## UNITED STATES OF AMERICA 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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PUBLIC MEETING

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THURSDAY

APRIL 16, 2015

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The Commission met in the

Commissioners' Conference Room, 1st Floor, One

White Flint North, 11555 Rockville Pike,

Rockville, Maryland, at 9:30 a.m., Stephen G.

Burns, Chairman, presiding.

## PRESENT

STEPHEN G. BURNS, Chairman

KRISTINE L. SVINICKI, Commissioner

WILLIAM C. OSTENDORFF, Commissioner

JEFF BARAN, Commissioner

## ALSO PRESENT

MIKE WELLING, OAS Chair

MICHAEL SNEE, CRCPD Chair

SHERRIE FLAHERTY, OAS Chair-Elect

WILLIAM IRWIN, CRCPD Chair-Elect
ALAN JACOBSON, OAS Past-Chair
MARGARET M. DOANE, OGC
ANNETTE L. VIETTI-COOK, SECY

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

9:32 a.m.

CHAIRMAN BURNS: I'll call our meeting to order, and we welcome the Organization of Agreement States and the Conference of Radiation Control Program Directors. Today's meeting with OAS and CRCPD is an opportunity for the members to inform the Commission of radioactive materials policy and regulatory issues of interest to the States, as well as to the NRC. And we'll be briefed on a number of topics by several members of OAS and CRCPD. First, Mr. Bill Irwin, the Chair-elect of CRCPD and the Chief of Vermont --- in the Vermont of Health's Radiological Department Toxicological Sciences Program, and he will discuss reactor decommissioning, RadResponder and RadNet.

Mr. Michael Snee, the CRCPD Chair and Administrator in the of Program Bureau Environmental Health and Radiation Protection for Department of Health will the Ohio discuss training. Mr. Alan Jacobson, OAS past Chair and Health Physicist Supervisor for the Maryland Air Radiation Management Administration discuss source security. And Dr. Sherrie Flaherty, OAS Chair-elect and Supervisor for the Minnesota

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Department of Health's Radioactive Materials Unit will discuss Web-Based Licensing and the License Verification System. And Mr. Mike Welling, OAS Chair and Director of the Virginia Department of Health's Radioactive Materials Program will discuss the Integrated Materials Performance Evaluation Program, often referred to as IMPEP.

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The presentation will be followed by a Question and Answer session with the Commission. Would any of my fellow Commissioners like to say anything? Then, Dr. Irwin, would you begin your presentation.

DR. IRWIN: Well, thank you. Thank you very much for inviting us, and for this opportunity to discuss issues of importance to all of us. The two topics that I've been asked to address are reactor decommissioning and the RadResponder/RadNet efforts that are being undertaken by the States and federal agencies.

In the area of decommissioning, just a note that we're in a new era where merchant plants are not, necessarily, responsive to local issues, and where numerous reactors over the next 20 years will decommission. It's an era when regulations are not specifically focused on post-operational concerns; when states may lose the radiological and

nuclear emergency capacity that they've developed over decades that are a tremendous asset to this nation; when vital laboratories may lose environmental radiochemical analysis capabilities because reactor environmental sampling is curtailed.

There are good situations in this country where we'd like to consider them models. For example, in Maine using sister states in New England, the utilities there provided the state with the environmental surveillance and emergency preparedness needs that were negotiated with the licensee, the states, and the public, and the utilities. And this was very useful for the entire time of the decommissioning from DECON through finally the fairly recent license termination.

In Connecticut, Millstone maintains its environmental surveillance and its emergency planning from offsite response organizations because at that facility there are two operating reactors aside the one that is in SAFSTOR. That provides the State with the capacity to continue to be prepared for a wide array of radiological and nuclear emergencies that, unfortunately, in some circumstances will go away.

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it's not utility-owned. It is owned by a private corporation with a fleet of nuclear plants, and the regulations, in essence, provide for abandonment of emergency planning even before spent fuel is removed from the spent fuel pool to the independent spent fuel storage installation. And environmental surveillance can, essentially, be curtailed to what may be unacceptable levels for the host state and its residents, and its environment decades before the liquid and solid radioactive materials within the torus and the dry layup of systems are what is, essentially, taken out of radioactive storage facility.

The solution, I believe, and I think other states agree, and it's a position that the CRCPD has heard and we believe is appropriate, is that we should encourage the reactor licensees, the owners, to support offsite response organizations until spent fuel is removed into dry casks, and encourage full application of the Nuclear Energy Institute's Groundwater Protection Initiative until all radioactive materials are removed from the site so that the license can be terminated, and the site released for unrestricted use.

Sadly, without these kinds of encouragements for cooperation with the states,

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states only have litigation as a resort. And it's a sad waste of resources to use litigation to solve these problems when, possibly, they could be solved otherwise.

of negotiated settlements encouraged by the regulators, the possibility that we maintain a radiological nuclear emergency preparedness that this nation has benefitted from and developed over decades, rather than lose it because over the next 20 years and more we'll see dozens of nuclear power plants and several states lose their funding that's primarily afforded by the reactor licensees. And we may lose the nation's critical radiochemical laboratory capacity because, again, the funding for that has been borne by the nuclear industry. It's a very valuable legacy that we would feel disappointed to lose.

