# **UNITED STATES**

## NUCLEAR REGULATORY COMMISSION

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# MEETING WITH THE ORGANIZATION OF AGREEMENT STATES (OAS) AND THE CONFERENCE OF RADIATION CONTROL PROGRAM DIRECTORS (CRCPD)

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THURSDAY,

**OCTOBER 8, 2020** 

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The Commission met in the Commissioners' Hearing Room at the Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, at 10:00 a.m., Kristine L. Svinicki, Chairman, presiding.

**COMMISSION MEMBERS:** 

KRISTINE L. SVINICKI, Chairman

JEFF BARAN, Commissioner

ANNIE CAPUTO, Commissioner

DAVID A. WRIGHT, Commissioner

CHRISTOPHER T. HANSON, Commissioner

ALSO PRESENT:

ANNETTE VIETTI-COOK, Secretary of the Commission

MARIAN ZOBLER, General Counsel

# OAS AND CRCPD LEADERSHIP:

- DAVID CROWLEY, Manager, North Carolina Radioactive

  Materials, Agreement State and Environmental

  Monitoring, Radioactive Materials Branch

  (OAS Chair)
- TERRY DERSTINE, Radiation Protection Program

  Manager, Pennsylvania Department of

  Environmental Protection (OAS Past Chair)
- ANGELA LEEK, Chief, Bureau of Radiological Health,

  lowa Department of Public Health

  (CRCPD Chair-Elect)

RUTH McBURNEY, Executive Director, CRCPD

AUGUSTINUS ONG, Administrator, Radiological Health

Section, Division of Public Health Services,

New Hampshire Department of Health and Human

Service (OAS Chair-Elect)

- JEFF SEMANCIK, Director, Connecticut Department of
  Energy and Environmental Protection, Radiation
  Division (CRCPD Past Chair)
- KIM STEVES, Director, Radiation Control Program,

  Kansas Department of Health and Environment,

  Bureau of Community Health Systems

  (CRCPD Chair)

1	PROCEEDINGS
2	(10:00 a.m.)
3	CHAIRMAN SVINICKI: I open the Commission's public
4	meeting today with the Organization of Agreement States on the Conference of
5	Radiation Control Program Directors.
6	I will just say that once again the Commission is meeting
7	under its COVID-19 Public Health Emergency Protocols. We are, regretfully,
8	not in a position to have members of the public or other interested individuals
9	and NRC staff in the room. This is a very limited number of individuals for our
10	meeting here today.
11	And, consistent with our hybrid meeting format, we will have
12	our participating State representatives who will be participating remotely. And I
13	ask everyone's forbearance, including my colleagues and everyone else, but
14	the NRC staff has worked very carefully to put these protocols in place and,
15	hopefully, all the technology will cooperate and go smoothly.
16	This is a meeting that the Commission conducts routinely.
17	The format, the traditional format, which we will follow today, is to hear from for
18	both the Organization of Agreement States and the Conference of Radiation
19	Control Program Directors from various officers. We will follow the format again
20	this year of hearing from the chair, chair-elect, and past chair of both OAS and
21	CRCPD.
22	For purposes of clarity, I may do something a little unusual. It
23	is just to make clear the participants that the Commission is hearing from today,
24	I am going to start through and read and it's a bit long their affiliations, both

their, in their jobs at the State level but also the officer roles that they hold in the

1	two organizations.
2	And then I think we will see what works well. Perhaps the
3	presenters will hand off to each other. But, neglecting that, I will have begun
4	the meeting with a thorough description of who the Commission's panelists are
5	today.
6	So, in order in which they are listed on the Commission's
7	scheduling note, which is publicly available on our website if you would like to
8	read along, the Commission will hear today from Kim Steves, who is the
9	Director Radiation Control Program, Kansas Department of Health and
10	Environment, Bureau of Community Health Systems; joined by Ruth McBurney,
11	Executive Director of the CRCPD.
12	And, also, we will hear from David Crowley, who is the
13	Manager of the North Carolina Radioactive Materials, Agreement State and
14	Environmental Monitoring, Radioactive Materials Branch, who is the OAS Chair.
15	I'm sorry, Kim Steves is the CRCPD Chair.
16	We will also hear from Augustinus Ong, Administrator,
17	Radiological Health Section, Division of Public Health Services, New Hampshire
18	Department of Health and Human Service, who is the OAS Chair-Elect.
19	The Commission will hear from Jeff Semancik, Director,
20	Connecticut Department of Energy and Environmental Protection, Radiation
21	Division. And Jeff is the CRCPD Past Chair.
22	Next, or in some order to be determined, we will hear from

And, also, I think the only one I have missed, we will hear

Department of Environmental Protection, who is the OAS Past Chair.

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Terry Derstine, Radiation Protection Program Manager of the Pennsylvania

1	from Angela Leek, who is the Chief of the Bureau of Radiological Health of the
2	Iowa Department of Public Health.
3	And, again this is, this meeting is for the Commission to hear
4	about radioactive materials policy and regulatory issues of interest to the
5	States.
6	So, with that very long, I will also ask if any member of the
7	Commission wishes to make any opening statements.
8	(No response.)
9	CHAIRMAN SVINICKI: Okay. So, we will hear the
10	presentations then. And either, as I said, the participants can turn the
11	presentation over to the next presenter or, if they are not doing that, then I will
12	jump in and recognize the next presenter.
13	But, with that, I think we are ready to begin by turning it over
14	by my listing here to Kim Steves for remote presentation. Good morning.
15	MS. STEVES: Hello. Thank you very much.
16	As you just mentioned, my name is Kimberley Steves, and I
17	am the Director of the Kansas Radiation Control Program, and currently serving
18	as the Chairperson of the Conference of Radiation Control Program Directors.
19	On behalf of the CRCPD and the Organization of Agreement
20	States I want to thank the Commissioners for their time and this virtual
21	opportunity to address topics we feel are of interest to both the members of our
22	professional organizations and to the NRC.
23	It is an honor to spend time here today, and I know that our
24	conversations will be of great value. And with that, I will turn it over to David
25	Crowley and Ruth McBurney to provide additional opening remarks.

1	MR. CROWLEY: Thank you, Kim.
2	Good morning, Chairman Svinicki, Commissioners. As
3	stated, I'm Steve Crowley, Chair of the Organization of Agreement States and
4	Program Manager for North Carolina. Thank you for meeting with us remotely
5	today and for your ongoing commitment to our co-regulatory partnership. It is a
6	true honor to be here representing the Agreement States.
7	Before we begin with the official agenda items, the OAS and
8	CRCPD boards felt it would be beneficial to give a brief overview to our
9	organizations. To help me with this, I am asking Ruth McBurney, Executive
10	Director of CRCPD, to say a few words on her organization.
11	Ruth.
12	MS. McBURNEY: Thank you. Good morning. I'm sure that
13	several of you are very familiar with the Conference of Radiation Control
14	Program Directors as an organization and have even participated in their
15	annual conferences. So, since there are some new commissioners and staff at
16	NRC, this is a great opportunity to discuss the two organizations.
17	CRCPD was established in 1968 in response to a growing
18	need for the states to have a unified approach to radiological health programs
19	and problems, and a forum for communication and coordination of state
20	radiation control efforts. State programs were growing in scope at that time,
21	although the Atomic Energy Commission, now the NRC, regulated most of the
22	radioactive materials. There were fewer than 20 Agreement States at that time.
23	And the growing number of nuclear power plants, the state
24	programs were involved in emergency planning, and all state programs were

responsible for regulating the use of radiation machines and providing for the

- offsite emergency planning, for regulating radium, and other sources of non-
- 2 AEA material.
- Therefore, there was a need at that time to coordinate efforts
- 4 and gain consistency among the state radiation control programs.

5 The passage of the Radiation Control for Health and Safety

Act of 1968 provided the funding and the impetus for the initial conference to

7 convene.

CRCPD over the years has become a true partnership dedicated to radiation protection. We address a variety of activities involved in radiation control, including radiation, machine-based radiation, model state regulations, emergency response activities, environmental radiation including non-AEA material. Most of our funding is from federal grants, along with other funding sources such as donations, members dues, and the brokering of the Texas industrial radiography certification exam.

As a 501(c)(3) nonprofit organization we do not participate in lobbying. We have several cooperative agreements, two of which involve the Nuclear Regulatory Commission. We have an umbrella branch which is managed by the Food and Drug Administration, and co-funded by NRC and EPA, along with FDA, that provides for our annual conference, many committee activities, including the development of the Suggested State Regulations, guidance documents, and some environmental and emergency response activities.

We also have a cooperative agreement separately with NRC for the disposition of orphan radioactive sources. This program has provided a great benefit to the state programs.

1	CRCPD is also organized a little differently than the
2	Organization of Agreement States. We have a 7-member board. And
3	individual members of the board also serve as the as council chairs. They
4	oversee the five councils on specific topics covering the aspects of radiation
5	control programs that radiation control programs are involved in.
6	And these councils consist of about, approximately 70
7	committees made up of state radiation control staff.
8	Our membership also includes affiliate members from outside
9	radiation control and state government. We also have international members,
10	emeritus members, and life memberships.
11	The CRCPD and OED have a organiz Office of the
12	Executive Director, the OED, to provide administrative assistance, financial
13	management, website development, and other information technology, as well
14	as the grants management for the organization. So, that's what we do as the
15	Office of the Executive Director.
16	So, now I will turn it back to David for a description of the
17	Organization of Agreement States. Thank you.
18	MR. CROWLEY: Great. Thank you, Ruth.
19	To begin, let us consider Section 274 of the Atomic Energy
20	Act. It provided for the discontinuance of regulatory authority by the Federal
21	Government, and established states as regulatory partners. The first
22	agreements were signed in 1962. Today, there are 39 Agreement States
23	regulating nearly 90 percent of licensees nationwide. Thanks to New York, the
24	fourth agreement state, additional language was inserted to most agreements.
25	This language required the Commission and the states to both use their best

1	efforts in maintaining compatibility with one another.
2	While states' compatibilities are reviewed regularly, there is
3	not a mechanism for the NRC. This is where OAS has a role, to be a unified
4	voice representing the state programs. We provide an avenue for coordination
5	between the National Materials Program partners, or NMP, and support the
6	regulatory priorities of the states.
7	OAS is made up of staff exclusively from agreement state
8	programs. We are self-supported by attendance to our annual meetings and
9	the volunteer hours of our members. This allows OAS to collaborate closely
10	with the NRC.
11	Historically, the dynamics between the NRC and state
12	programs is unidirectional. At times, we are treated as licensees, not partners.
13	Over the decades there have been improvements to this little by little. During
14	my short eight years with the agreement state program I have seen greater
15	strides being made. Agreement states are coming into their own as true co-
16	regulators within the NMP. OAS is committed to nurturing this growth, while at
17	the same time reminding the NRC that the commitments to compatibility goes
18	both ways.
19	Next slide, please.
20	Thank you.
21	As Chairman Svinicki already listed off the presenters today,
22	we will just go through and share what we will be speaking on.
23	Auggie Ong will discuss the NMP, our new Champion roles
24	and OAS' perspective on COVID-19.

