UNITED STATES NUCLEAR REGULATORY COMMISSION

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PUBLIC MEETING ON TRANSFORMATION AT THE NRC - MILESTONES AND

RESULTS

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THURSDAY,

SEPTEMBER 17, 2020

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The Commission met in the Commissioners' Hearing Room at the Nuclear

Regulatory Commission, One White Flint North, 11555 Rockville Pike, at 10:00 a.m.,

Kristine L. Svinicki, Chairman, presiding.

COMMISSION MEMBERS:

KRISTINE L. SVINICKI, Chairman

JEFF BARAN, Commissioner

CHRISTOPHER T. HANSON, Commissioner

DAVID A. WRIGHT, Commissioner

ALSO PRESENT:

ANNETTE VIETTI-COOK, Secretary of the Commission

MARIAN ZOBLER, General Counsel

NRC STAFF:

REED ANZALONE, Nuclear Engineer, Office of Nuclear Reactor Regulation

AMY D'AGOSTINO, Human Performance Analyst, Office of Research

MARGARET DOANE, Executive Director for Operations

JONATHAN GREIVES, Branch Chief, Region I

NADER MAMISH, Director, Office of International Programs

PATRICE REID, Organizational Development Psychologist, Office of the Chief Human

      Capital Officer

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1	P R O C E E D I N G S
2	10:00 a.m.
3	CHAIRMAN SVINICKI: Well, good morning, everyone. The Commission
4	meets this morning to resume a dialogue we've been having with the Staff for some time
5	now, but we will be hearing from a panel of Staff representatives on the transformation
6	activities.
7	We've termed this Key Milestones and Results, but I imagine as the
8	nature of these meetings has been for us, it will be a fairly wide-ranging conversation on the
9	topic of the significant initiatives we have going on here at NRC related to what we call our
10	transformation, which I always say is such a big word because it is a big word, but there's a
11	lot of really substantial initiatives that are going on.
12	And this is one of the meetings that I know in the spring, the members of
13	the Commission had so looked forward to, and it was one of the meetings that we had to
14	defer, but it's really wonderful to be here today and to see the Staff presenters who will be
15	talking to us this morning about a number of interesting topics and just a handful of others
16	here in our socially distanced format that the public health conditions this is what's available
17	to us now, but it's great to be able to be here and conduct this meeting with a limited
18	number of folks in the room, and of course the webcast that allows all of the NRC Staff, and
19	there are many who have an interest in this topic, so many significant contributors that can't
20	be in the room today, and I know they would otherwise be sitting here to be a part of this
21	discussion, but they can tune in and members of the public as well.
22	So, before we turn to the Staff panel, I would just ask. Sometimes
23	Commissioners have some opening comments. And I know that the camera view is a little

1   different the way we sit now, a little more spaced out.

2   But we are not joined by Commissioner Caputo today. It's not in any way

3   indicative of a lack of interest in the transformation topic and she's taken a very strong and

4   active role as a member of the Commission in engaging the Staff on their activities.

5   There was a scheduling matter that didn't allow her to be here today, but

6   I'm certain she's tuning in and also will review the transcript carefully, I'm sure, and continue

7   to stay abreast of all of the Staff's impressive work like she's been doing.

8   So, but are there any of the other Commission members that wish to

9   make an opening? Okay, I think everybody just wants to get right to it.

10   So, again, we will hear from one panel of NRC representatives and we will

11   be led off by Margie Doane, our Executive Director for Operations, who is wearing a

12   similarly colored blazer today, no coordination between the two of us, so Margie, take it

13   away. The floor is yours.

14   MS. DOANE: Thank you. Good morning, Chairman and Commissioners.

15   Thanks for the opportunity to share the agency's accomplishments on our transformation

16   efforts.

17   Since we last met about a year ago, we've made significant strides in our

18   transformation journey one decision at a time, while remaining steadily focused on fully

19   realizing our vision of becoming a more modern risk-informed regulator.

