## UNITED STATES NUCLEAR REGULATORY COMMISSION

\* \* \* \* \*

#### **MEETING ON**

# TRANSFORMATION AT THE NRC - BECOMING A MODERN, RISK-INFORMED REGULATOR

\* \* \* \* \*

### TUESDAY,

**OCTOBER 29, 2019** 

\* \* \* \* \*

### **ROCKVILLE, MARYLAND**

\* \* \* \* \*

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

**COMMISSION MEMBERS:** 

KRISTINE L. SVINICKI, Chairman

JEFF BARAN, Commissioner

ANNIE CAPUTO, Commissioner

DAVID A. WRIGHT, Commissioner

ALSO PRESENT:

ANNETTE VIETTI-COOK, Secretary of the Commission

MARIAN ZOBLER, General Counsel

NRC STAFF:

GREGORY BOWMAN, Deputy Director, Division of Risk
Assessment, NRR

AMY D'AGOSTINO, Human Performance Analyst, NRR
MARGARET DOANE, Executive Director for Operations
JENNIFER GOLDER, Deputy Director, OCHCO
JONATHAN GREIVES, Chief, Projects Branch 4, R-I/DRP
TAYLOR LAMB, NRO/DLSE/CIPB
JOHN LUBINSKI, Director, NMSS
DAVID NELSON, Chief Information Officer

MAUREEN WYLIE, Chief Financial Officer

1	PROCEEDINGS
2	(10:01 a.m.)
3	CHAIRMAN SVINICKI: I call the Commission's public
4	meeting this morning to order. Let me begin by saying that we have a nice
5	full room here, and a full table, so it's going to be, I think, a lot of wonderful
6	content that we get through this morning.
7	The Commission is convening in public session this morning
8	to discuss the strategic aspects of transforming the U.S. Nuclear Regulatory
9	Commission to better inform our decisions and prepare us for the future. I
10	would just note that we have had previous meetings on the Agency's
11	transformation effort, and the Commission contemplates that over the course
12	of time, as we proceed with transformation initiatives, that there will be
13	somewhat of a series of public meetings.
14	I think at this point in time it's not really determined. The
15	frequency may be correlated with progress under these initiatives or it may be
16	more routine. I think the Commission will kind of figure out what makes the
17	most sense as we move forward. But this is an exciting opportunity for us to
18	check in.
19	There's been a lot going on. We had an agency-wide
20	dialog. We have had a lot of activities following on from that. And there are
21	a lot of moving pieces. So, I think we'll hear something about that today.
22	I do want to note that among the many wonderful NRC
23	presenters we have today, we do have Ms. Maureen Wylie, who is our Chief

1	Financial Officer. And as she will be retiring or separating from federal
2	service at the end of the year, this is likely unless something changes that
3	we don't contemplate this is likely to be her last opportunity to present and
4	appear before the Commission today.
5	Maureen, you, beyond the contributions you've made here
6	at NRC, you have a long career in federal service. I want to recognize your
7	service to the country and your many years of hard work and the contributions
8	that you've made here as well. And we will have the more appropriate
9	venues to fete and recognize, and perhaps roas,t in a good natured way,
10	MS. WYLIE: In a good natured way, of course.
11	CHAIRMAN SVINICKI: and light-hearted ribbing, and
12	various things from your peers, and members of the Commission, and your
13	colleagues, and others who may join us in that.
14	But thank you, again. And as we always do at NRC, we are
15	sad to see people go but we wish you kind of every happiness for you and
16	your family as you move forward.
17	MS. WYLIE: Thank you.
18	CHAIRMAN SVINICKI: And with that, on that topic or any
19	other, do any of my colleagues would they like to make some opening
20	statements?
21	Commissioner Baran.
22	COMMISSIONER BARAN: I don't know if this falls as a
23	opening statement because it's so brief. But we're really going to miss you,

- 1 Maureen. You've just been so terrific in this role. And it's going to be a real
- 2 loss for the Agency to see you go.
- And we'll have more time to, you know, celebrate you and
- 4 everything you've done. But it sounds like you've already had the forethought
- to begin structuring your, you know, going away party to avoid that kind of,
- 6 you know, gentle ribbing that sometimes occurs. And that's pretty smart, so.
- 7 MS. WYLIE: Well, there's so much material.
- 8 (Laughter.)
- 9 CHAIRMAN SVINICKI: Thank you. Anyone else?
- 10 Okay.
- All right. Well, with that, so we have one panel at today's
- meeting comprised of the NRC staff presenters. And we will lead off with
- 13 Margie Doane, our Executive Director for Operations.
- 14 Margie, please proceed.
- MS. DOANE: Okay. Thank you, Chairman and
- 16 Commissioners. And before I begin my remarks and the introduction I, too,
- want to thank Maureen. And I want to emphasize what she has meant to the
- 18 staff of the NRC.
- 19 She came here from NOAA, and she had great ideas for
- transformation. And I really believe that her, and Dave Nelson, and some of
- 21 the other executives that came into the Agency, along with some really
- forward-thinking at the Agency, executives that were already forward thinkers
- at the Agency really kicked off our work to become a modern, risk-informed

- 1 regulator.
- So, not only is she working so hard on these systems that
- 3 she has transformed within the CFO -- which you're going to hear about -- but
- 4 she really has been a motivator to help us change our culture in a really
- 5 positive way. And that's an incredible legacy to leave in such a short amount
- 6 of time.
- 7 So, we'll have lots of opportunities, but on behalf of the staff
- 8 I just wanted to also give our thanks.
- 9 MS. WYLIE: Thank you.
- 10 MS. DOANE: Okay. Let me turn to the issues at hand
- 11 then.
- So, we're appreciative of this opportunity because we've
- had some trans -- we've had some innovation meetings but we haven't really
- been able to show you all the different work that's going on. And this really
- should be seen as the tip of the iceberg. There is a tremendous amount of
- work in addition to what you're going to hear about today.
- So, our goal is to show you kind of a smattering, an array of
- things that are going on to show you that we are making significant progress
- to become a modern, risk-informed regulator.
- So, like most large organizations who reset their work
- 21 periodically, you don't transform, you don't -- you're not like a chrysalis that
- becomes a butterfly in a couple months. That's not what transformation is.
- 23 It really is some -- it's an evolving, an evolution of many small things that go

on all over the Agency. And that's why we like to say change is happening one decision at a time.

But that doesn't mean that we are not making progress and that we're not moving urgently. We are, as you'll see, doing many different things. But it is an evolution as we're carefully making sure that we don't lose sight of our very important mandate to be -- to ensure public health and safety, common defense and security, and protect the environment.

A critical step in our evolution is ensuring that we foster a culture that embrace mindsets and behaviors that are consistent with being a modern, risk-informed regulator. We have collectively established -- we have collectively established seven initiatives that we have identified as the next steps of transformation.

One of these initiatives is a culture of change. What I mean by a culture is a shared, are shared organizational values, assumptions, beliefs, and behaviors that provide signals about what is accepted and what is expected of our employees. The culture we establish will influence all aspects of innovation and how we approach becoming and making modern regulatory decision, making regulatory decisions with an eye toward becoming a modern, risk-informed regulator.

Our efforts in this area are focused on how we should lead during times of change to enable trust, eliminate fear of change, and encourage thinking big across all of the Agency. It includes holding ourselves accountable for meeting our mission; leading by example; meeting milestones

- 1 that we set for ourselves for transformation.
- 2 Our culture initiatives also include proactively addressing
- 3 stakeholder needs as they continue to change, by being transparent,
- 4 performance driver, and focused on our principles of good regulation.
- 5 Our team lead for this initiative is Patrice Reid. She's been
- 6 working on these issues for many years at the Agency, and she has been
- 7 working very hard as we work toward our transformation vision.
- 8 I wanted to highlight this effort to emphasize that it is our
- 9 culture that underpins all aspects of transformation and everything we do.
- One other area that I want to emphasize is why we need to
- change. Our staff is constantly asking this question. And I think that the
- 12 Commissioners have provided a lot of guidance to us in this area, as every
- time the Commission moves on a case by case basis, and when we talk about
- risk and other issues that underpin, that underpin our transformational efforts
- it's been very helpful.
- And the reason that I -- we see as change, and what we've
- been communicating to the staff at the executive level is that healthy
- organizations reset the way they do work. They make sure that they are
- 19 evolving to take advantage of how to work smarter, because every
- organization meets its mission better when it is working smarter. It uses its
- resources better, for example.
- In addition, we make sure that everything that you're doing
- is leading toward meeting that mission. And this is why we're so focused on

- 1 making sure that we are focused on the most safety-significant issues. It is
- 2 urgent at this point that we do this because our staff is getting smaller. And
- 3 we will face that bubble that every other agency in the Government is facing
- 4 with some urgency.
- 5 In two to five years over 50 percent of our staff will be eligible
- 6 to retire. That will be a huge movement in some way. And it might be over
- 7 a decade, but at any rate it will happen. This transformation must happen
- 8 with staff. And we have to be able to tell our staff how to focus on the most
- 9 safety-significant issues, because if they have fewer resources and fewer
- people they need really -- they need better tools. And so, this is our
- opportunity to set what we're doing now so that we will be really good at it in
- the future. So this, this is very urgent, as I see it.
- And it also, we need to create a culture of innovation
- because that's what the staff is looking for now, and that's what the staff will
- be looking for in the future. This is where we haven't kept up with the pace
- of change.
- 17 So, now let me turn to you. Let me introduce the speakers
- and tell you a little bit about what they're going to do.
- So, all of these speakers will talk about the activities in the
- Agency that directly feed into the four focus areas and seven initiatives that
- 21 we have identified as necessary for us to align the Agency. You're going to
- see -- and I'm also going to put a little, at the end, I'll do more of this -- but
- 23 we're going to have an expert that's coming up that's also going to have a

- 1 number of initiatives that we're doing.
- We're doing a lot of different things. And so now is a good
- time for us to get together and really align the Agency on what we believe are
- 4 those things that are going to really need to be done. And Greg's going to
- 5 talk about that.
- So, we have Greg Bowman, Deputy Director, Division of
- 7 Risk Assessment, Office of Nuclear Reactor Regulation. He's advisor to the
- 8 Futures Core Team, advisors to the Futures Core Team director. And he'll
- 9 provide an overview of how we continue to prepare for the future with our most
- recent efforts of Futures Jam and Futures Core Team.
- And this slide shows, shows the different people that will be
- speaking. I know it's small, so I'm going to go over it.
- Jennifer Golder, Deputy Director, Office of Chief Human
- 14 Capital Officer, and SES sponsor of the Career Enhancement Initiative, will
- describe how we will be describing opportunities for employees to re-skill,
- broaden, and develop through new experiences, how we will be supporting
- staff and team agility, and how we are tracking and hiring the workforce of the
- 18 future.
- 19 John Lubinski, Director, Office of Nuclear Material Safety
- and Safeguards, and SES co-sponsor of the Accepting Risk in Decision
- 21 Making Initiative, will discuss who we will develop a common understanding
- of what it means to accept risk, how it connects to our transformation vision,
- and how risk insight should be applied in work that each of us does, be it

corporate, corporate support, legal, or technical.

David Nelson, Chief Information Officer, will discuss how adoption of technology services will enable all staff to easily and efficiently complete their work, and how we plan to increase the use of new and existing technology across the Agency. Dave has been on the Executive Steering Committee. He's been, actually an innovator right from the minute he came in. And he has had to do a lot of work because our systems were very antiquated in many ways. But, in addition, he's been on the Executive Steering Committee for the Futures Assessment, the Jam, and now for turning out the transformation initiatives.

And Maureen Wylie, our Chief Financial Officer, will discuss enhancements to the financial process, which are examples of innovation and process simplifications happening organically at the office level. So, you'll see what I mean when I say things are just happening in the offices as we move to become more modern. She's also an executive sponsor on one of our initiatives on signposts and markers.

Finally, Amy D'Agostino is a human performance analyst in the Office of Nuclear Regulatory Research, and she's our lead on our Innovation Initiative. And together with Jonathan Greives, Chief, Products Branch for Division of Reactor Projects in Region I, will talk about our new, our new process. We call it "innovateNRC 2.0." And it's how we're going to create and sustain a culture of innovation.

So, with that, I'm going to turn it over to Greg.