With regard to our second topic, I'll join RadResponder and RadNet together. This is a very encouraging activity. The tool, RadResponder, is a software based on what the FRMAC used in Fukushima, and has used in a variety of exercises and actual events to collect field data about the radiological conditions in the environment after an incident.

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It was developed in coordination with EPA, FEMA, Department of Energy, Department of Homeland Security, and the States, and it allows for collection of field data and realtime display of where responders are, and what they're finding. It's now moving to a condition we're calling RadResponder-ready where it's known, for example, that Vermont can trust the data from Massachusetts, or New York, or New Hampshire because they are RadResponder-ready. They have met certain quality control requirements.

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We're now working, too, on linking laboratories across the nation so that their data about the samples they are taking from the environment can be processed through the EPA's Exchange Network where Clean Air Act and Clean Water Act data go, and that information shared with all parties that need to see that. And a policy has been developed by the CRCPD to insure that this data is shared with the partners who contributed, especially when that data is quality data, and that policy is in the latest revision of the Nuclear Radiological Incident Annex.

At the beginning of this effort a few years ago after Fukushima, the NRC was a very strong part of the initial meetings. I'm not sure exactly

why, but that involvement has curtailed somewhat, and I would appreciate the great benefit of having NRC representation with RadResponder again, not just as a partner, as is often the case with the work that NRC, and the States, and other federal agencies do together, but also because we believe encouraged that the licensees can be participate; those licensees that are reporting to the State, but those of the NRC. In particular, the nuclear power plants could be encouraged to use RadResponder in their field team data collection, in their and environmental laboratory data sharing. it could be And incorporated into the Radiological Emergency Planning Program of FEMA.

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So, I appreciate, again, this opportunity to speak before you to present some of the perspectives of the State of Vermont, myself, and the Conference of Radiation Control Program Directors.

CHAIRMAN BURNS: Thank you, Dr. Irwin. And I think we'll go to Mr. Snee.

MR. SNEE: Thank you. I would like to briefly discuss training opportunities for Agreement State personnel, but before I start, I think I owe an apology to Commissioner Svinicki and

Commissioner Ostendorff because I realize you have heard this message time and time again over the past few years not only from those of us sitting here, but previous board members of both CRCPD and OAS. But there's a reason why we bring it up every opportunity we get to meet with the Commission, and that is how crucial this training is to the success of the Agreement States. Without the NRC training, Agreement State personnel, we'd have a hard time supplying this training. There's nowhere else to get it other than, perhaps, trying to do some in-house training the quality that we get from the States, classes, Agreement it would cost-prohibitive to do that. And, to be honest, most states don't have that capability.

For the past three fiscal years there have been an average of 486 Agreement States people have gone each year to NRC-sponsored classes, which is, you know, the cost fully picked up by the NRC. It's, like I said earlier, crucial to the success of Agreement States so we get our people trained.

Much like the NRC, state programs are seeing our people getting older, getting close to retirement age. We're bringing in new people, the next set of leadership for Agreement States that are greatly benefitting from this training. And the

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message we try to bring up every time we meet with the Commission is how much we appreciate what the NRC does. We fully realize the cost that the NRC bears from this. We support your efforts in fine tuning some of this training. There's an effort out of your Chattanooga Training Center now to get a lot of this on line, which states are supporting to help test these modules. And we'll do whatever we can to help. CRCPD has a working group working on training issues, more on the x-ray side to do the same sort of thing, to get this training out easier, to get more people involved. And we stand ready to help any way we can, but the big message is the states appreciate the NRC's efforts with this, and we ask that to the extent possible that you continue with your support for Agreement State training like you have over the past few years. Thank you.

CHAIRMAN BURNS: Okay, thank you. I think next, I think Dr. Flaherty, or Mr. Jacobson.

MR. JACOBSON: Thank you. Thank you for the opportunity to speak on behalf of the Organization of Agreement States on the topic of source security.

Security and control of radioactive sources is a priority for the Agreement States, and

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we have a long history of insuring radioactive source protection and security. The OAS believes that it is important to maintain a culture that integrates safety, security, and control in an effort to protect public health, safety, and the environment.

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The GAO has been examining security gaps at materials facilities for over a decade. We support the concept of oversight, and we appreciate the opportunity to accompany the GAO auditors at state-regulated facilities so we can insure that the findings are accurate, and that concerns are addressed in a timely manner.

Since the terrorist attacks on 9/11 put a new emphasis on security, the NRC and the States have effectively worked together to create and implement a regulatory framework that provides a common baseline of security. In this framework, security is achieved in layers with multiple approaches working concurrently.

States were engaged early and often in of the development 10 CFR Part 37. State representation on the working groups and the steering committee was substantial. As a result, this level of security provides the necessary for the protection of radioactive assurance

material in the current threat environment.

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Currently, the NRC and four states have finalized security regulations or legally binding requirements. Eight other states have submitted proposed regulations to the NRC for comment. In October 2014, the NRC approved the Conference for Radiation Control Program Directors suggested state regulations for security. We remain optimistic with the intent of meeting next year's deadline for the implementation of Part 37 security requirements.