Jeff Semancik will share CRCPD's response efforts to public

1	health emergencies.
2	Terry Derstine is covering HP training and recruitment.
3	And Kim Steves will be discussing a collaboration relating to
4	foreign-sourced americium.
5	Next slide, please.
6	So, the last two, I will be discussing the general license
7	programs and a couple of medical topics.
8	Finally, Angela Leek will be covering low-level waste, as wel
9	as transformation opportunities with CRCPD's suggested state regulations.
LO	Okay, Auggie, as our first presenter, please take it away.
L1	MR. ONG: Thank you, Dave.
L2	Good morning, Chairman Svinicki and the othe
L3	Commissioners. My name is Auggie Ong from New Hampshire's Radiologica
L4	Health Section. I am the OAS Chair-Elect.
L5	Thanks to all of you for meeting with us remotely and for you
L6	ongoing commitment to strengthen our co-regulatory partnership. It is an hono
L7	for me to be here representing the agreement state programs.
L8	For my presentation, I will briefly discuss the Nationa
L9	Materials Program, the NRC and Agreement State Co-Champion Partnership
20	and how agreement state programs are dealing with the COVID-19 public
21	health emergency.
22	Next slide, please.
23	Because we are partners with NRC within the National
24	Materials Program, when there's a public health emergency we use our existing
25	state authority to consider granting relief from specific regulatory commitments

L	During the	early phase	of this emergency,	NRC issued	guidance	documents
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- 2 outlining the regulatory options to provide certain regulatory relief to byproduct
- 3 material licensees, regulatory relief such as certain exemptions, amendments to
- 4 license conditions, technical specifications, and enforcement discretion under
- 5 certain circumstances.

Paramount criteria in providing any regulatory relief are that under no circumstances will the public health and safety be compromised, or the security of byproduct materials be jeopardized.

Next slide, please.

Because we are partners with NRC, we are encouraged to coordinate our program actions to those similar to NRC's. So, during this public health emergency NRC has issued guidance documents, such as the issuance of Enforcement Guidance Memorandum 20-002, Attachment 2, that discretion may be granted for certain noncompliance by a licensee that chooses to suspend the use of licensed materials, and has placed and maintained all licensed radiological material in safe storage in accordance with our applicable requirements.

Enforcement Guidance Memorandum 20-002, Attachment 3, deals with enforcement discretion that may be granted when determining a licensee's use of temporary compensatory actions or contingency plans that provide reasonable assurance that the effectiveness of its emergency response readiness is maintained during the public health emergency.

The final example is the issuance of inspection guidance during transition from COVID-19 mandatory telework for the Nuclear Materials and Waste Safety Programs.

As David said earlier, within the National Materials Program
the Organization of Agreement States has a role to be a unified voice
representing the state programs. We provide an avenue for coordinating
between the National Materials Program partners and support the regulatory
priorities of the states.

Just as the NRC has provided emergency guidance documents, OAS also has provided guidance to our Agreement State Materials Program that have various options within their regulatory authority to protect health and safety of the public, and to ensure the security of licensed byproduct materials.

In order to do so, the Agreement States may exercise options, as permitted by their respective state statutes: issuance of orders, granting exemptions or waivers, without compromising the need to protect public health and safety. And if any of those options are exercised, agreement state programs will communicate their actions with their respective NRC regional NMP management group.

Next slide, please.

OAS is made up of volunteers and staff exclusively from agreement state programs. We communicate with both NRC and with our agreement state partners. OAS has been providing guidance documents, available through our official OAS website, to aid various state byproduct materials programs and the licensees in dealing with the continuing public health emergency.

Examples are guidance documents from Alabama's Radiation

1	Protection Guidance for COVID-19; from Massachusetts; New Hampshire, such
2	as ours; and New Jersey.
3	Next slide, please. Next slide.
4	Okay. My screen froze.
5	But in any case, Slide No. 10, also guidance documents such
6	as those from North Carolina; Ohio's "Deferral of Certain Requirements;"
7	Oklahoma; Texas; Pennsylvania's COVID-19 Emergency Request to
8	Temporarily Suspend Regulatory Requirements; Tennessee; and Wyoming. As
9	you can see, Agreement States are indeed coming into our own as true co-
10	regulators within the National Materials Program, and share the same
11	commitment to protecting the health and safety of the public.
12	Next slide, please.
13	So now, going to the Co-Champions. So, how is it going?
14	As provided by NRC SA-10, Joint Oversight of the National
15	Materials Program, a champion is an NRC individual with expert knowledge
16	who serves as National Materials Program resource champion to help with the
17	consistent communication. The NRC also encourages the Agreement States to
18	create a co-champion to serve alongside the national I mean NRC champion
19	Currently, Duncan White from NRC, and Lee Cox from OAS
20	are designated as co-champions.
21	If I may, I would like to quote partially from Duncan and Lee's
22	June 19th communique. The NMP Co-Champions believe that communication
23	and collaboration is their primary responsibility. We work to provide common
24	ground, common ground, and look for efficiencies; discuss issues
25	opportunities, and strategies for improvement; updating the Agreement States

1	and the national Nuclear Regulatory Commission during the monthly meetings			
2	and more frequently, as needed.			
3	Next slide, please.			
4	Even in this public health emergency, the co-champions			
5	remain fully committed to account for individual agency needs and abilities;			
6	develop and suggest matrix for tracking National Materials Program			
7	performance; promote consensus on regulatory priorities and approaches;			
8	promote a consistent exchange of information; and optimize resources of both			
9	the NRC and the agreement state programs.			
10	Co-champions have finished presenting the progress made			
11	on the 2019 and 2020 priorities at the OAS spring board meeting. They also			
12	have worked to identify what priorities the National Materials Program should			
13	pursue in 2021.			
14	The OAS and NRC will use their list to finalize the priorities for			
15	the coming year.			
16	So, this is the end of my presentation. And thank you very			
17	much.			
18	Next presenter, please.			
19	MR. SEMANCIK: Yes. Next slide.			
20	Next slide, please.			
21	Good morning. I am Jeff Semancik, the Radiation Control			
22	Program Director for the State of Connecticut, and the Past Chair of the			
23	CRCPD. As the CRCPD chair at the time of the initial stages of the public			
24	health emergency, our member states and federal public health emergencies. I			
25	wanted to share our organization, both members and the Office of the			

1	Executive	Director,	how we	responded	to the	challenges	presented	by	the
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- 2 public health emergency to help our members continue to perform their public
- 3 safety duties.

4 Next slide, please.

The CRCPD Board recognized the challenges to our members, many of whom are public health responders and relegated to the front line in the public health response. The board adopted a resolution that the Radiation Control Program should take a graded approach, balancing the risks of COVID and radiation safety to implement risk-based guidance that maintains radiation safety, protects staff, limits the transmission of COVID-19, ensures sustainability of radiation emergency response, and minimizes disruption and distraction of critical health care services and workers.

In our resolution, we committed to coordinating actions between our members, our federal partners, and the regulated community, as represented by the professional organizations.

Next slide, please.

As with other activity, CRCPD leverages the expertise of our members through working groups. When we reached out to our partners to represent members of our regulated community, such as the American Association of Physicists in Medicine, they identified specific concerns, and consistently asked for proactive action by regulators to reduce administrative burden associated with specific exemptions requests.

In order to respect the different authorities, laws, interests, and specifically during a public health emergency, the executive actions of our various member states, our working groups were tasked to develop generic

guidance that could serve as a basis for specific action by each state.

Some examples of guidance issued by CRCPD working groups include guidance for radioactive material license compliance, indicating regulatory guidance that may be and should not be deferred; guidance for alternatives to an acceptable deferment of physicist's surveys of radiation-producing machinery in health care facilities; a guidance for radiation-producing diagnostic X-ray devices used at mobile field hospitals, nursing homes, and other temporary facilities.

CRCPD continues to leverage technology and work with our partners to collaborate and train virtually, as well as use web access to distribute working group guidance, serve as a clearinghouse for federal guidance, ensure best practices, and input questions.

## Next slide.

While several of our members are actively manning state emergency facilities and teleworking or otherwise implementing social distancing measures our members remain fully capable of meeting their radiological emergency response obligations. As with other response measures, several of our members have implemented enhanced guidance to deal with a potential radiological event concurrent with the public health emergency.

# Next slide.

This guidance includes modifications for offsite radiological emergency response staffing, including reduced -- reducing radiological monitoring teams sizes to single members, enhanced PPE such as N95 masks, and implementing virtual radiological assessment team staffing by leveraging

rad responder, radiotechnology, and web conferencing.

With respect to protection actions, this enhanced guidance utilizes the risk-informed approach in the 2017 PAG Manual for special circumstances, including concurrent emergencies. Specially, it recommends shelter-in-place versus evacuation as the preferred protective action in order to reduce COVID-19 transmission risks, relieve the burden on local law enforcement agencies for traffic management, transportation staging areas and community reception centers, and allow emergency managers to remain focused on pandemic response.

For nursing homes and hospitals at the front line, shelter-inplace recognizes that moving patients and residents in vulnerable positions could result in significantly more risk to vulnerable populations and minimize impact to our already-stressed hospital intensive care infrastructure.

Using the guidance in the 2017 PAG Manual, this guidance implements a graded approach, with shelter-in-place at the normal protective action guidance levels, and evacuation at a higher level for general population and vulnerable populations.

It should be noted that health care workers in these critical facilities should also be considered emergency workers, and that dose limited by staff, by shift limits and monitored by dosimetry.

In the event of a radiological release, this guidance also recommends that public communications clearly articulate the differences between shelter-in-place and stay-at-home orders implemented for the pandemic. As an example, for public health orders implemented in response to the pandemic, shelter-in-place orders for a radiological emergency would

1	include staying indoors with windows closed and outdoor intakes secured, and
2	would direct that the public should not be going out for recreation or other
3	reasons specifically authorized as emergency workers with response dosimetry
4	and limits.
5	Next slide, please.
6	Currently this guidance has been promulgated in Connecticut
7	and Iowa. Partners in Wisconsin, Minnesota, and New Jersey are considering
8	similar guidance. Our goal in developing this enhanced guidance was to
9	ensure that we provide consistent risk-informed guidance to decision makers,
10	and that stakeholders in nuclear radiological response would not be hearing
11	these recommendations for the first time in an event.
12	CRCPD felt it was important to socialize the concepts and
13	coordinate any necessary actions with our partners, including the licensees,
14	local emergency management, NRC staff, FEMA staff, the EPA, CISA, as well
15	as the A-Team and the Federal Radiological Monitoring and Assessment
16	Center.
17	Following our discussions with the A-Team we learned they
18	are developing a checklist with similar considerations for their members. We
19	have received positive feedback on the status from all members, and even
20	shared some of this guidance with international parties who had inquired about
21	U.S. response protocols.
22	Next slide, please.
23	Our Radiological Emergency Preparedness Working Group
24	continues to ensure readiness during the pandemic. This includes recognizing
25	the graded exercises involve large numbers of participants and evaluators

1 whose aggregation can increased the public health risk of an infe	ctious
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- 2 transmission, particularly among a limited population of responders. When
- 3 considered against the mature, high-performing Radiological Emergency
- 4 Response Program, including many essential elements to be implemented
- 5 common to the pandemic response, the risk of conducting these exercises in
- 6 the near term is high.

Exemptions to licensees. Thank you.