1	MR. BOWMAN: Thank you, Margie. And thank you,
2	Chairman Svinicki and Commissioners, for providing me with the opportunity
3	to brief you today. This morning I'll be giving you an overview of how we
4	develop the transformation initiatives that we'll be using to enact the vision
5	CHAIRMAN SVINICKI: Can you just move your
6	microphone a little closer. Thank you.
7	MR. BOWMAN: So, I'll be giving you an overview of how
8	we develop the transformation initiatives that we'll be using to enact the vision
9	that Margie discussed.
10	I'll start off with a discussion of the Futures Jam. I'll discuss
11	what we did with all the great feedback we heard from the staff. I'll give you
12	an overview of the approach we're taking to ensure we effectively implement
13	those initiatives. And then I'll turn it over to the other speakers to provide
14	some details on some of their initiatives.
15	Next slide, please.
16	So, it's been a few months since the Futures Jam, and I
17	thought there'd be some benefit to sort of refreshing everyone on what a Jam
18	is and how it was executed here at the NRC.
19	There are a lot of words on this slide. And as you can
20	probably already tell, I'm not a very good orator, so rather than going through
21	all these words with you, we'd like to show you a video.
22	This video was put together by Alysia Bone, who is sitting
23	behind me And it will walk through how we planned and conducted the Jam

Т.	nere at the NRC.
2	So, Doris, if you could role the video.
3	(Video played.)
4	VOICEOVER: journey, how planning for our future
5	became an agency-wide conversation.
6	The idea was to tap the collective wisdom of our staff or
7	how to make sure we're ready for the challenges of tomorrow. In the four
8	months between idea conception and implementation we learned how to jam
9	We researched best practices from those who've jammed
10	before us, used the 2019 Futures Assessment Report as a basis for
11	conversation, and developed a plan to explain the idea and generate energy.
12	We also needed to help folks be comfortable with the idea
13	of sharing candidly, in a forum similar to Facebook. Training on the Microsof
14	Yammer platform and how to encourage honest, open dialog were critical to
15	helping us get ready
16	To get the strategic thinking flowing, we brought four
17	scenarios of the Futures Assessment to lead staff towards this interactive
18	exhibit and envision the future.
19	We also produced a first-of-its-kind podcast series that
20	focused on the key takeaways of the report. We wanted our communications
21	tool to really feel as different and exciting as the Jam concept itself.
22	To symbolize how every has a voice in the Jam, we built a
23	mural together With each NRC location tasked with designing circles in their

1	assigned colors to create a mosaic of the Jam logo, this activity showed the
2	importance of coming together as one agency to create something unique.
3	We pushed ourselves out of our comfort zone and built the wave of the future.
4	Inspiring the catch phrase for the Jam, "The future starts
5	now," were our future regulators. Our NRC kids did their part by posing for a
6	photo scavenger hunt with the intent of helping us all be even more invested
7	in preparing our agency for the world of 2030 and beyond.
8	They were pretty excited to see themselves in the future as
9	well.
10	On Tuesday, June 18th, our Jam kicked off. The
11	conversation started off with one simple question, and everyone in the Agency
12	had a chance to respond.  In no time at all the discussion took off, generating
13	six subgroups. Conversations built on each other, and the discussion was
14	energizing, brave, and respectful.
15	Staff had the opportunity to post at any time to any comment
16	over the course of the 3-day Jam. And the Jam was facilitated by a team of
17	trained facilitators during work hours each day.
18	This was one of four groups that made up the Jam control
19	room. Also in the control room was the data analytics team in charge of
20	monitoring and evaluating conversations at real-time using the Power BI
21	application.
22	The themes team followed the dialog and noted the main

themes as the conversation was unfolding.

Τ	ine communications team was in charge of providing
2	agency-wide updates twice a day.
3	The control room was abuzz with activity and excitement
4	throughout the three days. But every hour on the hour the room went quie
5	for a 10-minute report from each of the four teams to keep everyone on the
6	same page. Every day more people joined the conversation.
7	During our research phase we learned that we could expec
8	about 30 percent of an engaged staff to participate in a Jam. For the NRC
9	Futures Jam we saw 73 percent staff participation, and around 30 percent o
10	the staff actively commented. These numbers, as well as the comments
11	throughout the 3-day conversation, underscored how committed our staff is to
12	the mission of our work and the future of our Agency.
13	(Video ends.)
14	MR. BOWMAN: You can go to the next slide.
15	Thanks, Doris and Alicia.
16	So, this slide, if you could pull it up, provides some
17	testimonials from some of our Jam participants. From a personal standpoint
18	I'm generally a skeptic, and to be completely honest, in the days leading up to
19	the Jam I was not expecting us to get very much out of it. However, I learned
20	very early in that my initial skepticism was way off.
21	Almost all the posts and conversations were positive and
22	constructive, and generally geared towards looking for ways to make the NRC
23	a better place to work. People's openness and willingness to share diverse

1	and differing views in a collaborative manner really impressed me. I think it
2	was a great demonstration of our values. And it honestly made me proud to
3	be an NRC employee.
4	The Jam proved very useful in providing insights into areas
5	we need to focus on. For example, Margie mentioned agency culture during
6	her opening remarks. We used live polling during the Jam to get feedback
7	on specific topics, culture being one of those topics. And I found the polls on
8	culture to be particularly insightful.
9	For example, we learned that 83 percent of the respondents
10	to one of the polls indicated that we need to change our culture in order for us
11	to be successful in transformation, with 93 percent indicating that they were
12	personally committed to helping shape our future together.
13	So, I think it's clear to me from those statistics that we have
14	a lot of work to do in the area of culture, but the commitment of our staff to our
15	vision and to making it a reality is really impressive to me, and it gives me
16	confidence that we will ultimately be successful.
17	My only complaint about the Jam, and I've heard this from
18	others, is I had a very hard time keeping up with it. If I left my desk to go to
19	a meeting or even to get a drink of water I would very quickly lose track, and

So, if we go to the next slide, I'll show you what we did to help address that concern.

it took -- it was difficult to get back into it.

So, to make the Jam more useful and to help people like me

1	who	are	а	little	slower	than	average,	staff	from	our	Office	of	Nuclea

- 2 Regulatory Research developed what we're calling the Jam Dashboard. The
- 3 front page of the dashboard is shown on this slide.
- The dashboard is a really powerful analytical tool that lets
  you drill down into posts, into by -- you can search by office, by most liked
- 6 posts, by pretty much anything.
- 7 I realize it's a little hard to read on this slide. But, for
- 8 example, on the left side of this, of this slide there's a word cloud. You can
- 9 click on any of the words in the word cloud and drill down into the specific
- comments on that, on the cloud. And you can act, interact with the rest of the
- dashboard in a very similar manner.
- So, a link to the dashboard was sent out agency-wide. And
- we have a link to it on our SharePoint side, so it's readily accessible to all NRC
- 14 staff. In addition to using it for specific transformation initiatives, we've also
- been able to leverage the Jam Dashboard for more routine work.
- For example, OCIO was able to use the dashboard to go
- back and identify and make quick fixes to things, to IT challenges that people
- were jamming about during the Jam.
- 19 Next slide, please.
- So, this was alluded to in the video, but behind the scenes
- during the Jam we had staff feverishly working to analyze the feedback that
- was coming in from the staff to turn that into action. We used the results of
- that analysis, along with some other information like the Futures Assessment,

2	focus areas for transformation.
3	They include recruiting, developing, and retaining a strong
4	workforce; improving our decision making by accepting an appropriate level
5	of risk; making better use of technology, for example, by better enabling our
6	staff to adopt new and existing IT resources; and establishing a culture that
7	embraces innovation.
8	On the right side of this slide are the seven supporting
9	initiatives that we launched. Again, this was based in large part on the
10	feedback we got from the staff through the Jam.
11	We made a lot of great progress on a number of these
12	initiatives even before the Jam took place. Amy will be talking about work
13	that she and her team have done on innovation. And that had they'd done
14	a lot of great work before the Jam.
15	Similarly, the work we did on the Futures Assessment will
16	give us a great head start on the Signposts and Markers Initiative.
17	Next slide, please.
18	Overall, we feel it's critical that we leverage all the work
19	that's already been done by our offices here at the NRC to make the
20	transformation successful. In fact, the first step in the majority of the
21	initiatives is to do sort of like a baseline with all the offices, get feedback on
22	what's going on so we know where we're starting from.

For each of the seven initiatives we've established a team,

and the work that went into the Transformation SECY Paper to develop four

1	including	an	executive	sponsor.	The	team	members	were	selected	from

- 2 across the Agency, and from all positions and grades, so we have a really
- 3 good cross-section of the staff represented.
- 4 Similarly, the majority of the NRC offices are represented in
- 5 the executive sponsor ranks. We have two regional executive sponsors, and
- 6 many corporate executives that are sponsors.
- 7 There's clearly, clearly a benefit to having such a diverse
- 8 team representing us. We'll hear a lot of differing views. But, also, those
- 9 staff will take back to their offices what they've learned through this initiative
- and, hopefully, build our change capabilities throughout the Agency into the
- 11 future.
- We've developed charters of concrete milestones and
- deliverables for each of the initiatives. The teams are responsible for
- developing meaningful performance measures so that we can make sure
- we're holding ourselves accountable for accomplishing each initiative and that
- it's achieving its desired result.
- 17 I mentioned earlier that the majority of the initiatives were
- based on feedback from the staff. So, transparency with them on how we're
- doing in addressing the initiatives is of critical importance. In the very near
- term we plan on making available information broadly that they can, that they
- can use to see how we're doing in implementing our transformation vision.
- We expect to complete work on the first seven initiatives
- within a year, with many of them being completed sooner than that. We've

- identified additional initiatives that we're planning on kicking off in calendar
- year 2020 as the first seven are completed. We've done some initial work
- 3 scoping those out, developing what they'll look like. But we have more work
- 4 to do before they're ready to be kicked off.
- 5 You can go to the next slide.
- So, before I turn things over to the next presenter, I'd like to take a minute to share some personal thoughts on transformation at the
- 8 internal. And I'll preface this by repeating something I said earlier.
- 9 I am generally a skeptic. So, when Steve West contacted
- me about helping with transformation, I did what probably many of the NRC
- staff in this room would do, and reacted with a lot of enthusiasm. Internally,
- though, I had a lot of skepticism, well, skepticism.
- But over the last few months I've had the opportunity to do
- a lot of reflection on how what we're doing today would have influenced some
- of the things I experienced at my career at the NRC, specifically, some of the
- 16 challenges.
- The specific example that resonates with me the most is our
- work on our actions in response to the Fukushima Daiichi accident. I had the
- 19 privilege of working on that project for about six years. And throughout that
- entire period I worked with some of the most hard-working, competent staff
- 21 we have here at the Agency. These are staff that know how to solve
- problems, that have a dedication to the mission of the Agency, and are willing
- to do whatever it takes to help us accomplish that mission.

1	But time and time again we found ourselves struggling with
2	one obstacle after the next trying to get done what we needed to do to
3	accomplish our mission. The reasons for the struggles varied. Sometimes
4	it was because our approach was a little different than how we'd always done
5	business. Sometimes it was because our processes were overly
6	cumbersome.
7	Sometimes it was because we were asking our staff to take
8	a little more risk than they were accustomed to. And sometimes it was
9	because people felt such a strong personal investment in the project that
10	change was very difficult for them. More often than not, it was a combination
11	of those things.
12	So, I was a first line supervisor for the majority of those six
13	years. And I can't tell you how difficult it was to come into work every day
14	and watch my staff encountering one roadblock after the next, being worn
15	down, all the while being worn down myself. It was really very, very
16	challenging to keep the staff engaged and keep myself engaged.
17	So, I think about the initiatives on the previous slide. And
18	every single one of them if well, not, maybe not every single one of them,
19	but the majority of them, if they had been implemented effectively back then,
20	would have helped us get past those struggles more efficiently and effectively,

So, for that reason, while I was initially skeptical, I truly believe that now is the time for us to change.

without the risk of disenfranchising our staff.

21

1	So, in closing, I view this as our opportunity to make the
2	Agency better for future generations and nuclear regulators. I want them to
3	work in a place where they can make a real difference and feel empowered to
4	help us identify ways we can make the Agency operate better.
5	So, I take our collective responsibility to make this vision a
6	reality very seriously. And I'm looking forward to seeing the change and then
7	living the change.
8	Thank you. Turn it over to Jennifer.
9	MS. GOLDER: Thank you, Greg.
10	Good morning, Chairman Svinicki and Commissioners. As
11	Margie mentioned, I'm co-sponsoring the Career Enhancement Initiative with
12	Dave Lew. And Dafna Silberfeld from OCHCO, and Colleen Todd from
13	Region I are co-leading the team. We have a great team with diversity from
14	throughout the Agency.
15	I'm happy to be here today to talk to you about our human
16	capital Transformation and Innovation Initiatives that support the heart of our
17	Agency, our people. And the NRC has a dynamic environment, and our
18	workforce needs to prepare to perform as modern, risk-informed regulators to
19	help meet our important safety and security mission.
20	This involves providing opportunities for our employees to
21	re-skill, broaden, and develop through new experiences; streamlining and
22	creating flexibility in our processes; supporting staff and team agility; and
23	feeding the pipeline of future talent.

