UNITED STATES

NUCLEAR REGULATORY COMMISSION

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MEETING WITH THE ORGANIZATION OF AGREEMENT STATES

AND COUNCIL OF RADIATION CONTROL PROGRAM DIRECTORS

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TUESDAY,

JUNE 9, 2026

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The Commission met in the Commissioners' Hearing Room, at 10:00 a.m. EDT, Ho K. Nieh, Chairman, presiding.

COMMISSION MEMBERS:

HO K. NIEH, Chairman

DAVID A. WRIGHT, Commissioner

BRADLEY R. CROWELL, Commissioner

MATTHEW J. MARZANO, Commissioner

DOUGLAS WEAVER, Commissioner

ALSO PRESENT:

SARAH SANDERLIN, OAS Chair

PATRICK MULLIGAN, CRCPD Past Chair

BETH SHELTON, OAS Past Chair

RIKKI WALLER, CRCPD Past Chair

BECKI HARISIS, OAS Chair-Elect

TANYA RIDGLE, CRCPD Chair

PROCEEDINGS

10:00 a.m.

CHAIR NIEH: Okay, good morning and we'll call this meeting to order.

Today we're going to be hearing from the Organization of Agreement States and the Council of Radiation Control Program Directors.

And the OAS and the CRCPD are valuable partners in the National Materials Program and Agreement States licenses and oversee nearly 15,000 material licenses in the United States, which is about 90 percent of the active licenses.

And the safe use of these materials really provides significant benefits in medical, industrial, and research applications, as well as the front end of the fuel cycle.

With the success of the National Materials Program really depends on a strong relationship and partnership between the NRC and the Agreement States.

And a good example of that is the NRC's Integrated Materials Program Evaluation Program Review that's going to be happening, I think, June 22nd, right? And you're the OAS is co-leading that effort.

So, I really look forward to the results of the NRC ZMPEP review.

And before we get started in the presentations, I'd like to see if any of my fellow Commissioners have any opening remarks they'd like to make.

(NO AUDIBLE RESPONSE)

CHAIR NIEH: Hearing none, I think, Sarah, you're first.

MS. SANDERLIN: Good morning, Chairman and Commissioners.

My name is Sarah Sanderlin, and I am the current OAS Chair.

As we have all heard over the last few years in impact management review boards and through presentations made at the Organization of Agreement State annual meetings, State to State assistance has been a crucial part of the NMP.

This morning, I will be discussing why State to State assistance is needed, the levels in which it has occurred, as well as the benefits and continued challenges to the Agreement States.

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The major issues Agreement States are facing are lack of staffing, training, subject matter experts, and resources.

Lack of staffing and training for many States has left gaps in the ability for a program to run effectively.

While the NRC is available to help and has assisted with States that have put in technical assistance requests, there is a limit to how much this can help.

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In many cases, these issues have led to turning to a neighboring State, consultants, or OAS board members for guidance and assistance.

This has been done in many ways, such as performing

licensing actions, inspections when able, providing subject matter expertise, sharing best practices, and training staff where possible.

An example of this includes Tennessee having other Agreement States employees observe and train with qualified inspectors.

Many Agreement State staff members have assisted with other programs in these ways, some of which occurs during their off hours as contracted employees.

This may be done by performing licensing remotely, physically traveling to a State -- or physically traveling to another State to assist with inspections or licensing on site.

Some choose to hire consulting companies who have employees that were previous Agreement State workers.

These consultants can provide great insight, knowledge, and assistance in getting a program back on their feet.

This, of course, would mean a State would have to have the funds to obtain a contract with the consulting company or to send their employees to another State for in-person training.

For many States, it is difficult to have the funds to obtain much needed training without the assistance from the NRC.

Other States -- or sorry, other ways States are assisting is by utilizing NRC state-delivered and hosted training to provide as many opportunities as possible.

Several Agreement State staff have attended train the trainer courses in order to be approved to teach NRC courses.

NRC training has been discussed previously at these

briefings, and while there has been discussion on how to address the issues Agreement States face, there is still a need for further assistance when it comes to particular topics.

For example, the medical course that has been moved online, there is no hands-on in-person training for students to see facilities in person for the -- some for the first time.

This leads to returning to your State and needing additional training to have staff able to perform successful inspections on their own compared to in the past.

For States where there are only newer employees, this poses some obstacles as there may be no senior staff to help get them qualified. This again leads to turning to other States for assistance.

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The benefits to having another State assist with your program is the networking it creates.

It is easy to feel alone in your State's issues, but once there is communication about what is happening, it has been found that other State programs have faced the same struggles.

This also allows contacts in areas of expertise to be identified.

If specific program challenges, such as hiring staff, budgeting, and fees, or even compatibility, you can find staff from another State that has fixed those same issues in the past and can provide insight on how to improve your program.

With all this being said, there are, of course, continued

challenges.

You may not be able to find Agreement State staff that has the time to help, the schedule and your time line may not match up.

As stated before, some Agreement State staff assist other programs in their off hours as a contractor, so, their own workload does not become impacted.

This is not something that seems fully sustainable and can feasibly be done to -- can feasibly only be done to a certain point.

Another major challenge is funding, many States do not have the funds to send their staff to trainings, whether it be NRC or another State, let alone hire a contracted employee.

Continued commitment from the NRC to support and fund training is of utmost importance to address the changes Agreement States face when it comes to staffing.

As previously stated, we are aware of changes being put into place to maintain awareness of training needs, but conversations regarding types and frequency of training will need to be continued.

In addition to continued conversations regarding current training, training for new technologies will also need just as much attention, for example, fusion training.

Right now, the Agreement States are the subject matter experts when it comes to this growing industry.

There is a reliance on other States with current programs to assist with licensing and training of staff to perform inspections because that is where the knowledge is.

This is why the continued communication, support, and funding from the NRC to OAS and Agreement States is so crucial.

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This concludes my presentation, thank you for your time this morning.

MR. MULLIGAN: Good morning, I'm Pat Mulligan. I am now the past Chair for Conference of Radiation Control Program Directors, and I certainly appreciate the opportunity to be here again today, and we're grateful for the time that you've given us.

The CRCPD is a nationally recognized leader in radiation protection.

Over time, we've established a strong working partnership with the NRC on various national radiation protection initiatives.

We believe that continued partnership with the NRC can facilitate the successful deployment of new reactor technologies nationwide.

As I will cover in the presentation, CRCPD can play a vital role in helping NRC build public confidence and trust in the process.

We look to the NRC to help us understand the inherent risks associated with the various designs being evaluated so that we can appreciate the inherent safety features.

Our confidence in design safety can help us shape public opinion at the State level and local level and garner local support for deployment of advanced reactor designs.

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Together, the Nuclear Energy Innovation and

Modernization Act, the ADVANCE Act, and Executive Orders have established a multi-pronged federal strategy to revitalize U.S. reactor sector.

Key impacts include streamlined licensing, financial support, market expansion, and securing the supply chain.

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Government State agencies will have a dual role in the development of new nuclear technologies, acting as facilitators in the deployment process, and potentially, in a regulatory capacity.

This deployment, which includes small modular reactors, excuse me, and other advanced designs will significantly impact State emergency response organizations, and security supports from State and local law enforcement.

State governments are assuming a more active role in promoting and facilitating deployment of advanced nuclear technologies.

Through technology promotion and planning, developing, and implementing energy policies that include and incentivize advanced nuclear technologies.

Through the regulatory frameworks, State public utility commissions will play a key role in evaluating the economics of new nuclear projects and ensuring they are considered adequately in long-term energy resource planning.

Through siting and development, the use of site suitability studies to identify the best potential locations for new reactors.

This is particularly important for smaller, more flexible reactor designs.

And through workforce development, State agencies and educational institutions can be proactive to establish a workforce for the new nuclear energy ecosystem by developing specific training programs.

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For new nuclear reactor designs, the developer is responsible for performing risk assessments, and the NRC oversees and approves the analysis.

CRCPD has every confidence that the NRC will continue to hold safety and security as the number one priority as designs are approved and deployed.

However, it is critical for State emergency planners to fully understand these risks and offsite impacts to develop effective, independent, and flexible emergency response plans.

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For State emergency planners, understanding the risks of offsite impacts of a nuclear reactor is critical for several reasons.

One, to protect public safety. Understanding reactive risks to develop appropriate and effective protective strategies.

To enable smart planning, use impact analysis to guide flexible scenario-based emergency plans.

To coordinate a rapid response, equip State and local officials to make timely and informed decisions during accidents -- excuse me, incidents.

To allocate resources wisely, we want to match staffing, equipment, and communication systems to risk levels.

To communicate clearly, we want to build public trust through transparent, accurate risk messaging.

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The NRC can educate State emergency planners in several ways.

