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Regulatory Framework

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1	UNITED STATES OF AMERICA
2	NUCLEAR REGULATORY COMMISSION
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4	PUBLIC MEETING
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6	REVISING THE REPROCESSING
7	REGULATORY FRAMEWORK
8	+ + + +
9	FRIDAY, SEPTEMBER 18, 2009
10	+ + + +
11	ROCKVILLE, MARYLAND
12	+ + + +
13	The Public Meeting convened in Rooms
14	6003-1B13 and 15 at 6003 Executive Boulevard,
15	Marissa Bailey, Moderator, presiding.
16	NRC STAFF PRESENT:
17	MARISSA BAILEY
18	DAN DORMAN
19	CATHERINE HANEY
20	KELLI MARKHAM
21	KEITH McDANIEL
22	MATT BARTLETT
23	STEVE WARD
24	JIM SHAFFNER
25	MAURICE HEATH
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1	NRC STAFF PRESENT:
2	NISHKA DEVASER
3	PHIL REED
4	WENDY REED
5	JAMES FIRTH
6	LISA LONDON
7	BLAKE PARNELL
8	ALEX MURRAY
9	LARRY HARRIS
10	DENNIS DAMON
11	YAWAR FARAZ (via webinar)
12	TERESA MIXON (via webinar)
13	
14	COMMENTERS PRESENT:
15	ED LYMAN
16	JIM LIEBERMAN (via webinar)
17	EILEEN SUPKO
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ALSO PRESENT:

ALAN LEVIN

EILEEN SUPKO

SVEN BADER

STEPHEN KUNG

FELIX KILLAR

DAN STOUT

ROBERT HOGG (via webinar)

YAWAR FARAZ (via webinar)

JOHN MASSARI (via webinar)

12 SARAH LEVERSEE (via webinar)

JOHN GREEVES (via webinar)

MARK LEWIS (via telephone)

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MS. BAILEY: Good afternoon. I'm Marissa Bailey. I'm the deputy director in the Division of Fuel Cycle Safety and Safeguards here in NMSS. And I'd like to welcome you to this public meeting where we plan to discuss NRC's efforts for revising the reprocessing regulatory framework.

This is a Category 3 public meeting, which means that the public will have several opportunities to provide input. The meeting agenda -- if you could get us a meeting agenda. I need to take off my glasses to read. The meeting agenda defines some appropriate times for public comments and questions.

The purpose of today's meeting will be to ensure clarify on NRC's efforts, the scope, intent for revising the regulatory framework for licensing reprocessing facilities. We hope that the series of presentations scheduled for today reflect that purpose.

Additionally, we hope to solicit input from all stakeholders as we begin the process of developing the technical basis to support

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rulemaking for reprocessing facilities. Before we get started, I would like to go over some logistics.

And first of all, point out that we're trying something new here today. We are conducting this meeting as a webinar and also via teleconference, so for the benefit of those who are offsite, when you do speak, if you do have questions, if you could speak into a microphone before providing questions or comments.

Could you go to the next slide, please? If the sound through the webinar fails, you can try calling the bridge line, and the bridge line number is 888-790-3146, and enter pass code 66264.

Other logistics. Please turn off your cell phones or, and for those that are listening on the bridge line, if you could mute your phone.

Location of the restrooms, they're in the elevator lobby, just turn left past the elevators.

You will need an escort to return to the meeting, and we have either Tony or Wendy out there to assist you with that. Also, please remember to return your visitor badges to the

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security when the meeting is over. And please remember to sign in on the sign-in sheet that's outside.

There are also feedback forms outside for comment and there will be a survey after the webinar asking for feedback, so we encourage you to please complete those feedback forms. Also, there will be a transcript available for this meeting, so to assist the court reporter, please introduce yourself before speaking. In addition, giving a business card to the court reporter could also be very helpful.

Paper copies of the presentation are available. They are outside. They can also be found on our public website, which is provided in this screen down here. And I assume that the folks that are viewing this on the website can see the, the slide. Okay.

Before we get to our first speaker,

I'd like to now go around and have everyone

introduce themselves first in this room and then

I'll go through bridge line and then do the folks

that are on the, on the webinar, so.

MS. HANEY: Good afternoon. I'm Cathy Haney. I'm the deputy office director in the

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1	Office of Nuclear Material and Safety and
2	Safeguards.
3	MR. MCDANIEL: Hello, I'm Keith
4	McDaniel. I'm a project manager in the Office of
5	Federal and State Materials and Environmental
6	Management Programs.
7	MS. MARKHAM: Hello. Kelli Markham.
8	I'm a project manager in the Office of Nuclear
9	Material Safety and Safeguards, the Division of
10	Fuel Cycle Safety and Safeguards.
11	MR. DORMAN: And I'm Dan Dorman. I'm
12	the director of the Division of Fuel Cycle Safety
13	and Safeguards.
14	MR. WOODS: I'm Randy Woods. I'm a
15	reporter with Platts Nuclear Group.
16	MR. BADER: I'm Sven Bader from AREVA
17	Federal Services.
18	MR. LEVIN: Alan Levin from AREVA.
19	MR. KUNG: Stephen Kung.
20	MS. REED: I'm Wendy Reed. I'm a
21	radiochemist in the Office of Research.
22	MS. SUPKO: Eileen Supko, Energy
23	Resources International.
24	MS. LONDON: Lisa London, NRC OGC.
25	MR. PARNELL: Blake Parnell, NRC, Fuel
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1	Cycle Division.
2	MR. DAMON: Dennis Damon, NRC, Fuel
3	Cycle Division.
4	MR. LYMAN: Ed Lyman, Union of
5	Concerned Scientists.
6	MR. HEATH: Maurice Heath, NRC with
7	Low-Level Waste.
8	MR. SHAFFNER: Jim Shaffner, NRC Low-
9	Level Waste.
10	MR. DEVASER: Nishka Devaser, NRC Low-
11	Level Waste Branch.
12	MR. FIRTH: James Firth, U.S. Nuclear
13	Regulatory Commission, FSME.
14	MR. KILLAR: Felix Killar, Nuclear
15	Energy Institute.
16	MR. REED: Phil Reed, NRC, Office of
17	Research.
18	MR. MURRAY: Alex Murray, U.S. NRC,
19	Division of Fuel Cycle Safety and Safeguards.
20	MS. BAILEY: Steven, you want to
21	introduce yourself?
22	MR. WARD: Steve Ward, NRC, Fuel Cycle.
23	MR. BARTLETT: My name is Matt
24	Bartlett. I'm also in Fuel Cycle. And on the
25	webinar, we have Jim Lieberman, John Greeves,

1 Robert Hogg, Sarah Leversee, and Yawar Faraz. MS. BAILEY: All right, would those on 2 the bridge line, please introduce themselves? 3 MR. LEWIS: My name is Mark Lewis. 4 a councilman with Salt River Project in Phoenix, 5 Arizona. 6 7 MS. BAILEY: Any others? (No response.) 8 BAILEY: Let me go ahead then and 9 introduce our first speaker. Our first speaker 10 11 is Cathy Haney, which just introduced herself. She is the deputy director of the Office of NMSS. 12 And she will be providing an introduction and 13 also talking about why we are going through the 14 15 effort of revising our regulatory process for reprocessing. 16 MS. HANEY: Thanks, Marissa. I wasn't 17 expecting the microphone and the webinar. Thev 18 didn't tell me that when they asked me to make 19 the presentation. I was expecting Friday 20 21 afternoon a tad more casual, so -- and they surprised me with that. 22 Ι'm here for 23 But what today, Marissa said, is just to make some introductory 24 25 remarks for you. I am the deputy office

11 director, so Mike Weber is the office director, I'm representing both of you, and just SO welcoming you to this afternoon's meeting. Steve, if you can go to the first, my first slide? PARTICIPANT: You need to talk a little

bit louder. The people on the webinar are having trouble hearing you.