1	And we last briefed you in June about the investments we
2	are making to evolve and bolster our human capital program to meet the
3	changing needs of the NRC, including enhancing our strategic workforce
4	planning efforts, and developing and implementing the Competency Modeling
5	Initiative. This summer's Jam highlighted the importance these programs
6	play in strengthening our workforce and creating opportunities to address and
7	change employee concerns and perceptions.
8	And today I will share insights from the Jam and highlight a
9	few new human capital initiatives under way that are purposefully designed to
10	help our current employees grow, as well as transform how we attract and
11	recruit new employees for the future.
12	Next slide, please.
13	The care and feeding of our current and future staff were
14	prevalent themes from this summer's Jam. And several sub-themes
15	emerged, including workforce planning, career advancement, training and
16	development, and recruitment. And these are just some of the quotes from
17	the Jam impressions from our employees.
18	Overall, our employees want to add and feel valued as they
19	support our mission.
20	They want to enhance or learn new skills, gain new
21	experiences, and have opportunities to contribute, grow, and succeed in their
22	journeys.

And our employees also understand that we need to feed

1 the pipeline for our future.

And through the Jam it became clear that while these initiatives have and will continue to strengthen our Agency, it was also made evident that employees don't understand how they all fit together, how -- what they all mean, and how to use all the resources and tools to advance their careers while becoming modern, risk-informed regulators.

Next slide, please.

The Career Enhancement Team Initiative -- the Career Enhancement Initiative Team will be focused on explaining how all the human capital programs, resources, and tool fit together, and how employees can leverage these tools to enrich their own careers and their own journeys.

The word cloud on this slide is not the same dynamic one that Greg talked about, but it does represent the rich array of tools and resources that are or will be available for our current and future workforce.

And our employees at every level can develop, grow, and expand in their journeys by taking advantage of these opportunities, including self-assessments through the Competence Modeling Initiative, and pursuing both technical training and training on softer skills, to name just a few. And Margie and Greg already mentioned culture. And Patrice is leading that effort, one of those initiatives.

And this year we developed a new seminar that examines the values, behaviors, and practices that promote and maintain a positive organizational culture. And this course enables our employees to share with

1	each other	as they	explore	and gain a	deeper	understanding	of	aspirational
---	------------	---------	---------	------------	--------	---------------	----	--------------

- 2 organizational cultures through the lens of our leadership model, which can
- 3 serve as a guidepost for navigating change, which is especially important,
- 4 given the many changes taking place in this Agency all at once, which can
- 5 result in feelings of discomfort, confusion, or even frustration among staff.

6 Next slide, please.

A new initiative we're piloting is a skills marketplace, which is being led by a small group within the SES career development program. Greg is on that group. The concept is to improve workforce agility and productivity by enabling the NRC to meet time-sensitive work and resources needs, and to better utilize people's talents through short-term projects that employees can work on part time while continuing in their current roles.

This will enable us to quickly create integrated teams to shift to support new or emerging work.

And the team conducted benchmarking to leverage best practices with other organizations, and chose the OPM Open Opportunities platform for the pilot that we're conducting. And six projects were advertised, including developing a Nucleapedia site, to coordinating training across regions, to supporting the Agency's Innovation Forum. And selections have been made from the people that expressed interest, and work is under way.

And an example of how this works will be given shortly by Amy and John. And this tool can be used as one potential feeder for innovative ideas, and it could also be considered for rotational and

developmental opportunities for our mid-career staff, and to address unanticipated workload.

And going forward, the team is going to assess the program, and will develop recommendations on platform use, process changes, training, and marketing to make it a key tool on how the NRC accomplishes work in an innovative and agile way while supporting employee development.

Another developmental opportunity is the Skills-based Mentoring Program. And that, we are piloting that right now in NMSS. And that connects experienced employees or experts to learners who are interested in developing specific competencies within a short time frame. And we envision that learners will be able to improve job performance, increase creative thought, gain new perspective, and increase their networks.

The pilot will also be assessed, and recommendations will be developed for broader Agency use moving forward.

And before I talk about innovations and recruiting, I want to update you on our Competence Modeling Initiative which we've briefed you on in the past. And that is a tool that can help staff improve their job skills and help prepare them to move into different positions to address workload shifts. And so far we've developed over 70 models for seven offices and the regions. And there are currently over 1,400 users with access to our self-directed learning engine. And they can take assessment in that tool.

And we're continuing to develop more models in conjunction with the enhanced strategic workforce planning process, as well as

- 1 encouraging staff and supervisors to complete assessment.
- Next slide, please.

As Jason Shay mentioned in June at the human capital Commission briefing, we're planning for a new entry level development program called the Nuclear Regulator Apprenticeship Network, or NRAN as we often refer to it. That will be launching in the end of this June. And program specifics are in development now. And we're actively working on selecting the participants.

And to support this, we updated and streamlined the recruitment process. We refreshed our marketing materials, which were outdated. And we made use of the new materials during this recruitment season, which occurred during September and October and just wrapped up. And we had over 40 NRC recruiters, plus H.R. specialists, attending career fairs. They held information sessions and met with grant recipients and faculty at over 20 schools.

And we will have our recruitment campaign materials on display at the Innovation Expo tomorrow for all to see, along with some other human capital initiatives that we're very proud of.

And to fill the program, we're focusing on nine competitive placement authorities, such as grant recipients, our co-ops who are graduating, veterans, and students with disabilities. And we created a team of managers from across the Agency to conduct interviews, and are making selections utilizing insights gained from our strategic workforce planning

1 process.

And through use of these teams -- we're calling them tiger teams -- we're able to extend offers four to five months earlier than in prior years. And we expect all offers will be made within the next few weeks. And doing so ensures that we are able to recruit top talent in this very competitive market.

We'll be leveraging affinity groups to engage selectees in activities before they come on board. And we plan to host an invitational event during the Regulatory Information Conference in March to introduce them to the NRC and strengthen their connection before they start in June.

We're also using the same approach to accelerate our summer student selections. We're planning to begin to extend offers by the end of November, again, many months ahead of prior years. And we expect to have a robust summer program. We've received over 500 applications for our summer students. And we're expecting to bring on between 75 to 90 interns. And that also includes the summer interns that are coming back from last summer.

And, additionally, we have expanded use of direct hire authorities, which can help us more quickly address critical workforce gaps, particularly at the mid-career level.

And, in sum, all of these efforts will support our employees in their journeys and will help feed the pipeline of future risk-informed regulators.

1	And with that, I'll turn it over to John.
2	MR. LUBINSKI: Thank you, Jennifer.
3	Good morning, Chairman, Commissioners. Very happy to
4	be here this morning to talk about accepting risk in decision making. I am
5	one of the co-sponsors, along with Darrell Roberts and Ben Ficks. We benefit
6	very much from having a diverse team from the standpoint of someone from
7	a program office, someone from a region, and someone representing the
8	corporate side.
9	We're also very fortunate to have such a strong team, which
10	is led by Mirela Gavrilas out of NRR.
11	From our standpoint, we look at us as co-sponsors as
12	helping to guide the team. The team is put together, they're doing the work,
13	they're actually owning the initiative. And we're very happy to see that they've
14	kicked off to such a great start.
15	If I can go to slide 2.
16	I really loved seeing the participation during the Jam in June.
17	During the Jam we have a topic on risk informing, and that was led by Ho Nieh
18	doing a chat on that. We received a lot of great insights. And the team is
19	looking at those insights while developing the charter for our group, as well as
20	the activities we will perform under this effort.
21	We could have included so many great quotes on this slide,
22	but we, for space, we've only included two. And these two very much
23	resonated with me.

1	When we consider we do consider risk, either consciously
2	or subconsciously, every day in every decision we make. These decisions
3	include whether to cross the street against the light because you're running
4	late for a meeting, whether to approve a license amendment for a plant design
5	change, or whether you're on vacation and deciding whether you want to go
6	parasail or not. We think about and evaluate the probability and
7	consequence of each of these decisions.

As Michele notes in her quote, the crux of our decision is how much risk are we accepting. Many times we reach different decisions based on our acceptance, our tolerance, or our appetite for risk. This is a key area where our group is focusing.

As noted by Susan, risk acceptance is broader than our safety decision. Risk is considered and accepted in policy, resource, corporate, and legal decisions every day.

Some notes during the Jam that we have many great methods and tools for considering risk. Some folks are becoming confused by so many initiatives and not understanding their relationship. We, as a team, need to capture these initiatives and efforts under an umbrella definition, and have a roadmap that ties in together for the staff.

Next slide, please.

The next three slides describe our charter in the form of a strategy on a page. As I noted, we all consider and accept risk. However, we believe that varied, different, and inconsistent all describe our current state

1 of use and acceptance of risk.

For instance, we have successfully used enterprise risk management, or ERM, over the past two years in addressing a full spectrum of risk across a variety of programs. In the corporate area, for instance, we've applied this to our efforts to increase transparency and accuracy around our fee revenue activities, and in maintaining IT service quality during transition to a new contract.

We are still in the developmental stages in our efforts to further risk inform our reactor licensing and oversight activities. There are a number of initiatives under way, including risk-informed changes to the ROP process, as outlined in the ROP Enhancement Paper, and a new low safety significant issue resolution process that is under development in NRR with senior sponsorship from Region III.

Similar efforts are occurring in the nuclear materials arena, including developing smarter licensing and inspection programs for fuel facilities.

While none of the current applications of risk are wrong, or one is not necessarily better than the other, we do have different and unique tools. Also, we have different levels of acceptance or tolerance for risk. These differences can lead to misunderstanding and ineffective or inefficient application and acceptance of risk.

Next slide.

So, what is our desired outcome? It is that everyone is

1	aligned with being a modern, risk-informed regulator, that we all have a
2	common understanding of risk and acceptance of risk, and that everyone
3	accepts risk in every decision every day.

4 Next slide.

So, how do we get there? We are not reinventing the wheel. We will develop common language using existing information, guidance, and policies as the starting point. We will identify all the communications, tools, and initiatives we currently have, current barriers to the acceptance of risk, any gaps in guidance and tools, and best practices, both internal and external.

Finally, we will develop a roadmap that highlights the connection between all of our efforts, and we will link this information together for ease of understanding and use.

Next slide.

As I said, we are not reinventing the wheel. Organizations have been successful at transformations in the past -- organizations that have been successful at transformation in the past have freed up resources to be used in these important areas, with the National Transportation Safety Board and the Department of Veteran Affairs who shared their experiences with the entire senior management team here at headquarters last week being great examples.

This is a graphic from the Committee of Sponsoring

Organizations of the Treadway Commission. As you can see, the words and

1	comments are the same developing similar to what we are doing here at the
2	NRC, particularly as it relates to NRC's enterprise risk management, or ERM.
3	OMB required agencies to implement ERM starting in 2017. At NRC, we
4	leveraged the quarterly performance review process to discuss agency-wide
5	risk holistically to identify, characterize, and control the risk. We will evaluate
6	this information and developing and improving our own tools.
7	Next slide, please.
8	The risk triplet resonates with us as a team. It asks what
9	can happen, how likely is it, and what are the consequences? It's plain
10	language and is used in all types of decision making.
11	Overlaid is the question: Given my options and the risk
12	associated with each, how much risk am I willing to accept?
13	Next slide.
14	On the topic of accepting risk, which is part of our initiative's
15	title, it's important to note that accepting risk means that we are strengthening,
16	not weakening, our oversight. It means that we are focusing our resources
17	on the most important issues to our safety and security mission, and applying
18	fewer resources to the less important ones as we continue to risk inform our
19	programs and ourselves.
20	Next slide.
21	As one example of how we are moving forward, the staff is
22	currently performing an assessment to identify opportunities to enhance the
23	rulemaking process. So far, we have conducted benchmarking of four

- agencies, and have interviewed 15 internal stakeholders.
- We are taking a hard look at why we do our activities the
- way we've been doing them. We are assessing the risk or consequences to
- 4 NRC changing, then considering whether we could accept that risk or put in
- 5 place controls to manage or mitigate those risks. While we are continuing
- 6 our assessment we are already implementing process changes.

With regards to regulatory bases, we are already implementing changes. The staff has historically developed a draft and final reg basis before developing a proposed rule. For rulemakings that involve development of a regulatory basis, the staff will issue a regulatory basis document for public comment. And instead of issuing a draft for public comment and then a final, the development of the final reg basis was

This change is expected to save at least three months of overall rulemaking schedule, and the staff will continue to benefit from the comments it receives on the reg basis which will be considered in the proposed rule.

somewhat duplicative to the development of the proposed rule.

For some straightforward rulemakings, such as some direct final rules, the staff will now recommend to the Commission that no regulatory basis be developed.