First, by sharing risk insights. The NRC uses risk assessment to identify vulnerabilities and areas most important for safety.

By sharing these insights with State planners, the NRC helps focus preparedness efforts on the most critical risks.

By participation in joint exercises and drills, regular exercises and drills test and maintain the skills of emergency planners that are a crucial part of the education process.

By providing technical expertise, the NRC can provide technical staff to explain complex reactor physics and accident scenarios to State emergency planners.

This provides real-time knowledge to make informed decisions during an event.

By developing guidance and regulations, these documents establish best practices and standardized preparedness frameworks.

And by maintaining open communication, direct coordinated information sharing with other State and federal partners during an event.

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It is critically important for the industry developing new plant designs to understand the difference between an emergency planning

zone and emergency planning.

Emergency planning is a comprehensive framework that ensures coordination between State, local, and federal agencies in the event of a nuclear incident.

Emergency planning covers communication, decision-making, and response activities, whether or not public protective actions are required.

An emergency planning zone is a specific tool used by off-site organizations to guide planning for incidents that could affect surrounding jurisdictions.

The EPZ supports effective communication, but does not replace the need for broader emergency planning.

Regardless of potential offsite dose impacts, there will always be a need for emergency planning for any reactor design.

Coordination with State and local agencies is essential to ensure communication and response readiness with or without the need to implement protective actions.

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Yes, we believe a persistent, not in my backyard feeling exists towards new nuclear technology even with the growing national support.

While most Americans favor expanding nuclear power generally, that support drops significantly when it comes to building a new facility in their local community.

Concerns focus on accidents, radiation, and waste

amplified by post -- by past incidents such as TMI, Chernobyl, and Fukushima.

The NIMBY resistance is a major barrier to setting deploying new strategies, but there is a solution, State governments can strengthen public acceptance in a number of ways.

First, by engaging communities early and often, integrating public input from planning through operation.

By educating on oversight, State organizations can help NRC's daily monitoring role to reinforce safety to the local community.

And by being transparent, State organizations can help communicate risks and benefits openly, acknowledging concerns of the local residents and government officials.

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State participation can foster credible and local communication.

Training State level experts empowers local officials to act as informed and trusted communicators.

This is critical for public acceptance as people often trust local familiar sources more than they do federal agencies.

Public confidence is enhanced when safety information is not solely controlled by the federal government or the nuclear industry.

And State subject matter experts are better equipped to address specific, localized concerns, which can vary significantly by community.

This personalized approach is more effective than broad

national outreach campaigns.

State participation can expand the NRC's communication network.

The NRC maintains a strong relationships with the State's local governments through the programs like the State Liaison Officer Program.

Equipping State experts with detailed knowledge on advanced reactors strengthens and broadens this existing communication infrastructure.

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State participation increases transparency and independence. Transparency is a core principle for the NRC and a critical component of building public trust.

By training independent State officials, the NRC signals that its safety standards can withstand scrutiny from outside experts.

State subject matter experts can provide an extra layer of oversight, giving the public confidence that reactor safety is being reviewed by multiple independent parties.

Training provides State officials with the knowledge to interpret and communicate complex technical information in plain language to their constituents.

Being transparent about risks and benefits instead of claiming absolute safety, communication should be grounded in rigorous social science and acknowledge the public's valid concerns.

State partition can enhance emergency preparedness and

response. In the event of a radiological incident, State and local authorities are on the front lines of emergency response.

Training these experts ensures that they are prepared to coordinate with federal agencies and communicate clearly with the public during a crisis.

Knowledgeable State officials can provide calm, accurate updates to the public during an emergency, which can help prevent panic and counter misinformation.

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State participation can help address misconceptions.

Training State experts allows for targeted education and addresses specific public misconceptions, such as those related to new reactor designs, radiation exposure, and waste management.

Informed State officials can help frame the potential benefits and risks of advanced reactors allowing for more productive fact-based conversations.

Research shows a positive correlation between public knowledge of nuclear technology and its acceptance.

Training State experts is a direct way to increase this knowledge at the local level.

So, in conclusion, the Conference of Radiation Control Program Directors is a trusted national leader in radiation protection with strong State and local connections.

States can strengthen public trust by engaged -- engaging CRCPD in nuclear technology deployment and risk communication.

A coordinated national effort with CRCPD builds confidence, ensures consistent public engagement, and supports the safe growth of the nuclear industry.

Thank you.

MS. SHELTON: Thank you, thank you.

Good morning -- good morning, Commissioners, I'm Beth Shelton with the State of Tennessee and I serve as the OAS past Chair.

I want to thank you all for meeting with us today.

An important challenge in front of the National Materials Program, or the NMP, today is the deployment of fusion regulatory framework.

Today I'm speaking to you about the Agreement States' perspective on the oversight of fusion machines.

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Both the NRC and Agreement States have a common goal of achieving consistency and competency across the NMP.

We have been partnering with the NRC over the last four years to develop the world's first fusion regulations and licensing guidance that have included leveraging decades of experience the Agreement States have had with regulating research and development fusion machines.

Washington and Massachusetts have issued licenses to commercial fusion companies to build their proof of concept facilities.

My State, Tennessee, is currently reviewing an application for a commercial prototype and expect to issue a license later this year.

These early opportunities to use these draft regulations

and licensing guidance have provided valuable lessons and improved the NMP's fusion framework.

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Since the last time we met, there have been several accomplishments that -- to support the development of a fusion machine regulatory framework.

First, the submission by the NRC staff of the draft fusion rules and guidance to the Commission in December of 2024 and the publication of the draft rules and guidance in February of 2026 for public comment.

The effort by NRC staff to meet with the Agreement States, industry, and the public in several government to government and public meetings contributed to providing a package to the Commission that we believe is thoroughly discussed and vetted.

The issuance in March 2025 of the vision and strategy document for regulating fusion machines across the National Materials Program highlighted several NRC and Agreement State activities.

The NRC Agreement States Standing Committee on the Fusion Machine Oversight has been working on developing regulatory framework products, such as inspection procedures that can be used across the NMP.

NRC staff have already issued an excellent online introductory fusion course and plan to release an in-depth course that introduces the NMP license reviewers and inspectors to the radiological and non-radiological hazards associated with fusion machines.

We look forward to working with the NRC with the development of additional courses to support the rollout of the fusion regulations.

The issuance of the Section 205 report to Congress in July 2025 was the product of NRC and Agreement States collaboration to evaluate frameworks for the mass production of fusion machines and laid the groundwork for commercial deployment.

Also, OAS and CRCPD have been proactively engaging its membership on fusion issues during the prospective annual meetings.

Over the last three years, CRCPD has held specific fusion panels, and OAS has dedicated a day of their annual meetings to fusion.

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Regardless of whether you believe that electricity will be put on the grid by a fusion power plant soon or not, many commercial fusion companies have either started construction of their pilot plants or have selected their locations.

This means that as regulators, we must be prepared to license these facilities.

These facilities will likely be near scale and designed so the companies can quickly move to deploy commercially.

For the Agreement States, this will present some challenges.

So first, the States are still determining how to fit fusion in their existing accelerator and radioactive material programs.

Fees will be an important consideration, I know it was for

Tennessee.

The NRC's proposed fusion regulations asked about unintended consequences from the inclusion of the term fusion machine into the definition of particle accelerator.

It's critical that the States have the flexibility to amend their regulations to adequately fund and to have sufficient resources to implement fusion oversight programs.

We encourage the Commission to take this into consideration with the final rule.

As fusion machines are scaled to commercial design, the Tennessee -- the States, sorry, the States will need to independently verify the adequacy of the machines shielding of high-energy neutrons and evaluate the potential off-site consequences to ensure that regulatory dose limits are met in workers and the public.

The NRC staff have also seen the need for these modeling tools, and we appreciate the Agency's continued support for this work.

The deployment of fusion as an energy source will not be successful unless the public believes it's safe.

One barrier is educating the public on the differences between fission and fusion facilities and their associated risk.

The public also wants independent verification of any radiation released from these facilities.

In Tennessee, we are required by regulation to monitor around these types of facilities that have significant quantities of reactive material.

For fusion facilities, this means monitoring for tritium.

Not all States are required to independently monitor, but States will be on the forefront and will need to continue addressing these issues with the public.

Although the NRC indicated to -- in its report to Congress that the development of fusion framework for commercial deployment is planned, we need to start working on these now.

Rulemaking takes time, and the development of good regulations require all affected parties have multiple opportunities to contribute so that the package is -- that is provided to the Commission is thoroughly discussed and vetted.

This was done with the current fusion rule, and we need to make it -- make the move likewise for commercial.

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In summary, the NMP has accomplished a great deal of developing a regulatory framework for fusion, but we still have work to do.

