, the experience of the Category III plant weighs in in the licensing, because if the equipment is resized, and it's the same type of process and the same controls that we've been working for 50 years are applied, we would hope that facilitates licensing.

The next consideration that's probably the biggest for us and earmarked in the DOE messaging for the HALEU, standing up the HALEU deconversion, is consistency and dependency on schedule. The advanced reactor community is looking for clarity on when the operation will be ready so the planning can be done.

You all heard about Google and Amazon picking their players and that feeds back to where we have to be on time to deliver the raw materials for the advanced fuels or the advanced fuels themselves, so consistency and timing is probably our biggest request.

The last one would be some consideration regarding security. I guess I would hope that we consider moving from Category III logic of security with material form to Category II versus taking Category I

requirements and moving down.

We think that would be overkill on the amount of necessary systems because at the end of the day, the materials in the forms are going to be very similar to what we've been working with for 50 years. Thank you.

CHAIR HANSON: Thank you very much, Mr. Freeman. Next, we'll hear from John Williams. He's the Senior Vice President of Technical Services and External Affairs at Southern Company. Mr. Williams?

MR. WILLIAMS: Good afternoon, Chairman Hanson and fellow commissioners, and welcome to Georgia, home of our country's largest nuclear power plant and clean energy generator. I'm proud that today, Vogtle 3 has completed its first cycle of operation at a capacity factor in excess of 93 percent and is currently refueling.

Vogtle Unit 4 has operated its first six months with a capacity factor of 98 percent, which is a testament to both safe and quality construction and operation by Southern Nuclear. We've learned significant lessons during both construction and integration, and I appreciate the opportunity to speak with you about those lessons today beginning with construction. Next slide?

Southern Nuclear has spent considerable effort looking into the challenges that occurred and believes three key lessons will support the success of other utilities.

First, the engineering design of a facility must be sufficiently complete to allow for efficient construction. Much has been documented regarding the state of the AP1000 design when construction

began at Vogtle, and the challenges occurred with both module fabrication and civil works.

Second, we believe the Vogtle project office supported a transparent, effective relationship between Southern Nuclear and the Nuclear Regulatory Commission. We are aware that a project office has been established for the Palisades project and are pleased that this model is continuing forward.

The third construction lesson is the importance of building a resilient organization capable of dealing with the challenges of year-long projects with thousands of individuals.

Southern Nuclear achieved resiliency through, one, partnerships with our co-owners and with labor, two, through cooperation with state and federal officials who enacted legislation that provided the necessary incentives to both continue the project and minimize costs to customers, including the DOE loan program office.

While I can assure you that we've captured and documented thousands of construction lessons, these lessons allowed us to test and commission Unit 4 in approximately half the time of Unit 3 and realized substantial cost reductions.

Southern Company is committed to sharing our lessons with any utility that wishes to pursue new nuclear generation in the United States and internationally. As we have transitioned the units to operation, we have continued to learn. While our plants are constructed in accordance with their design, some changes are necessary to support more efficient operations.

We intend to submit a number of license amendments over the next several years to bring the licensing basis for Vogtle Unit 3 and 4 in alignment with the legacy fleet. Further, as we have done with our legacy fleet, we are implementing a series of physical modifications that improve equipment reliability and overall performance.

Regarding licensing improvements, Southern Nuclear recently requested a license amendment to eliminate Tier I and Tier II start information from the operating license. However, we withdrew this LAR after being informed of its nonacceptance.

Maintaining Tier I and Tier II information in the operating license makes Vogtle 3 and 4 inconsistent with the rest of the industry in that Southern Nuclear is required to seek NRC approval for changes that can be done at other facilities using owner-controlled processes. Continuing to maintain Tier I and Tier II information in the operational phase is an unnecessary burden and does not allow for efficient regulatory processes.

Second, we have learned that some reactor oversight process performance indicators do not align with the intent of the indicators when applied to the AP1000 technology. For example, the actuation of our passive safety systems inadvertently meets the indicator definition of a complicated unit scram even though a review of the probabilistic risk data indicates that the consequence of the event is very low and doesn't meet the intended definition of the indicator. We expect other indicators will need adjustment and an efficient process to evaluate these changes should be developed.

Finally, Southern Nuclear appreciates the NRC has issued

reviewed inspection procedures for Vogtle 3 and 4, with some reduction in inspection scope samples. However, further reductions are warranted to account for the enhanced safety features and significantly lower risk profile of the AP1000.

As we look forward, Southern Nuclear intends to operate the Vogtle site as two separate two-unit sites. We have and will continue to look for synergies and efficiencies where it's more prudent to operate a functional area as one four-unit site. For example, security and emergency planning are already combined.

Although Southern Company has not current additional nuclear development planned, we continue to evaluate options for meeting our customers' growing demand for electricity. It is concerning that the design certification for the AP1000 is set to expire in February 2026.

Southern Nuclear supports the staff's recommendation within SECY 2252 to eliminate the expiration for existing and new design certifications. This action would give regulatory clarity and line of sight to a continued combined construction and operating license for AP1000.

Additionally, as international partners look to the NRC for leadership in nuclear regulatory matters, not having an approved DCD for the AP1000 could impact deployment plans for this very safe technology around the world.

We commend the NRC for its thorough documentation of lessons learned from the Vogtle project. However, more urgent implementation strategy is necessary, and we are concerned that future deployments would not benefit from these lessons if they're not

implemented. Thank you for the opportunity to speak to you today. I look forward to any questions you may have.

CHAIR HANSON: Thank you, Mr. Williams. Next, we'll hear from Scott Hunnewell. He's Director and Vice President for TVA's new nuclear program at the Tennessee Valley Authority. Mr. Hunnewell?

MR. HUNNEWELL: Good afternoon, Chair Hanson and commissioners. I appreciate the opportunity to share a perspective with the audience on how the growth in energy demand in the TVA service territory affects and impacts TVA's decision drivers around considering nuclear generation as part of TVA's target power generation mix.

I'd like to first say that the opinions and projections in this presentation are merely those, and do not reflect formal decisions by or policies of the TVA board of directors unless otherwise stated in these slides. Next slide, please?

TVA's mission is simple. It's to make the life for the people of the Tennessee Valley region better. TVA's roughly 10,000 employees and 10,000 contractor team members work every day to achieve this by focusing in three areas, energy, environmental stewardship, and economic development.

The southeastern United States and TVA's service territory in particular is experiencing strong economic growth. The chart on the right side of this slide is the most important with regards to the shape of the curve.

Load growth for TVA has been relatively flat in the decade leading up to the COVID-19 pandemic. Coming out of the pandemic, TVA

and other utilities, especially in the southeast, have seen demand growth return to an increasing trend similar to that seen in the mid-2000s.

This increasing load demand reflects economic growth in the southeast, increasing electrification of industries, and an increasing residential population that uses more electricity per capita year over year. Next slide, please?

TVA is a national clean energy leader, with 55 percent of our power supply coming from carbon-free sources in 2023. More than 40 percent of TVA's clean energy comes from our seven operating nuclear units.

The mix of carbon-free generation in the system was bolstered by the Watts Bar Unit 2 completion and startup in 2016, a series of extended power uprates for our three Browns Ferry units completed in 2019, and the retirements of multiple coal-fired generators across seven sites between 2012 and 2023.

Looking to the future, TVA has plans for the addition of wind and solar generation either in the service territory or beyond, and today, gas-fired generation is a currently available technology that can provide the dispatchable, reliable, and economic power needed by TVA's customers.

For these reasons, TVA has several gas generation projects in process. TVA's aspirational path to net zero carbon includes a retirement of the remaining coal-fired generation units, with anticipated closure of all coal plants by 2035.

As you can see from the FY 2023 chart, the coal-fired generation accounts for approximately 15 percent of TVA's power supply.

One thing to note is we do not see a path to net zero without nuclear power being in the mix.

So, for TVA, the challenge is not just meeting the increased power needs of our customers, but at the same time replacing the generating capacity of assets that have reached the end of their useful and economic lives. Next slide, please?

While there are a good number of considerations for all utilities making future asset decisions, I want to highlight just a few to give you a sense of how these considerations can intersect for TVA.

The TVA Act requires the use of least-cost planning process that is further defined in the statute. TVA must consider factors such as the reliability of the system, the diversity of generation, the costs and price stability of fuel, in the final analysis, a cost comparison of the alternatives.

When considering new energy resources that provide adequate and reliable service to Tennessee Valley Authority at the lowest system cost, factors to consider include all direct and quantifiable net costs for an energy resource over its available life, including the costs of production, transportation, utilization, waste management, environmental, compliance, et cetera.

This least-cost concept for an electric utility is not simply a low bid decision. Further, it's not hard to imagine how similar constraints for low cost, safe, reliable, increasingly clean power generation are applicable to other utilities who answer to their ratepayers, stockholders, and/or public service commissions.

TVA is required to complete and integrated resource plan, IRP, every five years to identify the most effective energy resource strategies to meet the region's energy needs. TVA is currently in the public comment period for the draft 2025 integrated resource plan. Next slide, please?

So, TVA is investing $257 million in FY25 to extend and preserve the life of TVA's seven operating nuclear reactors to support an 80-year life and beyond. TVA has announced a total of $350 million in advanced nuclear funding to further the new nuclear program and support the design and development of potential small modular reactors at the Clinch River site near Oak Ridge, Tennessee.

TVA is preparing an NRC construction permit application for a potential use of the GE Hitachi BWRX-300 at the Clinch River nuclear site as an enabler for the potential deployment of SMRs to meet the Tennessee Valley's future energy needs.

As part of the new nuclear program's mission to identify new nuclear options, TVA is also working with Generation IV technology developers as their technology and designs mature, and even the prospect of additional gigawatt scale nuclear is not beyond consideration, as reflected in TVA's draft IRP.

An important aspect of early planning new nuclear is the identification of suitable sites. A systematic approach to siting is critical to ensure the necessary environmental reviews, site characterization, and stakeholder support are present to support new nuclear.

Ultimately, TVA will make decisions on potential new nuclear assets that are best for the people of the valley, following a

structured process for decision making, subject to the required environmental reviews and the TVA board's approval. Next slide?

Maturing new nuclear designs offer potentially significant solutions, and if cost competitive with alternatives, the efficiency of NRC's licensing for multiple deployments of a few standardized designs will be vital to broad U.S. success. Thank you for the opportunity to talk with you today.

CHAIR HANSON: Thank you, Mr. Hunnewell. Next, we'll hear from Jeff Place. He is Executive Vice President for Industry Strategy at the Institute for Nuclear Power Operations. Mr. Place?

MR. PLACE: Thank you, Mr. Chair and Commission. I look forward to the opportunity to talk to you this afternoon about a very important component to the success of our current and future nuclear industry. I'm going to be talking about training and also the recruitment of our future workforce. Next slide?

So, training the current workforce, as you all may know, we run the accreditation process that helps the industry meet the training rule. One of the things that we believe is important is to enhance the effectiveness and also the efficiency of that process, and we've been doing that over the decades.

Some of the current things that we're doing today is last year, we moved the accreditation process into our continuous monitoring operation, so instead of putting larger teams out in the field every three years to look at either the operations training programs or the maintenance training programs, we're doing that on a more continuous basis.

So, when we put teams in the field for any of our other

opportunities, so crew performance evaluations on the simulator, we are capturing those training observations and also doing some of the technical reviews of the programs throughout the period, and we're seeing real benefit.

Our members are seeing benefit of that. We're able to work with them to continuously improve the program and the training that's being conducted instead of just doing it kind of episodically every three years.

All of the programs are on a six-year cycle, and we do review them on a triannual. So, like I was saying, every three years, you either get an ops training program review or a maintenance. One of the pilots that we're undertaking right now is reviewing all 12 programs at one time every six years. That has been piloted a number of years ago at Diablo Canyon. We are restarting a couple of other pilots. We had one earlier this year that was very successful, and this month, we actually have a team that's actually doing a set of 12 programs at another unit, and they'll come in front of the independent accrediting board in February of next year.

We'll make a final decision next year sometime as to whether we want to transition to looking at all of the programs. I should say put them in front of the accrediting board every six years all together and then review them on a continuous basis.

We've restarted and we're expanding our National Academy for Nuclear Training. We house that. We are responsible for the operation of that academy. Every station, every licensee in the United

States is a branch of the National Academy for Nuclear Training.

Under that, we not only accredit the training programs, but we also conduct all of our leadership courses and seminars that actually touch the industry, from first line supervisor all the way up through the board of directors, and we're looking to expand that.

And what expansion means is that we've been really kind of limiting that to INPO, WANO, Atlanta Centre, and our members. There are other entities that are now conducting training, high-quality training in the industry that we were not touching, the Nuclear Energy Institute. EPRI is also conducting training.