The concurrence process also presents opportunities to achieve efficiencies with the acceptance of some modest risk. Some ideas that are being explored are streamlining the process by having concurrence

- alignment meetings which would facilitate getting multiple concurrences from
- the right managers in an efficient way, and paperless concurrence, which
- 3 we're already in the process of piloting.
- 4 Early in the rulemaking process the staff is developing a
- 5 rigorous regulatory analysis that is risk-informed.
- Thanks to the regulatory analysis, the staff has identified
- 7 several rules that may not be justified and have been recommended for
- 8 discontinuation early in the process. The staff also looks into less costly ways
- 9 on achieving the desired outcome.
- For example, the staff recently submitted two papers to the
- 11 Commission recommending discontinuation of the independent spent fuel
- storage installation security requirements, and enhanced security of special
- materials rulemakings. The staff's rationale for these rulemakings is similar
- to what was presented for discontinuation of the access authorization and
- fitness for duty determinations rulemakings, which was discontinued in August
- 16 of 2019.
- 17 There are a few areas -- these are a few areas where we
- have moved forward. And as this initiative further takes hold, we will identify
- 19 others.
- This concludes my remarks. And I will now turn the
- 21 presentation to Dave Nelson.
- MR. NELSON: Thank you, John. Good morning,
- 23 Chairman Svinicki and Commissioners. As the agency's Chief Information

1 Technology and Data Tools and Governance Officer, I am -- and a member of

the executive steering committee on all the transformation, I am pleased to be

3 here this morning to talk to you about how IT modernization and leveraging

our data will support the transformation efforts of the Agency. Next slide,

**please**.

The Jam also exceeded my expectations as well. As a strategic partner to our offices and as a service organization as well, I felt we were close enough to staff to really understand the demand for the intuitive technology to support collaboration and new ways of working. Some of the planning and design for these tools was already underway and -- but it was exhilarating to lead the actual conversation around technology and to hear all the candid reviews and detailed information about how those experiences were occurring out in our organization.

The feedback did help us prioritize some of the work that we're doing and the capabilities and services that we plan to launch to support the agency. But it also, as Greg mentioned, helped us resolve some of the technical and process barriers that were already identified and were out there -- and easily addressed, once we really have the detail information about them.

One of the emerging themes that came out of the Jam was the need for support in technology adoption and how we would really drive the adoption of the tools that we have today, and the tools of the future. From that, one of the initiatives led by Rob Lewis as the executive sponsor, and Bob

- 1 Randall and my organization are helping to put the team together to really
- 2 address that particular initiative. Next slide, please.

So I am here today to -- over the course of this presentation,
I would like to provide a few examples of how technology helps us work
smarter and how it will help us develop the twenty-first century knowledge
workers that the Agency needs for transformation. I am also going to talk a
bit about data analytics and how it will improve our decision making and

opportunities to enable process simplification. Next slide, please.

To support transformation and our safety mission, OCIO has six priorities that are part of our IT/IM Strategic Plan. Leading those are customer experience, really improving the customer experience. Designing our products and platforms around how they're to be used and how we can actually put those in place to be the most productive for our employees. Also, IT and network modernization, cyber security and always improving our cyber security posture and making sure that we're prepared for the adversaries as their improving their skills as well. Data analytics to promote data-driven decisions. Business process simplification and modernization of end-user tools and systems. Those are our six priorities. Next slide, please.

So I would now like to talk to you and provide several examples of some of the IT modernization efforts. The first, the NRC actually relies on a tremendous amount of legacy documents to support regulatory missions. The nuclear documents system actually includes 42 million images on microfiche and paper that we are now currently in the process of digitizing

for our regulators. Those are inclusive of safety analysis reports, technical specifications, environmental reports and a number of other types of

3 documents that help us with our decision making.

We're leveraging advanced tools such as computer visioning, machine learning, digital scanning and extracting and organizing and loading that information into the Agency's record repository. It is now — we have hundreds of thousands of records that are now available for our regulators to actually access electronically through search. Next I'd like — one of the emerging themes that also came out of the Jam was the staff interest in technology to support collaboration and productive work activities. Since the Jam, we have upgraded that Agency's network to support secure wireless throughout the campus. We are currently in the process of testing a pilot on two floors in one of the headquarter campus buildings. And soon we'll be rolling out the wifi capabilities in allowing our employees to work in a much more mobile way across all of the campuses, including the regions.

Another theme was the conference rooms -- we've heard from staff throughout the Jam, and even before the Jam, that new tools were needed to support collaboration with external and internal stakeholders that were working together in these collaborative spaces. We're currently testing and have plans for rolling out in a very aggressive manner new technology that will allow a very simple connection to Skype in our productivity tools in the conference rooms. And it will be intuitive and easy to use and standard across -- again, across all of the campuses of NRC.

And then most importantly, the visualization techniques and technologies, updated analytics, help us disclose perspectives that haven't been available in the past, and extract new insights to support our decision

making.

I'd like to give you three examples of some of the data analytics work that's being done within the agency. First, in 2016, one group in NRR, the Plant Operating Experience Group, introduced a test and analysis, OpE Data Analysis Tool that was developed to crawl through information both internally and externally and make that available data displayed in easy interpretations to help our oversight program really make risk-based decisions.

Secondly, earlier this month OCHCO launched a portal which actually provides a clear lens into data that supports the agency's succession planning and critical gap analysis. This will allow us to make preemptive decisions versus reactive decisions in the area of strategic workforce planning. It's an exciting tool that is being piloted in several of the offices now, but has generated a lot of excitement through the managers that have actually been able to see this and drive insights.

And then finally I'd like to talk to you about our mission application portal, which provides accessible data to support NRC workload planning and analysis, budget estimation and execution. This was kicked off with the Office of 18F, which is part of the General Services Administration. If you recall, one of the speakers in the March Transformation public meeting

was Bethany Blakey, also from GSA. The GSA is currently helping and

2 partnering with agencies to deliver digital services and designers, engineers,

3 product managers and strategists to help with twenty-first century techniques

4 for development.

Throughout this kickoff they helped us with a discovery session and then helped us through a whole acquisition process to bring on a new type of designer and developer that will work with new twenty-first century concepts such as human-centered design and agile development techniques. But while these requirements in the -- were being assembled through discovery, an innovative team within OCIO and within NRR went through a process to see how they could develop, using these techniques, a dashboard for seeing how things were progressing at Vogtle's 3 and 4 units. We'd like to demo a working prototype a working prototype of that dashboard today with real-time licensing program insights. Taylor Lamb will be demo-ing this for us. She's from NRR and she's been instrumental in guiding this team through prioritizing user needs to optimize value through dozens of iterations. So,

MS. LAMB: Okay, thank you, Dave. Good morning Chairman Svinicki and Commissioners. I am really excited to be here today to show you this dashboard because this really a true transformational effort that we have at the agency. As Dave said, I've been working with a team in OCIO to develop a dashboard as a one-stop shop for Vogtle construction activities.

1	If you could pull that slide back up that was on there before.
2	So, back in July Ho Nieh ended up presenting this image to us as an idea for
3	the first step of the dashboard. And this project actually falls within Embark -
4	- which, I can see Commissioner Caputo, you're wearing an Embark pin over
5	there, so, hooray.
6	(Laughter.)
7	MS. LAMB: So the keys to this dashboard we really
8	wanted to present the key areas of success, which are ITAAC, licensing and
9	inspection. So what we really wanted was to have a simple, clearer and
10	easily accessible tool for the staff to go to see the entire project's status. And
11	display that information to a variety of stakeholders. So -I'm going to go into
12	a demo.
13	(Pause.)
14	MS. LAMB: And if you could share this screen, that would
15	be great. Here we go. All right. So this is the dashboard that was
16	developed from that image that you just saw. So this will be used to develop
17	reports, streamline executive briefings and it will inform decision making.
18	So, as you can see on the dashboard, the information on
19	the three key areas for success ITAAC, licensing, and inspection are
20	displayed there as well as information on public meetings, Vogtle construction
21	news, and some of the top focus areas for risks for this project. But for the
22	purposes of this demonstration, I'd like to discuss all direct inspection hours,

which are right under the cursor over here.

1	So, traditionally, we would manually gather that data and it
2	would take weeks to put this together for the annual Commission reactor
3	oversight process self-assessment that we would send up to you. But now,
4	this information is fully automated. So it updates on a daily basis. You can
5	go to this at any point and see what the current status is. And it actually
6	includes a projection based on current resources expended. So with that, if
7	you're also interested in just seeing the information for one unit, you can just
8	click in the top left over here. And now you can see the information for Vogtle
9	Unit 3 which is number one in line. Go back. So I am proud to share that
10	this was actually accomplished in just under ten weeks using solely internal
11	resources. So I thank the OCIO team for diligently working on this effort.
12	Thank you, guys.
13	And so in the coming months we will be working on
14	enhanced functionality to make it more predictive, to highlight if we're on target
15	with our planned burn-off for ITAAC and inspections and ITAAC closure
16	notifications. And it will also be accessible via mobile devices, which you can
17	see here. So, have it on the phone. And I look forward to continuing to work
18	with the OCIO and MAP teams on this project. So, back to you, Dave.
19	MR. NELSON: Taylor, that was great. Thank you. That
20	last iteration on the phone was just done yesterday, by the way, so
21	(Laughter.)
22	MR. NELSON: All right, next slide please. I would like to
23	say a few words about the future as well. I think it's important that OCIO and

our partner offices continue to search for innovative ways to implement and

2 support future efforts. The fast paced advances require NRC to keep abreast

of all these latest tools and methodologies that are being applied throughout

our industry and other industries. So we can really understand how they can

5 be used within our work and regulatory work.

Earlier this year, the Nuclear Regulatory Research Office and all the partner offices developed a plan which positions us to better understand and evaluate -- and take advantage of some of these advanced tools, such as artificial intelligence. There's several tactical activities that are proposed and are being implemented within that plan over the next three years to truly understand and take advantage of these new tools and our regulatory activities. Next slide, final slide, please.

Okay, so how do we marry these disparate activities and focus on transformation? Again, I'd like to bring it back to those priorities within my office, which is to support and to really push forward the customer experience and understand how the products are being used -- make sure that our networks and our IT infrastructure have been modernized and are ready to support these tools as well. Cyber security and protecting our data, data analytics to promote data-driven decisions, business process simplification, working with all of our offices in automate those processes and modernizing our end-user tools and systems for the twenty-first century workers. So with that, I'd like to turn it over to Maureen. Thank you.

MS. WYLIE: Thank you very much, Dave. Chairman

Svinicki, Commissioners -- I really appreciate the chance to talk to you about the innovation and change that we've seen within the budget and financial management communities over the last several years. The changes that I am going to talk to you about today extend into the work lives of every employee in the agency and will serve as the baseline for transformational change. It will allow scaling of projects, like the mission analytics portal or dashboards like the Vogtle dashboard, across our program offices because they'll be consistent and available financial management data for every part of our business.

That's been possible in large part due to the wonderful people in the Office of the Chief Financial Officer, and our partner offices like OCIO, NRR, NMSS and the other offices. So it's really been a combined effort because, as you'll see on the next slide -- go to that slide, please -- it's not a single financial system. It's actually a system of systems and it's extremely complex. Or, it can hurt your brain if you're not careful. It's very complicated. But these systems are the bones of our processes. And the data that these systems and processes produce -- there's an analogy to the blood in our bloodstream.

From my perspective, FAIMIS, which if our financial management -- our core financial system, is the beating heart of that system.

All of these systems are necessary for every part of our daily business. And part of the complexity is that we as an agency do not control either all of the requirements for the systems, or many of the systems themselves.

So, going to the chart again, for example, those cans that
are in red this is an architecture diagram of the system of systems are all
owned by the Department of Treasury or by GSA. These are systems that I
must use, I must be able to interface to for basic things like financial reporting
or acquisitions, as an example. So even though we have STAQS, the grey
can, we still have to go through SAM and IPP in order to execute those
activities.

So these systems are designed to facilitate our internal activity and to interface with the outside world. It also requires that the blue cans, which are those that are owned by my organization, interface with systems that are owned by other federal agencies. OCHCO gets their data and some of their process activities from FPSS -- and all of these acronyms are in your glossary at the end. The New Talent Management System comes from OPM. It provides us with critical data. The Reactor Program System, or its new incarnation, Replacement -- RPS, needs a new name in my opinion -- is one of those integral processes to provide management information, but also provides information to me about cost that then is made available to our licensees. WBL, GL -- those things are necessary for interaction with our materials licensees. And then you all love GSA's travel system.

20 (Laughter.)

MS. WYLIE: I don't -- we don't get a choice about being able to use that, but it also provides critical management information. We've made a lot of changes in the last few years because changes to systems allow

you to re-engineer your processes, increase standardization and integration 2 of business processes. And then improve the controls around them because

1

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

3 at some point it's work, but eventually it becomes money. And then once

4 those two items are interrelated, you have to have strong controls around that.