The commercial deployment of fusion machines will continue to require collaboration and coordination on a national level between the NRC and Agreement States.

We have learned a lot over the last few years, and we need to share those best practices and lessons learned to establish a viable and healthy commercial framework.

The NRC and Agreement States need to collaborate and coordinate and keep the lines of communication open.

An efficient regulatory process results from early and

frequent communication between regulatory agencies, public, and industry.

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And thanks again for your time and attention, and I'm going to turn it over to Rikki.

MS. WALLER: Thank you, Beth.

I'm Rikki Waller, I'm with the State of Idaho, and I am also a past Chair for CRCPD.

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Today, I'll be speaking about some of the challenges the States will face when fusion energy becomes a reality.

We are heading into some exciting times as we work towards the future of clean, sustainable energy.

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The commercialization of fusion energy will require proactive collaboration between developers, State, and federal regulators.

The State -- the successful, timely rollout of commercial fusion relies heavily on early, ongoing communication between private tech developers and governing bodies to establish clear technology-inclusive permitting standards.

The Conference of Radiation Control Directors prides itself on being a leader in the radiation protection industry.

We aim to look ahead and address emerging issue as early as possible.

My talk today is based on a technical white paper prepared by CRCPD's E-47 Committee on Commercial Nuclear Power.

This also included NRC representation writing this paper.

I know it was included in your packet.

It's a very well written paper that addressed a lot of the challenges that are ahead as we learn how to charter these -- go into these uncharted territories.

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Fusion machines are a subset of particle accelerators, and most States have been regulating particle accelerators as radiation producing machines for many years.

Agreement States also regulate radioactive materials.

One big stumbling block will be regulation of fusion machines in non-Agreement States where I am from a non-agreement State.

There will need to be some collaborative efforts to ensure regulations are met, both between the non-Agreement States and the NRC.

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Beyond the direct regulation of radioactive materials, States and local governments will also oversee fusion facilities through existing laws and regulations pertaining to land use, environmental impact, and public safety.

This involves permitting processes and oversight to ensure that fusion facilities are sited and operated safely and responsibly.

State and local emergency responders will need to receive specialized training on the specific hazards associated with fusion facilities and the appropriate response procedures.

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There are many regulatory challenges that come with fusion.

While the NRC has sole authority over the nuclear radiological operation and site specific aspects of nuclear facilities, States can implement policies to regulate the electric companies that develop and operate these facilities.

This could involve policies related to power purchase agreements, grid integration, and other aspects of how fusion energy is delivered to consumers.

Beyond their nuclear regulatory authority, States and local governments will regulate fusion facilities through existing land use, environmental, public health, and safety laws.

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Early and often communication is key in the development process.

The State should allow a phased approach to commissioning to allow materials licensees to test processes and equipment at increasing device power and output.

Use of a third-party consultant for assistance in complex areas of licensing review should be considered.

License applicants would be responsible for the consultant fees incurred by the States.

Evaluate whether the facility considered other catastrophic environmental events.

For example, State standard seismic acceleration for

industrial facilities, et cetera, and if it's appropriate for the region being built in when addressing potential exposure scenarios.

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In non-Agreement States, the accelerator is regulated by the State, and any byproduct material is regulated by the NRC.

CRCPD recommends the following best practices for regulating fusion machines in non-Agreement States.

The State should ensure they have expertise for evaluating shielding plans for high neutron fluxes or use contract experts.

Coordinate with NRC to determine jurisdictional boundary for regulating fusion machines.

In Agreement States, both the particle accelerator component of the fusion machine and any radioactive material, for example, tritium, are regulated by the State.

In Agreement States, CRCPD recommends the following best practices for facilities with fusion machines.

Shielding plan reviews must consider all radiation hazards associated with the fusion machine.

Ensure shielding plan reviewers have competency with neutron shielding or partner with staff who do.

Inspections should be performed jointly for all radiation control programs, x-ray, radioactive materials, and air emissions, for example, whenever possible.

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Just did that one, next slide, please?

The need for training will be ongoing as fusion grows and evolves.

One of our best assets will be operational experience as more of these machines are developed and put into use.

Overall, States face the challenge of developing a tailored, flexible, and robust regulatory framework for fusion energy that addresses its unique risks while fostering innovation and ensuring public and environmental safety.

This will require the States to foster close collaboration with federal agencies like the NRC, engagement with fusion companies, and active public education and participation.

Thank you for your time.

I'll now hand it over to Becki Harisis.

MS. HARISIS: Good morning, Commissioners, and Chairman, thank you for letting us talk today.

I'm Becki Harisis, I am the OAS Chair elect, and I work for the State of Tennessee, I was the previous Director of the State of Nebraska.

So, the National Materials Program is built on cooperation between the NRC and the Agreement States. This partnership has been highly successful in maintaining a compatible and effective regulatory framework across the country.

And today, I'd like to discuss the importance of continued early and meaningful Agreement State involvement and regulatory development to support that shared mission.

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Like you said, Chairman Nieh, Agreement States regulate approximately 90 percent of radioactive material licenses nationwide.

So. that's nearly 15,000 active licenses, compared to approximately 1,800 under direct NRC jurisdiction.

In addition, 40 States currently participate in the Agreement State program, soon to be 41.

Agreement States are responsible for licensing, inspection, enforcement, incident response, and compatibility implementation across the majority of the National Materials Program.

Because Agreement States are responsible for implementing such a large portion of the program, early collaboration during regulatory development is critical to ensuring effective implementation and longer term compatibility.

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The Agreement State program was designed as a cooperative regulatory partnership under Section 274 of the Atomic Energy Act.

The statute directs cooperation between the NRC and the States in the development of radiation protection standards.

In addition, NRC Management Directive 5.3 states that it is NRC policy to provide Agreement States the opportunity for early and substantive involvement in the development of rules, policies, directives, and guidance documents.

This collaborative framework has been a major strength of

the National Materials Program and has helped support consistency across jurisdictions for many years.

The agreement itself specifically recognizes the importance of coordination and compatibility between NRC and Agreement State programs.

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Agreement States are ultimately responsible for implementing compatible regulations within their jurisdictions, and therefore, provide an important implementation and operational perspective during regulatory development.

While each State process is different, implementation frequently involves multiple levels of review, including legal review, executive review, public comment requirements, and in some cases, legislative approval processes, many of which occur outside the authority of the Radiation Control Program itself.

Early participation allows Agreement States to identify potential compatibility considerations, implementation challenges, and operational impacts before major policy decisions are finalized.

This collaboration supports regulatory consistency across jurisdictions, improves communication throughout the rulemaking process, and ultimately strengthens implementation compatibility, and the overall effectiveness of the National Materials Program.

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Agreement States greatly value the collaboration mechanisms that already exist today, including working groups and ongoing

coordination with NRC staff.

At the same time, Agreement State involvement can vary across rulemakings, and in some cases, engagement occurs after significant policy direction has already been established.

Some Agreement States have also expressed concerns regarding participation timing and portions of major rulemakings, including discussions associated with Part 20.

Continued emphasis on consistent early involvement throughout major rulemakings will help ensure Agreement States can continue providing meaningful implementation focused input that supports the goals of the National Materials Program.

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Agreement States remain committed partners in the National Materials Program and appreciate the strong collaboration that already exists between the NRC and the States.

Moving forward, continued early and substantial involvement of Agreement States in regulatory development will help strengthen implementation, improve compatibility, and support regulatory consistency nationwide.

We also appreciate the continued opportunities to participate through OAS, such as working groups and other collaborative efforts.

The continued success of the National Materials Program depends on strong collaboration between the NRC and Agreement States throughout the regulatory development process.

One recent example of successful collaboration involved discussions surrounding the Executive Order of 14300 rulemakings.

During these discussions, Agreement States became concerned that the longstanding three-year compatibility implementation period could be significantly shortened.

Through the NRC OAS bi-weekly meetings, Agreement States were able to share information regarding State implementation processes and the practical challenges associated with adopting complex rulemakings.

NRC staff listened to those concerns and ultimately confirmed that the existing three-year implementation period will remain in place.

This is an excellent example of the NMP working as intended, concerns were identified early, discussed constructively, and resolved collaboratively.

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Congress established the Agreement State program as a partnership built on compatibility, coordination, and cooperation.

Continued early and meaningful involvement of Agreement States in regulatory development helps ensure that partnership remains strong and that the NMP continues to effectively protect public health and safety.

Thank you.

MS. RIDGLE: Good morning, I'm Tanya Ridgle out of the State of California, and I have the honor of serving as the current Chair of

CRCPD.

So, today, for the last presentation, I will be talking to you about dose modeling for advanced reactor designs.

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So, I first want to say that we are very appreciative of NRC.