20   I think our approach to transformation is appropriately captured in the

21   African adage, "If you want to go fast, go alone. If you want to go far, go together," all to say

22   we knew from the beginning that if transformation was to be successful, we needed to take

23   a thoughtful and paced approach that provided opportunities for all employees to take part

1   in the journey.

2   When we last met, we discussed the futures assessment, the futures

3   JAM, the formulation of our four focus areas, and the seven initiatives, first horizon

4   initiatives.

5   Then, we hosted the transformation expo to introduce employees to the

6   focus areas and initiatives and showcase some of the transformational work happening all

7   throughout the agency.

8   This well-attended event featured 32 booths representing different

9   transformation activities throughout the NRC and regions. The energy and excitement were

10   palpable, and this event truly represented how far the agency had come by going together

11   on our journey.

12   In the following months, we made steady progress on the seven initiatives

13   and this would turn out to be very fortuitous as we found ourselves facing the challenge of

14   the COVID-19 public health emergency which truly underscored the importance of

15   transformation.

16   Our earlier efforts to push technology adoption and encourage innovation

17   throughout the agency helped us adapt to our new environment, and as difficult as the

18   COVID circumstances were, they put us in what I call hyperdrive.

19   The pace of our transformation journey was accelerated because we were

20   pushed to employ innovative solutions to business process challenges in order to fulfill our

21   important safety and security mission.

22   For example, we fast-tracked instituting a process electronically to review

23   and concur on documents, learning how to use virtual platforms to host large-scale

1   meetings, and became adept at collaborating in real time on a single document via

2   OneDrive.

3   These are just a few of the agency-wide efforts that allowed employees to

4   continue collaborating, connecting, communicating, and engaging while working remotely.

5   There are many other transformation achievements that further

6   demonstrate how we continue to progress in our innovation efforts and enhance how we

7   carry out our important mission. Next slide, please?

8   With me today are several people who, along with their initiative teams,

9   are instrumental in helping realize significant transformation achievements. They join me

10   today to discuss the work being done in their initiative areas and highlight some remarkable

11   transformation successes. You can see their real jobs up on the slide. I'll tell you about

12   what they're going to be talking about today.

13   Amy D'Agostino, the team lead of Innovate NRC 2.0, will be discussing

14   the programmatic aspects of recent successes of the Innovation program.

15   Patrice Reid, the team lead for the agency's desired cultural initiative, will

16   discuss the importance of creating a culture that will enable the agency to transform and

17   continue achieving its mission.

18   Nader Mamish, the team lead for signposts and markers, together with

19   Jonathan Greives, will discuss key indicators that will help us monitor factors most likely to

20   affect our future work, and Reed Anzalone will discuss how data is being used in the

21   nuclear reactor safety program to enhance our regulatory activities. Next slide, please?

22   Before I turn it over to my fellow presenters, I'll provide a brief update on

23   the remaining four first horizon initiatives not being highlighted in today's presentations, and

1 highlight some of the notable transformation accomplishments in those areas.

2 First, the Be riskSMART initiative. The Be riskSMART initiative team

3 developed a framework to give Staff confidence in accepting well-managed risks and

4 decision making without compromising the NRC's mission. This framework can be used in

5 the legal, corporate, and technical areas.

6 To date, the Be riskSMART framework has been applied in numerous

7 contexts, including areas of fee billing, summer hire recruiting, information technology

8 deployment, risk-informed licensing actions, and emergent safety and security issues.

9 The initiative team has conducted 32 presentations across all offices and

10 are being requested to hold more, even to come back to some of the same offices, and the

11 team also launched an ambassador program to support Staff and they learn about and

12 apply the framework.

13 Next, is the process simplification initiative. This team worked to simplify

14 and streamline key agency processes, which was an area identified by the Staff in the

15 futures JAM as needing improvement.

16 The team identified significant process improvements for developing

17 SECY papers and communication plans, and developed corresponding procedures.

18 Staff has been using the new process for SECY paper development

19 during last month and has reported noticeable improvements in attaining early alignment

20 among involved parties.

21 To date, the initiative team has provided training to the Office of Nuclear

22 Reactor Regulation, NRR, Office of Nuclear Material Safety and Safeguards, NMSS, and

23 the Office of the General Counsel, with other offices to come.