National Under the scope of the Materials Programs, the Agreement States continue to take action to improve security at our licensed facilities. Our inspectors, our license reviewers, and our licensees are using the National Source Tracking System, and we recently implemented an improved access system. Security at our licensed facilities is further enhanced with NUREG-2155, implementation the quidance for physical protection of Category 1 and Category 2 quantities of radioactive materials. Security at our facilities is further enhanced by NUREG-2166, the physical security best practices for the protection of risk-significant radioactive

materials.

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Regulatory authorities and licensees are now using the License Verification System to insure that materials are shipped and securely received by the intended authorized recipients.

Today we look to the future, prepared to implement these essential security requirements without discouraging the beneficial use of licensed radioactive materials. Thank you.

CHAIRMAN BURNS: Thank you. Dr. Flaherty.

DR. FLAHERTY: Mr. Chairman and Commissioners, thank you for the opportunity today to present to you on behalf of the Organization of Agreement States. I'd like to discuss the topics of the Web-Based Licensing System and the License Verification System, which are otherwise known as WBL and LVS.

These are part of the integrated source management portfolio, which also includes the National Source Tracking System, or NSTS. The integrated source management portfolio is designed to have these three information technology systems working together as part of the Nationwide Radioactive Materials Security Program. Starting with the implementation of NSTS, then with WBL, and

then lastly with LVS. The web-based licensing system has two functions, one as the repository for radioactive material licenses, and the second as a platform for licensing and inspection tracking.

States began submitting license information to the WBL system in May of 2011. They started with the states with the largest number of Category 1 and Category 2 licenses, and because of the large number of licensees, it took until August of 2012 to get all the Category 1 and Category 2 licenses captured in WBL.

Next came the License Verification System. This system is intended to insure that only licensees authorized for licensed material receive it and within the allowable limits. License verification is accomplished in the LVS by allowing authorities and licensees to use the information that's already stored in WBL and NSTS. WBL confirms the validity of the license while NSTS checks the licensee's current inventory. This information is then relayed back to the user so they can determine if the material may or may not be transferred.

OAS has been actively involved in the Web-Based Licensing process since the early working group, and we appreciate the opportunity to offer input and make recommendations as part of

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this group. We recognize that in order for this security program to be effective, all regulatory agencies must participate; meaning the NRC Regions and the Agreement States must continue to populate WBL with the current licenses.

NRC Staff has worked with the States to insure that as licenses are amended, all the necessary license criteria is captured in WBL. And as I mentioned earlier, WBL has two functions, the first as that license repository used in conjunction with LVS, and the second function of WBL as a program tracking system.

The NRC uses WBL to manage all of its materials licensing and inspection data, and more; things like incidents, and allegations, and reciprocity. And because these are the same items that are being managed by Agreement State programs, the NRC has made WBL available to the Agreement States.

Currently, one Agreement State is using WBL, and two others are in the process of integrating it, one of which is my state. Several others are actively looking at implementing WBL.

The OAS fully supports the states' using all of the WBL capabilities, and recommends it to states wanting or needing a complete database

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and tracking system. We feel the use of WBL by the states builds consistency as part of the National Materials Program. It also adds to the efficiency of the IMPEP process because team leaders will be familiar with the data format, and allows IMPEP team members the capability to review information from any location over the internet.

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Another benefit is the NRC has continued IT support for the system, and upgrades are made, as necessary, with ongoing changes. And I would be remiss not to mention the feature of zero cost to the states, because to create and maintain a similar program by each state would be extremely expensive and time consuming.

While OAS recommends the use of WBL by those states interested, the OAS does not recommend that this be mandatory for the states. We recognize states that some manage multiple programs, including the Agreement State Program, within one comprehensive data system. Many states are satisfied with their current system that's in use, and it meets their tracking requirements. They also have IT support necessary to maintain these It would create difficulty for these states to separate that program from the larger system, and it would also require their staff

members to work in multiple systems.

OAS requests that NRC continue support states that wish to integrate WBL as a system to manage their Agreement State Program data, and for the NRC to continue reviewing the status of WBL to make the upgrades in the system; like adding capabilities licenses, and to have some sort of billing feature. We also value being part of the Change Committee that looks at and prioritizes upgrades to the system. And with that, I thank you for your time. CHAIRMAN BURNS: Thank you. Mr. Welling.

MR. WELLING: Thank you, Chairman Burns. Thank you, Commissioners, for allowing me time to present on behalf of the Organization of Agreement States.

I would like to take a few moments to discuss the Integrated Materials Performance Evaluation Program, or IMPEP. Since 1996, the IMPEP has allowed for an independent review of the Agreement State Radioactive Materials Programs. By allowing our fellow Agreement States peers and NRC partners to the National Materials Program to review our policies, procedures, and licensing and inspection programs it provides a chance to insure

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that public health and safety is being met by not only the licensees, but by the Agreement State programs, and allows us an opportunity to discuss best practices being performed throughout all the Agreement States and the NRC Regions.