So, we've expanded who's on our academy, and we're beginning to take a look at how we can integrate all of this training so we're not actually duplicating training in the industry and we can also use each of our organizations' talent and skills to best meet the needs of the industry.

The training excellence through teaching and learning, we had one way of actually looking at training for so many decades in the industry, and that was through the lens of accreditation. We recognize the accreditation process is in place to meet the training rule, but much of the training that is conducted really falls outside of the compliance component, and so we have been working with the industry.

We've been working with some of your staff to try to make sure we put the right structure around what's in accreditation, and then use teaching and learning techniques, more advanced adult techniques to actually help improve the capability of our industry, and that's going quite well. It's still fairly nascent and we've really just started kicking that off in the

last year.

And then we issued a new standard this year, 24-001, advancing human and organizational performance through a document around proficiency, and we are working with the industry to implement that, as well as it's a very simple to understand model and it's something that we believe will help the current and future fleet that we've got coming. Next slide?

I want to talk a little bit about the hiring efforts and future workforce, and this isn't just INPO's hiring efforts, but it's the whole gamut, looking at the industry through a number of studies that were done through the Nuclear Energy Institute, the DOE. We know that we need hundreds of thousands of new staff to meet the needs over the next couple of decades.

We are working with the NEI working group, workforce working group, as well as NAYGN, the North American Young Generation group. Several recent surveys that were conducted really gave us some really interesting information.

The three top reasons why people come and stay into our industry, the number one is salary, the second one is the mission and purpose, and then the third is the stability of the industry. And it varies depending on the demographics on which one of those is the most important. Salary was highest across most demographics.

But it's important because what we're also seeing is that there is so many competing opportunities out there for the same workforce that we're trying to bring in with tech companies as well as with the new nuclear entrants that are also looking to get that same talent.

The area that we're losing people the most is in that three to 12-year range. People will come into the industry, and if we are not paying attention to their needs within that three to 10, 12-year range is where we see the highest attrition rate within the industry.

And then with the new nuclear entrants, the last thing I'll say is that we're working and engaging with them because the operating models that we use today won't necessarily be the same models that we need to look at from accrediting the future nuclear entrants. The models may not work. They're going to use different business models.

Actually, an operator at a Gen IV plant is going to look different than what it is today, so we have to be flexible, and we're working with that group of vendors to make sure we come up with the right thing that will meet the training rule as well as their needs. So, thank you for the opportunity to discuss this.

CHAIR HANSON: Thank you very much, Mr. Place. And finally, we'll hear from Ms. Shelly Stancil. She's the Georgia State Liaison Officer and Safety and Compliance Supervisor for the Georgia Environmental Protection Division.

MS. STANCIL: Good afternoon, Commissioner and Chair Hanson. I wanted to talk to you guys today about Georgia's perspective on strong relationships and effective communication with the NRC and our other partners. Whether you are with a federal agency, a state agency, or local government, we all have one common goal, and that's the safety of the citizens that we serve.

And with that goal in the radiation emergency

preparedness program, we work together with all of our partners, from the NRC down to our community EMA directors, and we use that opportunity to discuss safety, and to discuss regulations, and to help train first responders to report and respond to incidences at nuclear power plants. So, to that end, our responsibility to maintain those partnerships and to maintain those relationships is utmost important. Next slide, please?

So, the citizens of Georgia being our priority, these are all of the partners that we work with, and I apologize if it's too small to see, but I have listed on there all of our state, federal, and local partners that we work with on a regular basis.

Part of my job as the state liaison officer and as the DNR radiation emergency protection program manager, is to manage the team that goes out to the counties, and we go and we train, we work with, we do exercises with all of these agencies.

In order to do that, we have to have open communication lines. We have to work together. We have to talk to each other. We have to be there when there are things going on and when there's not things going on.

So, as part of that, we meet with Southern Nuclear and all of our plant partners quarterly at their quarterly meetings. We also work with them at various exercises. FEMA comes in and evaluates us. So, all of that works together to create a program of readiness so that we can respond and keep the citizens of Georgia safe. Next slide, please?

Being transparent and maintaining open lines of communication with our partners is essential for building a strong rapport.

Demonstrating knowledge, reliability, and helpfulness in interactions with our partners enhances our trust and credibility. Tailoring messages' tone and style aligned with regulatory expectations and preferences is key to building effective relationships. Next slide, please?

We nurture these relationships and foster open communication channels when we remember our values, and we prioritize mutual understanding of our responsibilities to protect and serve. We also have to remain adaptable to any changes that occur. Credibility is built during the transparent collaboration during exercises.

We also recognize our different perspectives and experience can cause challenges. However, mutual respect and appreciation will build bridges and further create great relationships, and nurture effective communications with our partners. Next slide, please?

When we're fostering open communications, it's easy within the REP community. We often share information, collaborate at meetings, trainings, and conferences. During the preparation phase of the Southeast REP Conference, I participated in planning meetings with the host state of North Carolina as well as other southeastern states to plan the event, select speakers, develop the agenda, and present.

This opportunity allowed us to work together on something that benefitted the entire region, built relationships, and allowed us to build that fostering of friendship. This open communication and working together allows us to be better partners in the event of a disaster. Next slide, please?

Another example in value of the benefit of our relationship

with the NRC regional government liaison is the opportunities that are offered to us through those relationships. My team is a relatively new team to the REP world.

We have had the amazing opportunity through our regional liaison, John Pelchat, to attend the Plant Bellefonte tour. For anyone not familiar, this plant is an unfinished nuclear generating station that has all of the components that are necessary for learning about how reactors work, for learning how the nuclear power plant works.

So, my team being able to go to this training and to walk through this facility that has never been radiated allowed us to learn something that very few people get to see, and we were very excited about that. Currently, the site is used for training, and tours, and office space.

This ability to get up close and personal with a reactor without fear of radiation exposure is amazing. The magnitude of the facility, the amount of concrete, metal, and piping is unmatched. The tour was so beneficial to learning how reactors work and the safety mechanisms in place, the analog control room, and all of those things that we were able to get up close and personal with helped my team to learn to be better. To be able to walk through all of it and hear the instructors explain the components, and the safety features, and the design elements were a valuable tool.

This opportunity is something we would not have had without our relationship with the NRC. The relationship and regular open lines of communication opens doors to opportunities that may be missed otherwise. Next slide? Actually, will you play the video if it will play? I

don't think it did. Can you -- we'll go on.

The video is actually of my intern. She was on the last tour that we did. The bottom left, if it will click -- I'm not sure. It may not play. So, this video, she was allowed to go into the stack. So, we were actually touring the facility and went in, and she was able to pop a balloon in there.

And I don't know if any of you have ever been into the stack and done that, but it's pretty amazing, the echoes. This was something that she never would have gotten to do without this opportunity.

So, again, she was a summer intern in this program, the first one we've had in the state of Georgia for the REP program, which was very exciting for us. So, using those opportunities to work with the NRC, to work with our partners, to work with our state liaison has been amazing.

John and I talk to each other quite regularly through phone calls, and I appreciate him always being there when we have questions. Thank you for the opportunity to share.

CHAIR HANSON: Thank you very much, Ms. Stancil. Now we'll take questions from the Commission and we'll start this morning with Commissioner Caputo.

COMMISSIONER CAPUTO: Good afternoon. Sorry. Thank you all very much for those presentations. A rapidly-increasing demand for energy coupled with a drive to lower carbon emissions as described by Mr. Hunnewell really sets the stage for nuclear power to grow as part of the mix meeting national electricity demand.

It was also good to hear from Mr. Williams, as well, and the

experiences of Southern Nuclear bringing Units 3 and 4 at Vogtle Station into commercial operation. Like him, I see the need for a practical risk-informed approach to managing changes during construction and the transition to operations. The construction lessons learned report noted the need for hundreds of license amendment reviews by the NRC for merely those two units. Driving these numbers, in part, was the need for a license amendment for departure from what's known as Tier 2* information that has, quote "minimal, if any, safety significance." One example of such a license amendment was to edit a bibliography in a document that was Tier 2* in its entirety. While the staff has made minor changes to guidance in this area, I believe the pursuit of standardization should not be a barrier to risk-informed solutions.

With that as background, we also have bipartisan passage of the ADVANCE Act, directing the agency to be more efficient and effective in several areas. One area is the review licensing and oversight of nuclear power plants. Researchers who recently reviewed our regulatory approach for advanced reactors noted that judicial precedent suggests that agencies whose statutes require efficiency are likely to also be required to do a quantitative cost-benefit analysis comparing monetized costs and benefits of their actions, end quote.

While this is consistent with our guidance for regulatory analyses, the quality of our execution often falls short. Pending before the Commission is a proposal to align the requirements of our Part 50 licensing process with the Part 52 process implemented for Vogtle 3 and 4. The staff's regulatory analysis showed that most requirements would cost more

to implement than the value of the benefits they would yield, sometimes millions of dollars more. Yet, this was masked by the benefit of removing the expiration time span for design certifications. The Commission could act now to improve efficiency by both eliminating the expiration dates for design certifications and implementing practical lessons of construction as outlined in the lessons learned report.

Furthermore, needlessly modifying Part 50 adds significant regulatory uncertainty at a time when many companies anticipate filing their license applications under the existing framework. What I've described shows that we need to follow more closely our principles of good regulation, specifically with regard to efficiency, reliability, and clarity.

Furthermore, we currently have several rulemaking papers pending before the Commission that predate passage of the ADVANCE Act. These papers present opportunities for the Commission to demonstrate its recognition of Congress's intent to improve efficiency at the NRC through their passage of the ADVANCE Act.

With regard to training, as we've seen over the last two years, the NRC has hired in the neighborhood of 600 people and counting, so, obviously, training is a challenge, I think, for us to ensure that people are proficient in the skills that we need to execute the workload that we see coming in the future.

So, Mr. Place, you talked about INPO's efforts on advancing proficiency. Is that something that INPO would be willing to share best practices and some of your lessons learned in terms of how to really achieve high standards of proficiency and advanced skills?

MR. PLACE: The short answer is yes. We think that it's a high-quality, more generic standard that we've established. We see that some of our utility members are actually taking that and using it across their enterprise, so it's not just nuclear specific. But it helps and it's principle-based, so it's not specific on one job. It's really around how to make individuals, teams, organizations, and even enterprises more proficient in whatever it is, whether it's making a decision -- we were having some conversation today with some utility members about risk decision-making and being aware and being understanding of the foundations.

If you think about a Venn diagram, it's established around getting the foundations right, so it's the training, knowledge, experience, recency that is needed to do what you're wanting to do or decide, and then understand the challenges that any individual or team may be faced with. Maybe it's first in a while that the individual hasn't done it. Maybe there's some things going on with an individual's home life that is making them less focused on what they should be doing. But it's really understanding those individual environmental organizational challenges. In the intersection of those two, you find risk, but the self-awareness of where you sit in that or where your team sits allows you then to mitigate that risk, so you can have an excellent outcome at the end.

So one example that I've used in the past from a team standpoint, you know, the industry is operating very highly, so we see often stations are running breaker to breaker and they're not having refueling outages or maintenance outages in the middle. Well, you open the breaker and now you're going to be sitting in an outage control center. You're not

proficient two years down the road since the last time you closed the breaker.

So understanding you've got different team members in place, how you establish the foundations for that team, what are the challenges they're going to have -- maybe there's different things that they've never faced in that outage -- and then how are you going to mitigate it. So it's a simple way of thinking through; but, if done right, it can really help promote an excellent outcome with literally almost anything that you're choosing or needing to do.

COMMISSIONER CAPUTO: Thank you. Mr. Freeman and Mr. Patterson, so Framatome was recently awarded a DOE contract to develop HALEU fuel and Honeywell restarted the UF6 conversion facility as you described at length. In the ADVANCE Act, Congress directed the staff to develop an MOU, the NRC staff to develop an MOU with DOE on advanced nuclear fuel and report to Congress on NRC's preparedness to review and qualify advanced nuclear fuels for use in advanced reactors. What more can the NRC do to efficiently and effectively license advanced nuclear fuels?

MR. PATTERSON: From our perspective, it's the timeliness and predictability, like we talked about with the license renewal. Now that things are moving pretty fast, there needs to be a quick timeline response. At least with our licensing experience, you know, we submitted a license application, but it could be quite a long period of time before you receive any RAIs or responses to even get the process going. So I do know that there are things with the smarter licensing program that actually have

made some improvements, but I still think there's some opportunities there as far as just reacting and the conversation of how do you get from point A to point B.

MR. FREEMAN: I would add when you come to our facilities, if it's a very heavy analytical new code topical report, you come to our facilities and meet with the engineers and have that back-and-forth dialogue through an audit that is in part of your system, that facilitates and speeds the process dramatically. So we would invite strongly during licensing to have your license individuals come to our site, sit with us, see the existing processes, see how we're moving them over, and it's about transparency and stopping the misunderstandings that happen with the submittal, the wait, the delay, the RAIs. If there was more interaction, I think you could cut 30 percent out of the schedule very easily because, most times, it's just about communicating to the other person what you're doing.