We have had countless meetings with NRC just to help provide CRCPD with a better understanding of this new technology, and we think that has strengthened our knowledge base, first of all.

And I think that's one of the things that is a huge gap right now, is that knowledge base about this new technology.

Whenever we have new technology, there's always the wonder that this new technology is great, but there's also the questions and the concerns of, what does this new technology bring -- to us.

For States and locals, there are always questions no matter what the emergency is, especially when it comes to a radiation emergency.

We always have those questions of what radioactive material is going to be released?

How far will this material travel?

How many people will it affect in our State or in our cities and towns?

What decisions do we need to make?

Should we evacuate?

Should we shelter in place?

These are all decisions that local and State leadership

need to make.

And when they make those decisions, it's important that they have the best information possible to make those decisions.

And one of the tools that would help us do that is dose modeling.

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So, dose modeling is an excellent tool, we already have many software tools that help us do this right now.

It helps us figure out what the type, and the release patterns are during an incident.

It also can go over different accident scenarios, which becomes very important to us.

And this helps us answer those questions that I just mentioned.

And in addition to that, it helps us prepare, and that's one of the important things that's necessary when it comes to new technology.

We are not familiar with this new technology, but we still have to prepare for it.

And although it may not be the State and local jurisdiction to license, I guarantee you, the questions we have to ask from the people who live in our cities and towns, it will be our responsibility to them to answer those questions.

And it's still our responsibility to protect them from any and all hazards.

So, it's important that we have the tools available to us to

make those decisions and to do the proper planning.

Next slide, please?

So, just some of the unique considerations that we have talked about are that State and locals have had with this new technology with advanced reactors.

We understand their smaller size and we understand this is a benefit in that maybe it's possible that the release rates do not leave the site.

However, this is something that we need to figure out for our States ourselves, as State and locals, and to do that, those modeling tools would allow us to do that.

To have those tools available to us, we can run different scenarios, we can answer those questions, get proper predictions, and we're able to make the necessary plans to protect our public.

We also understand that these advanced reactors are fabricated, and then, transported to the sites where they will reside.

We are not familiar with the transportation process and what happens if there is an accident during that transport -- during transportation.

We're not familiar with what that scenario looks like and how we should plan for that.

Dose modeling tools would allow us to get a better sense of what that release rate will look like, how far the release of materials might travel through our communities.

These are all things that will help us plan better, and in

addition, it'll help us earn the trust of the people that live in our cities and towns, and that's what's most important here.

Next slide, please?

When it comes down to it, this is, as I said, new technology. We do have dose modeling tools available, but the big question is what changes?

How does the change in this new technology affect the modeling that we have?

Can we use the current dose modeling tools that we have right now to do modeling for these advanced reactors?

How does the new technology change this modeling for us and what do we need to consider for future planning?

Next slide, please?

When it comes down to it, I think the biggest problem is we just don't know, we don't have enough information about this new technology yet.

We understand the benefits and we are excited about it, but we are still trying to figure out what this means for our cities and our towns and our States and what this means for emergency planning.

And that's our most important thing right now is making sure that the public has our -- we have the public trust.

And to do that, it is important that we do our own individual and independent modeling and assessment of the incident, and to do that, we need the proper tools, and a dose modeling software will allow us to do that.

We also don't have a historical basis right now with advanced reactors. They haven't been around for 30, 40 years like normal, traditional reactors, so we don't have the benefit of having real world incidents.

We don't even have the benefit of exercising with this new technology yet.

So, there's a lot of unknowns and uncertainties, and that's what we are dealing with in the State and local world right now, and there's a lot of questions.

And one way that we can fill that knowledge gap and we can answer those questions is, if we have the correct tools available to us to at least prepare and have proper emergency planning techniques for this new technology.

Next slide, please?

So, today, we asked the question, will there be dose modeling tools available to the States and locals for advanced reactors?

Will we be able to use this -- the technology that we already have in place?

How will that technology be changed?

What parameters will be changed?

What assumptions will be made to make sure that the current technology we have available or the current software tools will be -- can be used for modeling for advanced reactors?

And when will this technology be available to this?

And we are hopeful that the NRC, through our great

partnership, will be able to help continue our partnership, and help give us some of these tools that we need to help properly plan to protect the citizens of our State and local cities.

And with that, I will end and thank you for your time.

CHAIR NIEH: Okay.

Well, thank you for -- to all the presenters for the comprehensive and very informative information.

I get to go first at this Commission meeting today.

And it's, you know, very clear that the Organization of Agreement States and CRCPD are really an important player in the kind of the moment that America finds itself in today with respect to nuclear energy.

Right now, through the ADVANCE Act, and you referenced NEMA in your presentation as well, which triggered the fusion rulemaking on top of that, adding the Executive Order issued by President Trump for NRC reform, the NRC finds itself in the most comprehensive period of reform in probably 50 years.

You know, we have new technologies such as reactors, fusion, medical uses of materials, as well as, you know, things on the front end of the fuel cycle with mining technologies, as well as things on the back for remediation.

These are all things that we have to continue our partnership together.

And it's really great to hear that these are issues that you're focused on as well.

And I think, one thing that really stood out to me was the

discussion of public trust, how important that is for America to see -- succeed in this era.

I think the risk communication part was really important as well.

So, I want to kind of kind of start there first.

Can you tell me, and maybe, Pat, starting with you, I think it was kind of in your presentation, what are the specific areas that the public, in your States, are most concerned about with new technologies?

What do you hear about most specifically?

MR. MULLIGAN: I think from the things that I've been hearing, most of it is the risk assessment part of it.

They very much, especially in States that already have reactors, very much understand what the risks are from the light water reactors that are there because we have an established program there.

But I think, as the new designs come out, they're trying, I mean, many of them, at the public level, are equating the same risks with the new designs as they were with the old ones.

And so, I believe that there is some reluctance to support it because they believe that the risks are higher than I think they really actually are.

And so, I mean, it's incumbent upon us, as we're siting new facilities, to make sure that we go out, and certainly the State can help partner with the NRC to do this, is to teach them that the inherent safety features are significant based, you know, over the older designs.

And that the safety factors that we have right now are

tremendously, you know, supportive of building these in areas where you might not have thought they might be built in the past.

And so, I think that's the thing, is the public, right now, is associating what the risks are to what they already know.

And I think we need to overcome that barrier to make sure that they understand the risks are significantly less than they were in the past.

CHAIR NIEH: Thank you, Pat.

I really do see that as an area that the States and the NRC could really partner together with as, you know, we're looking at a lot of different designs.

I think we're interacting with probably over 30 different reactor designers that do have machines that are -- that have risk profiles that are far less than the large gigawatt scale reactors that are operating today.

Tanya, you talked about the modeling tools.

Can you tell me a little bit more about kind of the specific need?

I think the transportation scenario you raised was an excellent one, that gives me something to follow up on.

But is it access, more access to tools or do you have the access to our models or do you need something beyond what you already have access to?

MS. RIDGLE: So, right now, States and locals have a current -- they have current tools that they can use for traditional nuclear

power.

However, there are so many new designs with the advanced reactors, we do not, right now, know if those modeling tools have been updated to include those new designs.

And if they have, I'm not sure the States and locals have access to those -- to each of those models for the designs.

So, for each individual design for an advanced reactor, there has to be new parameters, new assumptions made.

Has all of that taken place?

Did that happen during the licensing process?

And if so, is that information available to the State and locals so we can do an independent assessment ourselves?

We understand that you did this assessment during the licensing process, but, once again, to gain that public trust, we think it's important that we are able to do our own independent assessment using those same tools.

CHAIR NIEH: Okay, thank you for the reinforcing that.

I understand we have made some adjustments to the modeling based on some of these new designs, but I think that's an important area for us to follow up on to make sure that you have meaningful access to those tools for your purposes.

I know when in -- and I'm trying to look at whose presentation here, maybe it was Becki's about collaboration.

I think that's, you know, a thing that's different that I noticed.

You know, I've just been back about six months here at the NRC.

Given the new way that NRC is being rolled into the broader federal policies with how we execute our rulemaking process, do you have thoughts on how we can reimagine our relationship for communication given the current situation?

MS. HARISIS: I think with all of the changes, there were things that kind of got left out that were being done before, like bringing the Agreement States in early, just because there were so many fast moving parts.

It was like, oh, right, we need those guys too.

And so, we were pulled in, but I feel like it was after things had already been decided and determined for that.

So, I think just to go back to how it was before, just remember to involve us early, make that part of the process that we reach out to the Agreement States as we're making these rulemaking groups, and get them on there from the beginning is the important piece.

CHAIR NIEH: Yes, thank you.

And obviously, I know there were, you know, there's draft rules that have been published which have been done in a different sequence, let's say, than you've experienced in the past.