MS. HANEY: Okay, all right. We got to get the voice check here. So welcome to today's meeting. First I will start out as really as our main goal in the safety, security, and protecting the environment.

couple -- the first there touches on the fact that we in a are regulatory position, we're not the proponent nor an opponent to the reprocessing. We're here to make sure that we have established the regulatory framework should move forward in this we particular area.

Τ licensing do have authority, regulatory authority should someone move forward in the reprocessing area, and we do have several years of experience in this area as far and, where appropriate, if licensing we moved

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into any inspection areas.

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And that was primarily focused to date on any construction. And this goes back to years ago as compared to more recent experience. We're touching back and going back in history into, as far back as the 19 -- 1966 time frame.

The regulation that is in effect right now is Part 50. And, as I said, we do have experience back into the '60s. We have licensed facilities, but they were licensed under Part 50.

As you all know, technology Technology has changed NRC's changed since then. focus in the different licensing areas, as well as inspection. We've learned a lot over the last year, and therefore, in licensing the facility to current technology, we have identified that there are areas where we need, would need to change the regulations, and possibly even move into a new Part as compared to Part 50 as compared Part 50 would not possibly be the best place for us to start licensing.

And as you've seen on numerous documents that we have produced so far in the public domain that have looked at, is Part 50 the right regulatory basis? And if not, how do we

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move forward with the regulatory framework to license a facility, which is really why we're here today.

Steven, next slide. Okay, just as far as a few milestones, and I've been looking, I'm looking more in the more recent milestones as comparing, going back and looking at past history.

We started out with back in 19, I mean 2006. Several of the GNEP initiatives contributed to our interest to start looking into this reprocessing again and specifically focused in DOE-owned reprocessing facility.

In 2007, based on interaction between the staff and the Commission taking into account internal and external stakeholder interest, this Commission directed us to move forward with identifying a regulatory gap analysis. And that was where we could look at Part 50 and see what, what changes in our regulatory program are needed in order to establish a framework for moving forward in this particular area.

In 2008, as you can see from this slide, we did receive indication from industry that there was a commercial interest in pursuing

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reprocessing facility. And based on that, we shifted our focuses from a DOE federal agency interest to moving more at looking at a private interest or the industry's interest in moving forward with reprocessing.

did In 2009, we complete our regulatory gap analysis. And what this does is it lays out a regulatory framework for developing technical basis that would support rulemaking. Right staff with now, mу contributions from the other offices in the agency are moving forward with developing this technical basis that, for a regulatory framework, specifically for a rule, which you'll shortly in our next speaker is that, how we get the technical basis to the rulemaking It's a lot of involvement in technical basis and this particular area would need to be a very detailed document.

As part of what we need in developing a good technical basis and to move forward into the rulemaking, we need, do need input from our stakeholders. Again, and I'm using stakeholder term in a very broad sense that being our internal and external stakeholders.

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And if you could move on to the next slide. So looking at this slide here without going into details on all the bullets here on this slide, it's just that the stakeholder involvement to us is very important. It will help us in developing a very strong technical basis that could be used to form the basis for a rule.

Think of it as a phase one would be a technical basis development. Step two would be the rulemaking. And we would seek your input in the technical basis. And then also as far as if there are any regulatory gaps that you see that we have not addressed to date, for example, in the SECY paper where we did do our gap analysis, that was, we had gone through, those were our ideas.

We can obviously learn from those of you in the audience. And your continued support in this area will help us make a better technical basis.

Also what happens is that when the technical basis comes out, it forms the basis for the rule and then we need the rule to be something that seems reasonable. It needs to meet

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1	our strategic goal of protecting the public and
2	health and safety and the environment, but yet,
3	it needs to be something that is useable.
4	And that's what we'll be looking for
5	input from you on that. We have had a few
6	interactions in the last months with either in
7	the format of a meeting or in written
8	correspondence. Written correspondence I would
9	make note of any documents, white papers
10	they've sent to us where we've had discussions on
11	those.
12	We will have continued interactions
13	with you as we go through this process. And I
14	would encourage you to actively participate
15	because at the end when we do move forward, if we
16	do move forward with the rulemaking and in
17	developing the technical basis, we'll have a
18	better document because of the interactions.
19	So with that, as opening intro
20	remarks, I'd be happy to take any questions.
21	(No response.)
22	MS. HANEY: No.
23	MS. BAILEY: Are there any questions
24	from the bridge?

MR. LEWIS: No.

MS. BAILEY: From the webinar? 1 2 (No response.) MS. BAILEY: Okay, thank you, Cathy. 3 4 MR. LYMAN: Ed Lyman, Union of Concerned Scientists. You said, "If we proceed 5 the rulemaking," SO what additional 6 7 information are you going to use to base whether or not to proceed? Is it -- will it be the level 8 of seriousness from the industry applicant? 9 There are several things 10 MS. HANEY: 11 that we consider when we move forward with a I'll answer on a 12 rulemaking. And it general There is -- one is when whether we, 13 answer. 14 public comes to us and requests that we do a 15 rulemaking or our internal staff identifies that we do a rulemaking. 16 17 When you first start down t.hat. process, you hear the issue, it seems like 18 rulemaking is the right solution to that issue. 19 What we have found over the years of rulemaking 20 21 is that once you start to write the technical basis, you learn a lot of different things. 22 One of them is, and you consider, is 23 the rulemaking still needed? Or is there a --24 25 basically, you continually ask yourself, is this

the right process for addressing the problem that we have at hand.

I have seen -- I've worked in the rulemaking area for years and I've seen situations where you get almost to the end and you think you've got a firm technical basis and then you learn that, no, you don't have a firm technical basis for moving forward.

So one of the criterial is how we develop the technical basis and is it a firm enough one to move forward with the rule. The other thing is developing a technical basis does take, it usually takes a year. It can take longer depending upon the complexity of the issue.