1   Next is the career enhancement initiative and the employee journey

2   initiative. The recently completed career enhancement initiative and follow-on journey

3   initiative focus on helping NRC employees plan their career paths and provide valuable

4   interactive tools and resources to support current and future workforce needs.

5   Over 340 Staff have accessed the tool provided under the career

6   enhancement initiative which includes direct links to policies and resources such as the

7   Office of Personnel Management, sponsored resume writing classes, and information on

8   our human capital programs.

9   This tool has provided Staff the ability to connect with mentors and

10   provided more efficient and informed ways to update their individual development plans,

11   and identify training opportunities to help them progress in their current careers, and even

12   prepare for future careers.

13   Finally, there's the technology adoption initiative. To date, the technology

14   adoption initiative team has conducted 91 training sessions on Office 365 to over 3,200

15   participants and created a network of IT experts to help employees. They're called IT gurus.

16   These actions were critical in helping us quickly transition to working

17   remotely during the COVID-19 public health emergency, and employees have been

18   embracing new technologies, including the recent adoption of the Teams technology.

19   Just in the first week of deployment, we've had more than 2,500 active

20   users who have joined in, and more than 30,000 messages were sent. Clearly, Staff is

21   demonstrating their adaptability and willingness to embrace new technologies to help us

22   work and collaborate in better ways.

23   Aside from providing new technology tools, efforts were also focused on

1   improving access to strategic use of data within the agency. For example, the Chief

2   Information Office or the OCIO developed a centralized data repository or warehouse.

3   Prior to this effort, the agency's documents were so siloed that they did

4   not allow for broad access. Additionally, the data quality of many documents was

5   inadequate.

6   This prompted the OCIO, the whole office, to focus on modernizing

7   agency data, including digitizing the agency's entire microfiche collection which is

8   comprised of millions of documents.

9   OCIO also joined the Office of the Chief Financial Officer and the Office of

10   the Chief Human Capital Officer to implement two powerful cloud-based business

11   intelligence platforms, Power BI and Tableau.

12   This transformed OCFO's and OCHCO's ability to analyze and present

13   data in ways that improved decision making processes, but collaboration didn't stop there.

14   I'll never forget the day the CIO and the Chief Financial Officer, who was

15   then Maureen Wiley, proposed partnering with NRR to create a system that married

16   individual effort with cost and output using these data platforms that they had recently

17   developed.

18   This was the genesis of the mission's analytic portal or MAP. However,

19   the idea of matching program office data with financial and human resources data extends

20   beyond a singular office, even though I will say that NRR is very enthusiastic and their

21   director is very enthusiastic and has really put his vision on this process, which has been

22   key in developing MAP to where it is today.

23   However, but what we'd like to do now, work is underway in NMSS to

1   develop a comparable system similar to MAP to enhance decision making so that NMSS will

2   now have its own MAP program that has just similarly enthusiastic executives all the way

3   down to the project managers for this project, and that will enhance decision making within

4   their programs.

5   Lessons learned from the implementation of MAP are being considered as

6   NMSS works with the Office of the Chief Information Officer and NRR so that we use

7   lessons learned to create products tailored to their unique processes.

8   We've also realized technology advancements that support inspection

9   activities, including providing mobile capabilities to access real-time data and perform in-

10 field data analysis to support regional and material inspections.

11   And even individual employees across the agency are taking advantage of

12 the capabilities of Power BI and Tableau to curate and manage program data to inform their

13 own work and decision-making processes, and you'll hear about this later in our

14 presentation.

15   These varied success stories prove there's no single best way to

16 approach innovation. When an environment exists that allows every employee, regardless

17 of their background or experience, to participate in the Innovation process, significant

18 progress is realized across the entire agency as the roots of innovation take hold.

19   We are at the point in our transformation journey when four of the first

20 Horizon Initiatives, Innovation, Signposts and Markers, technology adoption, and career

21 enhancement will be closed, but this doesn't mean we stop with respect to those areas.