- CRCPD presented its perspectives by letter to both FEMA and the NRC. We greatly appreciate the NRC's consideration in working with us to understand our specific concerns that resulted in the recent NRC guidance on REP, on Radiological Emergency Preparedness Exercise
  - While we believe that reducing the risks associated with the exercises is warranted, CRCPD members continue to conduct exercises and readiness activities to maintain proficiency, including virtual drills and remote training.
  - Finally, CRCPD continues to monitor this dynamic public health emergency that continues to challenge our members. Regional and often local variations in transmission and infection rates, as well as variations between individual states of each of our members are often addressing different conditions and public health policies.
  - The public health emergency has negatively impacted much of the regulated community, resulting in programs responding to closed facilities, access restrictions, and requests for regulatory relief. About half the states' Radiation Control Programs involving public health departments and members, are integrally involved in emergency response organizations, and

- they continue to be involved through the mass vaccination being planned.
- 2 Members across all Radiation Control Programs are facing
- 3 significant challenges to budgets. Many have already seen furloughs and hiring
- 4 restrictions. And most have restricted travel.
- 5 CRCPD is committed to support members, while adapting to a
- 6 new normal, and addressing these issues when possible, and adapting our
- 7 operations support and guidance in recognition of these challenges.
- Thank you for your time. And I will turn it over to Terry
- 9 Derstine.
- MR. DERSTINE: Good morning. My name is Terry Derstine.
- 11 I'm a Radiation Protection Program Manager for the Pennsylvania Department
- of Environmental Protection, Bureau of Radiation Protection, and the Past Chair
- for the Organization of Agreement States. Thank you for this opportunity to
- discuss some of the radiation safety topics deemed important by the OAS.
- 15 My goal here today is twofold: to highlight the current value of
- 16 NRC technical training to the Agreement States, and to emphasize its
- increasing importance in the coming years.
- 18 In my 32 years as a member of the Pennsylvania Radiation
- 19 Protection Program I have participated in, as well as supported, employees to
- attend dozens of NRC-sponsored technical training courses. As such, it is
- 21 always concerning when rumors circulate, claiming that the NRC is considering
- 22 restriction or reduction of training funding and the associated travel costs for
- Agreement States' staff. Most likely, these rumors are echoes from the 1997
- decision of the Commission to discontinue funding for state staff training, which
- the Commission did not fully resume until fiscal year 2008.

1	Related to the importance of NRC technical training is one or
2	the biggest concerns facing the radiation protection industry now: the declining
3	number of radiation professionals. This decline was brought to light in the
4	National Council on Radiation Protection and Measurement Statement No. 12
5	"Where are the Radiation Professionals"? This document, typically referred to
6	as WARP, was released in December of 2015.

The importance of the findings in WARP were underlined by the April 2019 release of Health Physics Enrollments and Degrees Survey 2017-2018 data by the Oak Ridge Institute for Science and Education, ORISE. The ORISE report noted a falling trend of a number of bachelor and graduate health physics-related degrees being awarded, along with the cessation of several universities' health physics degree programs.

Also detailed in the work statement was a survey of the CRCPD, which predicted that over 50 percent of technical staff will need to be replaced by 2025. Also, the federal workforce will lose a significant number of technical professionals to retirement. This surge of retiring employees, combined with the waning interest in the field by young professionals, and the deficit of training programs in general, may contribute to a significant skills gap in the industry.

We can expect state radiation health safety programs will be disproportionately affected by the shortage of prospective employees with health physics experience or degrees, an increase in demand in the private sector and Federal Government positions, compounded by the general lower level of state salary scales will limit the number of recent graduates willing to work for states.

1	Further hindrance can be seen in states where salaries are
2	tied to the pay scale of a department, thereby making it impossible to adjust the
3	starting salaries, and negating any potential negotiation process.

With this increased demand for experienced health physicists, states will most likely have to rely on employees with more generic science degrees, or degrees with less applicability to the science of health physics. It will be incumbent upon states to provide training and experience opportunities in order to foster competent radioactive materials inspectors and license reviewers. Yet, training and experience opportunities are becoming increasingly limited due to primarily budgetary constraints. Personnel may find it impossible to obtain approval due to not only the direct cost of courses, but also the approvals and expenditures associated with travel.

To counteract this impediment, many states have come to rely upon on-the-job training. However, on-the-job training needs to be anchored with quality formal training, or certain issues can arise over time, such as inefficient processes may be reinforced in a program's culture. Knowledge of critical subjects may be omitted, all while employees' morale falls due to the perception that informal training processes are less professionally minded and less certain of quality outcomes.

Fortunately, the NRC has demonstrated their commitment to continue the funding for agreement state personnel to attend requisite courses, made evident by several recent developments which improve accessibility to technical training.

The recently revised SA-600, procedure, process and criteria for agreement state personnel to attend NRC-sponsored training, describes a

- 1 process to select agreement state training course attendees and provide the
- 2 guidance to Agreement States on the process to host a training course.
- 3 Meanwhile, several fundamental training courses have been converted to web-
- 4 based training, reducing the need for costly and time-intensive travel away from
- 5 homes and offices.

This COVID-19 public health epidemic has reinforced this development, as the Commission has converted several other prominent courses to a web-based format. Many students now have the perfect opportunity to continue their training progression during this time of travel blackout and work from home for most states.

There is one note of concern about web-based training: it should not be relied upon too heavily. A screen is no surrogate for in-person interaction. Meaningful interaction with trainers and professional peers can easily fall by the wayside in a digital classroom. Smaller agreement state programs are especially vulnerable to this deficiency, as co-workers may not be numerous or lack meaningful experience themselves to provide an internal knowledge base.

In-person, instructor-led training allows students to quickly and comprehensively discuss any questions or uncertainties in subject matter with the trainer and fellow students, while affording an opportunity to more readily facilitate an expansion of professional contacts for future interactions.

Almost as important as formal training for agreement state personnel is the ability to communicate and share pertinent information. The Organization of Agreement States has always endeavored to promote communications among the Agreement States. Agreement states have

1	historically worked closely with their regional state agreement officers who
2	routinely share pertinent information.
3	The recent commitments that the NRC has made to the
4	National Materials Program, primarily with the creation of the Co-Champion,
5	and the framework for a dedicated National Materials Program website, will
6	most assuredly prove to be invaluable achievements to promote even healthier
7	information exchange.
8	In conclusion, affording training opportunities to the
9	Agreement States provides knowledge, promotes critical thinking skills and
10	decision making, increases efficiency, identifies and highlights talent, fosters
11	cooperation and teamwork, and is a critical component of the National Materials
12	Program. If the decision were made to withhold program for agreement state
13	training again, there would be hurdles for states to overcome, some of which
14	may not have existed back in 1997, at least to the extent that they do now.
15	So, thank you very much. And now I would like to turn it over
16	to Kim Steves, who is the Director of the Kansas Radiation Control Program,
17	and the current CRCPD Chair.
18	Kim.
19	CHAIRMAN SVINICKI: If you can hear me, Kim, you are
20	muted, I think.
21	MS. STEVES: There we go. How about that?
22	CHAIRMAN SVINICKI: Thank you.
23	MS. STEVES: I'm going to briefly, okay, I'm going to briefly
24	cover some ongoing collaboration efforts, including discussing foreign-origin
25	americium.

1	Next slide,	please

The OAS wants to promote cooperation and communication
among Agreements States and partners. Under CRCPD, we work to
coordinate with state Radiation Control Programs to resolve radiation protection
issues and encourage high standards of quality in radiation protection.

As discussed earlier by Ruth and David, our two organizations have similarities, but also differences, in membership, missions, goals and objectives, and funding.

There are times when the comments and opinions of the OAS and the CRCPD may not be in agreement. It is, however, our mutual goal to keep those lines of communication open between the leadership of our organizations and ensure that when those times arise, that we may submit comments to the NRC on guidance and/or regulations which differ, that we are both aware of this fact and understand the different positions.

We consider our two organizations to be partners, and are continually striving to keep those lines of communication and coordination open. On that topic, I want to mention that we are aware that on the recent Federal Register notices pertaining to a rulemaking on training and experience requirements for different categories of radiopharmaceuticals, the CRCPD comments differed from those of the OAS.

We note that the CRCPD comments were submitted in January of 2019 based on the Federal Register notice published in October of 2018. And the OAS comments were submitted in July of 2019 based on the Federal Register notice published in May of 2019. Both our organizations have committed to ensure communications occur regarding any potential differences

1	in our positions on topics, to hopefully avoid any surprises.
2	Next slide, please.
3	On the topic of unwanted radioactive materials, which is
4	constantly a concern with state radiation programs, I want to take a few
5	moments to discuss a critical ongoing collaboration project.
6	The CRCPD E-34 Committee on Unwanted Radioactive
7	Materials has been working to finalize a white paper to discuss the quantities o
8	americium-241 of foreign origin which require disposal in the present and in the
9	future, and propose options for these disposals.
10	As you may be aware, americium-241 is a transuranic which
11	has a long half-life of approximately 432 years, which means that only a small
12	activity may be disposed in commercial low-level radioactive waste disposa
13	facilities.
14	In an attempt to estimate the total number, the total
15	americium-241 in need for storage in the United States, the CRCPD E-34
16	Committee has been working to collect data on the amount of americium-241
17	sources collected by the Department of Energy Offsite Source Recovery
18	Program, on the import and export of Category 1 and 2 quantities of americium
19	241, and the total quantity of americium-241 produced domestically up to 2004
20	when the DOE production stopped.
21	Since that time, Russia-produced americium-241 appears to
22	be the primary source, with France also producing a smaller amount. Our data
23	estimates that there are approximately 39,000 americium-241 sources
24	containing foreign-origin americium in the United States. Of those

approximately 7,500 are currently deemed obsolete, with that number estimated

to grow to 20,000 obsolete sources by the year 2025.

The largest percentage would be in sealed neutron sources
used in the well service industry, or in storage awaiting manufacture in some
sealed sources.

Current legal interpretation of the Waste Isolation Pilot Plant Withdrawal Act limits the waste disposal in the WIPP site to those from radioactive wastes generated in the production of United States nuclear weapons only. WIPP is the only geologic repository in the United States and, by law, can only receive transuranic isotopes from U.S. domestic weapons production, which must be verified by DOE's Offsite Source Recovery Program.

In some legal interpretation, only congressional action can provide a pathway to disposal of foreign-origin transuranics at the WIPP. Our goal is to finalize this white paper which outlines the issues and pulls together data and information on the current situation, estimations of the number of foreign-origin sources in the United States, both in use primarily by American companies in the oil, gas, and water exploration sector of our economy, and those sources which are currently not in use and in long-term service -- long-term storage awaiting a disposal option.

We believe that with this white paper, decision makers will have the information which is needed for a congressional act. We are working to educate the state Radiational Control Programs about this important topic to provide them the information and tools needed to be able to educate members of the Legislative Branch about the importance and need for legislation to determine a disposal pathway.

Next slide.