And as we know, this is a very complex issue, so I'm not putting a time-line on of a year. But during that rulemaking process, new things come to light and new considerations, so we're constantly, again, asking that question, is this the right way to go?

Whether there is a need for this particular action, and I think this is where you were probably going, is if there is an interest for the recycling facility? That will be a

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consideration when we look at wise use of resources.

If there isn't a need for a facility,

I'm sure the Commission at all levels will be asking, you know, do we need to move forward now?

Or is this something that we make take resources and devote to another project and come back to this one when there is a need for it? So we're constantly looking at what are the external factors that would play into a decision such as this.

I don't know, Keith, anything you want to add or Dan on why we would or wouldn't move forward with the rulemaking? So I did use the term "if" because, you know, nothing is ever 100 percent sure, but I will tell you at this point, we are developing a technical basis to support a rulemaking.

MR. BARTLETT: There's a question from the webinar. And Jim Lieberman asks, will the technical basis document be put out for comment?

MS. HANEY: Yes, it will be. I can't tell you at which stages, but again, our desire would be to have as much input in developing the technical basis as we possibly could.

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1	MR. BARTLETT: And does the public have
2	any ability to comment on the technical basis
3	when it's in draft?
4	MS. HANEY: There would be stages. And
5	what I've asked Kelli Markham to do is to address
6	with her specific schedule and plan what those
7	milestones would be.
8	MS. MARKHAM: We're considering various
9	stages throughout the technical basis
10	development. And I think one major milestone for
11	us would be before we compile a draft of the
12	technical basis, we were planning on another
13	Category 3 public meeting.
14	And at that point, we will begin to
15	discuss a lot of details related to the input on
16	this document. And at that point, is going to be
17	another opportunity for the public, as well as
18	some of the public meetings we will have in-
19	between to provide specific input into the
20	document. So there will be opportunities before
21	we do the draft, and after we do the draft, there
22	can be additional opportunities as well.
23	MS. BAILEY: Are there anymore
24	questions?

(No response.)

MR. BARTLETT: No. 2 MS. BAILEY: Let me just go ahead and 3 introduce our next speaker. Our next speaker is 4 Keith McDaniel. Keith is a project manager for, 5 from the Office of Federal and, Federal and State 6 7 Materials and Environmental Management Programs, or FSME, where he works in the rulemaking branch 8 developing new regulations and amending existing 9 regulations for nuclear materials facility. 10 to 11 Keith is here discuss the 12 rulemaking process and highlight generally the opportunities for stakeholder involvement in the 13 14 overall rulemaking process. 15 MR. MCDANIEL: Hi, good afternoon. My name is Keith McDaniel, and I'm here to talk to 16 17 you today about the NRC rulemaking process. emphasize NRC rulemaking process because 18 different government agencies' rulemaking 19 processes can vary slightly from ours. 20 Even our rulemaking process evolve, has evolved with time. 21 The next slide, please. 22 Before we get into rulemaking, I wanted to talk about 23 24 overall regulatory process. Our overall

MS. HANEY: Anything more, Matt?

regulatory process is a three-pronged approach.

25

And I always picture a three-legged stool when I think of this process. And the three legs are rulemaking, which is what I'm going to talk about, licensing, and inspection and enforcement.

This three-pronged approach to regulating is something that you're probably more familiar with than you realize. Just as we regulate the safe use of nuclear material, the states regulate the safe use as an example of automobiles.

The states have the same three-pronged regulatory approach when they do that, they have a rulemaking group that sit down and decide what the, what the traffic laws are going to be, then they have a licensing group. If want to drive an automobile, I'd have to go to the DMV and I take a test and I pass certain requirements and they give me a license.

So they have licensing that's a licensing leg and then there's inspection and enforcement. You have the traffic cop out on the street. If I don't follow the rules that were laid out, he will issue me a ticket, so there'd be enforcement action and inspection.

We have to take our cars in, get

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safety inspection, inspections for emissions to make sure our cars are running right. So this three-pronged regulatory process we're all familiar with whether or not that we realize it. This is the same process we use here at the NRC to regulate the safe use of nuclear material.

All right, the next slide, please. So what is rulemaking? Well, rulemaking is the process that government agencies, both federal and state, use for developing regulations. And I just want to focus on a couple of words in that first bullet.

First word is process. It is a long process. You may have heard people say, "It's a marathon and not a sprint." It takes a long time and you'll get a sense of that when I go through the four steps here in a minute.

The second word in the first bullet, agencies. When we think rulemaking, I want you to think government agencies. Congress passes laws that they put in the U.S. code. Government agencies issues regulations that they put in the Code of Federal Regulations. So rulemaking is a government agency thing.

Okay, so what do these regulations do

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and who do they apply to? The second bullet says that NRC regulations impose requirements on applicants and licensees that want to use nuclear material or operate a nuclear facility.

rules, we regulate a lot of So NRC things in this regard. We regulate the transportation of the nuclear material, we regulate the use of nuclear material at power fuel cycle facilities, at plants, at uranium mills, at waste repositories, we regulate the use of nuclear material for academic and medical and industrial purposes, so there's а whole wide nuclear of material range use that our regulations have to govern.

Regulations or rulemaking is a form of law. Sometimes you'll hear it be called, "Administrative law." And you might ask, "Well, what is it -- what am I here at the NRC doing creating this kind of law? I mean, I wasn't, I wasn't voted in by the people. I wasn't, I'm not an elected official, but here I'm making law." And that's a very good point to make and that leaves me to the next slide, please.

These are two very important Acts that

I want to point out. The first one is what

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happened was Congress delegated authority for us at the NRC and other agencies to make regulations.

And then the second Act is they didn't just delegate the authority and say, "Go ahead, go forward and do regulations." They laid out some minimal procedural requirements that we all have to follow.

So I'd like to take a look at those two Acts for just a moment. Let's take a look at the, the first Act which gave us the authority, the delegation to do rulemaking.

This thing of delegation to the federal government to do rulemaking goes all the way back to the very first Congress. The very first Congress delegated authority to the President to do rulemaking to govern our trade with American Indians.

Subsequent Congresses after that developed more and more, delegated more and more authority to the federal agencies do rulemaking. In the early 20th Century, rulemaking really took off with things like the Great Society and the New Deal. So that's how we got the authority to do rulemaking.

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The second Act, the Administrative Procedures Act, APA, lays out some minimal procedural requirements that we all have follow. Congress put this Act in place to bring predictability and regularity into the rulemaking process so that all the federal agencies didn't go off and do their own thing that would make it very hard for the stakeholders, licensees, and members of the public to understand what we do in rulemaking.

The other thing the APA does is it ensures what they call "due process and fairness" in our regulatory affairs. The APA 553 provides some requirements for what they call the "Notice and Comment Rulemaking." And the Notice and Comment Rulemaking is the most common type of rulemaking that we do and it's the one that I'll be talking about.

The requirements, let me name a few of the main requirements in here that we all have to abide by. We have to publish the proposed rule and the final rule in the Federal Register for the public to see.