Certainly encourage OAS and the CRCPD to, you know, provide comments through the formal rulemaking process.

And you know, I know I, and other members of the Commission, have really encouraged our staff to do as, you know, much

outreach as we can without compromising any deliberative pre-decisional information in the process that currently in right now.

But I do think that's important and I think the input that you have is valuable to our final decision making.

I mean, I heard a lot on fusion. It sounds like we're directionally correct with fusion, but I want to probe a little bit more there.

I know there's some just limited examples of States licensing fusion. You mentioned Washington and Massachusetts, I think Tennessee, you're looking at it as well.

Are there any early lessons learned here or any things that you see diverging in States' approaches with fusion that we should be mindful of?

MS. SHELTON: I think the main thing is that the States have to, because it involves x-ray and materials, they've got to look at how, with Tennessee, I'm sorry, I'm bringing Tennessee into this, I'm here for OAS, but it had a good example of where our x-ray program and materials are there together.

But because of our laws, it was going to create a complication to regulate fusion. So, we had to figure that out.

And I think that's different, every State is different in that way. We have to -- every State has to look at how it's going to fit into their program.

And that's one thing I've been stressing to every State when I talk.

But did you have anything you wanted to add about that?

MS. WALLER: I'm just coming from the part from being a non-agreement State where we do have to have the collaboration between the material side and the radiation producing machine side.

So, there is going to have to be some communication on that and it's similar to particle accelerators in the State as well as machines like PET, CT.

CHAIR NIEH: Okay.

You mentioned something, Rikki, in your presentation, it was just a bullet in the slide, but I just would give you the chance to elaborate on it.

You said that there wasn't the clarity with cybersecurity requirements.

MS. WALLER: Yes.

CHAIR NIEH: Can you talk a little more about what isn't clear right now there?

MS. WALLER: A lot of it's in the paper, it's just, I think it's, like Tanya said, an emerging technology, a lot of things are new.

And I -- with the new changes, I think cybersecurity has to have some changes that come along with it, just to make everything more clear, just across the board on requirements, and what needs to be done to bump those up to make sure that these -- the computers that run everything, what type of requirements are needed to ensure security of all of those networks?

CHAIR NIEH: Okay, thank you, Rikki.

And Sarah, I was a former NRC inspector, and I listened to

your presentation about the training needs, and, you know, the support that NRC provides, which I believe is very important for, you know, you all to execute the oversight functions here with OAS.

Can you talk a little bit more about what the critical skills are that you're seeing in the inspection area that you really need the most training support?

MS. SANDERLIN: I think that's a little hard to specifically answer because every State is different.

But I feel like the trainings that have moved online has significantly impacted inspection skills.

And then, when you go back to your home State and your program is relatively newer, it's a lot harder to get people up to speed as quickly.

CHAIR NIEH: Is it more related to the technologies or the inspection techniques? Like what -- I'm trying to differentiate the need here.

MS. SANDERLIN: I might need some help answering this question, I'm not really sure, specifically, how to answer?

MS. SHELTON: So, I think one thing, one class particularly, the medical course, it used to be in person, and we would go to the hospitals or go to the places, and we'd visit, and it's very easy to look -- go to a pharmacy and see how the inspection would be done in the course.

If you go -- if -- now, it's all online. If you're learning -- the class, the online stuff is great, it's wonderful, and they do have tours.

You know, they have videos and stuff, but you -- it's harder to ask the -- what's really coming into your brain right that second. You

know?

So, what happens now is, the inspectors that were in the course come back to their States, and they go out with other inspectors from their State and get that on-site experience.

Well, the problem we're seeing is, with States that are smaller or only have new people, they're not having that.

So, they're not becoming the inspectors, they need to be as fast as some of the bigger States.

CHAIR NIEH: Okay, thank you for painting that picture for me.

Okay, my time is up.

And Commissioner Wright, I believe you're next.

COMMISSIONER WRIGHT: Thank you.

Hi, thank you so much for your presentations and for being here. It's good to see each of you again.

You know, over the last eight years, we have seen a sea change in how the relationship between the NRC and the two organizations have gone.

And it's been really, really good to see, and it's been awesome to be a part of it.

So, but I've heard it twice today, every State is different, I've heard it twice.

And I want to talk about that a second, because I have, for one, tried to be involved to help where I could when I do my travels around.

How are the States handling today -- how are your States

responding to your needs for talent from a pay perspective and recognition of the talents that they have, that they're not lumped into some lower classification, you know, like your certified health physicist and stuff like that?

Are they responding better?

Or -- and if they're not, where are the problems?

You know, are there specific States?

Because as we all know, we provide three years' worth of training.

And then, if you're not paying them enough in South Carolina, Virginia steals them. Okay? They poach them because they can pay them more.

So, I'd like to -- and I -- that's what I've tried to do when I go out, is to talk to those -- your, I guess, your secretaries and your governors about being, you know, paying attention to that.

Can y'all share with me what's going on?

MS. SHELTON: Do you want to talk about -- CRCPD just did a salary study, I don't think the information is out yet.

(OFF MICROPHONE COMMENTS)

MS. SHELTON: It's not out yet?

PARTICIPANT: It's not out yet.

MS. SHELTON: Okay.

Well, I think that we will learn a lot from the salary study that's coming out, so to be determined.

But again, I will say you came and talked to Tennessee,

and it was incredible, it really helped us.

So, having that, support from y'all can really make a huge difference in how the staff are viewed.

They actually, you know, in Tennessee, they didn't even know we existed.

He came out, and the next thing you know, we're involved in everything, like, too much.

(OFF MICROPHONE COMMENTS)

MS. SHELTON: Right, right.

So, but it is -- it's very -- it opens their eyes and tells them that, oh, there is this regulatory side that we are a part of, whether y'all are going to be the ones regulating or not, we're still very involved with every facility that's coming into to Tennessee or any of the other States.

So, having y'all is -- there to provide that support is first and foremost.

COMMISSIONER WRIGHT: When will that study be done or be public? Do you know?

MS. RIDGLE: Right now, we know we've received all the results, we just haven't -- the committee that's over it has to go through the results and kind of publish those results.

But that's something, especially if it's something you would like to see, we can definitely push that.

COMMISSIONER WRIGHT: I mean, it would be helpful just to know, you know, because I've tried to pay attention to that just from myself.

I mean, because you've spoken to it, you've got to have certain expertise, right?

And if you can't afford the expertise or if they get taken by, you know, a better opportunity somewhere else, that's not helping the overall program.

And so, you know, I think we need to try to pay even closer attention to that, especially as these things start rolling out, you know, it's going to be a lot.

And one, I want you to be ready, and I want us to be ready as well to support you, which goes to training.

So, if you need the -- if you're trying to train your inspectors and the other people in your organization, are there gaps in our training?

Is our training -- you mentioned -- you did say that a lot of it was really good, was awesome or excellent, that was the word I think you used.

But are there gaps, or are there areas where we need to freshen things up?

MS. HARISIS: I can speak to that if you want.

I would say the online stuff is great to get you like the knowledge that you need, but there's not the personal, like to stop and ask somebody some questions.

So, even if there was like one day where it was even a virtual class for each offering, just to have that one-on-one with the teacher, professor, whatever they call them, to be able to actually have that interaction with the questions and that kind of stuff.

Right now, it feels like, you go through the trainings, and I've done several of them online, now I did transportation, I took a lot of trainings during COVID, that was fun. I did advanced health physics during COVID virtually, that was something else.

But the advanced health physics course, I had a teacher through that whole course, even though it was virtual and online for that, that was helpful.

The transportation one, it was just you go through it, and then, you're done. If you had questions, there really wasn't anybody readily available to answer them for you.

So, I think that would be a huge help is if there was something, where there was a day, or a half a day where you actually had interaction with somebody.

COMMISSIONER WRIGHT: Are you -- I know that we've talked about, in some of your meetings, and then, on side trips where I've met with certain States that are really, y'all are close by and very -- and you work close together.

Do you do any more regional trainings than you used to? I mean, multi-states where maybe Tennessee hosts for Arkansas and North Carolina or somebody like that?

Or is there a way that we can help facilitate that a little bit better?

I know the train the trainer stuff is important, and we've been, you know, we've been focused on that with you, too.

But you've made two things today that are shortcomings as

I see it.

One is the lack of being able to get some of your questions answered in a virtual or live setting. Right?

And the second is the personal touch, like in your pharmacies and stuff like that, right?

So, that -- because hands-on, I get it, it works.

So, I'm just -- is there a way -- do you have any ideas on how we can better help you there or things you might like to see?

MS. WALLER: I just want to add something going towards what Becki had to say.

Even maybe some type of a mentorship program would be very helpful in these situations, especially the States where they don't have -- where everybody's new, like Sarah said, having -- coming up with some type of a mentorship program might be a good idea.