22   Instead, individual regions and offices will take responsibility for curating

23 their respective efforts in the initiative areas and ensure positive benefit continues to be

1   realized.

2   This will allow us to focus on completing activities under the remaining first

3   horizon initiatives and launch some new initiatives that will build on the transformation

4   framework that we've already constructed. Next slide, please?

5   Finally, I'd like to discuss the role organizational health plays in our

6   transformation journey. In their book, Beyond Performance 2.0, a Proven Approach to

7   Leading Large-Scale Change, Scott Keller and Bill Schaninger defined organizational health

8   as how effectively an organization works together to achieve its common goal.

9   Throughout our transformation journey, we have paid close attention to

10   organizational health and experience of our employees. This is because we care about our

11   employees and because organizational health directly informs how successful we will be at

12   meeting our goals.

13   That means NRC's organizational health directly affects our ability to

14   reach our strategic safety and security goals, as well as our transformation goals.

15   We have a proud history of working well together to achieve our strategic

16   goals, and now we must focus on working together toward realizing our transformational

17   goals.

18   We've been assessing our organizational health by evaluating internal

19   alignment, quality of execution, and capacity for renewal. We are ensuring alignment in

20   several ways, including developing an interactive web page that provides employees

21   information on initiative efforts underway and progress to date.

22   We also hosted the first ever series of executive and supervisor

23   workshops at headquarters, and hosted employee workshops to ensure a common

1   understanding of our transformation journey and vision.

2   We also send out future feeds to keep Staff updated on a real-time basis

3   on these efforts. Finally, in the month of November, we're going to partner with several

4   offices to offer several transformation knowledge workshops.

5   Execution refers to whether employees have the necessary tools,

6   resources, and support to perform their daily work and contribute toward our transformation.

7   We will discuss these tools throughout the presentation, including technology, idea scale

8   for innovation, and dashboards.

9   Renewal refers to how well we, as an organization, understand, respond,

10   and adapt to our external environment through innovation and creative thinking. We have

11   certainly underscored our ability to adapt during the COVID-19 public health emergency.

12   We've also addressed this element by focusing our efforts on developing a

13   new pipeline of talent through restructuring and modernizing our new hire program and

14   implementing the nuclear regulator apprenticeship network. We have our first class.

15   Efforts are also focused on continuing to increase our readiness to review

16   applications for the use of new technologies for existing and new nuclear power reactors

17   and materials users.

18   This concludes my introductory remarks. I'll now turn it over to Amy

19   D'Agostino.

20   MS. D'AGOSTINO: Thank you. Good morning, Chairman and

21   Commissioners. It's nice to see you in person today, and I'm back here again to tell you

22   about innovation.

23   We've gotten a lot done in the last year. I've been lucky enough to be

1 asked to be the team lead for the innovation effort and -- can you hear me? Okay, there we

2 go. All right, there we go.

3   I just want to first of all say thank you to our SES champion, Andrea Veil,

4 and my teammates who couldn't be here but are hopefully watching virtually, Niav Hughes,

5 Dan Shermeyer, Pat Vokoun, Steve McCarthy, and Marcos Colon. They have been integral

6 to this effort, and so I just wanted to make sure that you're aware and wanted to thank them

7 for their efforts. Next slide, please?

8   Okay, so I'm going to kind of bring you back to about a year ago. We

9 talked a bit about what the initiative was going to undertake, and so as a reminder, the

10 objective of the Innovation initiative was to create a best in class Innovation program.

11   Some of the ways that we prepared to do that was by incorporating the

12 lessons that we learned from our 1.0 version of the program and also by benchmarking

13 other federal agencies to develop how our program would go forward based on best

14 practices.

15   Now we're in stage three as you can see here, which is the full

16 implementation of the Innovate NRC program, 2.0 program. Next slide, please?

17   So, there are four primary elements to our Innovation program and I'm

18 going to provide a brief overview as a reminder to you and then progress and tell you the

19 progress that we've made on each aspect.

20   So, the first aspect of our program, the Innovation platform, really in the

21 JAM in 2019, we heard from the people that participated and also affinity groups across the

22 agency.