It also requires that we allow public participation. Remember, we weren't elected

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officials, so what we do is we pull the public into the process and we invite them to participate. So when we put the proposed rule out, which will be my step three, we offer that for public comment, and then we need to consider in a meaningful way the comments that we receive from the public.

The last thing that this Act, that I'll mention, is it requires that the effective date of the rule will be no less than 30 days from the date it's published. That's to keep us from publishing a rule today and expect licensees to comply with it tomorrow. It goes back to this fairness issue, so there's a 30-day minimum window that we need to allow.

So we've talked about what rules are, where we get the authority to do rules, what the minimal procedural requirements are, so that leaves the groundwork for us to talk about the rule process, the rulemaking process.

Next slide, please. It's a four-step process, easy to remember. There's got to be a need, there's going to be a regulatory basis, which has been called, "The technical basis," and we very recently are changing that terminology to

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regulatory basis. You may catch, catch me saying both, saying it both ways. The third step is a proposed rule and the fourth step is a final rule.

So let's take a look at each one of these steps and focus on where the public can get involved. Step one is a need for a rule. That makes sense. Somebody has to have a need for a rule.

I work in the division that does rulemakings for material licensees, so the need that comes to us can be in a number of different ways. Let me mention three of them. I have them up there.

One is that we can be petitioned to do rulemaking. Our 10 CFR 2.802 allows anybody that wants to petition us to do rulemaking they can. It can be an individual, it can be a private company, it can be a licensee, it can be another government agency, but they can, through 2.802, they can petition us to do rulemaking.

The petition process is very straightforward. They submit to NRC a petition, NRC takes that petition and we, we publish it in the Federal Register. We invite people to

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comment on the petition. They have a 75-day comment period.

NRC reviews the comments and the merit of the petition. The -- we have a petition review board made up of high-level managers that will make a decision as to what the resolution of the petition is, either we'll accept it or deny it. And then the NRC will publish a Federal Register notice letting the public know how we resolved the petition.

So that's one way that we can get a need is through the petition process. Another way that we can get rulemaking requests is through congressional mandate or an executive order.

Congress could pass a new law, say the Energy Policy Act. That would trigger the need for us to revise our regulations or to add new regulations so they would be consistent with the law that Congress passed.

But usually the way that we get a request for rulemaking is internal. It's NRC initiated. The Commission could direct us to do rulemaking or we could get a request from another office or division.

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For instance in this rule, in this, for this rulemaking, the requesting office and division would be NMSS and the Fuel Cycle Division. So at some point, they will come to us and request that we do rulemaking, and I'll get to that point in a minute.

All right, so there is a need and we can see where the public can get involved in step one. They can get involved right away. They can actually ask the NRC to do a rulemaking. It doesn't mean that we will do one, but it does mean that we will consider doing one.

That takes me to step two. It's the regulatory basis or the technical basis is what you'll hear it said many times. I should point out that steps one and steps two are considered pre-rulemaking activities, and the steps three and steps four are rulemaking activities. All four steps are part of the rulemaking process though.

So the rulemaking basis, the requesting office, and in this case, would be NMSS and the Fuel Cycle Division, will be responsible for developing the regulatory basis. Rulemaking will not start until the regulatory

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basis has been developed and sent to us and then we'll review it and then we'll accept it. Once we accept it then rulemaking can start.

upon which the rulemaking stands. It's the rationale for why we're going to do the rule. It answers a lot of the why questions as to what we want to do so that we don't just list that we're going to do this, we're going to do this. It's going to fill in a lot of the information as to why we're going to do this.

What has changed that has caused the need for us to revise our regulations? What new information has come up that we've become aware of that would require a new regulation? Where is the regulatory gap? What is the regulatory gap that needs to be filled? And they had talked about the regulatory gap earlier and I think that there's going to be more discussion about that.

regulatory basis The does not necessarily and doesn't usually contain rule The rule text will come in in steps three steps four, but it will identify the and regulatory concepts and requirements that going to be considered for the rulemaking.

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There has to be enough information in a regulatory basis to have a meaningful interaction with the public because the public interaction, this is a, step number two is a big step for public interaction. We like to try to get the public involved in this process as early as we can.

All right. An inadequate technical basis, if we don't, if it doesn't get done right in step two, it can throw everything off in steps three and steps four, so it's very important that the technical basis be complete at the beginning.

far Now. the, as as the public involvement goes, we do like to get the public involved in a lot of rules at step two. We don't It's outside of the APA box. requirement requires us public to get the involved in step three in the proposed rule stage.

So when we get the public involved in step two, the regulatory process, it's what we call "Enhanced public participation," beyond what the APA requires. Some of the things that we can do to engage the public is we can post the draft technical basis, and that was mentioned I think

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from somebody in the webinar.

We can post that on our website and invite the public to comment on it and then we can review the comments and can even then post what our responses were to the comments. We could hold public meetings, just like what we are doing today. This is where you are in this rulemaking. You're in this step two, developing the technical basis.

Meaningful stakeholder involvement at this point will help ensure that we've looked at all the relevant issues and will help identify any unintended consequences. And I really think, I'm a real big fan of stakeholder interaction at this point because I've seen too many times where it wasn't done here, we get to steps three and four, and we bring the public in here, and then we end up going in a different direction.

Whereas, if we had figured that out in step two during the technical basis development we would have started the end of the rulemaking on the right course. So early stakeholder involvement in step two many times will result in fewer public comments in step three when we put the proposed rule out because you've taken care

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of a lot of questions.

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So that's step two. When we go from it to step three, represents transition not only in organizational responsibilities, but in the process itself. regulatory basis step, the requesting organization has a lead in that. In this case, it's the Division of Fuel Cycle.

Once they develop the technical basis, they will send it to us and as an attachment to a user need memo. In step three, the responsibility shifts over to my division in my office.

So we're in step three. We've reviewed the technical basis, we've accepted it, we've moved to step three, and we put together a proposed rule. It takes about a year, as you can see up here.

It's sort of the generic length of time that we use for a proposed rule and a year for the final rule. And Cathy had already mentioned today, regulatory basis can take up to a year to develop or longer depending on the complexity of the rule.

Some agencies call this the "Draft

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rule." We call it the "Proposed rule." So you may have heard the term "Draft rule" used in other places.

The, as I mentioned, the APA requires that during this step that we engage the public, so step three is our first formal engagement of the public. When we put the proposed rule out, they will have, there'll be a comment period where they can provide us comments.

So for step three, the staff puts together a proposed rule package. A lot goes into the package, for instance, a Commission paper. A Commission paper will be made public. It's around five pages long, give or take five pages, you know, it's about that long.

Attached to the Commission paper is a Federal Register Notice. Now, the Federal Register Notice is really the heart of the proposed rule.