1	CRCPD continues to look for new partners with whom we can
2	work to address issues associated with lost or unwanted radioactive sources.
3	When several members of the CRCPD board of directors were in Washington,
4	D.C., in January, we met with representatives of the Institute of Scrap Recycling
5	Industries, or ISRI. Prior to that, we had recently finished a joint project to
6	develop a video targeted towards the scrap industry, providing education on
7	what to do when the radiation alarm goes off at their facility.
8	We are continuing to coordinate with ISRI on addressing the
9	issues of lost sources, and what to do if they show up at a recycling yard, and
10	how to communicate and coordinate between the scrapyards and the state
11	Radiation Control Programs. We have also begun exploring options to notify
12	ISRI of lost sources, as they have a network system of notification with which
13	they could notify their member facilities to be on the lookout.
14	We continue to keep the special contact with the U.S.
15	Department of Transportation for material that comes into scrapyards and solid
16	waste facilities that can be used by states for returning the materials to the
17	owner. These type of calls are received regularly by the state Radiation Control
18	Programs.
19	Thank you. And with that, I will pass it on to David.
20	MR. CROWLEY: Thank you, Kim.
21	Looking forward in 2020, while a lot has changed here and
22	perhaps I should have said in hindsight 2020, either way, I hope to reflect on
23	some regulatory practices and ask are we looking at them with 2020 clarity to fit
24	the NMP's future needs? Are we creating a vision for a robust regulatory
25	framework, one that satisfies the demands of our regulation communities and

Τ	best protects our lellow chizens?
2	First of all, I fully believe in the rulemaking process. It allows
3	for input from all stakeholders. And their varied positions will result in the best
4	outcomes. That said, it is a long process and requires Commission approval to
5	move forward.
6	Regarding the conduits of rulemaking, the NMP may need to
7	rely on other methods to address some issues more immediately. While I cover
8	my topics, ask yourself are we looking at these with 2020 vision?
9	Next slide, please.
10	General licenses have been around for a long time. They are
11	notably one regulatory area with the least consistency and some of the most
12	heated debate. A working group was formed in March of 2018 to examine the
13	GL programs across the NMP, and to ensure it upheld public health and safety.
14	The working group began their review using requirements in
15	10 CFR 31.5 as a baseline, and then reached out to various stakeholders, NRC
16	regions, and Agreement State programs. It became clear that some Agreement
17	States had more requirements for GL. These include registration of different
18	activity levels or isotopes, or more routine outreach and inspection components.
19	The working group's goal was to recommend a model GL
20	program that is risk-informed and right-sized for the materials in question.
21	Next slide.
22	The GL Modernization Working Group has provided the
23	following potential future changes:
24	One, expand the current group of GLs requiring registration to

include devices of isotopes associated with higher risk profiles, regardless of

1	their activity level.
2	Two, strengthen the regulatory oversight for registered
3	devices.
4	And, finally, reduce regulatory burden for items of low risk and
5	minimal consequence.
6	The working group believes that these potential
7	recommendations will risk-inform the GL programs by improving overall
8	accountability of devices, including those just below the reportable threshold.
9	They will reduce the quantity of materials disposed of improperly that could then
10	lead to contamination events and events requiring regulatory response.
11	The proposed items are possible with minimal regulatory
12	change, yet the working group also explored more complex options, such as
13	reclassifying certain devices as exempt. I believe NRC management has
14	already been briefed on the working group's recommendations. The OAS
15	board will be retrieving that update in the near future. Stay tuned as we
16	continue to work on this effort.
17	Next slide, please.
18	Now we will go back to 1980 to an issue few in the NMP even
19	realized existed until recently, that is extravasations or infiltrations in nuclear
20	medicine.
21	Four decades ago the Commission published a rule on
22	misadministration, and accepted an idea that extravasations occur frequently
23	and are virtually impossible to avoid. As such, they were exempted.
24	Over the last 40 years, the nuclear medicine field has

changed dramatically. We have targeted radiotherapy drugs coming to market

	opes providing quantitative	naging isotopes	We have PET	at an accelerating rate.	L
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diagnostic studies, not just qualitative, and we have novel ways to generate

3 isotopes.

While the U.S. exempted extravasation, the rest of the world did not. Many professional societies have addressed extravasations in best practices or clinical standards.

### Next slide.

Thanks to a recent petition for rulemaking referenced here, we have new information that the 1980 assumption is wrong. Clear evidence has provided that extravasations are indeed avoidable. Rates between facilities can have large disparities, sometimes as high as two orders of magnitude. Is it not our obligation to patients to reduce this to be as low as reasonably achievable?

Through repetition and independent research, it is evident that extravasations in the U.S. occur daily with minimal concern. This is despite the fact that there are examples of patient harm, both deterministically and in clinical outcomes for patients. The petitions for missed cases or doses to tissue exceed our medical event dose of half sievert, sometimes by a factor of ten or more. The nuclear medicine community has long established the deterministic effects can begin as soon as one sievert.

Our medical event rule threshold was set at a risk-informed level, but that does not mean that we required physical harm to be present to have a report. We also want to see errors that may show up where programs have weaknesses, or where technology may exhibit flaws. We want to see general trends of improvement across the industry over time.

1	Additionally, the NRC's medical policy statement supports regulating
2	radiation safety of patients, and to ensure the use of material is in accordance
3	with the physician's direction. One key factor for patient safety is the right for
4	them and their physicians to be informed when there are issues with their
5	health care.
6	The Medical Event Rule helps in that way, but not if
7	extravasations continue to be exempted.
8	Now for the states. States do not need to follow this
9	exemption policy. In my state we would expect extravasations exceeding half a
10	sievert to an unintended tissue to be reported to our agency. OAS polled the
11	states earlier this year to gain insight on its positions. This was just before the
12	Commission responded to an inquiry by Congress on the topic.
13	Most of the states were unaware of the 1980 policy, and 75
14	percent responded that they would expect an extravasation to be reported.
15	Next slide, please.
16	So, where do we go?
17	First, we need to reject the 1980 exemption and accept the
18	petition for rulemaking. In the meantime, we need to raise awareness, engage
19	with stakeholders, and develop interim guidance. Through the rulemaking
20	process we will arrive at the best solution for future regulations, and ensure that
21	patients get the highest quality of nuclear medicine care.
22	Next slide.
23	Okay. Now to another medical use topic: training and
24	experience for authorized users.
25	This concept goes all the way back to the Manhattan Project

- as a means for physicians to demonstrate their competency to safely receive,
- 2 handle, and administer radioactive materials. Over the last 70 years there have
- 3 been significant changes, both on the science and medical fronts, but also with
- 4 our regulatory framework.

- 5 Changes to T&E have traditionally been iterative in nature,
- 6 but now we have this transformative opportunity to reimagine how physicians
- 7 access radioactive materials, or at least that's what the SECY paper is offering,
- 8 a chance to step back and really reevaluate our practices.

Does the status quo approach fit the 2020 environment or can we generate a novel solution to better fit our needs? Today, new drugs and devices are being developed at increasing speeds. Not all are intended to be used by traditional physician types under our current prescriptive T&E. By maintaining the status quo we create an unnecessary barrier to these advancements and, ultimately, to patients who would benefit.

There is no analogy to how the NMP acts as gateway allowing physicians to use certain materials. Even with other high toxicity treatments, such as chemo or immunotherapies, medical licenses, and specialty board certifications are sufficient. There is limited to no data that shows a correlation between our current prescriptive T&E methods and patients' public or occupational radiation safety.

In cases where patient safety is in question, like with extravasations, we often find physicians are not actually present, let alone supervising. Many states feel strongly that we need to shift our focus from the physicians and instead look more to those actually handling and administrating the materials.

1	There are some rules in Parts 20 and 35 that already focus on
2	the handling or administrative controls but are then covered redundantly in
3	existing T&E.
4	Through rulemaking, we can increase alignment with medical
5	policy statements. We would no longer infringe on practice of medicine by
6	telling who can or cannot prescribe what. Instead, we would defer to other
7	authoritative figures on this matter. We can still push for radiation safety
8	training of physicians commensurate to their roles, but with a more streamlined
9	and performance-based approach which does not create barriers.
10	As a final benefit, a new approach would reduce
11	administrative burdens on facilities and on regulators who spend a great deal of
12	time adding or removing authorized users from licenses.
13	So, there you have it, three examples within a regulatory
14	framework and how we may benefit by departing from an historical trajectory.
15	These are, of course, not the only examples, but these are currently all before
16	the Commission in some fashion. I'd ask that we trust in the rulemaking
17	process and approve for these to move forward so we may have the opportunity
18	to see them with 2020 clarity.
19	Thank you for your time today. Next up is Angela Leek.
20	MS. LEEK: Great. Thank you, David. And thank you,
21	Commissioners for the opportunity to speak to you on these important topics.
22	My name is Angela Leek. And I'm the Bureau Chief for
23	Radiological Health here at the Iowa Department of Public Health. And I'm the
24	CRCPD Chair-Elect. And I'll wrap up the last of our topics here today.
25	So, we want to start with a discussion about a couple of low-

1 level reactive waste items. Next slide, please.

In late 2019, the CRCPD Board, the OAS Board, and various states specifically those with jurisdictional authority over existing low-level radioactive waste disposal facilities, made comments on the draft regulatory basis for the disposal of greater than Class C and transuranic waste.

While some state comments have individual notations, overall there was support indicated for integrating the regulations for the disposal of greater than Class C and transuranic waste into the proposed Part 61 rulemaking. And defining classifications for these waste types with appropriate disposal criteria.

The states felt that this could serve to ensure that compact inside of states could address the Part 61 changes in a more coordinated and consolidated effort. And allowed sited states to address state specific policy considerations regarding these unique wastes in similar manners.

We appreciate the NRC's effort to clarify the purpose and scope of this draft regulatory basis. And while future need and the importance of a national solution for the proper management of high-level radioactive waste is critical, we believe that the scope of the greater than Class C and transuranic waste discussion should not be overshadowed by these out of scope matters.

A final regulatory basis for greater then Class C and true waste disposal should be consistent with the needs to promote access for low level radioactive waste balanced with the need for the flexibility of each individual compact inside the state, to determine the acceptability of these wastes with respect to their state policies, site specific conditions, and existing waste acceptance criteria, which again, are consistent with Part 61

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2 We note that the sited states in their roles and responsibilities 3 as agreement states, have the expertise and technical resources to determine 4 the acceptability of greater than Class C or true waste for disposal in facilities 5 that are meeting the Part 61 requirements. 6 In related issue, and the next issue that I'll discuss regarding low level waste, is the proposed interpretive rule for the transfer of very low-7 8 level waste to dumps for disposal. And this also generated comments from the 9 CRCPD Board, the OAS Board and various states. The comments shared that the states' perspectives are that 10 11 the proposed interpretive rule provided very little detail on the actual implementation. And that it was challenging to provide meaningful comments to 12 the notice. 13 But both the OAS and CRCPD have indicated that they are 14 15 not supportive of addressing the management of very low-level radioactive 16 waste as proposed in the interpretive rule.

And instead favors rulemaking following the Administrative Procedures Act that would assign new categories of radioactive waste for very low waste, and be also included in the 10 CFR Part 61 rulemaking.

There's significantly more to licensing a Part 61 disposal facility such as site stability, and that's more than just the proposed cumulative dose of 25 millirem per year.

And there's also the consideration of the acceptance process at a permitted RCRA disposal facility, and its knowledge, then is acknowledged in an assumed generic waste acceptance process.