23   The tool was really needed on a consistent basis to collaborate across the

1 agency in a way that would break down geographical and organizational boundaries to

2 allow for a more democratized approach to innovation.

3   And so the response to this was our Innovation platform called IdeaScale.

4   Hopefully you've heard some buzz about it. I would say in the hallways, but maybe more

5 like on Skype or Teams, and hopefully you've even gotten in there and got to see some of

6 the good work that we've done.

7   We launched the platform agency-wide on June 18 and we've seen

8 continuous adoption of the platform since then. We're now at over 50 percent of employee

9 adoption of the platform. Next slide, please?

10   Oh, I'm sorry, no, stay with that side, sorry about that. The second aspect

11 of our program are our new tools that come with IdeaScale and with how we've set up the

12 program.

13   Two of those are crowdsourcing challenges and the success gallery,

14 which were a big part of our launch campaign on June 18, and I'll be talking a little bit more

15 about those in the upcoming slides.

16   The third aspect is our integrate Innovation community. This, from my

17 perspective, is the most important part because it's the part about our people. We

18 transitioned from 16 different Innovation panels in our 1.0 version to one integrated

19 Innovation community.

20   Our initiative team developed new rules for our community members,

21 including things like Innovation coaches, creative strategists, ambassadors, and

22 management champions, and not only did we create these new roles to support our new

23 program, but we also launched, created and launched training for each role that's available

1   to the entire agency, and even Commissioners can take it because everybody can be an

2   Innovation ambassador.

3   And then lastly is the rewards and recognition piece of this initiative that

4   we're -- this was included to ensure that we reward and recognize those behaviors that

5   support the NRC's leadership model and desired culture.

6   Some of the behaviors that we plan to reward and recognize were

7   identified through extensive research as behaviors that facilitate and sustain a best in class

8   Innovation program, and so we need to make sure that we're rewarding and recognizing

9   these to really meet that objective of being a best in class Innovation program.

10   So, we specifically want to reward and recognize three types of behaviors,

11   the first being engagement behaviors. So, engagement behaviors are things like submitting

12   ideas, comments, and votes, say in a crowdsourcing challenge.

13   You know, when people do this, it may seem like a small thing, but

14   employees are really taking a risk to improve our operations because they're putting their

15   ideas out there for everyone to see, they're commenting on other people's ideas, and they're

16   voting to let us know where their energy and attention is focused.

17   And the engagement behaviors are obviously very necessary to have a

18   successful Innovation program, and ultimately contribute to the culture that helps us

19   become a more modern risk-informed regulator.

20   The second piece is the achievement behaviors. So, these are things

21   that, you know, ideas that get implemented or folks that submit to challenges and are our

22   challenge winners that really help us improve government operations.

23   And then the third category are the exceptional contributions. So, these

1   are sort of personal superior accomplishments. So, when I think about this, I think about

2   who is out there breaking boundaries so that we can get things implemented that maybe

3   otherwise we would have said, well, we just don't do it that way.

4   Well, we do now because we're innovating and we're finding ways to do

5   that, and there are people out there who have really helped us break those boundaries and

6   find new ways of doing things. Now, next slide, please?

7   Okay, so returning to the new tools as I promised, the first tool I want to

8   highlight is the success gallery. When we launched the program in June during the

9   Innovate-A-Thon, we captured over 300 implemented innovations in the IdeaScale success

10   gallery. So, you really want to think about this as the knowledge capture and knowledge

11   sharing portion of our new program.

12   I have a couple of examples up here just to give you a flavor for what's in

13   the success gallery. The first one is the audible version of the NRC Information Digest.

14   This is an annual publication that basically highlights the agency's activities.

15   It's typically done in a print, in both print copies and online, but OPA

16   decided to develop an abridged audiobook to appeal to new audiences and broaden the

17   publication's reach, and it was done entirely in-house by our OPA Staff.

18   The second one is the single Federal Register notice for four exemptions.

19   So, NMSS Division of Fuel Management received four nearly identical exemptions from

20   three licensees, and in order to minimize cost for publication in the Federal Register, NMSS

21   worked with NRC's legal research center to develop a template for issuing these four

22   exemptions in one.