Our stewardship of keeping the site safe is what we rely on. I mean, we don't try to sneak things through. There's no gamesmanship. It's always about understanding, and I think transparency and proximity would help dramatically.

COMMISSIONER CAPUTO: Thank you.

CHAIR HANSON: Thank you, Commissioner Caputo. Commissioner Crowell.

COMMISSIONER CROWELL: Thank you, Mr. Chair. Thank you to all of the participants today, especially those of you who are also attending INPO or maybe got the unpredictable last-minute switch to be here today from your colleagues.

I have questions for all of you, and I'll try to get through all of that, but I'm going to pick up first on the Tier 1 and Tier 2* issue that my colleague, Commissioner Caputo, referenced, so John, I'm going to look to you first here. So, you know, I understand that license amendments are one way to address changes in design as you construct a facility and whether you're using an amendment or some other mechanism to address design changes that are learned as you construct. Should commensurate changes be made to the design certification by the holder of the design certificate, so the vendor?

MR. WILLIAMS: So, you know, if I look at the purpose of Tier 1/Tier 2*, the reasons they were in there, the intent of that was intended to ensure that we built the facility as it was licensed and designed to be built. That was the purpose of that obviously. So the Vogtle plant has a thousand departures from DCD 19. Two-hundred of those required license amendments.

So, you know, I think that we have processes in place to modify our facilities using owner control processes, ensuring that we are not increasing the likelihood or consequences of an event, and making sure that that change is safe, and that can be done without necessarily changing the design certification. So, for instance, if somebody were to apply for a COL today for an AP1000, they would probably utilize DCD 19. That doesn't necessarily include the thousand departures that we have. They would have to include that in their license for submittal.

COMMISSIONER CROWELL: In hindsight, and I recognize that's -- any question that starts with hindsight is unfair. But in

hindsight, would Southern have included less or different information in their Tier 1 submittal than is currently contained in Tier 1?

MR. WILLIAMS: Yes. We believe, going forward, we believe that less information should be included in the Tier 1, focusing on those things that are safety related and of safety significance.

COMMISSIONER CROWELL: And I don't disagree with you, but I'm also thinking about how we address this issue without creating a precedent that is converse to that. So I appreciate, you know, it's for a longer conversation, but I appreciate those answers and that dynamic, and we can discuss it more.

Sean, I turn to you. You said supply chain issues were the biggest issue in getting back online. Where was workforce? A second, a distant second? How did that play out for you?

MR. PATTERSON: Yes. I would definitely say workforce was the second most significant challenge that we had. We're from a very small community, so the workforce is quite limited and there was a lot of other expansions of local chemical facilities and there's a DOE facility that is still in process of decommissioning. So when we went idle, a large portion of our workers went to those areas.

COMMISSIONER CROWELL: And then I'll ask you a hindsight question that you'll probably say is above your pay grade. But in hindsight, looking at the supply chain issues and workforce issues associated with going idle and then coming back on the restart, was there any thinking looking back about whether continuing operations would have been, I don't know, a better way to do things or lesser cost ultimately, given

the hurdles to restart?

MR. PATTERSON: I mean, we went idle because of market conditions, and it was just the market at the time. It was not conducive to continue our operations. So there's been significant changes in the market now, and it made it, basically, profitable to start the facility back up. So it's a really hard question to answer.

COMMISSIONER CROWELL: Well, I'll let you off here, saying that, you know, profit, at that time, too, you couldn't foresee the future in terms of a need for a restart and those types of things. So it's mostly out of curiosity whether there was any economic regret with going into that mode, given the challenges that we're all facing on all sides of this with regard to some supply chain, workforce, et cetera.

Mr. Freeman, I'm going to turn to you again. I was a little bit confused by your presentation, and I think I just need a little bit of explanation here on the Cat 1/2/3 issue. Are you suggesting that a category, like there should be a 10 percent to 20 percent category?

MR. FREEMAN: No, not at all. All I'm suggesting is that, you know, under Category 3, we're supposed to detect and notify. We're not supposed to stop. And we work with bulk materials. Nobody is going to walk off with a UF6 cylinder that weighs a few thousand pounds without us knowing. And, you know, obviously, nonproliferation is the big concern. But the difference of 20 percent in the material forms that we're going to be using, a lot of chemicals, it's going to have similar intrinsic restrictions of concern, versus a Category 1, which is, you know, more of a military-style security level. So I'm just suggesting, on the spectrum, Category 2 is closer

to Category 3 than it is to Category 1.

COMMISSIONER CROWELL: Understood. Okay. Thank you. I appreciate the clarification. And then, from a researcher technical perspective, are there technical areas in which Framatome is still conducting or sponsoring research on the full-scale industrial processes required to manufacture advanced fuels, or are the processes for these new fuel types pretty well understood and ready to be scaled up for industrial level?

MR. FREEMAN: 50/50. The deconversion is incredibly understood and easy to scale. The metalization is in process of being proven, prototyped and proven. And the TRISO is who we're partnered with that it's proven producible product today without the enrichment level, and enrichment doesn't change the process. So it's a combination.

COMMISSIONER CROWELL: Okay. I appreciate that clarification, as well. Scott, don't be offended I'm going to skip you for a second and I'm going to come back.

Mr. Place, when you're looking at the other entities that have training standards and programs and avoiding duplication, is there any issues related to the relative quality of similar trainings and how do you ensure that there's a high bar or the appropriate bar is maintained if you're going to try to remove duplication of training across different entities?

MR. PLACE: Thank you for the question. It really probably depends on whether the training is within or without the accreditation process. There's a lot of leadership training that's provided, and that's really on the licensee and the utility to make that decision. We

may offer some help and support, give best practices in that regard; but if you've got training that's going to be going on, let's say it's going to be provided by a vendor that's going to meet chemistry technician program guidelines, then we would do it one of two ways: we would either take a look directly at that vendor's training program or we would review the utility's review and overview of that training program and then make a judgment as to whether it met the requirements in the ACAD which is the academy document that we have for all of our training programs.

So there would be some level of oversight. It could be done two ways. We could do it directly, or it could be done through the utility itself that we have provided oversight of what they were doing.

COMMISSIONER CROWELL: So as much as I strongly believe in value, you know, workforce training both at the entry level and for the rest of their career, you can't train people who don't exist. What is INPO doing, if anything, or how do you see the farm team coming up through universities and technical schools? If those programs aren't robust, there's no one to train, so can you talk about that nexus a little bit to the extent you can?

MR. PLACE: Yes. And INPO has a role in this. I would say the Nuclear Energy Institute probably has played a much larger role using that workforce working group and working with the craft labor unions, as well as the government, military, and others. So through the universities, one of the things I didn't really highlight much in my talking points is we recognized years ago, back in around the 2000 to 2008 we developed what was called the Nuclear Uniform Curriculum Program, and that was really

focused on associate-level training and it was primarily around radiation protection, chemistry, some of the craft level and also non-licensed operators. And it was intended to say here's the standards for the industry, and then you'd see a utility partner with a junior college or a university to develop a program that was specifically intended to produce people that might step into a radiation protection technician job and they would get some experience through that. They would also have the training. We would have certified that the training was appropriate and met the needs, and they would be issued a certificate.

Well, at the peak of that, back in 2011, there were 50 different university programs that were filed under this program. As we sit here, around 2023, there's only 15. And so there was a lot that happened. What we thought was going to be the renaissance in the industry to begin with, some of the hiring just never occurred and those programs eroded.

So we are revitalizing that now. There's a CNO who is a sponsor of that. We are engaged, but we actually have given the responsibility of that over to the utilities themselves. And we will stand up through an advisory committee. We'll do a challenge board. We'll make sure the certification is appropriate. But there is work going on in that space. That's just one avenue of trying to get people in the door with the nuclear plants.

COMMISSIONER CROWELL: Maybe moving ahead, there may be opportunities with big tech to help with this conundrum, as well, since they're going to be in the nuclear game.

MR. PLACE: Yes. Right now, they're actually hiring our

people.

COMMISSIONER CROWELL: Now you know how it feels. And I'm running out of time. I have other questions, but, Ms. Stancil, I'll just say thank you for what you do. My part as a former head of a state regulatory agency, I appreciate the challenges you have at your level and you're preaching to the choir when you say that everything comes down to communication, communication, communication. It solves 90 percent of the issues out there, so I appreciate all that you do and look forward to chatting more later.

MS. STANCIL: Thank you. I appreciate it.

CHAIR HANSON: Thank you, Commissioner Crowell. I actually thought the discussion that you were having with Mr. Place was really interesting, so, if I could, I'm just going to follow up with you if I could. As many of you know, the ADVANCE Act requires the NRC to establish a traineeship program, and I think we're in the process of kind of understanding what that might look like. Obviously, we've got a university nuclear leadership program, we've got a minority-serving institution grant program that also engages with universities, et cetera. But a traineeship program kind of indicates something different.

So, Mr. Place, I was really interested in this, you know, nuclear uniform curriculum that's maybe focused at either two-year colleges or technical colleges or other kinds of schools around two-year degrees because that, to my mind, that's kind of what a traineeship program would indicate. And I think it's really important that we also don't duplicate efforts with other things that are going on in the industry or that we don't, you know,

self perform potentially in areas where it's not our wheelhouse.

So kind of given that scene-setter, do you have some initial thoughts or advice for us as we start to get our arms around what that program might be and implement Congress's direction here?

MR. PLACE: Maybe a couple and then certainly happy to have conversations out of here and share best practices and some of the lessons learned that we've had over the years with this program. You know, one is really aligning with the university or the technical school around what it is that's going to be taught and also recognize that we're finding challenges right now with a willingness, I'll say, to step back in because maybe it was because it takes a lot of time and effort to build a curriculum. What we found and you may have to find, as well, is that many of our utilities actually provided facilitators to actually help teach some of the program because the universities weren't really staffed to be able to take on all the course work that was going to be needed for, say, radiation protection technician or a non-licensed operator program. And so the utilities -- for a variety of different reasons. One, it maintains some of the control; but, also, there's been a downstream effect because they get to know some of the utility people and then there's more apt, you know, to join the utility.

So I'd say that partnership is really key and understanding the expectations on both sides because we have seen in the past where there were expectations that were never going to be able to be fulfilled through those programs, and that really came through a lack of clarity in establishing what the expectations were for students to come through, what was going to happen with those students on the back side of it. The

universities, they want these things to live on in perpetuity or for some period of time. They don't want to take the effort, stand it up, and then have it crumble.

CHAIR HANSON: Thank you. That's really helpful. And I hope we can engage further on that as we start to get our arms around it and set up the program in a way I think it's intended to benefit the industry writ large but also the agency as we continue to engage the workforce of the future.

You know, one of the things I noticed, and I don't remember if it was in your slides or if it was in some of the background material we got, but the efforts at INPO around diversity and inclusion in the workforce and also I understand you're on the executive advisory committee for U.S. Women in Nuclear.

MR. PLACE: Yes.

CHAIR HANSON: So I just wondered if you could share some thoughts with us, as I think we also seek to build a diverse and inclusive workforce going forward and incorporate as many different perspectives, kind of your experience in this area and any things that you think have worked particularly well for you all.

MR. PLACE: Well, it certainly stops at the top. The leaders need to be involved and engaged and committed to it. We are seeing across the nuclear industry, in particular at INPO specifically, a real benefit in a mentoring program, a coaching and mentoring program. Through the U.S. Women in Nuclear in particular, you know, we started a NEXT program. It's called NEXT, supposed to be NEXT-UP. So, actually,

there is a second one, NEXT-UP. It was really about those women who were far enough along in their career that their next step would be an executive, and CNOs got involved so it was at the very highest level. When we started a program, they all supported it financially.

The other thing that we found very beneficial is that they go through this in a cohort. So there's some support, mutual support, and you can get a group of, in this case, women through. And then we've seen many of them, I know three of our executives at INPO have all been through that program, so it's been successful in getting them promoted. Now we're starting at the lower level because we need to build a pipeline, so it's called the GROW Program. And, again, it's a wide variety of diverse people that are being the coaches and mentors. That's just one way, but that's been very powerful in helping to advance women's careers through the nuclear industry.

CHAIR HANSON: Great. Thanks very much. Really appreciate it. Mr. Patterson, I've been really interested in the start-up period that you all have had at Metropolis, and you were, I think, speaking with Commissioner Crowell about the workforce challenges that you've had there. And I noticed on some of the background material I had about maybe the dearth of operational experience that some folks had kind of walking in the door, and it seems like it's a real knowledge management challenge and almost like a nuclear safety culture challenge. And I know you guys may have experienced some bumps on the road.