1	The regulatory process of siting and licensing a Part 61
2	disposal facility should be followed in order to completely remove the
3	requirement for a case by case review of each site.
4	Additionally, it was recognized in the proposed interpretive
5	rule documentation that there's no current definition for very low level waste.
6	The OAS and CRCPD believe that the definition of a new
7	category of very low-level waste, that is lower than the existing Class A waste,
8	should be defined. And could have a lower disposal criteria, but would still
9	require disposal in a manner that provides isolation from the biosphere.
10	This could be integrated into the proposed rulemaking as
11	noted before, for the greater than Class C and true waste.
12	And it would provide the advantage of leveraging the existing
13	mature regulations regarding low level waste disposal, and at the same time,
14	reducing the regulatory burden that currently exists for the disposal of waste at
15	this very low end of the classification spectrum.
16	So, overall related to the waste stream, the sentiment from
17	OAS and CRCPD through our comments, for both of these waste streams, is
18	that the current 10 CFR Part 61 process is effective. And allows for concurrent
19	consideration such as other RCRA hazardous materials or site-specific
20	concerns.
21	These existing procedures and methods outlined in 10 CFR
22	Part 61 for accepting waste disposal should be leveraged, and it could be
23	adapted for addressing greater than Class C, very low-level waste, and true by
24	defining these additional classifications and disposal criteria. Next slide.
25	So my next topic for discussion is looking at the efforts that

1	we are doing within CRCPD to find ways to transform our work and the work of
2	our committees to be more effective. And specifically, we've recently looked at
3	the suggested state regulations for an opportunity for transformation.
4	The CRCPD maintains a dynamic document reflecting
5	suggested state regulations for state radiation control programs to incorporate
6	into each of those states' individual regulatory framework.
7	These SSRs or suggested state regulations, are an important
8	mechanism to provide recommendations for consistent regulations across the
9	nation to enforce regular regulatory control over radiation.
10	While agreement states much remain compatible with the
11	NRC regulations as a part of their agreement, states are not required to be
12	compatible in the same manner with the CRCPD suggested state regulations.
13	However, many states do incorporate some portion of the
14	SSRs and often reference the CRCPD's rationale and rigorous review process
15	as a justification for incorporating the SSR concept into their own rulemaking
16	rationale.
17	Prior to final publication, all suggested state regulations must
18	be endorsed by the Executive Board at the CRCPD and concurred by the FDA,
19	NRC, and the EPA.
20	There are currently 28 committees focused on the various
21	aspects of radiation protection. And the entire process of drafting and
22	approving an SSR for publication can take two to three years.
23	The length of time this takes is important as it is in
24	rulemaking, to ensure that all stakeholders have time to provide input into the
25	final product, and that it may be used as the basis for rulemaking within their

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1	state
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2	However, this time frame introduces challenges with council
3	and committee chair turnover, and the changing priorities or emerging issues
4	that arise in the middle of an SSR cycle.

In an effort to address these issues, and identify opportunities for efficiencies, the CRCPD Board has created an SSR Steering Committee, so on the slide you can see that we've inserted the Steering Committee between the council chair, the Board -- of the Board, and the committees themselves.

Next slide.

The focus of the Steering Committee will be to monitor existing and emerging radiation protection practices and regulations, to ensure that a committee is assigned with appropriate charges and an active chairperson when we need to be reviewing that area for regulation.

We also hope that this committee will advise the counsel chair on the prioritization of rule revisions and focus areas to ensure timely completion of drafts that address current issues, while maintaining integration of any emerging topics that come up throughout the middle of the process without derailing the entire SSR drafting and review process.

We also want to effectively allocate resources across committees to focus on areas of emerging importance or time sensitivity.

So, if we have a committee that is inactive, we can utilize some of those committee members to another committee.

We can also establish and monitor routing and timelines. Since the process takes two to three years, there is potential for the council chair to roll off or another critical member of the committee to change.

1	So, it's important to have a team of coordination to ensure
2	continuity and maintenance of these timelines over the time that the drafting
3	and review process is taking place.
4	So, the Steering Committee's been established. And is
5	working on establishing operating procedures. And will begin to review all of
6	the SSR committees and assist in prioritization of the activities and established
7	timelines for the next years.
8	We have two NRC representatives on the SSR Steering
9	Committee. And we hope to specifically review how to best implement the NRC
10	regulations, particularly with the compatibility levels across the various levels.
11	Next slide.
12	So this completes our presentation of topics. And on behalf
13	of both the OAS and CRCPD, we would like to again thank the Commission for
14	the opportunity to have this discussion.
15	And we look forward to addressing any of your questions.
16	CHAIRMAN SVINICKI: Well, thank you very much, Angela.
17	And I extend those thanks to all members of the Angela, we might need you
18	to mute your thank you very much.
19	So, thank you Angela. And I extend that thank you to all the
20	presenters here today. I think you very effectively laid the table with any
21	number of very important topics of interest to our regulatory partnership.
22	As a collegial practice, our Commission rotates the order of
23	recognition for questions. And today we begin with Commissioner Caputo. I
24	hope she knows that. Take it away.
25	COMMISSIONER CAPUTO: Thank you all for joining us and

1	participating in this meeting today. Your input is incredibly valuable to us as we
2	certainly make our decisions at the Commission level.
3	So, it's important to have this exchange. So, thank you all for
4	participating. I'd like to begin with a question to Mr. Crowley, regarding trading
5	and experience requirements.
6	We have received several letters here at the NRC from
7	physicians, raising concerns about the limited availability of authorized users for
8	medical treatments.
9	I'll read a quote from one such letter from a Dr. Luke
10	Nordquist, a practicing oncologist from Nebraska. He stated that patients
11	currently travel from more than 40 states to my center to receive care for their
12	cancers.
13	And quote, patients' treatments are dependent solely on the
14	availability of these authorized users. You have other fulltime responsibilities
15	and can't always be available when a treatment is due, when a for a
16	treatment when due to lead sorry, leading to unnecessary delays.
17	He further indicates that the lack of authorized users may limit
18	or preclude the opportunity to bring new classes of drugs to some communities.
19	Mr. Crowley, is OAS hearing similar concerns from doctors in
20	their states?
21	MR. CROWLEY: Thank you, Commissioner Caputo. Yes, I
22	believe that some of the state members are hearing very similar stories being
23	shared with them.
24	I can't say for certain what that letter, what treatments they
25	were referring to per se. But I know that there are a lot of clinics operating with

1	the contracts or different temporary physicians who may come or go to just
2	satisfy our need for an authorized user to be present.
3	In which case it can cause a barrier in availability they use.
4	So, depending on what the technologies are, and what the treatments are, it
5	may not be as prevalent throughout all regions of the country.
6	COMMISSIONER CAPUTO: So, this is one aspect of what
7	OAS would look for in terms of a potential rulemaking on training and
8	experience?
9	MR. CROWLEY: Yes. Absolutely. I think there's a number
10	of drugs and things, I don't have the time to go into each of them.
11	But, we're going to see, you know, we already have seen
12	interventional radiologists, urologists, coming onboard with drugs that are out
13	there now, who may have to rely on other AUs.
14	We have drugs coming to terms likely for orthopedic reasons,
15	in which case orthopedists would get included. And even in my state, we're
16	looking at brachytherapy devices that someday down the road may be used by
17	dermatologists.
18	So, you know, how do you account for all these physician
19	types with these new developing technologies with our old prescriptive T&E?
20	So, that's kind of the reason for our comments at this time.
21	COMMISSION CAPUTO: Thank you. I have a question for
22	Mr. Semancik. On slides 14 and 20, wait, you know, let me let me just start
23	by saying, you're really to be commended, I think, all of you, for the risk-based
24	response to COVID-19.
25	Obviously, there is a need to balance the response

1	capabilities. But also the challenging environment presented by the public
2	health emergency.
3	So, thank you very much for that. I do want to note, NRC
4	received a letter from Mr. Ken Evans, a CRCPD Committee Chairman, who
5	noted in his letter that the radiological emergency preparedness program has
6	reached a level of maturity where the national nuclear plants and associated
7	offsite response organizations have consistently demonstrated a high level of
8	preparedness.
9	In other words, this one-time exemption of biennial exercise
10	requirements in no way detracts from the overall state of emergency
11	preparedness.
12	So, Mr. Semancik, on slide 17, you discussed how enhanced
13	guidance during the public health emergency protects responders through
14	modified radiation emergency response staffing and virtual activation.
15	In the virtual exercises conducted so far, have you seen any
16	lessons learned that should improve how we conduct future exercises?
17	MR. SEMANCIK: Yeah. Thanks for that question. I think,
18	you know, that working group from Canada is still kind of looking at some of
19	those lessons learned from the virtual exercises.
20	I think we've certainly seen in the conduct of exercises how to
21	how to that we've had some lessons on how to do that.
22	You know, specifically in how do you, how do you account for
23	evaluators? People who normally would be going together.
24	A classic case would be, you know, typically we've used, if a
25	field team goes out to measure radiation readings, we've had somebody in the

1	vehicle that could give them simulated readings in the time.
2	Well, if we restricted the number of people in the vehicle, that
3	process obviously is interrupted. And so we have to look at other ways to do
4	that.
5	And, you know, we've looked at now additional simulated
6	equipment that could be used. That would actually provide a real indication of
7	radiation readings and things like that.
8	And I think the other piece is really also just understanding,
9	probably as we've all seen from our interactions during this time, the various
10	kind of collaboration platforms, and making sure we have consistency of
11	accessibility to the platform that the local ORO was using for collaboration.
12	So, the local communities can coordinate with the state and
13	coordinate with the feds. And that all the platforms and all the firewalls don't
14	block each other from those communications.
15	So, I know in the State of Connecticut we've exercised at
16	least twice using those platforms. And we've started to recognize where we
17	need to kind of triangulate to the right platform that works for all the partners in
18	the area.
19	So, I think we are seeing some of that. And it's good to work
20	out some of those, those communication challenges up front.
21	COMMISSIONER CAPUTO: Thank you. I have a question
22	for Mr. Ong. You discussed a wide variety of state's responses to the COVID-
23	19 public health emergency.
24	And I understand that the OAS Board participated in three
25	public meetings with NRC staff this summer, discussing the temporary

1	exemption process for materials' licensees, including how regulatory relief
2	granted by some agreement states might be different from exemptions issued
3	by the NRC.
4	Could you please describe for us some of those differences?
5	CHAIRMAN SVINICKI: Augie, I believe you're still muted.
6	MR. ONG: Thank you for the question, Commissioner
7	Caputo. The differences are really, in my opinion, minor.
8	In the sense that NRC has given us guidelines as to what can
9	individual states, not so much individual states, but what can be done in order
10	to deal with the COVID-19 emergency situation.
11	Such that then the inspections or licensing actions can still be
12	carried out without jeopardizing the public health and safety, or in fact any
13	compromising of the security of certain categories of reactor materials.
14	With that being said, then certainly any of the changes to the,
15	to the necessary to carry out the National Materials Program, those individ
16	those changes by a given state, would still have to be communicated with their
17	respective regional NRC management group.
18	Such that then there would be no compromising of the overall
19	program. So that, I think, with the NRC concurrence with those exemptions, or
20	waivers, or whatever process being implemented by the states, would still have
21	to be recognized and approved in many cases by NRC region representatives.
22	So, in any case, overall changes, as I said earlier, would still,
23	would never compromise the health and safety of the general public, or the
24	employees that, or operators using their resources, or using radioactive
25	materials for imaging.