COMMISSIONER WRIGHT: So, in that regard, and I know my fellow Commissioners are aware of this as well, but, you know, we're getting more and more Agreement States, right? And hopefully we're going to keep growing, that's the goal.

So, our involvement, as an NRC, is going to be more focused on the training side of things, I would think, going forward.

So, I think we need to be able to look at these opportunities and, for us, as an NRC to put in place those types of things that are going to give you the most bang for your buck and do the best we can to train your people.

While at the same time, y'all have got to -- if you need help

on, you know, with -- to your peers about, hey, if we don't solve this problem from an employment standpoint or a salary standpoint, you're going to invest a lot of money and you're going to lose people to other States.

So, we've got to -- I think we've got to be focused on that, too.

And I'm, you know, one, I'm looking for any opportunity to help support you there because the States can do it cheaper than the NRC can.

And you know your people, right, you know everybody local where we don't.

So, I think there's extreme value in what you do and, you know, I want to be sure we're doing all we can to provide you the expertise that you need.

We've asked a lot of questions here so far I -- there's nothing particular, except I want to ask you about public education real quick.

Our Chairman talked to you a little bit about this, but the education between fusion and fission, is there -- it's important.

How -- is there anything that Tennessee is doing or something that y'all are putting in place in one of your States or through your organizations that really addresses the public's concern or the need for them to understand the difference between fission and fusion?

MS. SHELTON: I think that -- the -- that's the main question that I feel like we get OAS is what people are -- what States are hearing is what's the difference and how are we going to explain that?

So, if the NRC -- if we could work together -- and I think the standing committee is working on some of that, too, maybe, working on some educational outreach stuff.

I know Tennessee and the State of Washington are working on our websites to put together some more outreach information.

Tennessee is different, we just had our public outreach event in Oak Ridge for Type 1 Energy, was not expecting many people to come at all because Oak Ridge is very knowledgeable.

Well, instead of getting the usual, you know, am I going to be green questions? They were very informed questions and it was a very different public outreach.

So, I think that's one thing that the States have to look at is where you're going to do this outreach, it's very different across, you know, you go into somewhere that has no nuclear power at all, you're starting from scratch versus somewhere like Oak Ridge or, you know, around the INL or something, you're getting very educated people who know the right questions to ask, and you better know the answers when you're being asked it on a Saturday morning.

So, those are my big things, with that, anybody else want to --

COMMISSIONER WRIGHT: Well, I do see that as a challenge.

MS. SHELTON: Yes.

COMMISSIONER WRIGHT: And to -- just to your point, we have States that are at different levels and some like Oak Ridge are -- I

mean, you walk in there, you better have your knowledge, you know, because they will challenge you. It's a wonderful place to hang out.

So, thank you, Mr. Chair.

CHAIR NIEH: Commissioner Crowell?

COMMISSIONER CROWELL: Thank you, Mr. Chair, thank you to all the presenters for being here today. This is always a valuable conversation. It's good to have you all squeezing around the table as the State federal family that we strive to be.

You know, as a former head of a State regulatory agency, I know your lives well, and I appreciate the good, bad, and the in between.

It is a different dynamic than -- working at the State level is a different dynamic than at the federal level.

You know, during the first Trump Administration, there was a philosophy called cooperative federalism that was used a lot.

And during that time, I was a State regulator, and it proved to be, you know, it sounded good.

And then, in practice, it actually worked really well.

I feel like we've strayed from that a little bit in the recent years, and I hope we can get back to more of that cooperative federalism between the federal government and State agencies.

I also appreciate how challenging it is, as a State, to have new requirements placed upon you or the need to have new expertise.

You know, my home State in Nevada, probably similar to some of your States, you know, they do two-year appropriation cycles.

And regulations have to -- or the State legislature meets

every other year for, you know, a couple months rather than, you know, on a regular basis, and to get things through that process, you've got to get it, if you need new staff, you've got to get that put in the budget. That's one fight.

Then, you've got to get it through the legislature. That's another fight.

And then, you've got to find that unicorn to hire for that position.

And then, you've got to go to battle for the consistent budget to continue to implement that stuff.

And the more the NRC can help, you know, fill that void or provide those resources of support, I think it makes it easier for the States.

But that's not to say, you know, don't continue to beat the drum through the State process to get what you need.

Pat, I really appreciated your presentation, your focus on community trust and communication and transparency.

Is there anything in the transparency realm that you're concerned about these days that, you know, maybe was more transparent previously and is not as transparent now that we could get back to improving upon in terms of clarity and openness and cooperation?

MR. MULLIGAN: And I don't think it's a lack of transparency at this point, I think it's a lack of identifying the things that we need to know that you need to be transparent about, and I think we need to make that clear.

What do we need as far as what reactor design risk is?

What information do we need to get to arm ourselves so we can go out and talk to the public?

And I think that, as we move forward, I think we can work on that transparency by us identifying what those specific needs are that we need to reach out to the NRC for support, because we just don't have the technical expertise at most of the State levels.

I'm fortunate in New Jersey, and Commissioner Nieh knows that we have some fairly qualified nuclear engineers on my staff that understand the technology.

But a lot of States that exist right now where the technology is going don't have programs at all.

And so, that's what we need to identify, the States that have the expertise now built with the NRC can build what information or a pathway to get the information to those State officials that don't have anything at this point.

So, I think that we can, together, build that transparency, not that you're not being transparent, but we just need to build that pathway between the NRC, the State governments, and the locals where it doesn't exist because it's going to be in every State, I believe.

COMMISSIONER CROWELL: It sounds like a very solvable problem, that communication could do a lot to correct, and I hope that we can just take that on and just nip it in the bud.

I think the same, you know, thing applies, Tanya, in respect to what you brought up.

And so, hopefully, we can do that. Hopefully, we have the

staff here to do that, and we'll connect the dots with our folks working with States.

Rikki, I think you mentioned during your presentation regarding fusion machine regulation, consistency between agreement and non-Agreement States in terms of the establishing fusion regulations.

Can you tell me a little bit more about what you're alluding to there and what your concern is?

MS. WALLER: What I'm alluding to is just the sharing of knowledge and information so that the States, as fusion comes in or, you know, the States that aren't seeing it, that they have somebody to go back to communicate with so they're not starting over from scratch, where they can take what other States that have the experience about it, and take their knowledge and build upon that so that it works for their own States.

COMMISSIONER CROWELL: Got you.

Take the fifth on this if it's not a question you can answer, but it's a point of curiosity to me, and since you're the -- since Idaho is the only State at the table that's not an Agreement State, what goes into the State deciding to be or not be an Agreement State?

I mean, has that discussion been had in Idaho and how did you end up on one side or the other?

MS. WALLER: I hear it has been discussed, it's actually going through the governor's, I'm trying to think of what it's called, Environment and Resources Bureau.

So, I think there has been some questions asked about what it takes to be an Agreement State.

COMMISSIONER CROWELL: From a budget and resource perspective --

MS. WALLER: Yes --

COMMISSIONER CROWELL: -- versus a --

MS. WALLER: Versus a radiation perspective, yes.

COMMISSIONER CROWELL: Got it, great, thank you.

MS. WALLER: So, I wish they'd reach out to me so I could tell them, you know, these are the States to talk to that can, you know, recent Agreement States that could help them kind of understand the process a little bit better.

COMMISSIONER CROWELL: Yes, I just personally, I've always wondered why particularly States like Idaho and Michigan are not Agreement States, given their profile footprint in history in these areas?

MS. WALLER: I wonder that as well, too.

COMMISSIONER CROWELL: Yes, well, I never got a clear answer out of our former Chair either who was from Michigan, but so it's always long been a mystery to me.

And I think I made it through my time of service in Nevada with not even knowing Nevada was an Agreement State or what that totally meant.

So, there's interstate, intrastate communication that used to happen as well.

Becki, real quick, in some of the time I have left here, you know, I appreciate your comments about, you know, the NRC finding its way back to the, you know, having a three-year implementation window, how

important that is.

I tried to, you know, give some commentary on the front end of my questions about why that's important, because of State dynamics are just different than federal dynamics, and we need to be amenable to that.

I'm also a little bit worried about whether we have so much going on at the NRC right now and a lot of it that affects the States.

Are you getting, not only the resources and information you need, but the time you need to do diligent review and provide feedback of rulemakings?

Tell me, I know it's a little bit of a loaded question, but it's a real one, because like 30 -- if I'm a State regulator and I got 30 days, I'm like, I go into panic mode because that's hard to marshal thoughtful, thorough comments in that period of time, especially on a major rulemaking, and then, ones that come one after the other after the other.

Tell me a little bit about the strain you're under in terms of these time lines?