So I'm really interested in kind of if you could just walk us through briefly some of the concrete steps that you guys got from that

starting point to kind of where you are today, which is, you know, kind of, I don't want to call it free and clear but operating, you know, at that high level that you are seeking to achieve.

MR. PATTERSON: Yes. You have to realize when we made the announcement to restart there was only 26 employees at the site. So not only did you have to staff the existing, like the training departments and reliability and areas like that, you had to get these employees in first to be able to get them trained, to get them confident and qualified, so they could actually start doing the inspections and assessments of the facility.

In addition, one thing that we did learn, just like your subject matter experts that you had on-site, they would be assisting with the training, but they should also be in the field helping with, you know, doing a lot of tag tries and the things to do the inspection. So there was a lot of lessons learned as far as, I want to say, the major milestones, if you will.

One of the other things that we found out was that, you know, when we shut the facility down, we did not know whether we would restart or not. So upon restart, the first thing we had to do was do a lot of vessel washes and things like that. So you had to start at the back-end of the facility to be able to process washes and things like that. So having the operators and people qualified in, actually, the backside of the process was the most important and then work your way forward is how we proceeded.

CHAIR HANSON: Thank you. So did you find that you kind of had the staff to accommodate folks that kind of peer training, that peer learning that you were having to do? You know, people have their day jobs, like you said. They're actually trying to operate the plant, but they're

also having to kind of, you know, the more senior, the folks with the knowledge base are having to bring others on.

MR. PATTERSON: Right. And that's where we did engage with some retired employees. We brought them back for short periods of time as contract workers to where, I mean, we were bringing knowledge back into the site to be able to train the new workforce.

CHAIR HANSON: Great. Thank you. Mr. Williams, I just want to finish up with you. Thank you for your remarks and particularly some of the lessons learned here about, you know, the Tier 1/Tier 2*, particularly in operations. I'm sensitive to the fact that I think there were some unanticipated impacts of the 52 framework when you got into operations and particularly the idea that Vogtle would somehow be treated differently in operations than other operating plants I'm particularly sensitive to, as well.

One of the things about, you know, getting both units into operation I think was most impressive for Southern Company was the handling of the initial neutron source. I think I've spoken about this before. Your RP manager, I believe it's Mike Dixon --

MR. WILLIAMS: Jim Dixon.

CHAIR HANSON: Jim Dixon. Oh, man, so close. And getting an education about that myself. I hope this is a little bit of a softball, but I hope that the entire industry, but also the NRC, can benefit from kind of your lessons learned there because I understand you all handled that source, got it into the core with record-low dose, if I have that correct.

MR. WILLIAMS: That's correct. So, you know, the

primary source for a new nuclear plant is very high dose, very unique in terms of you do it one time, in our case we did it twice, and it was something that, you know, there's just not a lot -- to go to Mr. Place's comments about proficiency, it was an area where we had none. And so we developed mockups for all aspects of that maneuver and went through it over and over and over again until our operators knew exactly what the next step was using dummy sources and things, such that, on the day of execution, it was like something we had done a thousand times and we executed it. And you're right. We had very low dose, much lower than expected, and it was executed flawlessly. And that goes to how we are trying to build proficiency with workers, especially on first-time tasks.

CHAIR HANSON: Yes. Thank you. Well, what's interesting to me, in part, is we're going to -- we've got Palisades, potentially what's going to be the Crane Clean Energy Center, maybe Duane Arnold. So there's a possibility we're going to be doing exactly what you all did, you know, two or three more times in the next three or four years, and so I think there's a real opportunity there. Thank you very much.

MR. WILLIAMS: Sure.

CHAIR HANSON: All right. With that, I'll hand it over to Commissioner Wright.

COMMISSIONER WRIGHT: Thank you, Chair. Good afternoon, everyone. You know, before I start, I just want to say hello, Region II; how are you all? It's good to see you, and I'm going to say also hello to your fearless leader, Laura Dudes. Thank you for everything you did to help put this together and pull this thing off. We're very grateful as

the Commission.

And I was able to walk around and see many of you in your offices this morning before the meeting. It was good to see you. I enjoy doing that and learning about what's happening to you in your personal lives, as well. And, again, like I said to you, anything that we can help you with at Team Wright, please reach out and let us know.

And a special shout-out, as well, to Robert Williams, who is sitting back over here. Robert was able to come and work in my office on rotation as a reactor TA, and he did a great job, forever a part of Team Wright now. And I want him to be sure to say hello to his family and to thank his wife, as well, for allowing you to come and work for me and support me and my team up in D.C. for the few months you were there. You're missed, just to let you know. People would want me to tell you hello, so I'm doing it right now. Suzanne here, who can back it up.

So thank each of you for your presentations today. I'm just from up the road in South Carolina, so Region II is my home, as well. And I'm very happy to be able to just get out of D.C. and get back down here. It's beautiful weather. I'm looking forward, I guess, tomorrow night for Halloween for everyone, too. You all have a good time.

It's an exciting time to be in nuclear. It's amazing what's happened just the last couple of years. And I'm going to kind of go a little bit out of order because I want to be sure I get to the most important things, too. But I don't want to miss someone.

Shelly, Brad has already talked to you, Commissioner Crowell, and I want to tell you myself I'm a big fan and believer in the states

on what they do. I mean, I served as an elected official both at the local and state level. I didn't run an -- well, I guess I did run an agency as chairman of the South Carolina Public Service Commission. So I got to work directly, I got to see, feel, touch everything that you do. And since I've been up here, I recognize the value that you provide and I wanted to thank you and thank your people, as well. It sounds like things are going well in Georgia.

MS. STANCIL: They are going well in Georgia. And we have a really great relationship with South Carolina and North Carolina. We work well with those partners.

COMMISSIONER WRIGHT: My question for you is a pretty simple one. Is there anything that we can do for you in Georgia that we're not doing at this time?

MS. STANCIL: So I don't think there's anything that you're not doing at this time. We have a great relationship. The thing that always comes down, I want to echo the training issues and the staffing issues. I think government workers in general are having a difficult time finding qualified, well-educated employees who are there ready to go to work for the government. I think that's also a nuclear issue.

I recently have become full-staffed, which is a great asset at this point because we have been understaffed for a really long time at DNR. We have made strides in getting people in the door. One of the issues that we have is finding people who have the experience necessary. So my team is unique in the fact that we have to have emergency management skills, as well as nuclear radiation skills. So finding someone that has both of those skill sets is very, very difficult.

One of the things I've kind of made my personal mission is to start in 2025 going out to younger students, high school students, and talking to them and getting them excited about the nuclear world and the radiation world and the emergency management world well before they make those college decisions because I think college programs aren't going to be sustainable if we don't have interest before they get to college. So I think that's one aspect that, as a whole, we need to look at doing.

COMMISSIONER WRIGHT: Right. Thank you so much for touching on that because Mr. Place and I had a conversation about this just yesterday, I guess it was, yesterday morning early before the INPO meeting started off. And I know they're very focused on, and the Commission and the Commissioners, as well, as we're traveling around to universities, that we have high school kids coming in and doing programs with us, as well. We're trying to get that message out. We're working, you know, with the Health Physics Society and others trying to see what we can do to expand that because it's not just here in the United States, it's worldwide. So thank you.

And, Mr. Place, I just wanted to ask you real quickly as just a tag onto this, in your comments earlier in your conversation with the Chair, which I thought was fabulous, do you see the same issues domestically with hiring and staffing, as well as international? Is it the same internationally, as well as domestic?

MR. PLACE: So I can't speak for the entire globe. In the Atlanta center, we're responsible for the Canadian plants, the ones in Mexico, South Africa, Romania, United Arab Emirates, and a few plants in

China. I can say with assurance, North America, the challenges are very similar. The Canadian plants are having the same challenges with craft. Electricians, welders, carpenters. It's impacting the current fleet today in being able to staff their refueling outages. It's also a challenge with projects. So we see that same challenge.

COMMISSIONER WRIGHT: Thank you. Mr. Williams, how are you? It's good to see you again.

MR. WILLIAMS: It's good to see you, Commissioner.

COMMISSIONER WRIGHT: I want to follow up on the conversations that you were having with this whole tier structure. You talked about the changes you think Southern needs to make in the tier structure in Part 52 and then, you know, like Commissioner Caputo and the Chair and Commissioner Crowell, I also have some thoughts about it, too. And I've been thinking about asking staff to take another look at it and look at the changes, that whole change process for Tier 1 and Tier 2 * to provide some flexibility, right, as you referred to in the construction and operation for future builds of the AP1000, especially when it's low safety significance.

Before I ask you my question, on the design cert part of it, right, I know that we would love everybody to stay within this standard design and I know that would be a goal of anybody who is trying to build it. But if someone decided that they had to do something that was outside the scope of that and had to make the change, that's on the company, it's not on the NRC; is that correct?

MR. WILLIAMS: That's correct. If they wanted to make a change to the standard design, they could absolutely do that, yes.

COMMISSIONER WRIGHT: Right. Okay. I wanted to be sure I was clear on that part. So would the flexibility, would that flexibility have been, and I guess you addressed it a little bit, would it have been helpful to Southern during construction at Vogtle and do you think it would help you or anyone else moving forward in the manner that you described it, is there anything else that you want to add or you would want to talk about there?

MR. WILLIAMS: Sure. I think the best way to answer that question is with an example with some of the information that was included in Tier 2* for instance. So Tier 2* included detailed design drawings for walls, floors, modules, structures of the nuclear island. So I think everybody knows that, in construction, everything doesn't go together perfectly. There are tolerances and stack-up of those tolerances. So in some cases, those components didn't look like as detailed a design drawing that was in Tier 2*, even though they met all of their requirements for the various codes and standards. So by any objective measure, that wall was just as good as the wall that was shown in Tier 2*. However, because it was in Tier 2*, I had to submit a license amendment to get that approved. That's not efficient.

And so, in our opinion, you know, going forward, there should be no Tier 2*. Tier 2* should all move to Tier 2, and Tier 1 should be reduced in scope to those things that are of utmost importance to safety related and safety significance. And when a plant reaches operations and receives its 103(g) finding, all the Tier 1 information moves to Tier 2 so that the licensee can use normal owner-controlled processes to make the

changes. And if we determine that it does increase the likelihood or consequence of an event, then we have to seek NRC approval for that. But, otherwise, we can make that change on our own, which is just like every other facility in the country.

COMMISSIONER WRIGHT: Thank you for that. That was very well said, and it helped clarify some things to me. How much time do I have left? I'm at time? Well, we got that part in. Thank you so much. Thank you, Chair.

CHAIR HANSON: Thank you, Commissioner Wright. All right. Well, thank you all to our external panelists. We really appreciate you all for being here. Very, very good conversation. We are going to take a short break, and we will reconvene at 2:37 let's say, okay? Ten minutes. Thanks, everybody.

(Whereupon, the above-entitled matter went off the record at 2:28 p.m. and then went back on the record at 2:43 p.m.)

CHAIR HANSON: All right. Welcome back. This is great. We are having so much fun talking and catching up and meeting new friends and seeing old ones. This is really good. So we're going to get back to it, and we've got the staff panel in front of us. I look forward to a good discussion.

With that, Mirela, I'm going to hand it right over to you.

MS. GAVRILAS: Thank you very much. Let's continue with the fun. It's a great day to meet in the beautiful city of Atlanta and hear from our Region II colleagues. But before I pass the microphone to Mark Miller to introduce the staff panel, I'd like to talk about my vision for more

tightly integrating regional program and corporate activities throughout the agency.

I recently saw in an international paper a linear presentation of the hierarchy between the law, the regulations, the licensing basis, and oversight, and had a reaction that something was missing. In preparing for this meeting, I realized what was missing from that picture was the feedback that we have in the NRC, from inspection activities into operational experience and back into not only regulations but into everything we do as regulators. It is my hope that we, as an agency, will maintain and strengthen this loop.

I think we're on the way to doing just that because of how we structured our response to the ADVANCE Act, the initiation of strategic direction initiatives that use talent from across disciplines and organizations, and our renewed focus on broadening the professional development of staff across organizational boundaries.

Before getting into the wonderful work being done in Region II, I'd like to give a shout-out to a few specific other regional efforts that are helping the entire NRC. Region I is lending a strong voice and a lot of practical examples to our culture champions' community of practice. Most recently, they shared their successful approach to non-monetary awards that will soon be implemented throughout the agency.

Moreover, Dan Collins is one of the strategic leaders in our oversight-related ADVANCE Act efforts. The exemplary partnering with corporate offices for the Region III office move has provided a wealth of lessons learned and best practices for all of us. Also, Jack Geisner is one

of the strategic direction-setters for the implementation of the ADVANCE Act. And I would be remiss if I did not mention the exceptional agency-wide collaboration on the Palisades restart activities.