1	And that at the same time, any of the Category 1 and 2
2	sources would still be fully secured in such a way as to provide that kind of
3	licensee assurance to the individual radiation control programs.
4	So, specifically then any of the deviation from a state to
5	another state, would still not matter so much when you get down to the more
6	important criteria. Again, has there been any compromising of public health
7	and safety or the security of radioactive materials.
8	So, I think overall, there has, there are no major deviations
9	from the National Materials Program or the respective individual states.
10	Thank you.
11	COMMISSIONER CAPUTO: Okay. Thank you for that.
12	guess my question was more along the lines of, in discussing some of these
13	differences, is there an opportunity to sort of review these different practices for
14	flexibilities that maybe useful?
15	Or maybe capturing and sharing best practices with everyone
16	learning from these slight differences.
17	So, thank you very much of course, for your commitment to
18	preserving public health and safety. That's very much noted. Thank you.
19	MR. ONG: Thank you.
20	CHAIRMAN SVINICKI: Thank you very much. Next, we will
21	hear from Commissioner Wright.
22	COMMISSIONER WRIGHT: Thank you very much
23	Chairman. So, Augie, I'm going to come back to you. And I'm going to follow
24	up exactly where Commissioner Caputo left off.
25	MR. ONG: Yes. Thank you.

1	COMMISSIONER WRIGHT: Because I had I had a
2	question, and you've kind of answered it a little bit. And Jeff did as well. He got
3	a little bit more detail, I think, in what CRCPD was doing during the pandemic
4	specifically.
5	But, can you maybe talk about some of, maybe specifically,
6	some of the types of changes that the states made to their programs during the
7	pandemic.
8	And you know, were the changes made, were they consistent,
9	you know, between the states? Or did, you know, did they have to be tailor-
10	made based on different state's programs or processes?
11	MR. ONG: I think the, thank you for the question again,
12	Commissioner. And as I said earlier, a lot of examples of the kinds of guidance
13	documents form the individual states are available at our organization of group
14	state website.
15	So, that being said then, any of the differences are going to
16	be somewhat unique to a given situation. And that exemption that could be
17	granted, would be dictated by what is relevant to the respective program in
18	terms of any of the amendments submitted to the given program, to the
19	radiation safety, radiation control program, would still have to be evaluated.
20	So, it's not going to be carte blanc per se, right. It's never
21	going to be carte blanc. But that in such a way as to, well, you know, then
22	again, if they are able to fulfill the criteria of an uncompromising of the health
23	and safety of the workers, or the general public, or the security of reactor
24	materials, then what can the deviation be permitted, or the waiver be permitted
25	such that then still accomplish what is needed to maintain awareness of the

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2	So, the licensing conditions can be emergency situation that's
3	occurring. But, certainly the communication between the radiation contro
4	program and the individual licensee to make sure that the requests have been
5	received.

What can the state be able to do in order to ensure the licensed condition still would be applied? Whether they will apply explicitly without deviation, or can be delayed in a sense that well, you know, certain reactor materials had to be, have to be, I would say either surveyed for contam -- for leakage.

Such an event can the deviation or the lack of thereof be postponed until such time that the survey can be done and submitted to a third party for determining of the determination of the contamination.

It's those things that are, that can be exempt or extended beyond the time interval. Those could be done without sacrificing public health and safety or the security of the materials.

So, the major differences, I have not come across that would then cause a raise in concern among the other state members such that then hey, you know, this state is doing this in such a way as to create problems across transponding problems that would then give rise to other states.

So that if a licensee from state number one said, hey, we could be exempt, certain condition from our license, well, yes. If other states are also -- a licensee from other states could then determine hey, if state one licensee can do it, why can we not be exempt from the same kinds of actions.

So, that we have to be aware of. And it has not raised to the

1	concern whereby there will be such a trans-boundary issue that could arise that
2	could then create conflict among the various programs.
3	And certainly, the OAS is well aware of any potential
4	problems. And it certainly would be up to date as to what kind of deviations
5	from the individual state that could then compromise the overall responsibilities
6	under our organization in order for fulfilling their requirements under the
7	National Materials Program.
8	So again, the final answer really, after all of that is, simply I
9	don't think the major deviation could occur, because there are serious
10	implications as to what's happening between states or among states or within
11	the National Materials Program.
12	Thank you, sir.
13	COMMISSIONER WRIGHT: Okay. Thank you. And this
14	next question, you can answer, or any of the others may want to add to it as
15	well.
16	So, I'll go to the IMPEP Program for a minute, the reviews.
17	So, I understand that the recent IMPEP reviews for Wyoming, Georgia, and
18	Virginia were conducted remotely, except for the inspection parts of it.
19	So, overall how did they go? Do you think it's something we
20	should continue doing after the pandemic ends?
21	And you know, does this process create any difficulties for
22	states, you know, the ones that may not have digital records for example?
23	MR. CROWLEY: Augie, if you will, I'll take a stab at that one.
24	MR. ONG: Yes, please do.
25	MR. CROWLEY: Commissioner Wright, thank you for the

1	question. During my tenure as Chair-Elect, I worked with the NRC staff who led
2	the IMPEP processes and helped organize that.
3	So, I was key, you know, in talking to them back and forth
4	about OAS's perspective and how to go forward with COVID and the temporary
5	instruction that was published.
6	So, with that and over the summer, the last few months with
7	the virtual IMPEP processes, I haven't heard anything negative back from the
8	states. I think everyone wants to try to stay as close to the normal as they can.
9	Like we are making changes all across our lives. And so
10	trying to stick with the IMPEP schedule as closely as we can, and address
11	those challenges has been key for many.
12	Now, with that being said, it does take some support that
13	states may or may not have, as you said, digital records. So, the NRC has
14	been very flexible in listening to the states as far as what we can or cannot
15	support.
16	I know there's been a couple of states who have postponed
17	their IMPEPs because they did not feel they could support it. And there was no
18	issue or kickback or any concern from the state or the NRC or OAS as a result
19	of that.
20	It's just simply can a state support it, or can they not. So, with
21	the ones that could, they're going forward by doing virtual IMPEP audits.
22	And to, what we've heard so far, they're going fairly well. So,
23	good luck to Kim. I know she's got one coming up. And I think Augie, you do
24	as well in New Hampshire.
25	So, hopefully that trend continues. Thank you.

1	COMMISSIONER WRIGHT: Thank you. So, if you don't
2	mind David, I'm going to stay with you there for a second.
3	You know, we had the discussion earlier about the
4	extravasations and how to treat them. And I guess my, the question I have for
5	you is, is there consensus among the states regarding how to treat
6	extravasations?
7	And if not, can you tell me some of the differing positions?
8	MR. CROWLEY: Yeah. Absolutely. As I mentioned in my
9	talk, the majority of the folks that responded from the states had the position
10	that extravasations exceeding the current medical event threshold, the half-
11	sievert, that they would expect the licensee to turn around and notify the
12	regulating agency of those.
13	So, I think the majority of the states have that mind set right
14	now. And as I stated, they were unaware of this four-decade old exemption
15	policy.
16	So, when I first learned about it, you know, I said, I don't know
17	what this is. But, we would expect to hear it reported.
18	And I think that's the general consensus across the National
19	Materials Program. There's a lot of reasons why they're not being reported in
20	large numbers.
21	But, that's mostly because maybe for the dying optics side,
22	we don't have written directives. We don't have procedures in place. We aren't
23	looking at or evaluating the doses on a regular basis.
24	So, it would only be in extreme cases either with therapeutics
25	or severe extravasations of diagnostic agents that the docimetry would even be

1	performed that would then instigate a report.
2	So, that's kind of where we are. Many, as I said, many states
3	would expect that if the current medical event threshold of half a sievert were
4	exceeded that indicates some type of error or issue at the facility, we would
5	hope to hear that report.
6	And then be able to tie those events together where we could
7	then go back and inform the industry for ways of improving and minimizing
8	these events from occurring.
9	COMMISSIONER WRIGHT: Thank you very much. And I'm
10	really short on time. But I do want to just make a comment, Chair that I think
11	that this format has worked fairly well.
12	And I hope that we can do more of this. Because I really
13	appreciate the way that SECY has organized it. And how they've done on the
14	screen. This has worked out great. Thank you.
15	CHAIRMAN SVINICKI: Well thank you for that Commissioner
16	Wright. And I was I'm not a superstitious person, but I was thinking the
17	technology has cooperated so far.
18	And to hear you, yes, we're not quite done yet. But let's hope,
19	cross our fingers for everyone's remote connections.
20	And with that I recognize Commissioner Hanson.
21	COMMISSIONER HANSON: That's right. Knock on wood.
22	Thank you, madam Chairman. And thank you all for being here today.
23	I was interested to read the 2018 Office of the Inspector
24	General audit of the National Materials Program.

And it sounds like from Mr. Ong's presentation that a lot of the

1	things that were recommended in that report have been implemented and have
2	gone fairly well. At least increasing in terms of increasing the overall
3	understanding of what the National Materials Program is, designating co-
4	champions, et cetera.
5	But I am interested now that we've got, it's been a year or so
6	since some of those changes have been implemented. It's been a couple of
7	years since that report's been issued.
8	You know, if we were going to do something next, you know,
9	what are additional areas for improvement? And that could be for Mr. Crowley
10	or Mr. Ong, or whoever would like to jump in on that.
11	MR. ONG: Yes. I'll take the first crack at this. Thank you,
12	Commissioner Hanson for that question.
13	And the, continuing with the co-championship. I think the
14	website needs to reflect more of the, as an ongoing dialog, the issues that are
15	being discussed.
16	The kinds of documentation that could be viewed either by
17	CRCPD or OAS such that then all of our members be able to discuss about
18	those issues raised. Or any concerns that maybe relevant to the overall
19	effectiveness of that co-championship.
20	So, as long as the communication and coordination of the co-
21	championship, and their subcommittee members, that would be extremely
22	beneficial for the overall National Materials Program.
23	Because then you have the input from the relevant folks who
24	are very interested in a given topic or issues that need to be discussed, present
25	resolutions or solutions that could then be implemented across the National

1	Materials Programs. Thank you.
2	COMMISSIONER HANSON: Okay. Thank you. Anyone
3	else?
4	MR. CROWLEY: Yeah. I would just echo what Augie had to
5	say there. And that the co-champions have been great for us in this last year
6	And has offered a new avenue for discussion and
7	collaboration between the agreement state programs and the NRC partners.
8	I think as he stated though, communication would be the next
9	step on how we can improve this. I know they're working toward a website
10	portal and a place that we could go to find information that's relevant and timely
11	necessary to share between our partners.
12	But, we hear about it like every year at our OAS meetings that
13	we would enjoy forums, some online place to go and discuss things. It used to
14	be called RADRAP, I think, it was before my time unfortunately.
15	I think everyone wants to get back to something like that
16	where we can just have an online environment to discuss kind of informally just
17	between state regulators and federal regulators alike.
18	COMMISSIONER HANSON: Okay.
19	MR. CROWLEY: So, hopefully communication. Thank you
20	COMMISSIONER HANSON: Yes. Thank you. That's
21	helpful. That gives us plenty to think about there.
22	The NRC's been making staff resources available to assist
23	states with utilizing the web-based licensing as their licensing system. Do you
24	have any indication that states are increasingly interested in using the WBL?
25	And you know, what types of additional assistance could NRC

1	provide that would support increased usage of the web-based licensing
2	system?
3	MR. ONG: Yes, I'll take that. This is Augie, Commissioner
4	Hanson. And thank you for that question.
5	And given the COVID-19 situation right now, and what we are
6	experiencing in New Hampshire, and that is because of the state budget, right,
7	on that matter. That really inhibits the states from fully getting onboard with the
8	web-based licensing.
9	And the reason why is because the individual materials'
10	control program, the Radiation Control Programs have to set aside capital
11	investment money in order to allow for their internal IT group to start to fully
12	understand what's needed in terms of implementing the WBL.
13	The budget has to account for the necessary folks to help with
14	the migration of the state database system, such that then it could be upload
15	and allow for the WBL to be implemented in stages.
16	And the investment right now, I was told at least, the state,
17	our own program would have to commit \$50 thousand of our budget for the first
18	year. And in terms of fully implementing the WBL, it probably would take four to
19	five years of capital investment in order to make that happen.
20	So, that being said then, true WBL is still fully funded and
21	maintained by NRC such as then it's going to be no cost of almost no cost to
22	the individual states.
23	But, if the initial capital investment to make that happen, and
24	for us, and I can only speak for New Hampshire, we did set aside money, and
25	we are taking steps now to get onboard with the WBL.