As Mike Wetklow, the deputy chief financial officer at NSF, pointed out at your last transformation meeting, financial management systems in the federal government are based on requirements for auditability and control as articulated in the Chief Financial Officer's Act of 1990. Across the federal government and with GAO we're engaged in trying to modernize that act. And as a part of that, we've recognized that data -- for data analytics -- may be as important, or even in some cases more important than that auditability control environment. Not getting all the traction we'd like from some of our friends in the audit community. But across the federal government, we know that managers and leaders need information that we have available and our challenge is to get it out. So I've given you a tour of our environment. I'd like to go back to the slide just for a moment to talk about some of the changes we've made to FAIMIS.

FAIMIS is a Momentum product. It's a government-wide It's owned by CGI. They've been our partner since software. implementation in 2011. We have made substantial changes to the system over the last several years. It's about five times faster than it was when we implemented it in 2011. It's in a private cloud which gives us a great deal of speed. It gives us efficiency. And it also gives us an opportunity to get

- 1 updates done faster and cheaper. The reason we have to do updates is
- 2 many times not for things that we want, but because the Department of
- 3 Treasury drives a lot of our requirements.
- 4 So as the Treasury modernizes its approach to financial
- 5 management, they pull us along. So particularly in the cost arena, we get
- 6 significant benefits there. It is the source of authoritative data. Even though
- 7 we have systems that have other parts of our financial processes, essentially,
- 8 if you ain't in FAIMIS, you ain't. Then it is the core of the reality of
- 9 implementation of spending money in the agency.
- 10 We have also gone into the shared service environment.
- And we in fact have Department of Treasury employees operating in our
- system. They're in the Administrative Resource Center in Parkersburg, West
- 13 Virginia. We were able to make almost 25-percent savings in how we
- 14 implemented those transactional processes by going there. We're their first
- 15 Momentum customer. And now that they've been designated the quality
- service management organization for finance for the federal government,
- they'll be taking on more Momentum customers and finding savings for other
- 18 federal agencies as well. Next slide, please.
- 19 So I'm really excited about the opportunity to talk about the
- 20 budget formulation system and to highlight some of the challenges that we've
- 21 had in that area as well. So OMB, as you might be aware, is bifurcated into
- 22 two areas. Management, which is where Financial Management
- 23 Procurement sits, and budget, which controls the budget execution process.

- Our processes are governed by Appendix A, 1100-page sleeper about how
- we would in fact do the detailed business of financial management in budget
- 3 arena.

- The two segments do match, but OMB has different requirements. BFS is an Oracle Financials product. It is the best system available to do budget-type activities. It's based on an old Hyperion product that Oracle bought and substantially improved. And we've used it to centralize budget formulation as a part of the TABS initiative, integrate and standardize how we actually do formulation in our business lines. It's been flexible enough for us to adapt to use for the new data requirements in NEIMA. And it is in fact the policy implementation of resources in our agency.
  - When you, as a Commission, make decisions, those decisions are held within BFS. The most exciting and newest part of BFS is the commitment planning module. This is the place where we're able to start from financial -- from budget formulation, and yet do all the parts of budget execution within a single system. Budget execution is very difficult to automate because it's done differently in almost every federal agency because it's driven by organizations and allowance holders. So for the first time, we'll have not only the contract execution data and spend plan, which you can see on the chart, but we'll also have that planning by allowance holders -- will allow us to do acquisition planning and to forecast through the fiscal year what we'll actually need and when we'll actually be able to obligate it.

So for the first time, instead of just being able to tell you, well

this is what we've spent to date, we'll be able to give you a fuller picture

2 because we'll be able to say, here's what we've spent to date, here's our plan

3 for what we need spent throughout the end of the year, and the added benefit

is that Dave gets to have full control over how we handle IT spending as well.

We also do support to our friends in OCHCO in the staffing module. That's the management of funded positions. We're getting ready to field that across the agency. And that will be very helpful to managers who actually have to do that staffing plan management year over year. So if you go to the next slide, these systems allow you to have little dashboards or infolets. These are items that allow you to see if you're a contracting officer's representative, or if you're an executive trying to manage your staffing plan. It's going to allow you to see very quickly in a one-stop shopping way where you are and where you need to go. Next slide.

So now to my favorite part. When we talk about fees transformation, there is often a focus on the sort of surface things -- and I am going to show you some of those things. But the big changes that we've made around fees transformation have really been in the systems that govern our work and govern time and attendance. Inherent to the Part 170 billing process is the ability to have transparency for licensees so they will know what they're paying for and how much of it that we've actually charged them for. We had to create sources for authoritative data outside of RPS because as RPS was evolving, some of those data elements were being left behind.

And our previous process had significant deficiencies in

1 terms of how those elements were concerned. How dockets were made -- a

2 nice lady with a book would write down your new docket if a new docket was

3 required. So not even basically automated. We didn't have any way to

4 control those items. Now Dave has a system, EDMS. That controls that for

5 all users of dockets. So, nice to have, not in a book. Easier to see.

into HRMS, where people do their time.

TACs, in RPS and that's how work was being assigned. We had 15,000 of those. Anybody could make one and that's sort of the antithesis of a control environment from financial management. So now we have tightly controlled cost activity codes that my staff is accountable for, and that we centrally control through the cost activity codes system, or CACS. Those things lead

Well, it's still more complicated than it needs to be. We heard loud and clear from inspectors during the Jam that they have some of the most complex time cards ever invented because we currently collect both procedure, as a Enterprise Project Code, or an EPID, and activity. So if you're walking through a plant and you touch on 12 procedures and five chapters, you've got 190 CACS that you need to be accountable for. So we are working very expeditiously with our partners in NRR and other parts of the agency to try to get a hold of that coding. What's the magic minimum that allows us to have transparency to licensees, management information and break to those folks? But the EPID is a powerful data element that we have yet to fully exploit.

It started when our folks in the Research Office said I need a better way to track projects -- thank you, ma'am. Where we recognized that we needed to have a code that would have some more flexibility than those just for financial management. I don't have to control them so tightly. But as we've implemented those codes using CACS over the last couple of years, Dave and I have determined that there's still opportunities to go. So I am very excited about the authoritative data and the controls that we have in this area. I am going to go quickly through the last couple of slides. All this new data, all these controls allowed us to go to an enhanced invoice. This is, to me, the inherent transparency of the fees process. transparency allowed us to gain trust with our licensees about reducing billing errors. And it allowed us to go to -- next slide -- to electronic billing. So not only now will we have better information and transparency with them, but they'll have the ability to download their own data and do their own data analytics in a way that they haven't been able to do before. We currently have 14 licensees, up from 9. We issued \$23 million in electronic bills this month. It's very exciting. Next slide. So there's more to come. The next CFO is going to have a lot of opportunity to excel here. We have been implementing robotic process automation within the accounting system to get rid of days of work that it would require us to do to close the year. We're using, as a test project, Tableau, to

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

do things like the budget execution report, which we've been transforming this year, because we want to have a thousand flowers blooming. We want to

1	have as much innovation and change as we can. We're also we have an
2	RFI out now to get a new look at our fee billing engine to see if there are ways
3	that we can do that better and faster. And then coming up we appreciate the
4	support that we've had from the Commission to add acquisition and simplify
5	our interface process. Thank you very much, and now I'll turn it over to Amy.
6	CHAIRMAN SVINICKI: Thank you. And just before Amy
7	goes, I've seen some real-time supervision happening at the table, and we're
8	running a little behind. But Amy and Jonathan, I really do want to hear I
9	want to hear what you're going to talk about today. I think it's really important.
10	So if necessary, to my colleagues, I will yield some of my Q&A time. I want
11	to hear what you have to say. Thank you.
12	MS. D'AGOSTINO: Thank you, Chairman. I appreciate
13	that.
14	Thanks, Maureen.
15	Good morning, Chairman Svinicki and Commissioners. I'm
16	Amy D'Agostino. I am the Innovation Initiative lead under the Transformation
17	efforts, and Jon Greives is with me today. Both Jon and I are excited to be
18	here today to talk to you about innovation. Next slide, please.
19	I wanted to start with a quote from the Jam that I think really
20	captures what we're trying to accomplish through our Innovation Initiative.
21	We want to capture and share successful innovation. We also want to reward
22	and recognize innovative mindset and behaviors, and we want to learn from
23	our successes and failures and continue to evolve our approach to innovation.

1 Next slide, please.

Innovation is one of the four Transformation focus areas as our EDO mentioned and that's because it helps enable all of the other focus areas. To achieve our vision of being a modern risk-informed regulator, we have to find new and better ways to work and we can only do that through innovation. But innovation is impossible if we don't have a culture that not only supports but encourages, and in fact expects our people to find better ways to do their work while maintaining the highest safety standard. Next slide, please.

We are on an innovation journey at the NRC. Our first formal innovation program was created in 2017. However, as you can see from all of the wonderful presentations today, we've been innovating for many years in many ways.

Today, Jon and I will focus on the formal innovation program because this program is a great example of how we are applying lessons learned and best practices to find better ways of doing business. Jon's going to take over in just a minute and explain the journey of an innovative idea in the first version of this program, and then I'll follow with a discussion of how our efforts over the last year will improve the next version of the program.

MR. GREIVES: Thanks, Amy.

Good morning, Chairman and Commissioners. My name is Jon Greives and I've been involved in InnovateNRC 1.0 and Region I's innovation greenhouse since their inception. I'm also currently a team

1 member on both the career enhancement and signposts and markers
2 transformation initiative teams.

To best describe how InnovateNRC 1.0 worked, I think I'll share the journey of an idea that -- a recent idea. Over the summer, a Region I staff member questioned the way that we share recent findings, observations and inspector best practices through a weekly effort we call knowledge transfer or KT. And, specifically, he noted that each region, you know, implements their own version of KT independently and occasionally brings in other regions as appropriate, and had the idea that we could develop a more integrated approach to share these lessons learned across all regions.

We already use Skype to allow our, to enable our resident inspectors to participate, and he figured that if we broadened this approach so that all four regions participate, we could save resources, share these lessons more broadly and maybe even become more consistent across the regions.

He submitted his idea to the Region I innovation greenhouse and in short order the Region I innovation panel had reviewed his idea, assessed its value and determined it needed to be submitted to the Agency Innovation Forum, or AIF, because it affected multiple offices. However, that submission didn't occur. Right about that same time, an SES CDP group was looking for pilot projects for the skills marketplace and the Region I innovation greenhouse or panel thought that it might be a good fit.

This is one of the ideas the Jennifer had mentioned previously. Had the idea of taking the normal innovation approach, within 30

- days the AIF would have assigned an idea champion to evaluate the idea
- 2 based on its merits, and within 90 days the AIF would have voted on the idea
- and whether to present the idea to management with a recommendation for
- 4 implementation.

At that point, implementation would have been up to senior agency leadership based on current resource constraints and, you know, alignment with the broader agency direction. The skills marketplace path took less time in this case and allowed us to align resources, to gather resources directly from across the agency.

While the skills marketplace path can be faster, provide a faster route to implementation, there are some downfalls for some ideas. For example, there's no opportunity to bring in a variety of viewpoints to maybe make the idea better or find an optimal solution. In addition, going direct implementation for ideas that affect multiple offices can also result in a lack of alignment. While the original path can take longer and path implementation may be a little less clear, it does ensure that we provide an opportunity to gather multiple viewpoints and opportunities for alignment along the way.

I'll pass it back now to Amy, and she can discuss how we might address an idea like this under our new program in the future in a way that allows for a diversity of thought, seeks the best solution as well as quickly aligns to our implementation process. Next slide, please.

MS. D'AGOSTINO: Thanks, Jon. The first version of our innovation program really helped us build our innovation muscle. However,

- our experience over the last few years has really taught us that there is room for improvement.
- Over the past year, we've invested time and resources to
  gather lessons learned through an internal assessment of our innovation
  program and we also held our first InnovateNRC workshop on September
  30th. We've also done extensive external benchmarking with other federal
  agencies to identify best practices.

We've collaborated with agencies such as NASA, the Jet Propulsion Lab, OPM and DHS, just to name a few. Based on our findings, there are four major elements we will modify in InnovateNRC 2.0. We will diversify our approach to innovation. We will not just be using a suggestion box to submit new ideas, we're also going to use a more targeted approach to innovation. Specifically, we will innovate around problem statements or challenges and crowdsource our staff for solutions.

We're also going to capture and communicate what we're already doing in our home organizations. As you can see today, we have a lot of that going on. And we're going to capture those things at a central location so that we can all see it, we can celebrate all the innovation that is happening, we can avoid duplication of effort and we can integrate and streamline approaches to our work.

When ideas do come in as a suggestion, if they are aligned with our vision and well-developed, we're going to fast track them and have clear paths to implementation such as the skills marketplace, but we are also going to say no to things that aren't well-

developed and that don't get us closer to our vision. We're

2 also going to ensure, recognizing and rewarding innovation as a priority. I

3 know you are interested in that. In line with our leadership model, we want

to consistently reward the behaviors that we want to see. And, finally, we're

5 going to use technology to work smarter. We've recently procured and

onboarded a technology platform called IdeaScale, with the help of our folks

7 in OCIO. Next slide, please.