MS. HARISIS: There are people in this room who have heard about that from me and other people, and they know how hard it is for us.

The 30 days is almost impossible. We have been, on the OAS side of things, because they've been able to share with us, I feel like we've gotten more than the 30 days because we've been able to share with the Agreement States stuff before it's gone out. That's been helpful.

So, we've been able to have State to State meetings on that.

But to pull -- especially there's some rules that are coming out that are huge and big, and 30 days is going to be a stretch.

I believe those are being extended to 45, so that's helpful and we're thankful for that, 90 days would be wonderful.

Yes, it's a lot for States to pull together, and typically, it's -- there's States that don't have the resources to be doing the reviewing, so they're relying on the OAS.

COMMISSIONER CROWELL: And when you've got your day job to do as well and if, perchance, you're in the throes of your, you know, annual or biannual legislative session when you don't have any extra time to do things, it becomes really challenging.

And I do appreciate that, through OAS and the other State organizations, you all can share.

But we need to be realistic about what is within the realm of possibility for getting quality review times and input out of that process, and I appreciate your comments on the front.

That's all I have, Mr. Chair.

COMMISSIONER MARZANO: Good morning, everyone, and to our panel, thank you very much for being here for presentations.

I am very grateful for this long overdue opportunity to sit across the table from you, because it's my first public meeting with OAS and CRCPD, given our last year's meeting was postponed by the government shutdown.

So again, I might do a little filibustering here.

We are in a period of significant transformation across the

nuclear enterprise.

Innovation is accelerating and the commercial potential in the nuclear technologies and new applications of -- and so is the commercial potential of new nuclear technologies and new applications of radioactive materials.

And the NRC, alongside our agreement State partners, are being called upon to evolve with it.

I'm reminded of a quote by Thomas Jefferson that, although frequent changes in law and constitutions are not ideal, laws and institutions must go hand in hand with the progress of the human mind.

In that context, our fundamental mission to provide reasonable assurance of adequate protection of public health and safety remains unchanged, but our approaches must adapt to this progress.

Crucially, we do not regulate in isolation.

Under the Atomic Energy Act, we share the responsibility with our Agreement State partners to ensure that nuclear technologies and radioactive materials are deployed safely.

Today, as Becki mentioned, the Agreement States regulate nearly 90 percent of the nation's radioactive material licenses.

While the NRC sets national standards, Agreement States hold the collective implementation experience that sustains the National Materials Program, as we undertake major efforts, such as the wholesale review and revision under EO 14300.

And it is essential that we move forward in full collaboration with our partners.

Yet, as we have heard today, and from many external stakeholders, our commitment to provide proactive, transparent, and meaningful public engagement has diminished.

The NRC's traditionally open rulemaking process has become constrained under Executive Order 12866.

We no longer share draft documents publicly, nor do we consistently engage diverse stakeholders early enough for their insights to help inform draft regulation before they are issued for public comment.

It is my sincere hope that, once we move beyond the implementation of Executive Order 14300, we can return to a more deliberative and participatory rulemaking process.

We should strive to streamline our regulatory development efforts, while preserving robust public engagement that has long strengthened our work and upheld public trust.

So, along those lines, starting with the public trust, Patrick, I appreciate your presentation.

I think that, as these technologies are evolving, as their uses are being spread, not just through electricity generation, and of course, on the material side, I think the NRC has a role to play with States, either through direct engagement with the public and supporting State programs.

So, I'd like to kind of ask a little bit, and dive down a little bit deeper, about the NRC's own kind of institutional mechanisms for enabling those types of engagements.

So, we have our regional Agreement State officers and our regional State liaison officer programs that support State planning efforts.

What improvements in communication can strengthen safety and community engagement, especially using our ability to convene stakeholders and through our existing government to government exchange processes?

MR. MULLIGAN: I'm going to take a second to think about that because I want to process exactly what you're asking me.

COMMISSIONER MARZANO: Maybe if I could, really --

MR. MULLIGAN: Sure.

COMMISSIONER MARZANO: -- we have these existing structures in place, and I think that they were built for a time that's not necessarily seeing the level of innovation and deployment that we expect.

How can we look at these existing structures within our institutions and maybe update them and revive them for the new environment that we're in?

MR. MULLIGAN: Yes, and I think your State liaison program officer, right now, that we have in place is a good conduit for us to really solve a lot of the issues that I was talking about.

They are essentially your subject matter experts in every State, and they interface with the NRC regularly on a number of issues.

And so, bringing them into the fold and utilizing that already established framework that we have between NRC and State, to share the information that I was talking about, to build the subject matter experts within the State, that can facilitate that process of bringing out to the local communities.

And I think that, you know, with that in place, as we identify

what information needs to be exchanged and what we're looking to get as the broader technologies, and it's not just nuclear power plants, but it's the fusion, we're going to need to reach out to the community to let them know a number of things that are going on from that level.

And so, that can be a way that we can share really high-level technical information so that, at a State level, we understand what the inherent risks are, what the safety features are, and so that we can actually go out to our communities who are actually -- some of them are soliciting, can you come and talk to us about this? We're interested in nuclear, but we don't understand it.

And so, I think that that's it, if you arm us with the facts, we can build fact sheets, we can build outreach programs, and we can go out to those communities as they request it and give that information.

COMMISSIONER MARZANO: Yes, and I think that's kind of where I'd like to drill down a little bit deeper because it's based upon on a request.

And I envision a scenario where our capacity gets challenged to handle each of these requests across States.

And so, is there maybe, you know, additional resources to be committed to these relationships?

Should we be taking a more proactive approach in engaging States, similar to how, you know, the Department of Energy has gained which has gone out?

Of course, they have a very different role and responsibility in this whole enterprise.

But, you know, can the NRC fulfill a role similar?

And I'm mindful of, you know, the whole, I'm from the government, I'm here to help kind of challenges with that, but we'd just like a little bit more, you know, idea of whether or not that -- and of course, the panel can help, is free to answer this as well.

MR. MULLIGAN: Yes, I mean, I think absolutely the NRC can be a huge -- and it's not that we want to get the information from you and be the only voice out there, I mean, I think that's a partnership.

I think us standing shoulder to shoulder at a public meeting goes a long way to building public trust.

I wasn't trying to infer that, you know, we'll take it from here, you give us the information. I was like, you know, well, we need the information that we can stand next to you confidently and say, yes, this is a pretty safe design, and you really should have this in your community.

And so, I think that if we can build that, when you're looking, much like Commissioner Wright, like you do, go out to the States, and talk to the communities.

If you're standing there with somebody from the State who says, yes, you know, you got to trust this guy because he's, you know, he's worked with me and, you know, he's telling you the truth.

I mean, I think if you have State folks standing there at the same podium and sharing that information, I think that goes a long way to building public trust.

And once the word gets out and you do that a few times, that'll spread and I think that it'll be easier as time goes on.

But if we can get something in place that facilitates that, I think it'll go a long way.

COMMISSIONER MARZANO: Okay, thank you very much.

I want to keep on the kind of emergency planning and supporting States in that way.

You know, we talked a little bit about the specific need for access to modeling tools, you know, that's something I think that this Commission, we are definitely interested in providing and making sure is available.

But, you know, I want to look beyond just the consequence modeling and talk a little bit more about protective actions and programs and how the best practice in science has evolved.

You know, we've learned a number of lessons from previous events, Fukushima being one, a recent one, and that, you know, protective actions themselves certainly have an impact on public health and safety.

And how can the NRC be working with States to, one, you know, incorporate best practices to emergency planning?

And then, also essentially partner to better educate and build consistency across States with how emergency planning is executed such that, you know, I think that there is a sense of public trust that can be built when there is that consistency and confidence and that the actions that States are taking to protect the public and have the public support.

MS. RIDGLE: I'll take that one and it actually goes back

to what Pat said, and also what you said.

I think if the NRC helped and were a little bit more proactive, you have to realize sometimes States, and those of you who've worked for States, they are a lot focused on they go out, they inspect, and that is what their main primary focus is and that's all they have time for.

The other stuff, the new technology that they have to learn, they squeeze that in somewhere in between their day jobs.

The emergency response and preparedness, if you don't have a primary department for that, typically, nuclear power plant States, they do have that department.

Other States, that's something they also have to squeeze in as well.

So, there's not always the main focus on figuring out the best possible ways to come up with preparedness plans and there's -- and not because they don't want to, just because there's just not the time and it's not their priority, their main focus.

So, maybe if we can collectively, whether it's the NRC working with OAS or CRCPD, coming together, CRCPD is happy to be a conduit for that to make sure that, if we partner together and came up with some ideas, we could get those out to States.

But it has to be something that, I think, and I'm hopeful, that NRC can help do a little more proactively.