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Since 1996, 36 of the 37 Agreement States have had a chance to go through at least two IMPEPs. The 37th Agreement State is scheduled for its second IMPEP next week. In Fiscal Year '14, 12 Agreement States and NRC Region IV were conducted an IMPEP. Of those 12 Agreement States, 11 were found to be adequate and compatible with the NRC's program, and the 12th was found to be adequate, but needs improvements.

Based on SECY-12-0112, a comprehensive review was performed of the IMPEP procedures, and a working group consisting of three NRC Staff and two Agreement States Staff was assembled. During last year's Agreement States annual meeting in Chicago, their findings were presented to the Agreement States and the NRC. Comments were also asked and were due September of last year. Ten papers were submitted based on those findings and recommendations of the working groups. Nine of the ten commentors stated that they felt the --- there was an inconsistency in the IMPEP itself.

Now, this could be due to definition of what the IMPEP team leaders feel is the IMPEP process, what they feel findings and recommendations are, and how the actual reporting process is conducted.

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The IMPEP process is a great program. The Agreement States and OAS Board believe fully in the IMPEP, and we look forward to working with the NRC Staff and management to enhance the IMPEP process. We encourage other programs to look at the IMPEP as a way of working with states and federal partners enhancing those programs.

Thank you, and I look forward to any questions.

CHAIRMAN BURNS: Well, thank you all for your presentations. We'll begin this morning with questioning from Commissioner Baran.

COMMISSIONER BARAN: Thanks. Thanks to all of you for being here. Good to see you again, Dr. Irwin.

I wanted to follow-up on your comments on decommissioning. So, obviously, Vermont Yankee shut down, and your state clearly wants to --- or is interested in playing a role in decommissioning. And can you tell us more about what role you envision the State of Vermont playing in the

decommissioning process?

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DR. IRWIN: The history of Vermont Yankee and the State of Vermont is a rich one. It's actually, for the most part, been very productive. For example, in the early days of startup, it was identified jointly by the state scientists and the licensees' staff that radiation levels at the nearby elementary school were higher than optimal. They were within regulatory levels, but an effort was made to reduce those levels. Over the years, a number of activities were conducted jointly by the state and the licensee to evaluate the impacts on the environment from a variety of normal operations, and some incidents that occurred. And over all of those years, the State of Vermont has published annually an Environmental Surveillance Report to provide an independent verification of the Radiological Environmental Monitoring Program that is required of the licensee by the NRC regulations.

Concurrently, a robust emergency preparedness program was developed. And as is appropriate for any institution that creates resources and develops assets for an important function, those can be leveraged for a wide variety of purposes. For example, our State HAZMAT Team

uses the skills that were developed during the of radiological and environmental years preparedness planning to be capable of not only responding to Vermont Yankee incidents and all of the exercises that are required for maintaining preparedness, but also for improvised nuclear device, radiological dispersal device, transportation accidents whether they're hostile action-based, or truly accidents. And we believe a need to monitor the one, there is radiological environment, as we have up until December 29 when the plant shut down until all of the liquids and the solid radioactive materials have left there so that we can provide still that independent verification that the environment is protected, as it has been. It's as important to count no levels above background as it is to count levels that exceed some regulatory limit.

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And, also, to maintain the capability to respond to not only radiological incidents that might occur, but industrial and transportation incidents that might occur that have a radiological component to them. And the phases of decommissioning where this is most important are, of course, the early stages where they're now trying to put the plant into wet layup for SAFSTOR,

and later when they move into the spent fuel campaign to move all of the fuel from the spent fuel independent spent fuel pool to the storage installation. And then after that, relaxation of emergency preparedness to some degree incidentally, the funding associated with that until the DECON phase of dismantling decontamination occurs where the opportunities for that industrial accidents could have radiological release as a small component of that might occur. And, again, not only with the amount of work, but the funding would likely need to be increased.

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So, those are the thoughts that we have relative to our objectives for both radiological emergency planning and environmental surveillance during decommissioning.

COMMISSIONER BARAN: So, at the end of last year, late December, the Commission directed the Staff, as I'm sure you know, to initiate a rulemaking to take a fresh look at a range of decommissioning issues, including the appropriate role for state and local governments in the process. And Vermont and other states will have the opportunity down the road to comment on a proposal, but sitting here today, what suggestions do you

have for us and for the NRC about how the reactor decommissioning process can be improved?

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IRWIN: Yes. As you heard in my DR. opening remarks, I used the word "encourage," and the reason for that is that the licensees are taking what I would probably take as a licensee, only the required steps. And, unfortunately, when all that is allowed are exemptions from the operating standards, it does not, necessarily, genuinely meet the objectives of good radiological health protection to ignore some of the opportunities like those that I suggest here. So, we're not going to benefit from that rulemaking; those states that are currently dealing with plants that decommissioning phases. So, I would, as again I said, try to encourage the licensees.

Now, that's not an easy thing to do, but we believe that we have been able in Vermont to work with your licensee very effectively over decades to accomplish public health and environmental protection goals because we have respect for each if other's positions. And that kind of encouragement, which is, I think, embodied very effectively in the NEI's Groundwater Initiative Protection --- Groundwater Protection Initiative, really where stakeholder engagement is a critical

component. That sort of encouragement maybe even through another NEI initiative could be a very effective way to accomplish that for those who are in between the stage where we are now and the final rulemaking.