We will publish the Federal Register

Notice in the FR, in the Federal Register. And
they're very picky about the format and the style
and how it looks because what they're interested
in is consistency throughout all the agencies, so
it's more user-friendly to the members of the

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public.

So we publish the Federal Register Notice. Generally, we give the public 75 days to comment, and this is the, the APA requirement is to do this, not the 75 days, but that's, but to put it out there for public comment.

The Federal Register Notice has some key elements to it. It has what they call, what we call, "Statements of consideration." Other agencies call this a "Preamble," so you may have heard the term "Preamble" used.

It has information in it that's laid out in the way that makes it very user-friendly for the public to read and understand. It has like the point of contact, where you would send in your comments, it has background information on what you want to do for the rule.

It'll have a section that will contain the draft environmental assessment. If the draft environmental assessment is too big, it could be a separate document, but this section would point to it.

NEPA requires that we, whenever we do rulemaking, we look at it to see if there's any environmental impacts. If there's significant

environmental impact, then we have to do environmental impact statement.

So we do this environmental assessment and we'll determine if there's a significant environmental impact or not. If there's not, we issue what we call a "FONSI," a finding of no significant impact. If there is, we'll take the next step and develop an environmental impact statement.

Also, in the Federal Register Notice is a draft regulatory analysis. This examines the cost and benefits of all the alternatives that the Commission considered for this rulemaking. It provides some checks and balances so that we as an agency don't move forward on a path that's very costly, but there's no benefit to it, so it provides some checks and balances in the system.

And lastly, the FRN at the end of it has the draft rule text. Now, step three is the first step where rule text actually gets introduced. Now, all these pieces that go in here, as you notice, I said, "draft" in front of all of them, a draft environmental assessment, a draft regulatory analysis, draft rule text. It's

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all draft at this stage and then we publish it.

Separate from the FRN, but just regulatory quidance Ι think, is documents that have to be developed. The responsibility for developing those falls on the requesting office, SO Fuel Cycle would developing regulatory guidance documents if they feel it's needed. Those guidance, the guidance licensees those documents help are to implement the new regulations that the rule is putting out.

Also as part of step three, we issue a press release, and we also provide, we send letters to the Congress to let them know that we're doing a proposed rule. A separate OMB package goes out to the Office of Management and Budget whenever there's a change and information collection requirements. We have to provide them with the rule and supporting statements to show what those changes are.

So this step three takes about a year. We post the proposed rule out for public comment, so then we give them 75 days to comment, and now we move to step four, the last step.

Step four, the final rule has to be

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what they call a "Logical outgrowth of the proposed rule." If there's a big disconnect between the two, if they don't fit together, if you don't recognize one from the other then what we may have to do is reissue the rule as a proposed rule and go back to step three and start over then.

Normally, that's not the case. We are allowed to make changes to the proposed rule based on the comments that we get from the public. That's the whole point of getting public comments. We're not just taking a pole to find out what their views are. We're giving them a meaningful interaction so that they can have an impact on the rule.

So the final rule may look different than the proposed rule and that's okay, but there can't be a huge disconnect between the two. The final rule package makeup is very similar to the rule package makeup for the proposed rule.

It'll have a Commission paper. There'll be an FRN attached to the Commission paper. This FRN though will have a section in the statements of consideration that includes a summary of all the comments that we received and

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our response to those comments.

Now instead of having a draft environmental assessment, we'll have a final environmental assessment and a final regulatory analysis. And instead of having draft rule text, there'll be final rule text at the end of the FRN.

And then separately, the requesting organization or office will finalize their rulemaking documents, their guidance documents, and publish those as well. What we try to do is get the guidance documents published about the same time that the proposed rule and the final rule are published so that the public can see them, see them together, that's what the goal is.

So the final rule takes about a year.

So it's a marathon. It's not a sprint. The whole process can take two-three years or longer.

So that's it in a nutshell. I hope you learned something about the rulemaking process. There's a poster outside that is a poster of this if anybody afterwards wants to go out and look at that they can, but you have the slide.

So is there any questions?

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MR. LYMAN: This is Ed Lyman, Union of Concerned Scientists. Two questions. The first is when a rulemaking, when the technical basis potentially involves nonpublic, either safeguards or classified information, what procedures do you address, including the public, extent possible that maximum SO the, the technical basis is, can be understood within the limits of constraints and information, is first question.

And the second is with regard to the authority of the NRC, could you clarify if a, the Department of Energy hires a contractor to construct the processing plant at a Department of Energy site then the NRC wouldn't have the authority right now under the Atomic Energy Act, it would have to be granted separately. Is that correct? Thank you.

MCDANIEL: Regarding your MR. question, if there is security-related issues, safequards information, we have to be very careful about that. We'd still want to We'll do so though and we will public meetings. not introduce any safeguards' information. We have to be very careful about that.

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You asked about what procedures do we use when that's the case, and I don't know what the, I don't know what the procedure is for that.

This is Dorman. MR. DORMAN: Dan Ι think the extent that to we can redact technical basis to the point that it shared with the public, that would be our first objective would be to share as much as we could to the extent that there may be safeguards or classified information that would inform technical basis of a rule that the, I think, the one that comes to my mind when that comes up is the design basis threat rule in Part 73.

of Commission's As part the policymaking process on the design basis threat, includes outreach to authorize federal agencies receive their comments the to information that goes into the technical basis. the extent that reach we can authorized stakeholders to get as broad perspective as we can, we will do that, and to the extent that we can get information out to the public, we will do that.

MR. MCDANIEL: Dan, do you want to take a crack at his second question?

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1	MR. DORMAN: The second question, if								
2	DOE under its authorities chose to, or was								
3	directed and authorized and appropriated by								
4	Congress to construct and operate a reprocessing								
5	facility on a DOE facility, my understanding								
6	would be in line with yours, Dr. Lyman, that that								
7	would not be under NRC's authority to regulate								
8	unless Congress made a specific Act as they did								
9	with the, the MOX Fuel Fabricating Facility,								
10	which is funded through DOE and is a commercially								
11	operated as proposed by Shaw AREVA MOX Services								
12	on the DOE reservation at Savannah River, that								
13	when there is specific legislation authorizing								
14	the NRC to license that facility.								
15	So I think the answer to the question								
16	is unless Congress passed similar legislation of								
17	such a facility as you described, would be under								
18	DOE's authority and not NRCs.								
19	MS. BAILEY: Any questions from the								
20	bridge line?								
21	(No response.)								
22	MR. MCDANIEL: All right. Well, thank								
23	you.								
24	MS. BAILEY: Our last presentation is								
25	from Kelli Markham. Kelli is the project manager								

for reprocessing regulatory development at NMSS. She was the principal author of the gap analysis and is here to discuss the regulatory gaps and explain the areas where we are requesting stakeholder feedback. Kelli.