Region IV is an invaluable partner in refining the agency's incident response program and continuity of operation activities. Furthermore, John Monninger is adding his wealth of experience by co-leading efforts to enhance the effectiveness of the standard review plan and associated training and developmental activities.

And now Mark, LaDonna, Tom, Bill, and John will talk about not only how Region II is contributing to NRC's mission but also about how their activities are benefitting the NRC family. Mark, all yours.

MR. MILLER: Thank you, Mirela. Welcome, Chair Hanson and commissioners. Region II remains laser-focused in carrying out our regulatory oversight role. We characterize our posture as mission focused, value centered, and people driven. In applying this ethos, the Region II team works together in times of normal operations in an event response at all hours of the day and night.

In the operating reactors business line, all Region II reactors are operating safely with 33 units currently in the licensing response column of the action matrix and two in the regulatory response column. All fuel cycle facilities are also operating safely. Notably, Vogtle Unit 4 entered commercial operation this year, and our staff completed a thorough and successful inspection process throughout the units program. Vogtle Units 3 and 4 are now operating under the reactor oversight process, a major team accomplishment by Region II.

In addition to executing the inspection program, Region II handles a large workload in the areas of enforcement and allegations. In fiscal year '24, approximately 20 potentially escalated enforcement cases were considered with six escalated actions and nine non-escalated actions resulting from the deliberative process surrounding these cases. Five of those cases are still in process.

Regarding allegations, Region II consistently receives and dispositions a large volume of work. This might be expected, given the number of sites, both reactor and fuel facility, in Region II and the scope and the complexity of the areas we oversee.

Beyond our oversight role, I'd be remiss in not highlighting that Region II has been heavily engaged in our space modification project. This effort will result in a 50-percent reduction in square footage and will allow the agency to realize a rent cost avoidance of almost a million dollars per year once completed.

Our Division of Resource Management and Administration has worked closely with the General Services Administration and several NRC offices to make this change a reality. Preparatory work including moving staff to interim offices and the accessing and removal of one floor's worth of furniture began this summer. The overall project is scheduled to be completed by the end of this fiscal year.

Throughout the effort, we've worked cooperatively with our Labor Management Partnership Committee to align on an approach that both minimizes cost and reflects staff preferences. In addition to the business of the day and changes to our spaces, Region II recently

implemented a reorganization in which both recognized the reduction in new reactor work at the completion of the Vogtle construction project and brought us into broad alignment with structures in the other NRC regions. This staff-led effort resulted in scalable and flexible organization that positions us to continue to be successful operationally and to adapt to changes in our oversight landscape in terms of construction across three business lines.

LaDonna Suggs, our director of Division of Fuels, Radiological Safety and Security will provide you with details regarding this change, how we benefitted from staff's thoughtful approach, and how the resulting organization will allow us to flex in a dynamic industrial environment.

While organizing structure is very important, our ability to attract, develop, and retain highly-capable staff is crucial. Tom Stephen, the acting chief of Projects Branch 6 in the Division of Operating Reactor Safety, will provide you with insights into how we recruit and mentor new staff, the investments we've made, and the results we've obtained.

The fruits of our approach to preparing staff for their even though roles are many. Bill Truss, the acting senior resident inspector at Vogtle 3 and 4, will provide perspectives on the resident inspector experience in Region II and the challenges and rewards of working at a site that now includes both new and more traditional technologies.

Finally, our activities at any site are incomplete if we don't invite and engage in external stakeholder involvement. John Pelchat, our senior government liaison officer in Region II, will provide insights into this important aspect that bears directly on emergency preparedness and

stakeholder confidence.

And with that, I'll turn the presentation over to LaDonna Suggs.

MS. SUGGS: Thank you, Mark. Good afternoon, Chair Hanson and commissioners. Next slide, please.

Over the past two years, Region II has consistently delivered high-quality performance across multiple business lines. Most notably, the Region II staff successfully leveraged our technical and operational expertise to independently verify that the two new AP1000 plants at Vogtle were constructed and are operating safely, ensuring public health and safety, environmental protection, and security, with each unit expected to produce about 1100 megawatts of electricity, contributing more than 30 million megawatt hours annually. This achievement significantly supports the United States' clean energy priorities by contributing to decarbonization efforts and providing reliable carbon-free power.

In the fuel facilities business line, we completed operational readiness reviews for key projects such as the HALEU demonstration cascade at the American centrifuge plants and Honeywell's restart of the nation's only uranium conversion facility idle for five years.

For the Kairos Hermes 1 research reactor in Oakridge, Tennessee, we're working closely with the program office and licensees on planning and conducting safety inspections in fiscal year 2025. Our team has also taken a proactive approach to upcoming construction projects hosting 15 public meetings, including a first-of-a-kind fuel facility construction oversight workshop to engage stakeholders and modernize our oversight

program.

Across all Region II operational plants and facilities, we achieved 100-percent completion of baseline inspections and licensee performance reviews. Over the past two years, we conducted nine supplemental inspections and multiple reactive inspections, four at fuel facilities and five at operating reactors, along with escalated enforcement actions covering a range of topics from operational incidents and equipment failures to physical security and hazardous material handling concerns.

As part of our knowledge management efforts related to inspection findings, Region II captures value-added insights and demonstrates examples of risk-informed decision-making. For instance, during a recent refueling outage, resident inspectors reviewed the final fuel verification video after the licensee had completed their review and found no issues. The inspectors, however, identified a small piece of wire on top of one of the fuel assemblies and brought it to the licensee's attention. Upon re-review, the licensee discovered additional pieces of wire and was able to recover them before startup, preventing potential damage to the fuel. This example provided significant value, showcasing strong inspection practices and positive outcomes for both the licensee and the inspectors.

In fuel facilities, we revised our event response guidance to create opportunities for applying the Be RiskSMART framework in decision making. Recently, we used this framework to support the decision to conduct a follow-up event inspection during the next routine inspection opportunity, rather than dispatch a reactive inspection team after a facility conservatively reported an event. The licensee finished evaluating the

consequences of the inadvertent open value during an accident while the inspectors were on site and retracted the event notice after determining it was not reportable. This decision saved both the NRC and the licensee resources, illustrating how risk-informed approaches can lead to more efficient and effective oversight.

Additionally, we launched a competency-based inspector qualification program, accelerating staff qualifications and improving cross-training. This prepares us to meet you for challenges with a flexible, well-qualified workforce. Tom Stephen and Bill Truss will provide further details on these initiatives shortly.

Earlier this month, Region II completed a reorganization, which was a highly-collaborative staff-led initiative that aligned our structure with the other NRC regions. The restructuring was timed to coincide with the completion of the Vogtle Units 3 and 4 construction oversight program, ensuring we retain centers of technical expertise in construction and fuel facility oversight. The reorganization leveraged lessons learned from other regions and incorporated the Be RiskSMART framework to align expertise and job functions efficiently.

Our integration of construction expertise within the Division of Operating Reactor Safety and our partnerships with the headquarters' program offices enable us to adapt to fluctuations in workload. As construction oversight on the Vogtle project has concluded, our focus has shifted to new and unique construction projects, which entail vastly different regulatory risks and aspects. This transition has been nearly seamless, as we have leveraged flexibilities in our oversight programs, staffing plan, and

budget to ensure that resources are available and scalable to meet the uncertainties of evolving nuclear projects.

Next slide, please. Looking ahead, Region II is leveraging nearly 20 years of construction and oversight experience to inform future inspection programs across all business lines. Our work on projects like Watts Bar Unit 2, the AP1000 unit, URENCO, mixed oxide fuel fabrication facility, and SHINE ensures we remain at the forefront of regulatory development and keep pace with emerging technologies and projects.

Future inspection programs will be tailored to align with the regulatory requirements, complexities, and risks of each project. We're adapting methodologies used in Vogtle operational readiness assessments for fuel facility projects, scaling our approach to align with the lower risk of these facilities while maintaining consistency across business lines, ensuring that our approach remains cohesive and efficient.

We're also expanding cross-qualification efforts to strengthen our workforce. For instance, we've staffed senior resident inspector positions at fuel facilities with experienced reactor inspectors while placing fuel facility inspectors in key roles across the region. This cross-training builds versatility and strengthens oversight across programs.

To further enhance knowledge sharing, we've partnered with the Office of Nuclear Material Safety and Safeguards, or NMSS, to bring subject matter experts into fuel facility and independent spent fuel storage installation, or ISFSI, inspections. This collaboration ensures effective inspections and promotes knowledge exchange across regions and programs.

It has also strengthened our oversight capabilities across both business lines, particularly in critical areas like materials control and accounting, transportation, radiation protection, and ISFSI inspections. There are more cross-business line knowledge-sharing opportunities being considered across the region, leveraging the different communities of practice and expertise.

In summary, Region II is working collaboratively across business lines to capture best practices and apply lessons learned. We are positioning ourselves to anticipate industry challenges align with emerging technologies and ensure our oversight remains flexible, scalable, and future ready. These efforts reflect an approach that spans the entire nuclear fuel life cycle, ensuring public safety and regulatory efficiency.

I'll now turn the presentation over to Tom Stephen.

MR. STEPHEN: Thanks, LaDonna. Good afternoon, Chair Hanson and commissioners. Next slide, please.

Over the last 18 months, Region II has hired 42 new staff. To put that in perspective, that's, roughly, 20 percent of the region's staffing. That doesn't include transfers, rehired annuitants, and reassignments. Over those 42, 22 were hired as resident and engineering inspection staff, 13 were mission support staff, and 6 were summer interns. We would not have been as successful if it weren't for the remarkable support from our designated human resource specialists, Cindy Jackson and Denise Baker.

We've also built strong relationships with our regional and headquarters counterparts, as well as with the Technical Training Center, where we continue to identify, share, and hire highly-qualified individuals

looking for opportunities within our offices. Moreover, the region has put great efforts in looking for alternative avenues for candidates. Examples include the work by Brad Bishop where he established and maintains contacts Kings Bay Submarine Base, Pete Meier and Kevin Pfeil's efforts with the Merchant Marine Academy, and our outreach and recruiting efforts with six other organizations, including minority-serving institutions. In addition, Region II has benefitted from reach-back efforts by new staff who find a rewarding and healthy environment in Region II and encourage former co-workers to consider the NRC. Through these grassroots efforts alone, we have gained six new inspectors. Region II continues to build and maintain a culture that values high-quality staff with diverse backgrounds needed to fill mission-critical roles for today and tomorrow.

Next slide, please. As far back as 2020, Region II senior management recognized significant challenges with staffing. With that in mind, in addition to an aggressive hiring effort, the region began to put in place pieces that would ultimately be formed as the Enhanced Inspector Training Program, and that was done in August of 2022. The Enhanced Inspector Training Program's main objectives were to ensure new hires have dedicated developmental support, to ensure that existing staff had time to focus on site coverage and emerging issues, and to ensure those in new roles have the necessary support to be successful and to quickly qualify without diminishing level of quality amongst our inspection staff.

The facilitated program selected senior staff who might have otherwise retired, along with rehired annuitants, and leveraged their knowledge, skills, and abilities to effectively mentor new inspectors to create

an environment where our staff were able to learn and thrive. The core team included Joe Austin, Andy Hutto, Jim Hickey, and Roger Reyes. Together, these individuals have, roughly, 150 years of nuclear experience and a remarkable dedication to our mission.

In addition to supporting our own staff, the team has provided support to the other regions, the Technical Training Center, and headquarters. They spent over 2600 hours working directly with staff and qualification-related activities and over 230 days providing on-site support and coverage.

In addition to establishing the framework for accelerating staff qualification, Region II also took steps to enhance inspector preparation. Working in partnership with the Technical Training Center, we developed a new single owner-based training course that places trainees in the roles of resident inspectors responding to an event. In these real world scenarios, rising inspectors have opportunities to experience what we hope they'll not have to encounter and, in doing so, prepare them better for their ultimate roles.

Over the last 15 months, we have seen over 30 individuals complete initial and cross-qualifications within a relatively short period. For example, the first two qualification inspectors completed the program in 10 and 14 months, and that's compared to the previous expectation of 18 to 24 months for an inspector, all the while maintaining our high standards of quality. These individuals were Bill Truss and Frank Young. Both individuals were mid-career employees with previous nuclear experience, Frank from a shipyard and Bill, a former engineer at a commercial site.

To highlight the success of Doug Tharp's work in developing the Competency-Based Qualification Program and region support implementation, I want to share the following in regard to Bill. He joined the agency in June of 2022 and, within ten months, was fully qualified. He was selected for the resident inspector position at Vogtle 1 and 2 and now is the acting senior resident at Vogtle 3 and 4. I want to point out that he started 26 months ago as a new hire. To go from a new hire to an acting senior within such a short period is an incredible accomplishment. This achievement made possible, in part, by Bill's considerable industry experience, reflects a dedication to hard work in both him and our amazing team.