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COMMISSIONER BARAN: All right. Thank you for your thoughts on that. Do any others have comments on decommissioning they want to share? Okay. Mr. Jacobson, I wanted to turn to Part 37 for a minute.

Can you just give us your assessment of how you think generally the Agreement States are doing with implementation of the Part 37 requirements? I know you mentioned that you were optimistic about states meeting the March 2016 deadline, but I'm curious how you think things are going? Are there any obstacles you're facing in meeting that deadline?

JACOBSON: Well, first, MR. the framework of the Part 37 requirements is substantially in place right now using regulatory tools, such as license conditions and security orders. And then the Commission published a very nice paper showing the differences between the --- between the increased license conditions, and the security orders, and the extra steps that Part 37 is going to require. So, it's very clear, the extra requirements that the states are going to need to implement on Part 37.

The performance of the states implementing these regulations, it's being tracked. The NRC is posting this on your Materials Security website. As I said, in October of 2014, the suggested state regulations were approved by the Commission, and we think that is going to really help out some of the states who have not yet submitted regulations, get their regulations approved in a timely manner.

And, finally, the OAS stands by, and we're ready to assist any state that may need help in meeting this deadline, upon request.

COMMISSIONER BARAN: Okay, thank you. So, Part 37 has a requirement, obviously, for license verification, and I wanted to follow-up on the discussion on the web-based licensing, and how that relates to the license verification. Are the states who --- which I take is most states that aren't using web-based licensing, does that pose problems on the license verification side of things?

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really good job of working with the states, and working through the differences in how states license versus how the NRC might license. And there's a set criteria of data that they want for WBL, as well as an image of the license. And your Staff worked very well with the states to make sure that all of that data was captured. And once we get through that process, now every time a license gets amended it gets sent over to the NRC, and if the state is not currently in WBL, then the NRC will put it into WBL.

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COMMISSIONER BARAN: Great. Thank you all. Thanks.

CHAIRMAN BURNS: Thanks. I have a few questions, but just at the beginning, I want to thank you all for your participation in this activity. I think the Agreement State Program, as I recall, goes back to the early 1960s, has been an important one because, again, it's sort of this shared responsibility that we all have with respect to assuring the safe use of radioactive material across the country in various applications. And I appreciate the comments in terms of the partnership we're trying to create with the states, because that's extraordinarily important. And I think sometimes --- I know, we've just been going through

our appropriations and our budget hearings, and one of the things, and I think it may have been --- a couple of you, actually, mentioned the importance of sort of, if you will, the centralized support that we can provide to the Agreement States, whether it's through training, through some of the other --- through the web-based licensing, and initiatives, and I think other important for us to keep in mind certainly as we budget or make our request to the Congress in terms of the funding for the Agency, and try to keep that in the forefront, you know, particularly in the area with the use of materials that are predominant --- I think we have 37 Agreement States now, and we have another one, or at least in part coming up in the State of Wyoming. So, again, I thank you all for your participation and the support for the program, and what you do to enhance this very important aspect of radiation safety, and the safe use of radioactive material in the United States.

Along those lines, as I mentioned, the State of Wyoming has indicated at least in part for the activities related to uranium mining that interest in becoming an Agreement State. Does the OAS provide sort of outreach or support to a state that wants to become an Agreement State? Obviously,

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I think you can take them aside and provide sage advice. Mr. Welling?

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WELLING: If there is MR. interest, actually, Wyoming did reach out to me for a couple of different reasons. One, as the OAS Chair, as far as uranium, so I did have a couple of conversations with the Wyoming program. So, the OAS does put on its website that if there is interest from other states, such as Indiana, Michigan, Vermont, whoever else, that we are willing and available to help out to discuss the process. SA-700 is a great --- it's already laid out in a procedure of how to become an Agreement State, but we do stress to them that not only with that procedure, that with our knowledge and experience of Agreement States, that we're willing to help them out in their process of, you know, filing the application, the agreement letter, whatever it takes. So, we are willing to stand by and help them out whenever necessary.

CHAIRMAN BURNS: Good, great. Thanks for that.

You made some comments, I'll stay with you for a moment. You made some comments regarding sort of the assessment going on with respect to the IMPEP Program. What --- are there any sort of maybe high level or general observations you'd make,

areas where you think we all have succeeded, or where we really need to focus coming --- in the coming years in terms of improving or enhancing the program?

MR. WELLING: IMPEP is a success story in itself. I mean, where you see a federal agency working with state partners, you know, in reviewing programs independently and providing an assessment, that in itself is a great tool, and a success story. Yes, there have been bumps along the road, and it's one of those programs which we've been asked to help, and we gratefully appreciate that concept of allowing us to provide feedback and looking at the future of the IMPEP.