With this platform, if we refer back to Jon's example, the Region I KT training process could be captured in a success gallery, facilitating awareness and perhaps even adoption and integration by other regions. Another way that we could address Jon's example in this future innovation program is by posting a challenge that asks how can we develop a more integrated approach to KT across all regions. The challenge might result in several possible solutions, then we can use the best idea or combination of ideas to be implemented. A challenge approach helps us promote participative decision making. It allows us to consider a variety of perspectives and ultimately allows us to choose the most appropriate solution. InnovateNRC 2.0 and IdeaScale platform provide a modern and efficient means to empower and enable our staff to find better ways to work.

In closing, I believe that when our first thought is how can I do this better, when we are excited to share our innovations and when we get recognized and rewarded by our leaders for an innovative mindset and behaviors and when innovation is part of our daily job, I believe then we will

- 1 know that we have realized our vision.
- 2 Thank you for your time today. And I'll also hand it back to
- 3 Margie.
- 4 MS. DOANE: Okay. I'm going to also yield some of my
- 5 time that I had for the conclusion and I'll take any questions and answer,
- 6 hopefully address any issues that I haven't covered that I thought I might sum
- 7 up in the conclusion when I get your questions, because I'm trying to move us
- 8 along but I do want to do a couple things.
- 9 The first is, I want to make sure that I tell you about a piece
- of art that we have that has been created. It's outside. Is it up in this room?
- Oh, no. It's up here. Great. It's back there. It's back in the room. We
- had, as Jon mentioned, we had a two-day workshop. This was the first time
- that we had ever done this.
- 14 We brought all of our executives here, even from the
- regions, and we could see how many of us were working together on
- Transformation, and we also committed to moving our Transformation efforts
- and we signed a document where we all committed to that and I don't think
- 18 that's in here.
- 19 At the same time, when we were going through this
- conversation, this is something that we had seen at an expo, an innovation
- 21 expo, a much grander innovation expo. We had seen how artwork could be
- produced at the time that you were coming up with the various proposals that
- you were going to embark on and that the artwork would capture what had

- come out of those conversations through art as well as we were capturing
  them in writing as well.

  And so this is the piece of art that we came up with that
- shows all of the different things that we had discussed, the themes, the initiatives and the commitments that we made. And it's really beautiful, and this was done real-time by two of our staff, Alicia Bone and Marcos -- somebody help me out here. Thank you. Rolon.
- Okay. So, sorry about that. I didn't have that written down. But anyway, it is very beautiful and we were all incredibly impressed.

  So that's just a way that we're really stretching our minds. That's the first thing.
  - The second thing is, we're going to have an expo tomorrow, and we've put out the ask for how many people want to show their ideas. You saw Taylor Lamb, you see Jonathan Greives where we have some things going on, and we have well over, I believe it's over 25 now, different ideas that are going to be the subject of this expo tomorrow and they're going to be doing real-time demonstrations for the staff.
  - So that was incredible, so I -- that's why I want everybody to see the progress that we're making on Transformation. It really is extraordinary. And, last, we'd like to show a video that just sums everything up for us.
- 22 (Video played.)

MS. DOANE: We're ready for your questions. We look

- 1 forward to them.
- 2 CHAIRMAN SVINICKI: Okay. Well, thank you all so
- 3 much. That was wonderful and you've left us a lot of terrain here to cover.
- 4 We will begin questions with Commissioner Wright.
- 5 COMMISSIONER WRIGHT: Good morning. So this has
- 6 been very informative. You've done a great job of setting the tone. I like the,
- 7 I really like the enthusiasm I see, Taylor, Greg and Amy and Jonathan. You
- 8 know, I can feel it and it's kind of contagious and that's a good thing. It's also
- 9 heartening to see that these first seven initiatives were developed from the
- 10 feedback that staff provided in the Jam.
- And that was my first Jam as well. You know, I've never
- experienced anything quite like that and it kind of grew on you as the days
- went. So, and I agree with you, Greg, that if you left for a while you had to
- dig your way through to get back, so.
- And, Margie, I'm going to start with you obviously, so I do
- applaud each of you for your communication today on Transformation. And,
- 17 Margie, your last three EDO updates have been helpful as well in providing a
- vision and an explanation of how we're going to know when we get there.
- 19 You know, your statement about being enablers of
- 20 enhancement to safety kind of resonates with me as well. I look at
- 21 Transformation as an opportunity to improve how we meet our vital safety
- mission. I think we should be looking at ways to do things in a new way and
- leverage technology, experience, data and innovation.

1	I was also pleased to hear about the all-SES meeting you
2	had with senior management because I do believe communication is really
3	going to be key to this. I think obviously face-to-face meetings are critical. I
4	really believe in them, especially, you know, with the senior leaders, so that
5	then you can infiltrate it down to everybody. So thank you for your efforts to
6	making this happen.
_	Company having a said that Mannia company talls to use a little

So now having said that, Margie, can you talk to me a little bit about how you're ensuring that communications are reaching the staff and that they're buying in to Transformation?

MS. DOANE: So we're using various ways to communicate. One thing is making sure that we're communicating well to our senior leaders, because our senior leaders touch all of those organizations, of course, but we have to do more.

We need to make sure that now we've talked to the senior leaders about the themes and the seven initiatives. We have to then make sure that we touch all of the branch chiefs, that we communicate with the branch chiefs as well, and then that we hear from the staff on how to implement these seven initiatives.

And so the teams, so the next effort that will happen is that the teams themselves will now be reaching out to the various parts of the agency to understand what are we already doing with respect to that initiative, and then what should be the agency actions and then what is being done or should be done at the office level.

And so as we, as the teams formulate this better

1	understanding	we're going to	have a dashboard	I that shows what the	nrogress
L	unucistanung,	we re going to	riave a uasiibbaiu	i iliai silows wilai ilio	progress

- 2 is that we're making on the initiatives, where the work is being done, and to
- 3 the extent that offices or maybe Embark is doing good work in these areas,
- 4 we're going to capture that so that all of the offices can see what's being done.

5 So this is all in progress because the initiative teams have

6 just been stood up and we're going to have milestones so that we can show

the progress and hold ourselves accountable and get feedback from the staff

on whether these initiatives are really moving the needle.

And the feedback that we seek will be through different ways. We can -- I've heard some of the teams talking about focus groups, some are talking about surveys and things like that. So a lot more communication needs to take place and needs to take place in different ways.

COMMISSIONER WRIGHT: Thank you for that.

So we've done quite a few change initiatives over the past decade or more such as Project AIM, we've done Fee Transformation and Enhanced Strategic Workforce Planning, Transformation Futures Assessment and Agency Innovation Forum. And Greg also mentioned there's several other grassroots things going on.

So how do these change initiatives kind of fit together? How are you trying to get that done? How do they fit into the overall vision, if you could explain a little bit more maybe in a little more detail. And then while you're thinking about it and going through that and given how much change has already been going on at the agency, how are you addressing change

- 1 fatigue? You know, how are you going to keep the momentum going?
- MS. DOANE: So it's a tall order. And I get a lot of my
- 3 motivation from reading books of people that have already gone through it by
- 4 seeing that there is a beginning and a middle and in the end is usually you've
- 5 **evolved**.
- 6 So it's never really an end to what the work has to be done
- or the new way that you're doing it, but it's really that you've reached this level
- 8 in the evolution, where like Amy was saying, you're there because people
- 9 know how to, you know, they're looking for ways of working smarter all the
- time and doing their mission better all the time.
- So one thing I've done is recently is I've been talking to
- people who also have gone through change to make sure that I understand
- what did they have to do at the beginning, the middle and the end and make
- sure that we're doing this.
- So, for example, we had Scott Blackburn come in from the
- VA and they were very instrumental. They had set out twelve initiatives. We
- have seven, but they set out twelve initiatives. They didn't carry out all of
- them, but they did the very same thing that we're doing by setting themes,
- coming up with initiatives and gathering their executives together periodically
- to make sure that we are focusing our Transformation efforts going down this
- one path and making sure that we're all staying on board.
- That will help us to address the fatigue, because as we see
- things that really aren't going toward that vision we can reprioritize those.

- 1 Those won't be as important. And that's what we should be doing, ideally,
- but we have a lot more work to do in this area, because like I said we just set
- 3 up these initiatives.
- 4 One of the biggest things that's going to be very important
- 5 to whether we can really make it through this is Commissioner Caputo gave
- 6 me a book called "Measure What Matters" and we've been studying this since
- you gave it to me. I read it like in days. It's a very good book. And it shows
- 8 you how to cascade these measurements through the organization so that
- 9 everybody understands their role in Transformation and what we mean by the
- initiatives that are most important.
- So this is going to be a very important pathway. It needs to
- be transparent, but this is another thing that we're doing. It's a huge effort.
- 13 It's not me, it's really this entire organization, especially all of the executives
- 14 that will have to --
- MS. DOANE: -- really participate in this in getting us all
- aligned in making sure that we don't have initiative fatigue.
- 17 COMMISSIONER WRIGHT: Thank you. And it wouldn't -
- I would be remiss if I did not end with Maureen.
- So, Maureen, you know, this is your last time before us as
- 20 CFO, more than likely, and I'd like to take this time to thank you for your service
- and for your vision. Many of these projects that we're doing wouldn't, it
- wouldn't be possible if it weren't for what your determination and your skill and
- your leadership, so thank you for that.

1	When I started here 18 months ago trying to understand our
2	budget here at the NRC that hurt my brain. So, you know, you've been a
3	great help to me and to my staff and for just trying to help us come up to speed
4	on how the agency does things, why we do it this way and why it matters, and
5	from everything from just the budget to fees and everything like that. So
6	thank you for that and I hope that you enjoy your well-deserved retirement.
7	And, Madam Chairman, she does smile way too much now.
8	MS. WYLIE: Thank you very much, sir. Thank you.
9	COMMISSIONER WRIGHT: So one last question for you.
10	In addition to the four near-term projects that you mentioned, what do you see
11	as the next big financial management issues to tackle and do you have any
12	advice for the next CFO?
13	MS. WYLIE: So thank you very much for asking that. I'm
14	involved at the government-wide level in the financial data transformation
15	executive steering committee and the big challenge is to transcend the
16	compliance requirement. I'm not saying that compliance goes away, but
17	we're actually at a point in my field where the demand for control and
18	auditability has become a risk to innovation.
19	And not all data needs to be controlled as tightly as some
20	does, but our approach has been very one-size-fits-all and very rigid. And
21	that's fair when, you know, we don't want the money to leak out, but as we
22	interact with the audit community with CIGIE and with GAO, it's clear that the
23	problems that the original CFO Act was meant to solve have largely been

1	20	lved.
	50	ıveu.

- There are agencies that have financial problems, still, but 20
  years later we're done, you know, we're mostly done. And so for the next

  CFO it's to continue to look for opportunities to take appropriate accepted risk
  in the environment so that more data can be easily made available for data
  analytics.
- 7 COMMISSIONER WRIGHT: Thank you so much.
- 8 CHAIRMAN SVINICKI: Well, thank you all again. I really
  9 appreciate the presentations.
  - And one of our, among our values here at NRC is inclusion and I appreciate that we were able to have a number of presenters today so that we could have the kind of inclusion and the diversity of involvement in our transition activities, our Transformation activities talked about today.
  - One of the unfortunate realities of doing a meeting like this is as much as we highlighted there's other stuff going on and those folks aren't here today. I hope that if they are in the audience or they are tuning in, they know that we did have to have an orientation for our discussion today.
  - But I certainly know, I know that my colleagues are all aware of a lot of other great initiatives and activities that are going on across the agency that, you know, so stand by, because as I mentioned at the beginning there will be future meetings on our activities. And I hope over the course of time we're going to be able to have at these public Commission meetings the diversity of things that are going on here.

Τ	i snare the interest that Commissioner wright had on, you
2	know, there can be fatigue about large organizations and the way that they
3	evolve over time. Having been here for the entirety of Project AIM, I contrast
4	my experiences with our Transformation work today very strongly with that.
5	That served a purpose and was a very useful kind of look
6	at, a strategic look at activities across the agency and as a result we did find
7	some very low-value things and we did that orientation. But I think
8	what we're embarking on today is a lot more profound and foundational than
9	that. That kind of initiative has its place, but to me this is a very different
10	orientation that we're on right now. And I would hope that the skeptics like
11	Greg and others, you know, would say that this does look and feel quite
12	different from some things that we've tried in the past.
13	I know that, Margie, you have a focus on communication.
14	Also today, I know that this presentation was maybe a little bit SES-heavy or
15	that there's a lot of executive perspective today, and I just want to
16	communicate from me is that's necessary.
17	We've got to have a kind of an architecture in which to bring
18	our activities together to do the kind of measurement that Commissioner
19	Caputo has talked about and that the staff is taking on board to say, you know,
20	how can we be sure that we are making timely progress towards achieving
21	the vision that we want to achieve.
22	But that being said, you know, this, I think the ownership that
23	I feel about Transformation is the people who are doing the work who will

derive almost an immediate benefit from some of these changes when they're
in place. The quality of, you know, their days might improve their efficiency

and getting done the really important parts of the process that they do might

4 fundamentally change.