And with that, I'll turn it over to Mr. Bill Truss.

MR. TRUSS: Thank you, Tom, for that introduction. Good afternoon, chair and commissioners. Next slide.

I was in a fortunate situation coming into the agency two years ago. The Competency-Based Qualification, or CBQ, process allowed me to really focus on my training on learning the NRC perspectives and regulations while working with a dedicated mentor. The most valuable aspect in this training, in my opinion, is the hands-on experience at the sites. Being able to talk with the residents, my mentor, and the licensee on an issue that was actively being inspected provided valuable insight to the way residents piece together details of an issue, interact with a licensee, and consider issue resolution or documentation through various means in ROP, or the reactor oversight process. I believe the CBQ process has allowed me to have a smoother transition to resident inspector at Vogtle 1 and 2 and

now acting senior resident inspector at 3 and 4.

Next slide. I had the opportunity to apply what I've learned from training at the newest and maybe the most unique plants in the country. The agency was proactive in preparing for these plants to come online, used a risk-informed approach to right-size the ROP baseline samples, yet maintained the same level of safety focus, strategically allocated staffing to transition from testing to operations, and leveraged the combined organizational structure of the site to improve efficiency between the licensee and the agency.

Due to fewer safety-related systems and the passive nature of the AP1000 design, the agency developed a unique sample size that suits Vogtle 3 and 4. A passive design plant utilizes gravity and differential pressure to inject borated water into the reactor core, where a traditional design plant utilizes active components, pumps, motors, coolers, to inject the borated water. At traditional style plants, roughly, four to six pumps are designed to auto start in the event of an emergency to rapidly cool and keep the reactor core covered.

At Vogtle 3 and 4, this function is now encompassed by the core makeup tanks and accumulators, which are attached to the reactor coolant system as passive tanks that inject borated water directly to the core by opening two valves. There are no pumps required. At Vogtle 1 and 2, there are four steam generators, two condensate storage tanks, two motor-driven pumps, and a turbine-driven pump per unit, all safety related, specifically designed to mitigate a loss of feedwater transient where, at Vogtle 3 and 4, the passive residual heat removal, heat exchanger, and

in-containment refueling water storage tank provide the necessary safety-related protection. No pumps, no external tanks required.

Through my firsthand experience implementing the program, I believe the adjustment of the sample size is appropriate as there are simply less safety-related components to inspect. As part of the preparation for transitioning to operations, I mentioned strategically allocating staffing. Five inspectors were utilized during the testing phase on Units 3 and 4, two of which observed the testing phase of the AP1000 in China. The resident office was staffed with inspectors that had an operations background and inspectors that had a testing background to ensure a seamless transition from testing to operations.

Now that the transition to commercial operations is complete for both units, the NRC maintains two resident inspectors focused on the safe daily operations of the plant at 3 and 4. The resident office actively monitors operators and plant staff to ensure that an operating mind set is maintained and that the applicable regulations are followed.

The licensee has combined certain organizations between all four units, for example security and emergency preparedness, or EP. The organizational structure alleviates some of the regulatory impact on the licensee staff for coordination of inspections, reports, and self assessments. Region II is maximizing this opportunity for traveling security and EP inspectors to perform one inspection across all four units to be fiscally responsible with the travel budget and to allow inspectors more time for other mission-critical tasks.

The NRC is utilizing unique ways to improve efficiency,

and we have recognized the same trait in our external stakeholders. And John Pelchat, our government liaison officer, will expand on that further. John.

MR. PELCHAT: Thank you, Bill. Good afternoon, Chair Hanson, commissioners. The work of the regional government liaison officer reflects the NRC's principles of good regulation with a strong emphasis on openness and clarity. Along with my colleague, Mr. Keion Henry, we serve as the region's direct point of contact for our regional federal partners and for elected and appointed officials at the local, state, and tribal levels. Our job is to keep these officials informed of the issues relevant to them and to their communities. We not only explain what the NRC is doing in terms that they can share with their constituencies, but we also ensure that they understand why we are doing it.

Next slide, please. Establishing, maintaining, and strengthening relationships with these officials is fundamental to our success. Stakeholders must be able to trust us to provide complete and understandable information. This trust is especially crucial when discussing technical issues or handling disagreements.

Recently, we facilitated a virtual meeting with Miami-Dade County officials and our local, state, and federal partners to address pre-flooding concerns stemming from a GAO report on the impact of climate change at nuclear power plants. We explained our regulatory processes and provide real-world examples of how the partners work together to protect public health and safety during plant events, even amid local flooding. Our strong relationships were self evident, and the openness that

we demonstrated helped address the officials' concerns and enhance the NRC's standing amongst those stakeholders.

Another example is our recent participation in FEMA's post-Hurricane Helene assessment of the communities surrounding the Hatch Nuclear Power Plant. The team, which included FEMA, the Georgia Emergency Management and Homeland Security Agency, the NRC, and the licensee, assessed the ability of the state and the four counties in the emergency planning zone to respond to a radiological event after the hurricane. FEMA used the team's findings to conclude that the state and county radiological emergency plans could still be implemented. This success is partially due to annual joint NRC Region II and FEMA Region IV outreach, which helps ensure that officials and licensees understand and can anticipate the assessment process before a natural disaster. Ongoing collaboration between NRC and FEMA at both the headquarters and regional levels also plays a vital role in this process.

Next slide, please. But transparency alone is not enough. Our stakeholders must be able to clearly understand the information we provide. We communicate with a diverse range of audiences spanning both technical and non-technical disciplines. Many stakeholders do not have a background in the engineering, chemistry, and physics that underpin the safe design and operation of NRC-licensed facilities. This can make our regulatory decisions less self evident, which challenges us to be clear and understandable in our communications.

For example, in response to requests from the state of Alabama for a detailed review of plant systems and operations that was

tailored for emergency management professionals, Region II worked with the Technical Training Center to adapt an eight-hour reactor system orientation at the Bellefonte plant. Since nuclear fuel was never loaded at this site, there are no radiation areas, allowing participants to have access to parts of the plant that are not accessible in an operational facility. Participants were able to visit all levels of the containment building, the control room, the turbine deck, auxiliary building, fuel-handling areas, and the emergency diesel generators.

The initial feedback from the participants was overwhelmingly positive, and, by word of mouth, requests for the orientation quickly increased. Since then, participants from every state and many of the counties in Region II all with roles in radiological emergency planning have attended, along with some others from other parts of the country. A more comprehensive version of the training is also available to both NRC staff and to state and local officials.

As interest in nuclear power grows, state and local officials will continue to request briefings and testimony to inform their policy decisions. In 2022, a member of the West Virginia House asked us to arrange presentations on the licensing and inspection of research and test reactors, as well as fusion for a joint House and Senate committee meeting. The presentations were very well received, and we were invited back in 2023 to discuss the licensing process for small modular reactors, as well as other new reactor technologies.

Government liaison officers in all four regions are uniquely positioned to contribute to the work of NRR, NMSS, and NSIR by effectively

communicating with state and local officials and their constituencies about our efforts to protect public health and safety and the environment. While we use every communication tool we have, including video conferencing, the value of face-to-face interchanges and conversations and relationship building, like we are doing right now, cannot be overstated.

I thank you and I'll return the presentation back over to Mirela.

MS. GAVRILAS: Thank you, everyone. And with that, we're ready for your questions.

CHAIR HANSON: Thank you, Mirela. Thank you for all your presentations. And we'll start again with Commissioner Caputo.

COMMISSIONER CAPUTO: Well, thank you all for hosting us today. It's wonderful to be down here in Atlanta, and I really appreciate the hospitality certainly for my meetings yesterday and again this afternoon.

I'm going to start with LaDonna. It's always nice to see you. There's a lot going on in the fuel cycle facilities, so thank you for your leadership and for the dedication and hard work of your team.

You talked about adapting methodologies from nuclear power plants and scaling them for fuel cycle facilities. Can you give me a couple of examples of how you are appropriately risk-informing these methodologies to align with the lower risk profile for fuel compared to a reactor facility?

MS. SUGGS: Right. Thank you, commissioner, for the question. And we certainly acknowledge that the construction of a large

light water reactor does not have the same risk profile for constructing a fuel facility. So in going into our efforts, the inspection oversight footprints are just very different between the two.

So one example, though, where we specifically considered some of the lessons learned from the AP1000 regulatory oversight process to inform our fuel cycle construction process would be, in the AP1000, there was a focus on inspection planning that would look at very discrete and specific items that were itemized out. We've learned that that may not be the best approach. It doesn't allow for enough flexibility if you are very specific in exactly what you're going to look for because during the construction process things change, schedules change, and you are only allowed to note that a sample is complete. If you look at a very specific, discrete component or activity, then it may limit your ability to actually close that out.

So for fuel facility construction projects, we would allow for a lot more flexibility in those types of activities, giving maybe a range of different items that you can look at that would fall under the umbrella and still meet the intent behind that particular requirement. So we are converting things like taking that type of a lesson, that type an approach, when we go into fuel facilities. We want to make sure that we are considering the risk but we're not being so inflexible that we become burdensome in trying to complete our inspection activities, as construction schedules and activities can change.

COMMISSIONER CAPUTO: So with several facilities and projects going on, there are going to be opportunities to learn lessons as you

go. How are you going to monitor and assess the effectiveness of your approach?

MS. SUGGS: So I think that, obviously, we're still developing a lot of our processes and programs, so I'll speak to you a little more generally than to say that we have a specific program that's already established to do that. But one of the really nice aspects of our reorganization is that we're still retaining all of the expertise that we had in place, so our folks that were heavily involved in the construction activities of all of the past construction projects are still available to answer questions, to share those lessons learned; and our divisions are now, for DFRSS, Division of Fuel Radiological Safety and Security, it's very closely tied to reactors. We share information across business lines very easily. So I think, from the perspective of sharing information, we'll be able to tap into those resources to make sure that we don't lose track of some of the lessons that are learned and also put in place maybe some tracking mechanisms that were successful for some of those other projects to make sure that we implement them for some of our future projects.

COMMISSIONER CAPUTO: Okay. Thank you. Mr. Stephen, so I asked a question of the earlier panel. I asked the question about their processes for advancing proficiency. This is clearly an activity where Region II has seemed to be very effective in developing the Enhanced Inspector Training Program. So these efforts could be a useful model as the agency looks to reconstitute strategic workforce planning and knowledge management.

Do you have any suggestions and, you know, maybe Mark

would like to contribute, as well, do you have any suggestions for other areas within the agency where this kind of a structured approach could really yield some gains for us in terms of the time it takes to achieve proficiency in various activities?

MR. STEPHEN: Thank you, Commissioner. I do appreciate that. In other areas, not just inspecting at the plants, we have a Friday training that myself and Steve Smith run, and what we've seen is other areas of the agency have started to come in and participate in that activity, specifically the Office of Investigations and headquarters' operations officers, because not only have they, like, attended the training, but they're also providing training to us. So those are probably two areas that we can kind of look at to maybe leverage those reconstitution of proficiency because I know we're getting a lot of new folks into the Office of Investigations, and we've also had a significant hiring process executed with the headquarters' operations officers. I probably discuss training maybe once a month, once a quarter with the branch chief in charge of the headquarters operations officers. We're tied in very closely, trying to help her with her training process and making sure her folks are ready to go on that day. And then also our staff here, inspection staff, we make sure that we know how to interact with them appropriately. Those are probably the two most important ones.

Mark, did you have any others you wanted to --

COMMISSIONER CAPUTO: Thinking more broadly. I mean, those are clearly very specific skill sets, but is the approach usable in a more broader context?

MR. MILLER: Thanks. I believe it is. And I think there's an overall framework that you can take away from a lot of what's happened here, and part of that is that very senior people, maybe mid to very late career, are actually very interested in sharing their knowledge with people, and that can be applied in any office for any role.

And the other thing, going back to Tom's example about Friday morning training, is a lot of these efforts will grow organically. This wasn't something that we laid out a tremendous plan for. This was something that started out of an interest on the part of branch chiefs to put effort into bringing people along, bringing them along well, bringing them along quickly. And so I think that would apply to any office, to almost any role. I mean, there may be a few rare roles where we just have only one or two experts, but I think that's how you leverage a lot of what we're doing and you have to recognize going into that that there's an investment that needs to be made in terms of devoting people's time, you know, hard and fast to mentoring.

COMMISSIONER CAPUTO: Well, given the challenges that we're going to face with potentially growing licensing workload, a lot will be expected of the NRC team writ large. And so finding ways that we can simply improve our efficiency and bring people up to speed for the tasks that we're going to need to execute in a range of areas, I think, is really important, but I also look forward to how it offers employees a chance to advance their careers and develop skills and find rewarding positions, you know, and job satisfaction within the agency. So I like this approach, and I would hope to see us expand this elsewhere.