The biggest, like Ι said statements, the biggest thing we think of is the inconsistency. When you have that many different people and personnel in a program, we each have a different belief and feeling, so trying to get a consensus is tough, and the human elements in a team brings that to bear. So, one of the biggest things we're asking for is look at the consistency. How program and process make that consistent across all 17 Agreement States and the three Regions when they're reviewed?

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I'm going to turn to the Source Security for a couple of minutes. Commissioner Baran touched on that.

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Again, Mr. Jacobson, you said you're optimistic. Make sure I understand, do you think --- are there --- what would you say are the biggest stumbling blocks that might be there in terms of the success path into 2016, if any?

MR. JACOBSON: The challenge with regulations tends to be at the state level at their --- with the state legislature and their own state's process in adopting regulation.

CHAIRMAN BURNS: Yes, so depending on the process, regulation --- because I know some states it requires the legislative --- you know, the legislature to approve, as opposed to just the Agency.

Again, one of the things, and you're probably well aware, we're under a requirement from our recent appropriations language to provide an assessment, I think in 2017, two years from now, so we certainly look for the support of the Agreement States as we proceed with that. So, thanks.

I want to talk a little bit about the training aspects. Some of our training has gone to,

as I understand, to a web-based, or parts of it, not everything, gone to web-based training. Do you see any benefits or disadvantages of that, or comments on how that might be working?

MR. SNEE: Well, I think there are some huge benefits to it --- and, actually, in Ohio we qot an email just last week from your Chattanooga Training Center asking for volunteers to test some of the modules. Having it web-based, one, of course it reduces the cost, but it also opens it up to --- I mean, I could have my whole staff sit in on those training sessions and do it, instead of having two or three people travel to Chattanooga, or wherever. Not all classes can be supported like that, such as industrial radiography. The hands-on part of that is a crucial part of that training, but much of the training can be done on line like that. And I think the NRC is off to a good start. We've seen some of what their thinking is and how they're going to do it, and it'll be a huge benefit for everybody.

CHAIRMAN BURNS: Well, good. Well, keep us informed on that. I think that's --- as I say, it's --- you know, using those techniques, as you say, if you can get --- sometimes for the right content, the right, you know, application, if you're able to expand it, get it across, that's

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MR. SNEE: Right. It will open it up to many more people being able to ---

CHAIRMAN BURNS: Good. Well, we'll keep an eye on that, and appreciate input from the community on that, too.

Dr. Irwin, I want to ask you, you mentioned RadNet, and what appears maybe a less of an NRC presence or the Staff presence. What --- help me along here, because I have to confess, I'm not extraordinarily familiar with it. What type of participation or contribution from Staff would you say might be --- maybe an idea, you know, describe an ideal or practical, or even impractical terms which would help from your perspective?

DR. IRWIN: So, we've had two national exercises, the first RadResponder was iust broad-based, everyone that is а registered RadResponder user was asked to log on and to start collecting actual radiological data wherever they were. And I believe 40 states plus participated, several hundred users participated, and tens of thousands of data points were collected. And it gave us the ability not only to provide realtime what the radiation levels, observations of the situation, even photographs of where people were

taking the field measurements and share that with everyone. And that was something lacking during Fukushima. And we believe that that was one of the most important first steps, was the ability to on time realtime provide the nation with information.

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A second one had a scenario built into it. Actually, a Conference of the New England Radiological Health Committee, they had improvised nuclear device scenario, and nation, again, logged on and showed through actual measurements, observations, photographs beginning of collection of locations where environmental media sampled, the were what conditions were.

Unfortunately, a gap in all of those parties participating are the many NRC licensees, primarily the reactors. And I think that if they were involved it would give us a greater level of participation and fill in a lot of really important data, because among all of the people across this nation with skills in this area, those that work in the nuclear power plants are among the highest. And especially so with laboratory data. So, as we move further into that, I would like to see encouragement in the FEMA exercise program for REP that RadResponder first be encouraged to be

integrated into it. And then maybe over the course of time it becomes a tool as convenient, and as for granted taken as our survey meters.

CHAIRMAN BURNS: Okay. Well, thanks for that.

I think I'll proceed to Commissioner Svinicki.

COMMISSIONER SVINICKI: Well, thank you for your presentations, and for the acknowledgment that for some of us, we've been at this dialogue for a number of years now.

One of the things that the NRC Staff is very helpful to make sure that we have annually for this meeting is this map which shows us the Agreement States and the NRC States, so I think some of my questions are rooted in this map. This map is getting very blue. I could have hash tagged Wyoming that has indicated and notified of its intention to pursue Agreement State status.

There are other orange states here that have over the past number of years at times indicated some interest. Other than Wyoming, we don't have a Statement of Intent from any of the others, but this map is getting very blue in terms of Agreement States.

I appreciate that we've worked very

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well on the training aspects. As a matter of fact, in 2008, I joined the Commission majority that re-energized that process of supporting Agreement State training, which had languished for some years. I don't know why that was, but it had champions in 2008, so we re-injected that into our budget process.

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But I'm going to suggest to you that OAS needs to be --- again, this is just a suggestion, but I think as you meet annually, it would be beneficial for you to be reflecting on how much of the country is Agreement State, and it's going in that direction.