And so I think they as beneficiaries of this are bringing a tremendous personal investment in what's going on here. And I realize that wasn't maybe the strongest part of the dialogue we had today, but it was intentional because we had the Jam and we needed as a Commission, I think, to put a spotlight on what were the really high-level things that grew out of the Jam and the fact that it does have a correlation through the analytics to what the, you know, tens of thousands of individual comments and remarks that were made in that Jam, so I appreciate it.

I just had one quick question and I do appreciate, Dave, that you talked about greater support here for technology adoption, which we all come at this with our own experiences. But I know here when we do some sort of technology upgrade, I, just as an employee here I get something, it's like, well, when you show up on Monday your workstation is going to look different and you're going to have something. The support is really essential and sometimes I feel like we focused on efficient rollout of things, but then I look at it and say, gosh, this probably has additional functionality some of which might be really useful to me.

But that element when we're all so busy just doing kind of the regular, what did we call it, keep-the-lights-on work, you know, you just go,

- well, I guess I'll read, you know, a little brochure on this later and there's
- 2 probably beneficial things here to my work.
- Can you talk, Dave, a little bit about what we're
- 4 conceptualizing on supporting people actually understanding the benefits of
- 5 these new tools and taking the time to learn them and use them?
- 6 MR. NELSON: Sure. Thank you for that question,
- 7 Chairman.
- 8 I'd like to concentrate on a few things, but also point out that
- 9 our initiative team is putting their plan together. And the design, by intention,
- brought people in from outside of CIO to really provide some of those user
- experience perspectives in what does a good rollout look like.
- So I'm looking forward to hearing, you know, some of the
- new things that we might be able to do. We have brought in new training
- contractors to help us with productivity tools such as Office 365. I know that
- the team is currently working to put together a working group across the
- agency to really find those individuals that are inspired by this kind of new
- technology and working with the new tools and trying them out to help become
- the ambassadors and to teach their offices as well.
- So I think that will be a big help as well, but we need to look
- at new ways of doing that. I think we've had some success with some of our
- technology rollouts. Our recent Windows 10 and laptop rollouts, I think, went
- almost flawlessly. We had a lot of really good feedback.
- And some of the tools we've designed most recently have

2	techniques and really concentrating on that user experience.
3	CHAIRMAN SVINICKI: Well, I appreciate that. I gave
4	some positive feedback. I hope it made its way to you. I was kind of
5	skeptical because I'm so old school I'm like oh, these big CPU towers that,
6	you know, obviously a laptop is going to be slower, I'm going to notice that.
7	And I didn't.
8	And now I am excited when I meet with employee.
9	Sometimes they've taken their laptops so they can show me something or
10	whatever, but the connectivity is the issue because they'll say, oh, this is just
11	a cached, and not ain money, but just it's a stored image of something.
12	And they said, well, when we get the secure wi-fi, Chairman,
13	I'll be able to kind of pull this up and actually show you something, you know,
14	during our discussion. So I know there's a lot of excitement about that.
15	And since we're all innovating and every idea is welcome,
16	I'm going to do a real-time idea right now that I have, which is that training, I
17	think, sometimes is unapproachable when you're busy, and so if you were to
18	say, you know what, you have something new on your workstation today, if
19	you have five minutes, here's a thing. If you have 15 minutes, here's a
20	different thing you could, you know, a little tour you could go through. And
21	then if you had like an hour you could sign up for this iLearn module.
22	I think all of that would so that's my suggestion
23	MR. NELSON: Excellent.

got similar sorts of feedback and it is because we are using these new

Τ.	CHAIRMAN SYMMEN IS to have tunable training. So
2	that's me, okay. And with that we will turn it over
3	MR. NELSON: Thank you.
4	CHAIRMAN SVINICKI: to Commissioner Baran.
5	COMMISSIONER BARAN: Thanks. It's clear from the
6	presentations that there's a lot of enthusiasm for making changes at the
7	agency and I think there are some very good innovative ideas here on
8	boosting workforce agility, being more innovative in how we recruit and hire,
9	simplifying some of our more cumbersome internal processes, and getting the
10	right IT in place including some exciting dashboards. But I think we
11	need to be honest. Mixed in with these positive efforts are some very bad
12	proposals that would roll back safety and security standards and weaken
13	NRC's oversight of our licensees. We've seen recommendations to reduce
14	the frequency of critical engineering inspections and problem identification
15	resolution inspections.
16	There are proposals focused on minimizing the importance
17	of white findings that would have the effect of making it less likely that nuclear
18	power plants would move to higher levels of NRC oversight. Some are even
19	proposing that NRC should allow industry self-assessments to replace NRC
20	inspections in engineering, radiation protection, emergency preparedness,
21	and security.
22	None of those proposals were discussed in your
23	presentation today, but they have all been characterized by the staff as efforts

to risk-inform NRC's oversight of nuclear power plants. We have a choice to

2 make. We can focus on consensus innovation efforts that everyone agrees

are worthwhile, or NRC can go down the divisive path of weakening safety

standards and reducing oversight.

needle at all.

I fear that risk-informing and accepting risk are becoming code for just this kind of regulatory rollback. The title of slide 23 of the staff's presentation is "What does accepting risk mean?" I think this has become a real muddle.

Using risk insights in decision making, of course that's a good idea. We do a lot of that. Taking chances personally on new ideas or approaches that's great. We want to encourage that. And NRC has never regulated to zero risk. But I don't think the American public is particularly interested in NRC accepting more radiological risk on their behalf. If that's what this is about, we have a real problem. So, Margie, I just want to ask you directly about this. Is this initiative about accepting increased radiological risk from nuclear power plants, fuel cycle facilities, and radioactive material users?

MS. DOANE: No. It's not about -- this is not about weakening our safety. It's about strengthening our safety. I am convinced that we will have a smaller staff and smaller resources, so we need to understand where have we put our focus in areas that haven't moved the

If you were to do a PRA in these situations and you were to measure this change, you would see no change on the risk analysis. None.

- Because these weren't safety-significant issues in the first place, they were
- 2 low or minimal. So if --

- COMMISSIONER BARAN: Well, I'm glad to hear this is not about accepting greater radiological risk and I hope the staff takes that seriously when they hear you. But I'll be honest, you know, that's not the conclusion I would draw based on some of the potential changes being discussed, particularly to the reactor oversight process.
  - You know, John made the point I think you were making here about shifting resources to lower risk items, from lower risk items to higher risk items can improve oversight, but most of the potential ROP changes wouldn't shift anything, they would just cut. And that's not better oversight, that's less oversight.
  - So I wanted to -- I appreciate that you're saying that this is not about accepting increased radiological risk. That's an important thing for people to hear because we're using the word "risk" now in so many contexts on these slides and as part of the initiative. If that's not what this is about we need to take that seriously.
  - I want to ask about a couple ideas for updating the rulemaking process that could be positive steps. John, you talked about these. You talked about streamlining the process that instead of a draft regulatory basis and public comment and then a final regulatory basis, there would one reg basis that the agency would take comment on it and then go right to a draft proposed rule.

Т	is that a change of a plan to apply to all rulemakings that
2	don't involve direct final rules?
3	MR. LUBINSKI: At this point we're looking at it on a case-
4	by-case basis.
5	COMMISSIONER BARAN: Okay.
6	MR. LUBINSKI: As we've gone through our analysis what
7	we've looked at is, we've gotten into the culture of looking at our procedure
8	and addressing every rulemaking the exact same way.
9	So we've always said, let's look at the most complex rule, if
10	you will, what steps do we need, and we follow that for even the most simplistic
11	rules where we've gone forward and said, let's do a draft reg basis and then
12	issue the final reg basis, then make a decision going through the rulemaking.
13	And we said, you don't need to do that because not every rule from a scope
14	standpoint or a significance is created the same.
15	So most recently when we've looked at it, we've said, what
16	benefit are we getting out of developing a draft reg basis and then a final?
17	The purpose of the draft is to get comments to determine should we go into
18	rulemaking. If the result is yes, we're going to go into rulemaking, then why
19	do we have to put back out a final basis that says here's our conclusions?
20	So proposed rule captures that plus we get the benefits of
21	the comments that came in. Also, if we already know we're going to
22	rulemaking and we, as I stated we may bring this to the Commission, is if we
23	know we're going to rulemaking or it's a direct final rulemaking, what's really

- the purpose of a reg basis? It's to get feedback on whether we should do rulemaking or not.
- Well, if it's -- why do you need the reg basis? If you're really
- 4 trying to get public comment on what the rules should look like, that's part of
- 5 the proposed rulemaking process. So that's what we're trying to say that
- 6 we're not doing it for every rule, but we need to ask the question of when we
- 7 do a rulemaking what is the best way to do it?
- 8 Another, which I didn't state earlier, was we're looking at
- 9 having now what we're calling mini-alignment meetings on the front end where
- we get together and make a determination of the process and say, okay, what
- is the most effective process to follow for this rule.
- 12 And even in some cases we've found we've asked ourselves
- the question, do we need a rule or is this just a policy change that we're making
- 14 that's a change in a policy statement and we can come back to the
- 15 Commission and change that policy statement?
- 16 COMMISSIONER BARAN: That makes a lot of sense to
- me. And the concurrence process, you mentioned the idea of concurrence
- alignment meetings and paperless concurrence. Can you talk a little bit more
- about how those approaches could work?
- MR. LUBINSKI: Sure. What we're talking about is
- 21 bringing together a group where when we're doing a rulemaking bringing the
- key decision makers who would normally have a concurrence and it could be
- at the division level or office level from a different group of offices, but their

focus would be on what is it about this rule that they're concurring in.

Is it just a security aspect of it where answer can come to
the table and doesn't have to look at the safety aspects of the rule. And that's
the concurrence to take a look at it and say, well, with respect to this issue, I
concur and I don't need to see the final package.

I trust the judgment of the final folks that are doing it that they'll follow the rulemaking process. They'll make sure that the grammar's correct. They'll make sure that the format of the FRN are correct, and I just had to give my input of the concurrence on what the technical issue or the policy issue that I was concurring in.

COMMISSIONER BARAN: Okay. Well, I think those are the kinds of practical ideas we should absolutely be exploring and pursuing.

Maureen, I wanted to ask briefly, we've got a little bit of time left, about the \$62 million in carryover we're expecting to have this year. This is money that was appropriated by Congress that NRC hasn't spent.

I think there are two primary causes for this large amount of carryover and they're closely related. First, there's been a steeper decline in agency spending than what was anticipated two years ago when the budget was being developed. And second, the agency hasn't been hiring nearly enough new employees to offset attrition.

As a result, some important mission-related work isn't getting done or is moving much more slowly than it should. What do you think about the causes for the larger than usual amount of carryover? Are these

- two factors, the steeper than expected decline in spending and lack of hiring
- 2 the main contributors of this?

MS. WYLIE: I have a chart that is at the end of the presentation, if you'll bring that up. I think the answer to both your questions is, generally, yes. So the traditional look at carryover is by fund source and so that's on my left. And as you can see, 50.8 million of that is in fee-based carryover. That's obviously, as the title says, is what licensees pay their fees on. And then the rest of it, with the exception of Commission carryover, they're fairly small dollars. The rep fund is so small it doesn't make it to the rounding error.

But, so in general, yes, where licensees have paid fee we do have carryover, but by control point you get some additional insight. Roughly \$30 million of the carryover this year, it was within the nuclear safety control point, so the new reactor business line and the operating reactor business line, and so the bulk of the FTE that were not hired are in that.

And so as we approach that budget in 2017, one of the things that we were worried about was the ability to attrit down to get ready for the NRR-NRO merger and so there was some conservatism in the estimation, in my opinion.