MS. MARKHAM: Can I be heard? Yes, okay, good. Well, thank you, Marissa, for the introduction. I would like to start also by taking this opportunity to thank you all for your participation in today's meeting, both here and ABB, ***1:51:54 as well as via the web.

has indicated, stakeholder Cathy involvement in this process is vital to its The outcome that I'm striving for with success. my presentation to describe the gap analysis that we have put forth is to establish clarity and a and mutual understanding among the NRC stakeholders of the regulatory gaps that identified.

So in slide two, as we've mentioned, the gap analysis has been completed and the, we have identified 23 gaps and prioritized these gaps. We prioritized them as high, moderate, and low-priority gaps.

High-priority gaps are those that must

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be resolved to establish an effective framework and these are the gaps that will be included in the technical basis development, if applicable. And I'll describe that a little bit further on in the presentation.

Moderate-priority gaps are those that should be resolved, but are not essential to license reprocessing facilities. In the gap analysis, we've indicated that moderate-priority gaps would be evaluated and could be included in the technical basis.

So inclusion of these moderate gaps would be dependent upon a combination of your stakeholder input, as well as available resources. And this why we need your involvement here.

We're looking for your input as we determine the scope of the technical basis and determine which moderate gaps should be included.

And I'll outline some of those areas as I go through some individual discussion of the gaps.

So to complete the discussion on the prioritization, low-priority gaps are gaps that could be resolved, but the technical basis development of these gaps is not essential for

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licensing reprocessing facilities. So at this stage, we won't be including low-priority gaps in the technical basis development. And we'll discuss this further when we describe some of the gaps.

Additionally, indicated on this slide, the requirements for Part 50, the requirements in Part 50 for production and reprocessing facilities will be consulted. And this is to ensure rigor and completeness of our technical basis. Additionally, we have active participation from our General Counsel to assist with ensuring that statutory requirements appropriately addressed and included.

And on this slide here, I have indicated four categorizations of our gaps, areas of groupings. And those, and those four areas are the areas that we will be describing on the next few slides.

Next slide, please. In the area of waste, we have four, these four gaps indicated on the slide. Two of these gaps are moderate gaps, and again, those are the areas, those are the gaps that we will be seeking stakeholder involvement for the scope of the technical basis.

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The first gap is independent storage of high-level waste. And this is a gap identifies that there is а lack available of independent interim storage options to accommodate and solidify high-level waste.

And I want to be clear that this gap is not referring specifically to a geologic repository, but rather interim high-level waste storage, such that could be found in Part 72.

Currently, the only storage option for solidified high-level waste is a monitored retrievable storage installation, or an MRS. An MRS is a DOE facility that would be licensed by the NRC.

There are currently no existing or planned, as far as we know, MRS facilities. Therefore, to accommodate solidified high-level waste, our framework for reprocessing facilities will need to include some type of interim storage facility.

The next gap indicated on the slide is incidental to reprocessing, sometimes referred to as WIR. The next -- this necessary. This gap was necessary to certain waste streams from spent fuel

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reprocessing to be classified as incidental waste rather than high-level waste.

And the nature of this gap, there are prior commissioned decisions about criteria for incidental waste. The NRC staff has long been involved in discussions with DOE in evaluating the criteria in classification for some of these waste streams. And there is some relatively recent legislation that we are using collectively to inform our technical basis to support an incidental waste classification.

The last two gaps on this slide deal with waste classification and confidence. These gaps are the moderate gaps. And they -- and the first gap is the waste classification gap. And there is a current effort within the NRC to revise the waste classification rules and that's being led by our Office of Federal State and Materials and Environmental Management Programs, or FSME.

And for -- but the purposes of reprocessing, the waste classification tables in 61.55, do not define all the radionuclides found in reprocessing waste. As a result, by default, some of these waste streams from reprocessing

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facilities, could be considered Class A, but may not generally be acceptable for near-term surface disposal.

In the ongoing effort for the waste classification revision, the Commission has directed the staff to risk-inform the waste classification scheme in the long-term. Such an effort will include unique wastes such that would result from reprocessing facilities.

This gap was prioritized as moderate since there is an ongoing effort currently to look at these rules and it is possible to address this gap through guidance in the interim, if necessary, to accommodate reprocessing facility licensing, but we need to hear from our stakeholders with respect to this gap.

What are some of the thoughts of the public about addressing this gap in our technical basis? And what is the current prognosis from industry regarding this gap and the need for it to be addressed to support their licensing intentions?

The, the last gap on this slide, the waste confidence rule, that is indicated in Section 51.23, applies only to the interim

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storage of spent fuel generated by light water reactors. Reprocessing waste forms were considered in the waste confidence decision, but not included in the rule.

Therefore, in order to have the waste confidence rule include reprocessing waste forms, staff will need to undertake a rulemaking. There is already a great deal of work done to support a technical basis for waste confidence for reprocessing waste forms.

However, reprocessing applicants could consider the impacts of long-term storage in their environmental assessments. As a result, this gap was prioritized as a moderate gap.

So as far the of the as scope technical basis goes, we need some input from our stakeholders relating to this gap. What are the industry's intentions? Is the industry considering facilities or one to two twenty? This kind of information is going to better inform our decision-making as we proceed in this process.

Next slide. This slide outlines the regulatory gaps as they relate to physical protection and MC&A. They're currently isn't --

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the first gap is, indicates that there's currently an inclusion for reprocessing facilities from Category 1, MC&A requirements in Section 74.51. This exclusion will be deleted in the MC&A rulemaking that is underway.

The next two gaps are related and involve risk informing the physical protection and material control and accounting rules, MC&A. These gaps are also the subject of the most recent NEI letter that Cathy mentioned.

The current quantity-based material categorization scheme in Part 73 and 74 may pose undue regulatory burden facility an for operations, such as shipments of XOM fuel assemblies. Risk-informing these regulations would consider other factors that contribute to the attractiveness of the material, such chemical form.

In considering the attractiveness of these materials, certain fissile materials, such americium and neptunium, would be treated as special nuclear material and subject to the appropriate requirements indicated by the revised categorization scheme. Reclassification of americium and neptunium was not supported by the

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Commission at this time.

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For the reprocessing framework, staff consider the impacts of what changes were needed to adequately and appropriately address safety for reprocessing The gap analysis indicates a highfacilities. propriety gap for either risk-informing Part 73 74, or instituting specific requirements. Both of these are options that would address shipments of MOX fuel assemblies.

Considering the Commission direction regarding the reclassification of americium and staff evaluated neptunium, the existing technology for separating these materials in a reprocessing scheme. Based on our knowledge from interactions and information sharing with DOE, determined that advanced staff separations resulting in pure or relatively pure streams of such materials as americium or neptunium commercially immature.

As a result, we did not feel that a diversion from the Commission direction Therefore, for necessary at this time. the reprocessing prioritized framework, we the reclassification of americium and neptunium

low due to our assessment that the technology was not yet commercially viable.

However, if such advanced fuel cycles are intended, we need to know as this would raise the priority of this gap to high and thus be included in our framework efforts. This is an area that we are also seeking stakeholder feedback for.