Our budget is under a lot of scrutiny. This year for the first time in so long that we had to ask the NRC historian when this last happened, but we've appeared before both the House and the Senate Appropriations Committees on our budget. That's unprecedented in modern history, so I use that so that you understand the level of how closely our budget requests are being examined right now.

So, I think at some point, if the nation is predominantly Agreement States, the NRC's very dominant role in training, I think will be questioned. I'm sorry, I'm just being honest with you about that. So, I know that our TTC contractors

are available. California has availed itself of that to, basically, kind of come in under the efficiency of our contracting that we have in place with the TTC.

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want to commend everyone, the Agreement States and the NRC Staff for the amount innovation they're brought to training opportunities. I'm just a little worried about the future as NRC has fewer and fewer licensees.

was a theme yesterday at Authorizing Oversight hearing that we had, which talked about the level of --- if nuclear contracting in the U.S., you know, NRC's budget, how does that relate to that? It was more a dialogue on the power reactor side, but I think the --- this is only more pronounced when we look at the material licensee side. So, it's something to be thinking about for the future. I don't think it affects FY '16 in any kind of dramatic way, but I'm going to suggest as you get together that you be looking at a future which might have a different role for NRC as we --- I don't want to call us a bit player in the materials licensees area, but if we don't --- if we have fewer and fewer materials licensees,

I think at some point you reach an inflection of

balance point where things tip, so I think it's just
--- that's just my personal view. It's nothing that
the Commission is supporting or preparing for.

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The other question I have is that I know that we carry around this notion that it takes four to five years to become an Agreement State. If I had to make an assumption about why that is, I would say it has to do with state legislative cycles which often are not --- state legislatures are often not in session for the majority of the year like national legislatures are. But what are the key points? If any of you can reflect on the history of your experience of becoming an Agreement State, what's the long pole in the tent there? Is it working with the state legislature to establish an entity, and then legislate the authorities to that entity within the state? Is that, basically, the long pole in the tent?

Four to five years seems like a long time. I would think that if a state were truly committed to it, I don't think that the NRC's validation and review steps are the majority of that time.

MR. WELLING: I'll speak on that as the 36th Agreement State. It only took Virginia three years. We were a little unique in some things I

1 could do as far as regulation stuff, but the process in itself from the state side is what is the leading 2 cause of time. 3 For us to go through and get the 5 governor to buy off, the state legislature to buy off to put the statutes in place ---6 COMMISSIONER SVINICKI: But by the time we get the Notice of Intent, I mean, we have that, 8 basically, I think from most states. That's how 9 --- so, for when we say four to five years from that 10 11 point, that seems excessive to me. MR. WELLING: That's just an average. I 12 mean, it's --- there had been very few instances 13 of taking four to five years from the time the 14 15 letter is submitted. If, in fact, everything is in place and accurate when the letter is submitted, 16 17 you know, as far as the regulation statutes, the program, the policies, procedures, it should and 18 has only taken two to three years from the start 19 20 of the letter to the time the agreement is signed. 21 So, I mean, there have been instances ---22

COMMISSIONER SVINICKI: Okay. So, that --- maybe if we use that four or five years, that's an outer bound, maybe, in recent experience.

MR. WELLING: In recent ---

COMMISSIONER SVINICKI: Because I think

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exploration, building the consensus in the legislature and with the governor, it seems to me that takes some years. But I was thinking that we use this term of four or five years from that point of making --- the state has made the decision to pursue it, so I'm encouraged to hear that that has not --- I think I was here for Virginia, but I think it was the tail end of the process, so I didn't realize how long that had taken.

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And then the other thing, you know, we talk about the reason --- I don't mean to sound hard on state legislatures. And, like I said, they're in session in most instances for shorter periods of time than the U.S. Congress. But we do have, in terms of the status of Agreement State regulations, that basic we've got some states have non-conformities going back --- in one case we're creeping up on 20 years. We've got a number of them for states, I won't name any names, it's nobody at the table here, but we've got some that are well in excess of 10 years.

You know, what --- you know, as NRC, as we look at doing IMPEP review and we keep these metrics on where states, the progress they're making in conforming and getting state regulations

in place. How do you think we should react to something if it's, you know, been 10 years, or more than 10 years. Is there a view that, you know, the state has hit some problem so fundamental, like should we doubt that it's going to get there ever?

MR. WELLING: No, I would say never doubt. In certain cases I've talked to states that have that problem. It's based on the legislatures themselves. They have put in place a minimum requirement of four to five years for a regulation or a law to get into place. Some states feel regulations are burdensome on their licensees or businesses, so it's --- unfortunately, it's up to each state to decide their own legislative process, which can cause differences between Agreement States and the NRC, and where the regulations are at.

Now, there are other instances besides regulations, there are license conditions, there are orders, there are other ways performance-based to meet those metrics. So, one of the things we're talking about, especially doing the IMPEP is looking at an overall concept of how the state has met those requirements. Is it by regs, is it by statute, is it by license conditions or orders? So, as long as those are obtained to put in place, and

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the health and safety of the public is met, then those metrics should be acceptable.