As Pat said, you all coming out to our States alone goes a really long way in talking to our leadership, just seeing you will make a huge difference and standing next to us.

COMMISSIONER MARZANO: Well, I think that that's -- that would be the kind of takeaway here is that I think we would definitely benefit from your organization's proactive engagement with us to identify where these gaps may be.

Before we close, I just want to plug our training center down in Chattanooga. I think it is, you know, this -- I continue to work with our folks on achieving this balance between utilizing some of the new tools that we have available.

I, you know, had a chance to put on a virtual reality headset and start doing an inspection in power plant, maybe that's something that could somewhat help with the hands-on training experience.

But certainly, coming out of, you know, the operations world myself, there's nothing that can replace that.

And so, continue to work with us, identify where we have gaps, where we may need to kind of focus more resources as well.

So, thank you very much for your time today and your presentations.

Thank you, Mr. Chairman.

COMMISSIONER WEAVER: Thank you, Chairman.

Thank you all for being here, I also want to just thank your personal commitment to taking leadership roles in an organization that is committed to safety to both organizations. So, thank you for doing that.

Going last has its advantages, going first has its advantages, too. I think I like being on either end.

So, and I -- I think all of us have had drop-ins from

microreactor vendors and fusion machine manufacturers who are envisioning these things being ubiquitous.

So, as I think about that, and listening to your presentations this morning, in some cases, you may be ready, in some cases, you may not be ready.

And so, for example, you know, with a microreactor, once they have a manufacturing license and they're making these things, it's not going to be a five-year construction project.

They're going to show up and want to, you know, put this thing down, and basically, get into operation in -- maybe in a matter of weeks, I'm not completely clear, but certainly not five years.

And so, our ability to be timely, collectively, it's going to be very different. What was timely before isn't going to work in the future.

And I'm just wondering, so, my first question, and I open it to anyone who wants to take a crack at it, and it kind of follows on a little bit of what Commissioner Marzano was asking at.

How do we need to work differently in the future to be able to respond to this world that I've outlined, if it comes to pass?

(NO AUDIBLE RESPONSE)

COMMISSIONER WEAVER: Takers?

(NO AUDIBLE RESPONSE)

COMMISSIONER WEAVER: I'm just thinking that maybe the old -- doing the things that we do may be part of it, but may not be sufficient.

MS. SHELTON: I'll just go real quick and then somebody

else jump in.

But I do like to talk, I'm sorry.

So, I think one of the big things that we're seeing with microreactors or small modular reactors or fuel fabricators, all of them, I'd like to see the NRC and the States work together.

We may not be regulating the big portions of the microreactors or the small modular reactors or whatever, but we're going to be the ones that are having to deal with the public and we're the ones that are going to be around it.

We're -- we've got, luckily, in our regulations, we have a regulation where we have to monitor around these types of facilities and then, we send them a bill.

So, we're lucky because that's really helpful, you know, for public outreach.

So, I'd like to see other States get on board with that one, it's been very helpful so far.

But I think if we could work together more on the stuff that we don't necessarily regulate, I think that will help us because we are the ones that are --

COMMISSIONER WEAVER: Could you give me an example maybe what that would look like?

MS. SHELTON: Well, like for instance, Kairos, we have been interacting very closely with them.

We won't be regulating probably any portion of that, but if we weren't involved with them -- because we're the ones that get the

questions.

I mean, you all get questions too, but we do get most of the questions.

So, having that working together, so that we know what's -- we don't even know a lot of times what's going on, we haven't seen their application. We haven't -- unless they're sharing it with us, we're not seeing that stuff.

So, being on the front end in the States, even though we might not be the regulator, would be very helpful.

MS. RIDGLE: I'll jump in, just starting earlier, we talked about that.

As Beth said, we know everything is public, but that doesn't mean we always review it right away.

Sometimes, you know, like as you said, we will have many licensees coming up and it's going to be in a matter of weeks and we're just going to be, you know, have these number of licensees that all have microreactors or something.

But maybe if we could have gotten started earlier with each of the different designs that are coming out, even though are not -- we don't have a part in that licensing process, we will have a part in dealing with the licensee and dealing with the public about that new technology.

So, while we don't want to take over and be a part of your licensing process, but maybe if we could learn about the different design during your licensing process, that will at least give us a little bit more time to kind of develop and come up with some plans on how to deal with it.

COMMISSIONER WEAVER: Right.

I think one of the challenges is, once they're licensed, and they may not say, I'm going to what -- which State they're going to, right?

So, the timing between when you learn that they're coming and then, they're actually knocking on your door, may be very short, I think is.

So, thank you for those.

With respect to fusion machines, the -- we talked about resources and being ready to regulate those.

I just have a few basic questions, I guess.

Does every Agreement State automatically authorized to regulate fusion machines?

Does that come with the standard State agreement? It does? Okay, thank you.

MS. SHELTON: You don't have to, you can -

COMMISSIONER WEAVER: You don't have to, that's where I'm going.

Right, so if you're one of the States, let's say, with fewer resources, and this is just maybe a bridge too far, or at least in the short term, so then, they would just let the NRC license that until such time as maybe they're ready to come up and fully regulate that?

MS. SHELTON: Yes, and we've had States ask at that -- during OAS, we had people ask about that.

So, all the States are aware that that is an option.

COMMISSIONER WEAVER: Okay.

And now I'm gonna switch gears completely and ask for a question that wasn't on any of your slides.

I know there's interest in some States about regulating uranium conversion facilities.

And I'm wondering, is that something that, you know, that either of your organizations has discussed or if you can make any comments or if you've taken any positions on that?

MS. SHELTON: I think you might have the wrong States in here.

COMMISSIONER WEAVER: Yes, I --

MS. SHELTON: We need Colorado or Wyoming, yes, I don't know.

COMMISSIONER WEAVER: Okay, so --

MS. SHELTON: I would have to -- you would have to --

COMMISSIONER WEAVER: So, as an organization, you haven't taken any? Okay, fine.

I guess last thing, what -- in terms of, again, back on fusion machines just for a moment, is there -- are there some specific actions you think that NRC could take to accelerate the standing committee's progress?

MS. SHELTON: I think it's doing a great job. I think the training, I think everything that the NRC has been doing with fusion so far has been wonderful, so, let's just keep it that way.

COMMISSIONER WEAVER: Can we mark that down? Yes, I think we might.

(LAUGHTER)

COMMISSIONER WEAVER: I know, I feel like maybe I should just stop there.

(LAUGHTER)

MS. HARISIS: Commissioner Weaver, I sit on that committee and the people that NRC has placed on that committee, they're fantastic.

So, give them a good pat on the back, maybe a raise, they are -- it is a great committee. I have learned a ton being on it and I echo what Beth said, I think they're -- it's moving as quickly as it can.

COMMISSIONER WEAVER: Thank you.

I guess lastly, I know I think we may be meeting with individuals later, but I'd be interested in learning how I personally can facilitate some of the work you do?

You mentioned that Commissioner Wright has done some things that are helpful, if I would offer myself as well if it would help you facilitate the work you do within your States.

MS. SHELTON: You can come to OAS annual meeting in August.

COMMISSIONER WEAVER: Chairman, that's all I have, thank you.

CHAIR NIEH: Well, thank you for such a really great discussion today.

And we're -- we've finished our meeting, we'll get ready to close here.

But before, do any Commissioners have any final closing

remarks you'd like to make?

(NO AUDIBLE RESPONSE)

CHAIR NIEH: So, this is really fantastic. You know, there's a spirit of optimism in the United States right now toward nuclear energy.

You know, we've been together with nuclear materials for a long time, and we're in it together and we're going to stay in it together.

I think there are clearly opportunities where we can partner for, you know, building public trust, which is very important in supporting the needs that you have, because you all have limited resources.

The one thing I feel confident about is, you know, safety remains our Agency's top priority. It's very clear to me that that's also a priority for your organizations and States as well.

That's not changing. You know, our mission, the core mission is safety, we are trying to be a disenabler as well.

What is changing is how we work, right, we're trying to work smarter and not harder, and I think Commissioner Weaver's and Commissioner Marzano's questions move toward that.

The one thing I should point out, because it wasn't said, and it's something that I'm going to recommit to, when I interact with a vendor or a licensee, I always emphasize the importance of their engagement as well.

In the past, I've been in public meetings as an NRC regulator and inspector, we have a meeting the licensees there, they take off as soon as their presentations over.

And then, you know, the State organizations and the NRC ends up, you know, carrying the load and building trust.

But I think they're an important entity as well in building trust and that's something that I certainly commit to emphasizing as I gauge -- engage with the broader nuclear community.

So, with that, thank you so much for being here today and end of meeting.

(Whereupon, the above-entitled matter went off the record.)