The last two gaps indicated on this slide are moderate gaps, and those involved, diversion path analysis, and some approaches toward material control and accounting.

Diversion path analysis would be a new material control and accounting requirement and proposed to make, and would be proposed to make Part 74 more risk-informed by requiring facilities to consider a wide range of malevolent activities that might involve overt or covert adversaries.

Reprocessing facilities would then be required to conduct the diversion path analysis and address any identified vulnerabilities. The gap addressing the approaches towards material accounting management would add regulations consistent with our guidance on hold-up material

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management to facilitate more accurate accounting measurements.

So hold-up material is the amount of material that is residual determined to be piping ***2:04:06 throughout the process, and equipment, for example, that cannot be flushed out for material control and accounting purposes. So, again, these two gaps, these two moderate gaps, as well as the other ones are looking for input relating to inclusion of these gaps in the technical basis.

The next slide has grouped the gaps that relate to the increased risk of a reprocessing facility over fuel cycle facilities. Staff is evaluating how to appropriately assess risk for reprocessing facilities.

Qualitative risk assessments are required under Part 70. Reactor facilities use a quantitative The risk approach. consequences reprocessing facilities pose is somewhere between that of a reactor facility and currently licensed Part 70 fuel cycle facilities. part of our tech basis, we are contracted assistance to help us assess this high-priority gap.

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The next gap indicated involves baseline design criteria. The baseline design criteria in Part 70 are not sufficient for a reprocessing facility, and the general design criteria in Part 50, are somewhat more specific for reactor facilities.

Therefore, a technical basis to support BDCs for reprocessing facilities, will need to be developed. The Atomic Energy Act requires technical specifications for any production facility, but this is not as simple as including a requirement for tech specs, technical specifications, for reprocessing facilities.

is some overlap between specs as defined in Part 50, and so the analyses indicated in Part 70, specifically items relied on for safety, or IROFS, and the methodology. Since the reprocessing framework will either be a subpart to Part 70 or a new part based on Part 70, our framework will need to provide а basis for requirements that are 50, yet also embraces comparable to Part primary controls on risk incorporated into Part 70, and that being the ISA and IROFS.

Additionally, licensed operators are

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required by the Act for production facilities. provides for Part 55 requirements licensed reactor facilities, operators of but specific to reactor facilities. We will need to similar framework for reprocessing develop a facilities.

And the last gap on this slide is effluent controls and monitoring. This gap was prioritized as a moderate gap since there are many requirements addressing this gap in Part 50.

As we mentioned earlier, Part 50 will be consulted for appropriate requirements in our framework development efforts.

And the next slide is the last grouping of gaps. And these gaps are all related to licensing. Industry has indicated their need for one-step licensing for reprocessing facilities, and the NRC has statutory authority to accommodate one-step licensing.

But one-step licensing involves the need to verify that the constructive facilities conform to the approved licensed design. For reactors, 10 CFR Part 52, identifies these requirements as inspection, testing, and acceptance criteria, or ITAACs.

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So for one-step licensing for reprocessing facilities, something similar to ITAACs, will be needed to established. be Currently, staff is devoting resources toward tech basis development for one-step licensing We need current input from industry as to their intentions to pursue other licensing options.

Some of the other gaps indicated on this slide, indemnity-related protection and feerelated gaps do not require a technical basis, so that was what I referred to earlier. These gaps will not be included in the technical basis, but are high-priority gaps since they will still be needed to license reprocessing facilities.

And the table set forth in 10 CFR 51, 51.51, and -- well, Section Section 51.51 includes tables of uranium fuel cycle 51.52 includes environmental data, and Section environmental impact, environmental effects of transportation of fuel and waste.

These data do not provide impacts for a closed fuel cycle that includes anything other than a uranium fuel cycle. So the data in those tables is based on a uranium fuel cycle and not

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on a MOX fuel cycle, for example.

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The data in those tables are used to support the preparation of environmental assessments by power reactor applicants. So if other fuel cycles, such as the plutonium fuel cycle, were developed, power reactor applicants would then need to consider and address the environmental impacts of the other fuel cycles.

Staff has prioritized this as a lowpriority gap and there is no planned effort to broaden this rule to include reprocessing The content of an application, facilities. differ indicated this slide, will for on different licensing options, i.e., one-step versus two-step.

This is a low-priority gap since staff is focusing efforts on one-step licensing at this time. Sorry. The content of an application, as I said, will differ depending on whether a facility undergoes one-step licensing or two-step licensing.

We've identified this as a lowpriority gap because currently our efforts are being focused on one-step licensing. Again, if this is not according to what industry has

intentions, we will need input for these alternate options.

Part 110 indicated or contains the requirements for import/export of nuclear equipment and material. Appendix I to this Part is an illustrative list of reprocessing plant components. And this list is focused mainly on aqueous separation methods, so equipment relating to aqueous separation methods.

This list does not include components of pyroprocessing or other processing, reprocessing-related facilities, such as vitrification facilities. The NRC has export and import licensing authority over production facilities as identified by the Act.

And this list was not intended to be all inclusive. Therefore, this gap was prioritized as a low-priority gap. So the next slide.

We're looking at establishing the scope of the technical basis in the next couple months, so we are requesting that you provide us with your input by October 19. The staff will evaluate all stakeholder input and our resource allocations and we will use that information to

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prioritize our moderate gaps.

The gap analysis is the foundation for the technical basis development and is currently underway. Industry has indicated intentions of potential licensed application submittal in the 2012-14 time frame.

We need input from industry as to their current intentions. Regulations and guidance will need to be established prior to receipt of an application for effective and efficient licensing.

And with that, I would like to again thank you for your participation, and am willing to take any questions you may have.

MR. LYMAN: Hi. Ed Lyman, Union of Concerned Scientists. I'm confused about a few things. First of all, you said that the Commission doesn't support at this stage the redesignation of americium and neptunium.

But my understanding, my recollection was that their SRM on the revision of Part 74 was that it wasn't to be considered in the revision of Part 74, but you should consider it in the reprocessing plant regulation. Now, unless maybe there's an SRM for this, for the regulatory gap

1 analysis that I didn't see. Is that --MARKHAM: That's the SRM that 2 MS. Ι'm referring and it says that 3 to in there 4 Commission doesn't support reclassification this time and that we should consider -it 5 broadly focused on all of the items associated 6 7 with that rulemaking package. MR. LYMAN: Well, that simply doesn't 8 make sense for a number of reasons. And also, 9 two out of the three vendors who've expressed 10 11 interest in the reprocessing plant application which wouldn't involve the 12 have processes inclusion of minor actinides with 13 along plutonium. 14 15 One is the Energy Solutions and NUEX, the other is the PRISM and pyroprocessing, 16 17 that's two out of three already satisfy that criterion where you should flip it to high, so it 18 makes absolutely no sense. 19 MS. MARKHAM: Inclusion of the minor 20 actinides is different than pure and separate 21 streams of them. 22 MR. LYMAN: But unless you, unless you 23

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special nuclear material, how are you going to

classify americium and neptunium properly

24

come up with a regulatory scheme for safeguarding a pyroprocessing plant?