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appreciate your mentioning that. That is very significant, because that gets to consequence and outcomes. The rest of it is process, which I would agree with you, at the end of the day when we're assessing the ability to assure safety outcomes, that's what matters.

But I --- you know, the Agreement State program arises from the Atomic Energy Act. At the end of the day, NRC is accountable for validating that the states are able to carry forward with the authorities that we essentially relinquish under the agreement. So, at some point, I think NRC can be --- one could question and ask us to account for fact that -- you know, our tolerance of something can't be infinite, so that's why I ask about is there some point at which we should have a fundamental concern about the ability of the state to kind of come into the compatibility? But you've indicated that there's more than one way to assess that. One is saying yes, you've been trying to state laws or regulation at the state level. The other is that the regulatory authority is itself compelling the actions through other measures that

are available to the state regulator.

So, I just --- I know, you know, we do track it. If there's some more sophisticated way for us to be looking at that, that gives us greater granularity to what's happening on the ground, I think that's valuable. I appreciate the Agreement States having that dialogue with the NRC Staff.

I guess I'll let it lie there, and next year we'll sit and we'll look at the same chart where we'll have probably some of these same outstanding compatibility issues, but I appreciate that we'll keep engaged in the dialogue about it. Thank you.

MR. SNEE: One, if I may, one thing that may help, and I know it's been discussed, is some regulations that the NRC implements. Not all them need to be implemented in three years. Some of them are rather minor with no safety consequence. They could be put off where perhaps states can have them in five, six years to reduce some of that burden on the states that have a hard time implementing regulations. That may help. With something like Part 37; yes, that should be implemented as quickly as possible, but some of the other ones can be put off a little bit.

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I'm always supportive of looking at what makes sense in terms of those time frames for implementation. So, again, I think we benefit by getting that state input, so thank you for that. Thank you, Mr. Chairman.

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CHAIRMAN BURNS: Thank you,

Commissioner. Commissioner Ostendorff.

COMMISSIONER OSTENDORFF: Thank you, Chairman. Thank you all for your appearance today, and for your presentations. I found it very helpful, and we're all so appreciative of what you do in your organization in your day jobs. So, thanks.

I'm going to just make a comment on Dr. Irwin's comments. I appreciated the --- your statement on Vermont Yankee, and concerns on the emergency preparedness stature. And I --- and this is a public meeting. There are people here that will know more about this than others, there are some that won't have any awareness. But I feel compelled to respond, not necessarily to you directly, but to those listening that the NRC has found that the --- has granted security and emergency preparedness exemptions for Vermont Yankee, and we believe that those are protective of public health and safety. And since you were alluding to it, you had a different belief. And I'm not trying to debate this with you, or argue with you, but I think it's important for at least a Commissioner to make the statement that we as the Commission have voted to grant exemptions that we believe fully are protective of public health and safety in the context of Vermont Yankee. So, I am not opposed to discussing this, but I wanted to make sure since you made a statement that was contrary to the Commission, I think it's important to in the public meeting setting make that statement.

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Mr. Snee, for your comments on training, thanks for making those. I don't think you can --- you know, I think repetitiveness is not a bad thing for key messages. But I also share Commissioner Svinicki's comments that we're in a very different budget environment than we are --- were even two years ago. So, I think that her counsel about looking at this perhaps through a different lens at some point going forward, I agree completely with that sentiment.

Mr. Jacobson, on your commentary on source security, I thank you for making the point that the states have been involved early and often on the Part 37 development. We've spent a lot of time as the Commission discussing this, especially

Commissioner Svinicki and I for the last X number of years going back on this topic. And I will just comment that I appreciate what you and the state organizations are doing in this area. It's been my --- I'm just making my own personal observation. It's my comment that many of the critics of Part 37 perhaps do not have a fulsome level of knowledge of what the risks are, and what the protocols are, and the different steps that are part of Part 37.

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I'm directly criticizing not organization or another, but I appreciate what you're doing and your colleagues to insure that the people understand what's the of nature materials we're talking about, and what the risks are, because I think in many --- my experience has been, even an official at Department of Energy, that a lot of people will conflate and exaggerate the risk profile for some of these materials. I'm not asking you to agree or disagree. I'm just making that statement, but thanks for bringing that topic up.

Dr. Flaherty, I appreciate your mentioning your belief that the NRC should not take steps to require web-based licensing to be mandatory. I think you give a good explanation. I would just respond, I think it's important for

those states that are using it, for them not to shy away from articulating the benefits, to the extent they found benefits, so that they can share their experiences with other states that have not pursued that. But I think you gave a good reason for why it should not be mandatory, and I appreciate your raising that in this meeting.

Thank you all for what you do. Thank you, Chairman.

CHAIRMAN BURNS: Thank you. Any other from our Commissioners?

Well, again, I want to thank the representatives of the Organization of Agreement States and the Conference of Radiation Control Program Directors for briefing us today, and sharing their insights. As I've said, I think our relationship with the states is an important one in this area to continue our mission of serving public health and safety, which you all do. And we support you, and appreciate the support for us in carrying out that mission.

And with that, we're adjourned.

(Whereupon, the above-entitled matter went off the record at 10:31 a.m.)