1	But again, I don't think for New Hampshire it will be able to do
2	so within that four-year investment time. I think it's being stretched out longer
3	such that then it will be, we will be able to fully take advantage of the WBL.
4	And I'm sure the other states would be similarly in a position,
5	or not in a position, of having enough capital investment money available for
6	really taking advantages that the WBL can offer.
7	Thank you, Commissioner.
8	MS. LEEK: If you're open to it, I can provide a little differing
9	response to that comment.
10	COMMISSIONER HANSON: That would be great. Thank
11	you.
12	MS. LEEK: So, in my state, in Kansas, we have our own
13	database which manages our radioactive materials program and our x-ray
14	program.
15	And when the NRC's web-based licensing added in some
16	supports for the x-ray program, we did make the determination to convert to
17	web-based licensing. And we are in the process right now.
18	So, to your question about the NRC staff support, I can say
19	that it's been excellent. They have been working with us every step of the way,
20	guiding us through the process.
21	We are not having any capital investment into it. Our staff are
22	doing the work themselves. It's very minimal.
23	Basically, we're uploading parts of our database into a test
24	area. And the NRC is working with us to convert it.
25	With COVID and everybody working at home virtually, the fact

1	that our access database that we currently use is somewhat antiquated, and we
2	have a lot of hard copy files, has been very challenging.
3	And we are looking forward to converting to web-based
4	licensing. We do have our virtual IMPEP October 26, coming up soon.
5	And it is going to be challenging, because we're going to have
6	to scan in a bunch of hard copy stuff. If we had already converted to web-
7	based licensing, it would be easier.
8	However, we are anticipating a conversion to web-based
9	licensing in November after our IMPEP is over. And we believe it will make
10	people working from home, the virtual working and for our x-ray program also,
11	much easier.
12	So, I have a little bit opposite response then Augie. But I did
13	want to point out that the NRC staff has been excellent. The support has been
14	excellent.
15	And it has not been an arduous process so far. Thank you.
16	COMMISSIONER HANSON: Thank you. That's great to
17	hear. I really appreciate that. One last question for me, for Mr. Derstine.
18	I was, in our background material, I was really interested in
19	some data on the training programs.
20	Online training has really grown significantly from, you know,
21	zero participants back in 2016 to almost 560 in 2020. Of course, a lot of that
22	participating in 2020 of course, had to do with the public health emergency.
23	But even so, I mean, the number of participants overall that
24	have been trained in the last five or six years has grown from some place in the
25	five hundreds to over eight hundred people, I think, so far in 2020. Which is

1	really, really pretty remarkable.
2	And Mr. Derstine, you mentioned, you know, that in person
3	training was important. But the online training seems to also have really
4	expanded access for people pretty significantly.
5	And I wanted to get your sense of what the right balance
6	should be going forward between online and in person training. And you know,
7	what can NRC do to expand access and make sure the right courses are being
8	offered going forward?
9	MR. DERSTINE: That's a great question. And the reason
10	brought it up in my presentation is I think that that has to be carefully monitored
11	in these coming years.
12	To make sure that the online training is providing everything
13	that, you know, that we were getting, you know, with the actual in person
14	training.
15	So yeah, that's why I wanted to just put a couple of those
16	caveats in there about, you know, hey we have to be careful about it. I know,
17	you know, of all the training courses that I took, you know, NRC trainings were
18	in person.
19	And I got to meet a bunch of other people, not only NRC
20	people, but people from other agreement states. And you know, develop
21	contacts with them.
22	And you know, and throughout the years, I've reached out to
23	them and asked them questions. Used them as sounding boards.
24	And so that's kind of why I brought that up. I just want the

NRC to be aware that there could be a difference.

1	And that maybe we should monitor this over the last several
2	years, or the next several years, excuse me.
3	One other benefit of online, of the online training, especially
4	with the more general, more basic radiation courses, is that a lot of the states
5	also have, you know, x-ray and radon people, you know, in their programs.
6	And all those people are responsible, usually, I know they are
7	in Pennsylvania, to provide a radiological emergency response as well.
8	And it's great that the NRC's online courses are somewhat
9	open to people other than just the agreement state materials' inspectors and
10	licensees. That's very important too.
11	But yeah, that's why I brought it up. I just want the, I hope we
12	can maybe discuss this over the next several years.
13	And if there are some concerns, that maybe we can address
14	them. And by maybe just a more blended, you know, having more people meet
15	in person instead of just online.
16	COMMISSIONER HANSON: Great. Thank you. Thank you,
17	Madam Chairman.
18	CHAIRMAN SVINICKI: Again, thank you all for your
19	presentations. Maybe I'll just continue on the training topic, but with a
20	comment.
21	Terry, I appreciate in your presentation you made mention of
22	the fact that there were a number of years where NRC support for state training
23	from a resources standpoint, was suspended. And that resumed again in 2008.
24	I joined our commission slightly, or about the same time that
25	NRC was able to begin providing that support again.

1	And I just want to acknowledge that that was in some ways,
2	just the strong personal advocacy of the NRC Chairman at the time, Dr. Dale
3	Klein, who just felt strongly that if you're in a partnership with state agencies in
4	a regulatory capacity, the mutuality of building expertise, your success kind of
5	rises and falls in your partnership based on that. And I appreciate his hard
6	work in securing resources.
7	And hopefully, whatever caused that suspension will not be
8	operative again. So that we can continue NRC's ability to assist the states in
9	that way.
10	And I think that the presentations that we heard today, maybe
11	from Jeff and others, really interwoven in a lot of your presentations was this
12	notion of, you know, just kind of recruitment and wage rates at the state level.
13	Retention of people, the ability for people to be growing their
14	credentials throughout their careers, which kind of keeps them at a state
15	agency, keeps them in a community of practice.
16	And I appreciate Commissioner Wrights commentary that due
17	to the public health emergency, we're all adapting and doing things.
18	But, I think I also heard from Terry and others that in a
19	partnership you want to be getting together with your partners. And you want to
20	be doing things like having the conferences that I know NRC staff and
21	Commissioners attend.
22	So, hopefully in due course we will be back to that. But I also
23	wanted to note that Jeff made a comment that I particularly throughout the
24	public health emergency have been trying to keep front of mind, which is, our
25	agreement state partners, often their programs reside in a state agency that is,

1	it never terribly resource rich, hopefully adequately resourced in good times.
2	But, it's trying to deal with or develop things like logistics for
3	massive vaccine rollout campaigns and other things, truly public health, medical
4	issues in the most direct sense, and not be attenuated exposure to that that we
5	get sometimes as a federal regulator.
6	So, it sounds like from your presentations, the NRC staff has
7	been uniformly sensitive to that. Has been understanding of all of the demands
8	on state agencies, but individual state agency personnel. So, I appreciate your
9	recognition to that.
10	And maybe I'll tee that up into a little bit of a question for Jeff
11	or any of you that would like to respond.
12	But, as we move into further phases of the public health
13	emergency, and I think with the growing recognition that there will be
14	constraints on some of our typical practices for some period of time going
15	forward, as we continue into 2021, where for any of you who want to weigh in,
16	what are kind of becoming the front of mine issues for you as you think, well,
17	we adapted well when we were in the first six to 12 months of the condition.
18	But now, if it looks like there's going to be constraints on what
19	we do going forward, what would be kind of the, the most compelling things that
20	are on any of your minds?
21	MR. SEMANCIK: Yeah, I'll take that first. I mean, I think, you
22	know, from what I'm hearing from folks, you know, what we're seeing is first and
23	foremost is going to be on hiring restrictions and budget challenges.
24	I think that we all expect that to occur for quite some time in
25	the forecast on looking out, you know, two or three years, still in that time

1	frame.
2	And that may, I don't know about all the places, but certainly
3	in my state and in some others, that also kind of coincides with a projected
4	retirement cliff at the same time. So, we may be facing hiring restrictions at the
5	same time we're facing retirements of experienced personnel.
6	So, that certainly is a concern. Probably in the more
7	immediate term is really building on the backlogs of other inspections that we
8	may have across the program.
9	Again, you know, from the state perspective, we live in a, kind
10	of the broader ecosystem of radiation protection. So, we've got, you know,
11	CMS audits to do. We've got x-ray.
12	You know, so we're coordinating quite a bit. In many of those
13	places we still haven't even opened up to getting out into some of the acute
14	care facilities and some of those areas due to the public health emergency.
15	So, that would be my take on what we see in the near term
16	and probably in the longer term.
17	CHAIRMAN SVINICKI: Would anyone like to supplement? I
18	think what Jeff's pointed out is probably kind of what we would think would be
19	the issues.
20	Is that experience shared among the presenters today?
21	MR. ONG: Yes, Commissioner Svinicki. This is Augie from
22	New Hampshire. And yes, I would like to add my input.

And that is, given the situation that we're facing now, and let's

assume then 2021, or part of 2021 that the emergency situation, it's still an

ongoing issue. Whether it's going to be a second wave or third wave until we

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get some effective vaccine be available to the public and to the stakeholders.

That being said then, we -- for our states' programs, we have to step back a little bit to see if during this year, has the individual radiation control program able to still maintain or the licensees' actions that would not present any compromising of the overall conditions that they need to fulfill within their license.

And if we're able to evaluate, given that New Hampshire is a small state, we could do that. But whether in a, from the larger state programs, are they able to evaluate overall effectiveness of what they've been doing during this emergency situation.

If there's an understanding that yes, this remote telework, the remote inspections given that the necessary conditions whereby you could verify whether inspections have been based on risk informed, evidence based, and necessary interviews with the licensees, then would you get, would you have the confidence necessary going forward into next year that yes, we can do it.

We're still able to manage that program very effectively without compromising any of our actions such that then could present a problem within the National Materials Program.

And if that kind of experience that could then communicate from a state to another state within our organization, that would be an excellent way of dealing with the current situation going forward.

And any of the lessons learned such that it's detrimental in fact, that are not able to fully carry out this supervision and the ability to manage the materials program, then that will then have to be stepped back.