The other area that I would want to point out though is the corporate support. One of the reasons that that's so large is that prior-year carryover which is effectively colorless gets included in that control point, so that's about ten million of those resources. But when the Commission is not

- fully staffed, your carryover falls into corporate support as well.
- 2 But we have had difficulty hiring in both the acquisition and
- 3 cyber IT space, which is one of the reasons that we underran in corporate
- 4 support. So.
- 5 COMMISSIONER BARAN: Do you think it's, in terms of
- 6 the kind of reasons for the lack of hiring, is it a reluctance to hire? Is it an
- 7 issue with managers being concerned about hiring for some reason, or is it
- 8 something else?
- 9 MS. WYLIE: I'll start, and I would invite Margie to give her
- much more informed opinion. I think there is a concern about the ability to
- attrit down to the next lowest year coming. We are still continuing in our glide
- path of decline, the '20 budget, particularly in the reactor safety control point
- we were very, we were much more rigorous in our application of cuts
- 14 associated with closing reactors. And so I think there's a national
- conservatism there as well because we have been focused on not having to
- then replace people in other areas. We placed almost 40 people when the
- 17 SCANA work went away, so there is some impact to that. But I think Margie's
- insights around we are trying to hire, the hiring process takes a long time.
- 19 And so, while budgeting is clearly delimited by the start of a
- fiscal year and the end of a fiscal year, the work of the agency is more like a
- 21 river that our regulatory activity continues. Sometimes it speeds up.
- 22 Sometimes it slows down.
- And then of course we're hostage to individual decisions like

1	mine, to retire. And so those things can culminate into some difficulty in
2	managing.
3	COMMISSIONER BARAN: Do you want to briefly add
4	anything on there though?
5	MS. DOANE: Just to make sure that, right, so I just want
6	to make sure that we understand that we had anticipated four percent attrition.
7	It's up to 6.9 percent attrition and that just, I want to make sure that that's well
8	understood, because that just demonstrates how we're, you know, we're
9	facing this higher attrition rate. I believe it will stay that or even be higher, but
10	that's not what we were expecting when we built the budgets two years ago,
11	so that's part of it is the attrition.
12	And also, as Maureen said, we were just starting to get back
13	to hiring because we did put in these very necessary changes so that we could
14	bring the agency down so that it matched our workload and now we're getting
15	started in things like the NRAN program, the apprenticeship program. It's
16	taking a while because we had to build it and then we had to match it to the
17	fall hiring opportunities.
18	So those are some of the things. And we have many, many
19	individuals in the pipeline ready to be hired into the agency that will just meet
20	our attrition.
21	COMMISSIONER BARAN: Well, I'm glad to hear that it's

starting to move after some kind of initial building of some of these new

processes. I, you know, and we've talked about this before. NRC has plenty

- of work and we're going to have plenty of work to do in 2030 and 2040 and 2050, so we've got to be ready for that timeframe.

  I think this carryover is an indication where we haven't been able to do nearly enough hiring to get the work done today or to be ready in the future. I think it's probably maybe our number one enterprise risk as an agency. And we need to make it a top priority and I'm glad to hear that that's starting to happen more.
  - I think it was you earlier who were talking about the potential, you know, retirements we're going to have in the next few years.

    We're going to need a lot of people still here doing the work and we've got to make sure we're ready for it. Thanks.

- 12 CHAIRMAN SVINICKI: Thank you, Commissioner Baran.

  13 Commissioner Caputo, please.
  - COMMISSIONER CAPUTO: Good morning. Thank you all for coming today. I'm very eager to have this meeting today and to hear all of these presentations. I wholeheartedly support Transformation and I do sincerely want to be helpful in any way that I can. I was lucky enough to spend some time yesterday with Embark Venture Studio and those folks, hearing about what they're up to. It's very impressive. It's very exciting in addition to all of your presentations today.

As Commissioner Wright said, the ideas, the initiative that's taking place here really is contagious and I want to commend everyone for their efforts. I think this is a very exciting time for the agency and I'm glad to

1 be part of it.

I do think one of the toughest Transformation activities is the risk and accepting risk. I think this is a situation where for the employees that are engaged in this Transformation activity it takes a bit of courage. It's probably the activity that's most likely to draw criticism. I know I've had conversations myself with Ho Nieh about accepting risk and about ensuring that any activities that we're taking here are thoroughly thought out, analyzed, able to articulate why they're important and beneficial, why they're going to meet that mission and preserve safety. That they are -- that we can articulate them and defend them.

And I think the work that's going on really represents perhaps the best within us as an agency, which is that we will have the courage to look at these issues, to look at these ideas and situations and really use our intellectual heft, our experience to really make the case for changes that ultimately are going to help the agency execute its mission better going forward.

So I just, I want to say a special thank you to the employees who really are contributing to that effort in challenging themselves to thinking this way and really make the case. So thank you, John, for your leadership in that area.

I also want to give kudos to NMSS for a recent lessons learned effort regarding the material control and accounting rulemaking. So I understand these conclusions are going to contribute to the Transformation

1	effort in simplifying and optimizing NRC processes, which I think is very useful.
2	However, I have to say, my own observations on the agency's lessons learned
3	efforts in general is they often seem to be somewhat cumbersome and time-
4	consuming.
5	So I'm wondering if you have any observations about
6	possibly using this example to also look at simplifying lessons learned and
7	making a more efficient tool for continuous improvement across the agency.
8	MR. LUBINSKI: I assume you mean from the standpoint
9	of, I believe this one was done very efficiently and effectively, so I'm assuming
10	the question is how do we take the lessons learned from this lessons learned
11	and apply it to the program. I think thank you for your okay.
12	COMMISSIONER CAPUTO: Let me clarify just a little bit.
13	MR. LUBINSKI: Sure. I'll make sure to get the question.
14	COMMISSIONER CAPUTO: Because I think this lessons
15	learned effort took six months, right.
16	MR. LUBINSKI: It was, we had a six-month timeframe,
17	yes.
18	COMMISSIONER CAPUTO: Okay.
19	MR. LUBINSKI: So I take that question of making it even
20	more efficient as a question, so.
21	COMMISSIONER CAPUTO: It's a long time to have folks
22	focused backward on a particular issue. I mean I just, I feel like we should
23	he looking for ways to sort of capture those lessons so that we can begin

1 applying them going forward.

MR. LUBINSKI: And I think it's -- I'm grateful you said that because when I looked at the team as developing this lessons learned they weren't looking backwards. They were really looking forward.

And not only were they looking forward from the standpoint of where do we go on making a new system that looks better with respect to what we're taking out as material control and accounting, but they were also looking more broadly and saying what else have we seen come out from the Commission recently? What have we seen externally that has taken place and factored that in?

So they weren't just looking backwards from the standpoint of that rule and what happened in that rule, they were looking forward from that point and saying what other changes have we seen across the agency that look like they relate to what we did here.

I also, I appreciate you thanking NMSS. I want to thank CRGR. You know, we were working very closely together on that. And I think if I had to say what would be the lesson I would take from that to be more efficient in moving forward is when you look at a lessons learned don't look just at the activity you did.

Look quickly at that activity to bring up the couple key points that you want and then start to take those more broadly and look at the other signposts you may have out there, the other indicators that you're getting externally and what you're getting from the Commission, because when the recommendations that came out of there I think really capture other items that

- came out, not just material control and accounting, but where did the
- 2 Commission come out with back fit, more recently on the discussion of forward
- 3 fit and factoring that into the discussion, issues of reasonable assurance, so
- 4 they were very broad issues that weren't just centered on this rule.
- So I think that would be what I would take as one of the key learnings from that moving forward.

## COMMISSIONER CAPUTO: Okay, thank you.

I'm going to shift gears a little bit to an area where I think our results really emphasize the need for Transformation and that's in financial management. Just to recap what Commissioner Baran pointed out, we just reported to appropriators 62 million in carryover, so this is 62 million more that we collected from ratepayers and licensees that we didn't need to use to complete our mission this year. But the reality is, this is in addition to prior year unliquidated resources of 107 million. So these are appropriated funds from fiscal years 2018 and older that still haven't been spent, so together this is quite a sum of money that we have collected but not used.

So I understand your comment about work being a river, but I think there's room for certainly an improvement in our accuracy in budgeting. I think this is an area where above all data analytics is important. I understand Margie's comment about attrition, but this agency has also discussed the age demographic and the potential for retirement for years.

So, you know, the expectation that somehow that

- demographic would grow over time and attrition rate wouldn't change, I think
- 2 is probably just a lack of looking at the data. Because I think if we look back,
- that attrition rate has creeped up and we should not find ourselves surprised.
- 4 I would be surprised if it doesn't increase beyond where it is.

14

15

16

17

18

19

20

21

22

23

5 So the hiring effort, I think, is very important. It needs to be 6 measured, but I think it also needs to be fully informed by data on where we're 7 seeing retirements, where we need to build those skills, where we have not 8 just gaps in expertise through strategic workforce planning, but also where we 9 have surpluses of personnel with expertise that we're perhaps not using that 10 need to be reskilled. But I think all of this gets back to the 11 need to better use data analytics to actually inform budgeting and that's what 12 I find missing, really, from the slides.

Ms. Wylie, slide 34 touts innovation, but it doesn't have a connection to the use of the actual expenditures to inform budget development. So we're still in this cycle where we're developing a budget two years out by basing it on a budget that was developed two years out.

Is it your expectation that you're going to continue the practice of keeping budget execution separate from budget formulation, or do you see a Transformation opportunity by using data on actual expenditures to improve budget accuracy through data analytics?

MS. WYLIE: So thank you very much. I think that we have a different view on how data analytics and the use of actual expenditures is, in fact, used. There are large-scale actuals at the product and product line

1	level where we do, in fact, looked at what we spent in the most recent year.
2	But the challenge of building budgets two years in advance
3	that the actual data that we have is also two years old by the time, or three by
4	the time we actually get it in budget execution. So we do ask that people look
5	at their actual data, but they're not able to look at it at the workload level.
6	That's what the data analytics' opportunity is going to give
7	them. We're going to be able to see what specific licensing actions really cost
8	in a way that will be different than we've been able to see in the past.
9	So I do disagree with you. I do believe that we use actuals
10	data. We both use it at the program level and we provide it in the budget as
11	is required. But again, a program that is looking at actuals when they're
12	building the budget so when we were building the budget in '17, we were
13	looking at '16. That was a year that we spent \$990 million.
14	COMMISSIONER CAPUTO: So at what point in time do
15	you factor into budget space the fact that we are carrying money that is a year
16	or older forward without actually utilizing the resources?
17	MS. WYLIE: So I
18	COMMISSIONER CAPUTO: How do you account for that
19	in budget space?
20	MS. WYLIE: We do, in fact, take into account the
21	requirements for our contracts and we make explicit the requirement that we
22	look at forward funding. We have a difference of opinion here as well about
23	whether or not forward funding is bad for the agency. In a period where

resources are relatively constant, I would agree, yes, that a large bow wave of forward funding is a bad idea.

But over a period of time, over five years and now more where our budgets are going to decline, we mitigate our risk to our central functions by maintaining contracts that will handle things particularly in the corporate space over time and we are looking specifically at forward funding. We did for '21 and will for '22.

And the commitment planning module that we've put into effect will give people greater clarity about what the plans are for the year that's underway. So I don't agree with you that people don't look at it. I think that we do, but we draw different conclusions about its importance.

Related to carryover, first of all, the 62 million is total funds. The fee-based funds which our licensees have paid fees on is 50 million, still a large number, but the process that we've been in with our appropriations committees over the last four years of using carryover balances to reduce the requirement for appropriation in the next year, actually then limits the impact on licensees year over year.

So the Senate bill that we have before us that has not yet been to the floor calls for carryover funding of \$40 million. That is a number that we discussed with both majority and minority staff recognizing that that would leave the agency a cushion should it want to spend resources on things like renovating facilities that are not in the budget or having resources in the in-house, so to speak, should there be uncertainty about appropriations.

Τ	But those monies don't just sit in the bank. They're
2	essentially going to the Treasury and we're being appropriated less. So in
3	the end that year over year process does control for that.
4	COMMISSIONER CAPUTO: But in the end, we have
5	resources from 2018 and 2017 that we didn't use this year, so what's the point
6	in maintaining that?
7	MS. WYLIE: Well, we are executing those resources as a
8	part of legally binding contracts that were based on requirements at the time.
9	So each of those things vary contract over contract, but the purpose of having
10	those things like the accounting system, some of our GLINDA contracts, is in
11	fact to mitigate risk in corporate while we continue to reduce our budget going
12	forward.
13	COMMISSIONER CAPUTO: That's it for my questions.
14	MS. WYLIE: Thank you, ma'am.
15	CHAIRMAN SVINICKI: Well, again, I want to thank
16	everyone who presented today and just all of the NRC employees in every
17	office, at every level with every expertise that are a part of these activities.
18	I do agree with Commissioner Caputo, it's really, I think, an
19	exciting time. I think this time will be looked back on in the agency's history
20	as, really, the incubator of a lot of things that had great staying power and are
21	so related to the core important mission that we carry out that we'll say, thank
22	goodness for those people, much like we say thank goodness for people who
23	created ROP and other things we benefit from today.

- So thank you all for the work you're doing and the
- 2 contributions you're making, and with that we are adjourned.
- 3 (Whereupon, the above-entitled matter went off the record
- 4 at 12:17 p.m.)