MS. MARKHAM: Again, we need continued input from industry as to their intentions for pursuing pyroprocessing and some of the other technologies. Our current understanding from what we have received relating to the technology is that these technologies for having pure and separate streams of these fissile materials is not industrially mature. If that's not the case, then we need to, to reevaluate it.

MR. LYMAN: Right, but that's, again, that's the separate issue from if someone comes to you and says, "We're going to be producing, we're going be separating a mixture ofto plutonium and minor actinides. The dilution is it. such shouldn't be considered Category material under this new scheme because we have these minor actinides in it."

Now, if those are weapons used minor actinides, but you don't consider them strategic special nuclear material, you're going be having the appropriate to characterization of the, of the security potential of the material.

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1 MS. MARKHAM: Are you suggesting that, minor actinides 2 that the would dilute the plutonium so that it would be lower --3 4 MR. LYMAN: I'm not suggesting it, but that's what some people do. They --5 MS. MARKHAM: Again, we --6 LYMAN: 7 That they argue that MR. minor actinides should be considered lower 8 security diversion risk 9 or and separate And I'm saying that this scheme is 10 plutonium. 11 going to have to recognize that that's not true. MARKHAM: Again, we're looking at 12 MS. from the point and perspective of having 13 pure streams, which is what I have understood to 14 15 point of incorporating some of these the fissile requirements. Now, again, if this is not 16 the case, and industry has different intentions, 17 then we need to understand that. 18 LYMAN: So you're, so what you're 19 saying is that at this point, you don't intend to 20 21 change the regulations that would even -- well, let's 22 acknowledge say, the definition of plutonium is a strategic -- would 23 not be changed even if there were admixtures of 24

the neptunium and americium in the stream.

MS. MARKHAM: That is not what I said. What I'm saying is that we need to understand better what the technology is that's going to be out there. And definitely, if we were to receive something of that nature, we need to be prepared for something like that. That's the point of this meeting.

LYMAN: Right, but like I MR. NUEX have admixtures is going to of actinide, so you're just going back-and-forth. All I know is that if, you can adopt a material attractiveness table that, where you're going to risk-inform, whatever that means, the -- you're going to dilute or reduce the, the safeguards and physical protection requirements for reprocessing plant unless you actually take into account the, what. is known about the useable weapons properties of the entire spectrum of actinides, and otherwise it's technically defensible approach.

MS. MARKHAM: I am not, I am not here to evaluate specific technologies at this point.

I understand your point and we are here to debate some of these topics and to move forward with them and to understand them better so that

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we can better inform our process.

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MR. LYMAN: And you are familiar with the National Lab study of material attractiveness that said that, that there is virtually no benefit with to, regard to material attractiveness for incorporation of actinides for dilution of plutonium with uranium unless the dilution is below, plutonium is below 20 percent, and even so, it's still a weaponsusable, directly weapons-usable mixture according to this paper. How are you going to accommodate that, those findings?

MS. MARKHAM: Again, we need input to know if that's really the intentions. Our current understanding is that that's, we need to evaluate it a little bit better.

MR. LYMAN: But why -- all right, I'm not going to belabor the point, but I mean this is going to be a major -- this a major effort. Why would you go through this effort and then have to redo it a couple of years later when someone else wants to submit an application with a different technology? It seems like a waste of time, and, you know, we're going to be taking this up with the Commission again. Thanks.

1	MS. BAILEY: Well, we appreciate your								
2	comment and we note that it's actually in the,								
3	it's going to be in the transcript, so it's								
4	something that we may need to take a closer look								
5	at as we move forward in developing the gap								
6	analysis, or I'm sorry, in developing the								
7	technical basis. So, thank you, and your comment								
8	is noted.								
9	Anymore questions?								
10	MS. MARKHAM: Other questions.								
11	MS. SUPKO: Eileen Supko, Energy								
12	Resources International. You mentioned that you								
13	identified a gap associated with independent								
14	storage of high-level waste. Have you also								
15	identified any gaps associated with								
16	transportation of high-level waste or any of the								
17	other materials?								
18	MS. MARKHAM: We have looked								
19	comprehensively at Part 72. We do have rules in								
20	place for transportation of high-level waste								
21	currently.								
22	Other questions?								
23	MS. BAILEY: Questions from the bridge								
24	line?								
25	MR. BARTLETT: There's currently no								

questions from the webinar.

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MS. MARKHAM: Okay. Well, with that, I'd like to thank you once again for your participation.

MR. DORMAN: Okay. In closing out the meeting, first, I want to thank all of you for your participation in the meeting. I think you've got a quick overview sense of the level of complexity and the broad scope that this effort will undertake.

first This is t.he ofwhat. we anticipate will be a series of meetings. Our in this meeting was twofold through intent Keith's presentation to give you a sense of the opportunities for a public participation in the process and through Kelli's discussion to give a general sense of the scope that we anticipate in the rulemaking and some particular areas where we have need of input into the, the, into defining the scope of the rulemaking.

I think you've got a sense of the broad scope and the complexity, both from a technical and policy aspects of this, and so we hope that this meeting has helped to provide that mutual understanding of the nature of what we

presented to the Commission in the paper earlier this year, as well as the scope of the issues that we need input on as we define the scope of the technical basis and further develop the technical basis.

I appreciated Keith pointing to the, to the authorities because I think when we get several years down the road here to presenting a rule to the Commission, what we need to do is achieve our principal missions as laid out in the Atomic Energy Act of providing a rule that is sufficiently comprehensive to provide assurance that there is adequate protection in the public health and safety, that there is promotion of the common defense and security, and protection of the environment, which are the principal missions that we are given.

And so the input that we get from everybody in that process will be critical to our success in doing that. I think we do plan to have more public meetings that will delve down into the specific issues more, including the, the physical protection, the MC&A aspects, so Dr. Lyman, I appreciate your comment and we will be delving into that more, and hopefully, in the

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relatively near future.

And so finally, I want to thank Matt and Steve for their support in helping to organizing the webinar aspect of this meeting and to facilitate that process, and our reporter, who will get us a transcript so that we can glean out the key points from your comments, Dr. Lyman and others, and incorporate that into our process.

Looking at Keith's presentation, we are in step two of the process. It is the more informal part of the process, but as you look through the items that were in Kelli's slide or you read through the paper, we welcome the public's participation and comments at any point in the process. And so, just keep connected with us and keep an eye out for these additional meetings that will be forthcoming in the near future.

Just as one final logistical reminder, we do have the feedback forms out on the table if you didn't pick one up on the way in. We do appreciate feedback on the conduct and the content of the meetings. And on your way out, for the visitors, please remember to return your security badges. And the presentations that were

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