1	And examine what can be done to plug up the holes
2	necessary in order to make sure that as we're going forward, we still have a
3	very effective program, still intact given the emergency situation if it continues
4	until next year.
5	Thank you.
6	CHAIRMAN SVINICKI: Thank you. And I would just say that
7	the NRC staff, I think, will be engaged in very much a parallel effort to look as
8	the public health emergency continues in whatever form.
9	And as Augie's talked about, you have to have not only an
10	effective vaccine, it has to be widely deployed. There has to be time for that to
11	establish some level of immunity in the population.
12	So, I think it's appropriate for us to begin to prepare ourselves
13	as regulators for, of sustainment of the measures that we've taken so far.
14	So, thank you for that. And maybe as, you know, as OAS and
15	CRCPD develop lessons along those lines, you know, share those with the
16	NRC staff who will be actively engaged in the same kind of continual look as we
17	move forward.
18	I just wanted to close, maybe this is a suggestion not so much
19	a question, because my time is limited, but Kim, you presented on CRCPD and
20	NRC collaboration efforts.
21	And Angela, one of her topics, she talked about a look that's
22	being taken at the state regulation process with maybe the offer, you know, the
23	optimism of saying we could transform. We could get better. We could make
24	that state regulation process more effective.
25	I know that for our collaboration efforts with OAS and

1	CRCPD, we rely on a structure of working groups and committees and taskings
2	for the same probably very busy volunteers who agree to serve on those
3	various bodies.
4	That sounded very parallel to what Angela said was being
5	looked at. You know, look at maybe which committees or working groups are
6	active. Look at moving people and saying we don't so much need you
7	volunteering here, you could go over here.
8	So, my suggestion would be, you know, if it looks like the
9	CRCPD work on state regulation process has some parallels and connective
10	tissue to our collaborative structure between NRC and all of the states, I for one
11	would be interested in just, you know, the sharing of that or some discussion.
12	So that maybe if there's things that are just smart ways to
13	improve, we could bleed that over into the structure that we use to collaborate
14	with all of you.
15	And I don't know, Kim or Angela, did you have just a quick
16	response or reaction to that?
17	MS. LEEK: Sure. This is Angela. I will jump in. I appreciate
18	those comments, and we will definitely be happy to share any lessons learned
19	as we get the steering committee and, you know, the prioritization process
20	underway.
21	CHAIRMAN SVINICKI: Thank you for that. And with that, I
22	will turn to Commissioner Baran.
23	COMMISSIONER BARAN: Well thanks. Thank you all for
24	participating. It's always great to hear the perspectives of our state partners.
25	I'd like to get your thoughts about a paper pending before the

1	Commission on the two-person rule for industrial radiography operations.
2	The NRC established this rule in 1997. And there have been
3	two different interpretations of the rule. NRC's always interpreted the rule to
4	mean that the second person needs to be directly observing operations in the
5	same room.
6	Some states have interpreted the rule to mean that the
7	second person only needs to be nearby and available to provide immediate
8	assistance. And under that interpretation the second person could, for
9	example, be in a nearby darkroom developing radiographic film.
10	The NRC staff is now recommending that NRC adopt a more
11	flexible interpretation of the regulation.
12	Can anyone talk a little about how many states are using the
13	more flexible interpretation? And whether those states have encountered any
14	problems with their licensees operating under that approach?
15	MS. LEEK: Sure. This Angela. And again, I'll take that
16	question and try to give a little bit of context to it.
17	Right now we understand that there are four states with an
18	interest in having more flexibility to the two-person rule. And I understand that
19	there has been a Commission paper that has come your way in July.
20	But, I'm not aware that it has been made public, out to the rest
21	of the public. The states have been engaged in discussing this through the
22	standing committee on compatibility.
23	To talk about how to approach potentially this interpretive rule
24	process and the need to change the compatibility classification for that rule.
25	To allow for states to have a different interpretation and

Τ	potentially stay more restrictive then the interpretation that's being proposed by
2	the NRC.
3	So, I think that the limited scope that this would entail, lends
4	to the ability to have this interpretative rule approach to address this.
5	I think that, I don't know that any of the states that are
6	interested in this flexibility are looking to apply it across the board to all types of
7	industrial radiography.
8	I think there are just certain conditions or certain field
9	activities such as a rural location of a pipeline where there's no one around, and
10	they can have more efficient processes by having the two people do different
11	jobs at the same time, and things like that are, I think, what's being considered.
12	So, because of the very limited scope and no mandates to
13	have a state adopt that, if they don't choose to, I think, you know, lends itself to
14	this type of a discussion.
15	COMMISSIONER BARAN: And have OAS or CRCPD taken
16	you know, a position on it? Are they supportive of the proposed change and
17	interpretation?
18	And are you hearing any states that have any concerns about
19	it?
20	MS. LEEK: So, I think that overall this has been discussed,
21	think last year at our OAS meeting. It was presented to us as a presentation by
22	NRC staff.
23	And the review by both an OAS representative and the
24	CRCPD representative on the standing committee on compatibility is really the
25	extent of the engagement so far.

1	I think we look forward to having the opportunity to comment
2	when this comes out into a public forum. But I don't anticipate that there will be
3	a huge outpouring of opposition.
4	Because again, the states and access whether they want to
5	stay with the current interpretation or utilize the flexibility that will be offered to
6	allow for this activity to occur under different capacities.
7	And it will be up to them. And so, I don't see a lot of
8	opposition to it.
9	COMMISSIONER BARAN: Okay. And have you been, have
10	the agreement states or the state programs been hearing anything about this
11	issue from other stakeholders, either for or against?
12	MS. LEEK: Sure. So, I can't speak directly to that. I know
13	that there are certain states, those four states that I indicated that have been,
14	you know, wanting this flexibility.
15	And so, I'm I would endeavor that that's coming from
16	requests from the industry. Asking for some of the flexibility to allow more
17	efficient practices out in the field.
18	So, I can't speak to that directly. But, we can definitely find
19	out if there's any details from any of those states if it's needed.
20	COMMISSIONER BARAN: Okay. Great. Well, the staff
21	recommends issuing the Federal Register notice announcing the change of
22	interpretation, assuming the Commission approved it.
23	And then having that change be immediately effective.
24	Afterwards the staff would take public comment on the change, I guess leaving
25	open the possibility they might change it after making the change.

1	That sequencing strikes me as a little odd. Especially if there
2	hasn't been that much detailed engagement with OAS or CRCPD on this.
3	I could see issuing a notice of our proposed change, taking
4	public comment, and then deciding whether to finalize the change.
5	Do you have thoughts about what's the right process is there
6	in terms of getting comments on this, and when?
7	MS. LEAK: Sure. So, from the state's perspective, we
8	always, you know, appreciate the opportunity comment. And that's a really
9	important part of moving through any new conduct or any new rule making.
10	However, I will balance that with, you know, the need to be
11	able to move nimbly. To be able to make adjustments for industry when they
12	are telling us that some of our regulations might be causing extra burdens.
13	So, we'll always be open to looking at other opportunities,
14	other ways to approach this. This one in particular, I think because what the
15	proposed interpretation is doing, is opening a pathway for states to do their own
16	rulemaking to allow for those allowances.
17	But making it effective immediately could likely allow states to
18	start moving down the process of enacting it in their own state if they were
19	choosing to at that point in time.
20	But again, they would need to know that if the comments
21	came in such that something was going to change, they may have done that
22	work and not be able to enact that more flexible structure.
23	So, it could pose a little bit of a continuity issue if states get
24	really far ahead of the game while the comments are coming in. But, I don't
25	think we oppose the ability to move more nimbly in certain, certain cases like

1	this where it's a very limited scope.
2	If you, you know, recognize in my comments about the very
3	low-level waste, we're questioning interpretive rulemaking approach in that
4	case, because it is a more complex issue. And it is more wide-ranging
5	application.
6	And in that case, we do believe that the full rulemaking
7	process and comment period with Part 61 is more effective.
8	COMMISSIONER BARAN: Thanks Angela. Actually, I was
9	going to ask next about low level waste. That's a perfect segue.
10	And as you pointed out, that's another potential
11	reinterpretation of a rule. Although it does appear to be much more
12	controversial based on the comments NRC's received so far.
13	NRC staff, as you mentioned earlier, is taking public comment
14	on a proposal to authorize the transfer of what the staff's calling very low-level
15	waste to entities who hold specific exemptions for disposal without a case by
16	case review or approval of the transfers.
17	I think the basic idea is that solid waste landfills could be
18	allowed to dispose of this waste. I'd like to ask you about some of the concerns
19	expressed by CRCPD, which submitted a written comment on this proposal.
20	And you also, of course, discussed some of these issues
21	earlier in your presentation. In its comment, and in your presentation, you
22	mentioned and CRCPD stated that the proposed interpretation would bypass
23	the Part 61 low level waste regulations.

And that there's more to siting a low-level waste facility then just meeting the proposed dose limit of 25 millirem per year.

1	Can you talk a little bit more about that concern?
2	MS. LEEK: Sure. So, I can talk from a perspective of
3	potentially having, you know, a solid waste landfill taking radioactive materials.
4	My state does not have a sited Part 61 facility. So, I would
5	rely on the states that do have those sited authorities to, you know, provide that
6	feedback.
7	And that's where a lot of that feedback came from as far as
8	both of the comments from CRCPD and OAS to the Commission.
9	So, you know, from the perspective of very low-level waste,
10	we do struggle with places to put these lower activity sources that need to be
11	properly disposed of, but don't have anywhere to go.
12	It's very expensive to go down the regular pathway. So, we
13	do feel strongly that there does need to be another classification for these low-
14	level wastes, they are very low level waste.
15	But, we also need to make sure that we're factoring in all of
16	the other components of the waste cycle. And by just, just without defining
17	what very low-level waste is, and trying to move forward without incorporating
18	all of the other mature and established components of Part 61, we are not going
19	to be successful.
20	Or we're going to be reinventing the wheel on a lot of things
21	that have already been practiced through the existing regulations.
22	COMMISSIONER BARAN: I gather from CRCPD's comment
23	and the comment of the Association of State and Territorial Solid Waste
24	Management Officials, that there are potential problems with shifting
25	responsibility to state solid waste permitting agencies for the radioactive waste.

1	Can you just take a minute maybe to talk about that?
2	MS. LEEK: Sure. Again, at a very high level, I think that, you
3	know, the structure of what Part 61 is using for management of waste
4	particularly radioactive waste, is not necessarily structured in the current solid
5	waste regulations and/or processes within states across the board.
6	So, you know, I think again, leveraging the Part 61 lessons
7	learned into some sort of a capacity to ensure that the solid waste landfills and
8	the states that would be helping to manage this new category of waste, are
9	doing it in line with how other waste is managed, in an appropriate manner to
LO	the activity that we're talking about.
L1	COMMISSIONER BARAN: Okay. And so it sounds like
L2	overall CRCPD doesn't support the staff's proposed interpretation of the
L3	regulation.
L4	You think it makes more sense to do a full notice and
L5	comment rulemaking to amend Part 61 if NRC wants to address the very low
L6	level waste. Is that where you guys are now on it?
L7	MS. LEEK: Yes. I believe that that is where we are. And
L8	again, we don't object with creating a very low-level waste option with disposa
L9	criteria and definitions associated with it.
20	We just think it's more effective through those entire
21	rulemaking processes to ensure that we're taking into account all those
22	complex criteria.
23	COMMISSIONER BARAN: Okay. Thanks so much.
24	CHAIRMAN SVINICKI: Well, again, I want to thank all of ou
) 5	OAS CRCPD presenters. And all of those who support you in working or

1	these many issues in our kind of collaborative regulatory structure.
2	I thought that this was great. And I appreciate you all having
3	strong WIFI, or connectivity so that things worked out today.
4	You might be a model group though. So, maybe we won't
5	extrapolate to all of the other groups that might participate remotely.
6	But, thank you again. A lot of interesting topics we talked
7	about today. A lot of important issues being worked between our organizations.
8	And with that, we are adjourned. Thank you.
9	(Whereupon, the above-entitled matter went off the record at

12:01 p.m.)