Mark, I'll stick with you for one last question. So it's been several months since passage of the ADVANCE Act, and, obviously, there's a team that's established to work on implementation in particular. But can you just tell me how, just within Region II, how has passage of the ADVANCE Act, how is it shaping the thinking of the leadership team and maybe beginning to guide some of the actions that the leadership team is taking just in, you know, fundamental day-to-day activities?

MR. MILLER: Thanks for that. So some of it is very natural. You know, the word efficiency gets used and used and used. And some of it goes to some very practical questions, you know, how many of us are on this meeting, do we need to be here? If you think about our recent reorganization, we used to have a daily 9:15. I think you've attended a few of those. Well, eventually, the team looked at it and said, all right, what's the value looking like over the course of a week, do we need one every day? Well, these meetings have over a hundred attendees every morning, and sometimes they're very quick. Fifteen minutes, you get a picture of what things are going on in the region. Sometimes, they go long. But one of those meetings per week has been dropped without a loss of knowledge transfer, but there was a recognition that the time could be used better in other ways.

And so, you know, those are small examples. Nothing huge and structural. But we're looking for those opportunities where we can give time back to people to apply it more directly to what they do.

COMMISSIONER CAPUTO: Okay. Thank you.

CHAIR HANSON: Thank you. Commissioner Crowell.

COMMISSIONER CROWELL: Thank you, Mr. Chair. Thank you to all the panelists for great presentations. I'm going to start with Mirela but then, as I ask other questions, if you're not the right person, just hand it off to the appropriate person. And if the question is pointed or hot, just hand it back to the middle of the dais over there or the end as it may be, whichever is more appropriate.

So, Mirela, thank you for being here today and thank you for your tenure thus far as Executive Director of Operations at the NRC. I think you're off to a great start and am excited about what's ahead. I really appreciate your messaging and your remarks to open today's panel about, you know, your vision for integrating regional programs and corporate activities throughout the agency and the feedback loop that goes with that. Consistency is huge. Consistency is, you know, it's what our licensees and applicants expect and deserve. It's what Congress expects. It's what makes the Commission's job go more smoothly, and it is not something that is found in all federal agencies that have multiple regional offices. I won't point anybody out specifically, but, in my time as a federal regulator and a state regulator, the ability to venue shop different regions of the same entity for the answer you prefer, it does happen and we need to make sure we're avoiding that, and communication there goes a long way.

So with that being said, one thing I've been looking into but I need more intel still is consistency across regions in how we do things. Can you maybe give a sense of how you're proposing to improve that consistency or how it's being done already or if Mark can add to that answer, too. But go ahead, Mirela.

MS. GAVRILAS: I'm going to first give a shout-out to the people who preceded me, who put in place a lot of formal vehicles for achieving consistency across the regions. There are information exchange venues that sometimes are anchored in headquarters but very often happen directly between the regions. So our RP branch is doing a lot of the coordination, but there are also one-on-one conversations that happen when a new issue comes out. There's practically instant conversation going on throughout the agency.

What I hope to do is figure out a way to accelerate the time it takes to basically learn that something new is going on, so we rely more on formal mechanism as opposed to the ad hoc mechanisms that are often used.

Mark, any specifics that you would like to add?

MR. MILLER: I'll add only that -- well, I say only -- at all of the different levels between the regions, you see counterpart calls, counterpart meetings occurring on a weekly or biweekly basis. On a biweekly basis, I meet with all the deputy regional administrators. We talk about what's afoot.

At the division level, every two weeks, I believe it is, there is a division director counterpart meeting that occurs and includes all the regions, plus program office. And that's an opportunity to bring up practices that are a little closer to the action. And then weekly and biweekly, we'll have an office director RA call that also allows talk across the organization.

And that, at least in my experience, contributes a lot to collaborative solutions. At the same time, collaborative solutions take time.

So it's a really good opportunity at all levels to talk the issues through.

And then, finally, I'll add that, at the branch level, these things occur, too, on a programmatic level with our technical support and assessment branch chiefs meeting, which helps take care of some developmental and training issues, some budget issues, some things like that.

COMMISSIONER CROWELL: Thanks, Mark. I appreciate it. I'm going to kind of go to the other aspect and come to you, John. First, John, tell me how to pronounce your last name correctly.

MR. PELCHAT: Pelchat.

COMMISSIONER CROWELL: Pelchat.

MR. PELCHAT: It's a French name, sir.

COMMISSIONER CROWELL: Got it. My high school French is going to defeat me right now, so I'm not even going to try. But tell me a little bit more about what life is like at your end of, from your vantage point and specifically how do you share information, whether it's directly relevant or best practices, with your regional counterparts? How do you take the information you're receiving from local and state and tribal officials and feeding that back into leadership at the region and making sure it gets to headquarters as appropriate? How does all the things that you're hearing and seeing get worked back in to mix appropriately for either action or awareness?

MR. PELCHAT: First of all, thank you for the question. It's kind of hard to describe because there is not a one-size-fits-all approach to it. And communicating to our states, each of our states have different

needs in terms of how much information they want shared with them. I mean, there's this basic standard level of information that all of the states will receive; but, sometimes, some states want additional information or they'll want more frequent communications with us and we have to adapt to that and we have to recognize that.

As far as with discussing things with my regional counterparts, in a process very similar to what Mark was describing, we have a weekly counterpart call Monday afternoons where we talk about what are we doing, what are we encountering, what are our issues. And that's an opportunity for not just Keion and I but for all of us who are regional government liaison officers to hear what's challenging us and possibly hear some ideas about, hey, this is how we can address it.

And there have been times, too, when we come up with a need to share information with the states, we work collaboratively amongst all of the regions to try to track the best, clearest, most functional message that we can so that we are successful in communicating things the first time. So, you know, some people might call it plagiarism, but we rely on our strengths and we share drafts of communications and, out of that, we'll distill a communication that we are very confident in sharing with all of the states.

COMMISSIONER CROWELL: And then how about from the other side of the equation of doing your job effectively. Do you feel like you are in the loop and get the information you need to effectively communicate with your constituencies, or are there any challenges in terms of not having the information or the people with the technical expertise at your disposal to help with those conversations?

MR. PELCHAT: No. Actually, I feel very comfortable with the level of information I'm getting. First of all, I have a meeting with the regional administrator's office every week on Monday morning and we talk about what's going on, we talk about what we've accomplished, and what's laying ahead. So that's a first-level opportunity to have a conversation.

We also participate in daily staff briefings that are going on, the 9:15 call. It just got re-labeled, and, I'm sorry, I don't remember its name yet, but we always called it the 9:15. And we would be able to go to that meeting and we would hear from each of the divisions and we would hear from each of the plants, really from the branch chiefs for each of the branches, we would hear about what's going on at the plant, where they are in a refueling outage, how are they doing, what problems are they encountering, those kinds of things.

And then, sometimes, we have to have information on an emergent basis, you know. Something is going on at a plant, we might have to communicate that with the states. And, first of all, I'm included in the blast dial that are made by the headquarters' operations officer. That includes all the decision-makers from the various offices --

COMMISSIONER CROWELL: I'm going to try to sum up what you're saying. In those instances, you're getting the information you need and you're also in the loop so that you're not getting out of ahead, you're doing it at the right time.

MR. PELCHAT: Yes, sir. Yes, sir.

COMMISSIONER CROWELL: I don't mean to cut you off,

but I'm interested in your perspectives because back at headquarters at the 17th - 18th floor, you're about as far from the ground as it can be and you get to hear what's going on in the real world, which I appreciate.

Can I ask you a little bit more about the meeting you had with the Miami-Dade officials on those flooding impacts? You said that you had a very constructive conversation and it helped address the official's concerns. Did it resolve their concerns?

MR. PELCHAT: I think so. We had a meeting. They came back and asked for a follow-up meeting with additional requests for information, and, at the end of that meeting, they said that they were satisfied. The meeting was organized by the county's emergency management agency, and the feedback I got from them was, yes, you answered all the questions. You answered the email.

COMMISSIONER CROWELL: Okay. Thank you. We'll hopefully have an opportunity to have more discussion because I'm interested in all the things and the interaction you have. Am I out of time? Okay. I'll ask one last question.

Bill, how long did it take you to get hired at the NRC?

MR. TRUSS: To get hired, I believe I interviewed in December and first day started was in June.

COMMISSIONER CROWELL: Okay. I just wanted to know if it was longer or shorter than the ten months up the ladder that you had or your ten months of being fully trained and then shooting up the ladder. All right. Thank you. Thank you Chair.

CHAIR HANSON: Thank you, Commissioner Crowell.

And thank you all again for being here and for this really, really engaging discussion. I just want to take a few minutes of my time as we start. I want to thank Laura and Mark and the entire Region II staff as we wrap up what I hope is another, what I hope we're wrapping up hurricane season. And I'm going to knock on the wood. It is real wood, at least that's what SECY tells me. And, you know, these kinds of efforts, every once in a while I know Region IV will get some activity, but it's primarily you all and maybe not so much wind in the last years but certainly a heck of a lot of water, and we saw that certainly with Helene and Milton. And whether that was having, you know, some of these meetings with Miami-Dade County or providing expert capacity so folks could take care of their families down at Turkey Point and St. Lucie, you know, licensees, emergency prep, monitoring and reporting on the storm's progress in the incident response center or being in Tallahassee for the Florida State Emergency Operations Center, just a sincere -- oh, I would be remiss if I didn't mention NFS because, good Lord knows, they got a lot of water down in the valley and that impacted. But being there and being able to walk down that facility and monitor progress there, just a sincere thanks to everybody from me. I know it's what you guys do, and it's year-in and year-out, but it doesn't go unnoticed or unappreciated. So thanks.

Ms. Suggs, let me start with you, if I may. I appreciated in your presentation the liberal sprinkling of Be RiskSMART, and you mentioned its use in the reorg, and I just wondered if you could say a little bit more about that and how the thinking by the staff, and you mentioned the collaborative and kind of staff-driven approach on that. How have you all

integrated Be RiskSMART into the reorg?

MS. SUGGS: I'm glad you asked that because that effort was very collaborative, and it was staff led, and it's something that I think we take a lot of pride here in Region II. The way that the Be RiskSMART framework was used, first, we had a mini-jam, a two-day mini-jam that was specific to Region II. During the process of that jam, we got tons of ideas on how the staff felt like we should reorg, what our new structure should be. And there was a gamut, as you can imagine, of suggestions about what that should be.

So our working group that was responsible for putting this on and facilitated it, and they worked extremely hard, they gathered all of that information, condensed it all down, and then the top, I'll say the top ten that had the most interest and that also seemed to be kind of the most contentious, they put through the Be RiskSMART framework. So each one of those ten ideas got a separate Be RiskSMART framework that it went through, which was really good because now you're comparing each option with the same set of information and getting a specific set of data out of each framework.

It also provided a level of transparency to the staff because the team was able to go back and say, okay, this is how we evaluated each one of your options and these are the pros, these are the cons, this is all of the risks that would be associated with each of them. It provided a lot of transparency for the staff to understand how their ideas and suggestions were actually evaluated.

From there, you know, we were able to make some

decisions, but what was also really nice about that was, in using the tool, our Region II subject matter experts in IT, Tom Easum and company, made an app, specifically made an app for Region II that took the tenets of the Be RiskSMART framework, made it into an electronic application process. So you were able to not just have the written form but actually have an application that you could run all this through that has now been, we're working on making it available outside of just the reorg process that we used it for but making it available to the rest of the NRC to be able to use because the nice part about it is it will have a search function. So now, when you use the Be RiskSMART framework, you have prompts that are going to prompt you to put the information that's required for Be RiskSMART into those prompts, and then that information gets stored. It almost creates a sort of database that you can then go back and search and query the types of things that have been put through the process before and be able to pull that out. Now, all that functionality is not necessarily been completely rolled out, but that's the mind set behind it and I think we're really excited about it.

But that's how we used it, and so that really helped us to support our decision-making around the way that we ended up going because our senior leadership, Laura and Mark, did not put any specific constraints around what it would look like. It didn't have to be what the other regions were, it didn't have to be a particular way. We really wanted to figure out what made the most sense for Region II given our workload and what we look like, and the fact that we ended up looking very similar to the other regions, I think, is a testament to the work that was done by the other regions in getting there. But we got there in a very organic, very

risk-informed way that leveraged our own tools and then I think also provides an application that can be used in the future. So we're very proud of that effort.

CHAIR HANSON: Thank you. That's a great story. I mean, I love the illustration, and I think one of the good things both for the Commission but also for the entire agency is to really hear those use cases of the Be RiskSMART framework, right, where it's not just thing that we did where, you know, 80 or 85 percent or 90 percent of the agency took this training and we're done, but it's actually becoming kind of a living, breathing thing and now you've got this library, this use case library essentially, in your pocket. And I think that's fantastic. It's both the application of the principles themselves but also a lot of buy-in. If folks aren't bought into organizational change, that change is not going to go well in most cases.

MS. SUGGS: I agree. I agree.

CHAIR HANSON: So that's fantastic. Thank you so much. Mr. Stephen, if you could, I'm really interested, we talked about a couple of things, and maybe, Mr. Truss, this is for you, as well. Between the Competency-Based Qualification Program, which I think is a real innovation and a positive development in the agency, as well as the Enhanced Inspector Training Program, I think I want to understand a little bit more about the relationship between those two things and how they, I hope, complement each other and so forth. So let me just hand that over to you.

MR. STEPHEN: Well, thank you for the question, Chair Hanson. So the whole process with getting an inspector through the inspection pipeline to get to the finish, the agency took a look at what was

our existing inspection process for resident inspectors, and we made a decision that we wanted to have it more focused on activities and demonstration of what you're going to do vice just, you know, basically read a book and then tell me about the book. Show me you know what the book tells you to do, and that's the Competency-Based Qualification Program in a nutshell.

The Enhanced Inspector Training Program, the idea behind that was to have additional resources available because of the large number of people going through qualifications. Now, we got a ton of help from the Technical Training Center, but, internally, we also needed to have additional resources available to help all those new inspectors get through the process.

So they do complement each other. The Enhanced Inspector Training Program folks did have a large role in making sure that Bill Truss and Frank Young got through the program in the time frame they did. If it hadn't been for their efforts, we never would have got there without those resources.

MR. TRUSS: Just to add to that, like I said, that was one of the most valuable things going through it is actually at the site working through the inspection procedures, asking the questions with my mentor. I mean, I even talk with my mentor to this day if I have any questions, and I have a senior resident inspector at 1 and 2 that I talk to, as well. So that communication, that knowledge transfer, is extremely beneficial, and I learn best from hands-on so getting my hands-on learning there was just invaluable.

CHAIR HANSON: Got it. It sounds like the Enhanced Inspector Training Program is a real bonus to the CBQ and a real, like you said, complementary. It was a game changer. Thank you very much. Kind of book-learning and experiential learning going together. Thank you so much for that.

Mr. Pelchat, I'm just going to finish up with you. I think this is a question for you. I'm not 100-percent sure. But, apparently, there was an industry regulatory inspection summit. Is that something --

MR. PELCHAT: I actually think it's going down --

CHAIR HANSON: Is that going to be down there? Oh, LaDonna. Okay. Very good. I just wondered if you could tell me, just mention a little bit more about that. Why did it, you know, why did it occur and kind of what was gained from that conversation?

MS. SUGGS: Sure. It occurred at the request from the industry. So twice a year, we do have periodic discussions with industry representatives from regulatory affairs folks from all of the utilities. And coming out of some of those discussions, there was a recognition that, on the industry side, they have a lot of new reg affairs folks, a lot of new engineers, a lot of new points of contact that are directly interfacing with NRC inspectors. On our side, we have a lot of new folks within NRC, a lot of new inspectors that are going out and engaging with the licensees. So there was a desire to really have an open dialogue on expectations, communications, interactions, to understand how do you really do what you do. When an inspector asks a question, do our inspectors understand what it takes for a licensee to provide the response to that? For the licensee,

when there is an issue that happens at a site and it's not completely resolved during the inspection, it's an unresolved item, what does that look like on the NRC side?

And so there was a lot of up-front information exchanged between NRC and industry to understand what some of the questions were so that we could answer the mail during that inspection summit. But it was all geared around really understanding our processes. And for NRC, all of our processes are really laid out. We have inspection procedures for everything we do. We have inspection manual chapters for everything we do. So a lot of the discussion was pointing back to those reference materials but then also walking you through what does the day-to-day interactions look like.

So we came out of a request by industry to have that level of dialogue. It was done in a public forum, and my understanding from the feedback that was gained was it was a good information exchange. There may be more questions that need to happen. There may be other business lines that could benefit from that type of an exchange since we do inspections outside of operating reactors, but that's sort of where it came from and how we did it.

CHAIR HANSON: Thanks so much. And thanks to my colleagues. I think I overran a bit. So thank you. Commissioner Wright.

COMMISSIONER WRIGHT: Ten minutes goes by quick. And being last, you should see my notes. Oh, my gosh. So first off, thank you for your presentations today and thank you to your team that helped you put these things together. I know it's not an easy thing, but it's been a really

good meeting.

Before I go further, I want to take a chance and the opportunity for Commissioner Caputo and Commissioner Crowell to associate each of us with the Chair's remarks and comments concerning your work during the summer and the fall. It was impressive, and we cannot appreciate you enough. So I just want to, just from us, on behalf of all of us, again, thank you for everything that you did. It has gone noticed, let's just say that, and appreciated.

Mirela, I want to come to you. Thank you again. Commissioner Crowell spoke to your comments, as well, and thank you for those comments. I did appreciate your reflections at the beginning of the panel. Something that I've noted for a while is the need to break down silos. I've noticed that very early when I was at the NRC, and I know I'm not alone in this awareness.

So I'm glad that you're thinking outside the box on this and ways to improve the feedback loops that currently exist across all disciplines. So I don't particularly have any questions for you, but I wondered if you had anything you might want to add considering what you've heard today.

MS. GAVRILAS: So it starts with senior leadership, but it ends with the staff. So what I'm hoping to do is to have senior leaders collaborate on things that impact all of us, whether it's a regional topic, whether it's a headquarter topic, whether it's corporate, whether it's program. A bunch of brains coming at the issue from different directions, working together to resolve it for the betterment of the entire agency is what I'm looking forward to.

And I think that the other thing that I want to see a lot more of is vertically integrated teams, teams where you'll have senior leaders and branch chiefs and first-line contributors working together on issues so that you have the vertical perspectives brought in directly. So that's the vision.

COMMISSIONER WRIGHT: Thank you so much. Tom, you had some conversations earlier, and I know Commissioner Caputo asked you a series of questions, so I'm not going to go back and cover any of that ground. So this question is going to be a little off-script.

I've heard about some helpful knowledge management activities that you're implementing, and they have to do with the inspector training that you have on Fridays, right, and the prep course for the Westinghouse series. Can you tell me a little bit more about it?

MR. STEPHEN: Thank you for the question, Commissioner. So Friday's prep courses, one of the staff members actually came to me one time and said, hey, can I start running these classes on Friday mornings and he started working with the Technical Training Center to get those off the ground. So what they're designed to be is a pre-training course for members of our staff that are newly hired that have little to no experience with nuclear power, and it's designed to give them a leg up, so they can be basically more successful once it goes to the full series.

Traditionally, the NRC has hired a lot of post industry, post Navy with a lot of experience in nuclear power, but now that we're hiring from a greater diversity of America, we need more help to make sure everyone can succeed.

COMMISSIONER WRIGHT: Thank you. Thank you.

To say that we're proud of what you've done and what you've accomplished is an understatement, and I just wonder, at some point, maybe I'm going to have to come work with you as a resident inspector for a day. I mean, ten months is amazing and congratulations again.

I think it's, you know, quite impressive that you were able to leverage your experience, your prior experience, right, and I just wonder, I'm kind of hopeful there might be more like you out there, but can you, now that you've gone through this Competency-Based Qualification process, are there any thoughts, any additional thoughts that you might have about that program or, you know, does it work the way it's intended, do you think that there are some changes that could be made? I mean, just your personal thoughts about that.

MR. TRUSS: Well, thank you for the question. Since I was a part of the pilot program, I did provide a lot of that feedback up-front to Tom and his team when they were going through it, and I believe a lot of that has been incorporated moving forward. But I think that there are certain aspects of that program that are extremely valuable that I've actually been able to put in practice, one of which was the emergency response training in the simulator where they actually have the resident inspector in development actually go in and simulate how they would act in the control room during an emergency response. I mean, getting on the phone call and talking through the issue, which is, I mean, that was a great benefit, especially given that, now that I've been at 3 and 4, they have had two trips where I did have to respond. So having the communications there was very good.

Also, like I mentioned, being out in the field and actually

getting the experience working through the procedures, I mean, having the up-front knowledge of how you navigate through the inspection procedures, what sections you're looking at, and where you can kind of tripped up, you get that experience from someone who has been doing it for 20-plus years. I mean, that's invaluable, and you take that and you hit the ground running when you get assigned your site. And I think that it was a benefit for me when I got to Vogtle 1 and 2 to say, hey, I've got experience with 10 of the 12 that we're working through right now. Just a better chance to hit the ground running and help the senior that's actually there, you know, with the baseline.

COMMISSIONER WRIGHT: Right. Yes. Having observed and, in some cases, been a part of kind of the process stuff, I mean, it's very detailed. I can see where you could get tripped up. Well, thank you for that.

How much time have I got? Three minutes. All right.

John, I'm not even going to try speaking Southern French to you. So it sounds like you're doing a great job and interfacing with the multiple different entities that you have to deal with, the local, state, tribal. And you've had a successful career here at the NRC. I'd say long, but you're not that old yet.

So from your perspective, are there areas where we could improve? I know you spoke a little bit to this, but are there other areas where we can improve or maybe are falling short of where we could be in our interfacing with these different communities? I mean, give me the benefit of your experience here.

MR. PELCHAT: Thank you for the question, Commissioner Wright. I think that we can enhance our outreach by meeting folks by where they are. We have to recognize that not all parts of a community rely on digital communications. We've had public meetings where we get feedback asking why we didn't post notices in a neighborhood store or share information through local churches, which are the way that many people, especially in rural communities, get information.

A really good example of this is something that Mac Reed, the senior NPC at Summer did. He went out and he had a couple of signs printed out saying NRC meetings, date and time. He had those put up on a couple of different roads near the site, and people noticed them and there was a significant increase in the number of people attending the meeting. And during that meeting, people were saying, hey, these signs are great, have you thought about maybe putting them up by the county dump, which is where everybody takes their trash to? So it's that kind of thing. I think it's a simple, non-technological approach, but it sure as heck worked.

I think, too, that we have to also recognize that when we do our public meetings that one size doesn't fit all. When we make a presentation to a technical group, it may not resonate with the general public. If I could, I use a test I call the Rita test. If I can't explain it to my mother-in-law Rita across the breakfast table, then I know that the presentation isn't quite ready for prime time with the general public. So just working, you know, on trying to make sure that we make our information as clear and as understandable to as much as the public as we can.

One last site, if I can, senior resident at one of our plants

down in Florida noticed, you know, that we didn't have a lot of information that was available to the Hispanic population, so she worked with SBCR and with OPA to get many of our brochures translated into Spanish, and that helped us in our outreach to those communities.

COMMISSIONER WRIGHT: Okay. Do we have time for one more? All right. Mark, so 42 new people in 18 months. That's a lot. And even though you've done that, maybe we can talk offline, are they the people that you need, or are you still looking for specialized people for some of those vacancies? That's what we'll talk about offline.

But with the new hires, right, because we're hiring so many new people that, within, like, five years, they're going to be the old timers, so how are you ensuring that they're becoming fully acclimated from a culture perspective?

MR. MILLER: Well, thank you for that. So we have days, excuse me, Tuesdays, at least for people in the region, that where attendance in the region is encouraged just so we get that face to face, elbow to elbow. And then, you know, there are other days of the week obviously, but everyone is aligned on that one.

The messaging, I think, we have tried to be as consistent and repetitive as we can be in terms of doors are opened, ask me questions, I'm here to talk to you. Laura does it all the time. I try. And what can we instill? We can instill a sense of openness. We can instill a sense of collaboration, you know, in terms of culture. And then I liked what Mirela said about vertical integration but, through the horizontal integration, working with peers and seniors, you know, that's where it really gets put into action.

Can you challenge me? If I say, hey, this is my idea, are you feeling good about your ability to say, well, you know, I don't know, and that's the kind of thing we're trying to establish and encourage and make people, you know, really believe is important to how we do business.

COMMISSIONER WRIGHT: Thank you for that. Chair, thanks.

CHAIR HANSON: Thank you, Commissioner Wright. All right. Well, we have reached the end of our time together. Let me just share a few thank yous. Thank you to our regional administrator, Laura Dudes, here in Region II and for hosting us all today. Our deputy regional administrator, Mark Miller, thanks for being on the panel and for also helping corral all of this. Our good friends in the Office of the Secretary, Carrie Safford and the rest of the roadies for taking us here down to Atlanta and working with the region and making all of this work. It's really appreciated.

Thank you also to all of the folks here in Region II who have joined us in the room today, as well as those online. And, finally, thanks to my colleagues for a great discussion and all of your questions.

And with that, we're adjourned.

(Whereupon, the above-entitled matter went off the record at 3:59 p.m.)