23   And then finally the last one, the ADAMS QuickView app, is probably my

1 favorite, and it may be one of your favorites if you've had a chance to use it. ADAMS

2 Navigator is a tool to manage and search agency documents.

3   However, it didn't really provide an efficient way to search documents

4 based on ML numbers, and as we all know, that's how we search for our documents.

5   So, an innovator developed an HTML script that enabled the ability to

6 search using ML numbers and even to drag and drop from multiple applications like Word,

7 and Outlook, and Adobe into a search box. And basically the Office of Research and OCIO

8 took that original script and they worked together to refine the original script to create an

9 internal desktop tool called the ADAMS QuickView app, which is now available to all

10 employees. Next slide, please?

11   Okay, crowdsourcing is the other major new tool that's been added, and

12 just to kind of remind you, crowdsourcing is where you put a problem or challenge

13 statement sort of out into the world and you ask for the wisdom of the crowd to come back.

14 In this case, it's internal to us, and so we can put things out there that all employees can get

15 involved with.

16   To date, we've run three challenge campaigns during our Innovate-A-Thon

17 and an additional campaign regarding the resident inspection program since the Innovate-A-

18 Thon, and this slide features our challenge winners that you can see here. We got some

19 really great ideas.

20   It really allows us to collaborate across the agency and enable a faster

21 collaboration with a broader audience. In total across the four campaigns, we had over 50

22 ideas, over 600 votes, and over 200 comments.

23   So, you can see that there's a lot of engagement. There's a lot of

1 conversation going on, and we were really able to move the problem statements forward

2 into solution space. Next slide, please?

3   So, and finally, the next steps for our program is that, as Margie

4 mentioned before, you know, our initiative, this as an initiative under OEDO is coming to a

5 conclusion.

6   However, that's not the conclusion of our program, right? This was meant

7 to live on hopefully for many, many decades to come, and so we're going to be transitioning

8 it to a permanent home in the Office of Research.

9   We also want to expand our community and we want to do that in several

10 ways. We are currently bringing the Innovate 2.0 program to all offices, not just OEDO

11 reporting offices, and so at the current time, we have a representative from just about every

12 office in the agency to be the main point of contact for Innovation, and so we're getting

13 everyone involved.

14   We also want to expand the community of IdeaScale members. So, we're

15 at a 50 percent adoption rate. I personally am not going to be happy until we're at about 95,

16 and hopefully the five percent that aren't on there just means that they're, you know, out of

17 the office.

18   But we want to expand the community and bring in as many people as we

19 can, and I think we do that by, you know, getting really compelling crowdsourcing

20 challenges in there.

21   I'll tell you the resident inspector challenge, man, people really got fired up

22 about that. They had a lot of things to say. They had a lot of contributions to make, and I

23 think the more challenges that we put out there like that, the more we're going to see people

1   coming in.

2   They are also seeing that their ideas are getting celebrated through our

3   success gallery, and people are really seeing the good work that's getting it done across the

4   agency, and so hopefully that's going to continue to bring more people into the community.

5   And then finally, we want to continue to identify challenge owners across

6   the agency. So, we, you know, we're bringing this tool to the table, and it is just that.

7   Crowdsourcing is a tool and we want people to see this as another tool in their tool belt to

8   get their work done.

9   And then finally, we're working with OCHCO to finalize the guidance for

10   rewards and recognition for innovation, and we hope to get that guidance out by the end of

11   2020. And we're also, the transition to the permanent home in research will also be

12   completed by the end of the calendar year.

13   So, thank you so much for your time, and with that, I am going to turn it

14   over to my colleague, Patrice Reid, to talk about our culture initiative.

15   MS. REID: Thank you, Amy.   Good morning, Chairman and

16   Commissioners. I am Patrice Reid, the team lead for the Agency Desired Culture Initiative.

17   I'd like to take this opportunity to provide an overview of the team's efforts to intentionally

18   manage our culture in a holistic way that ensures that we are consistently valuing and

19   supporting behaviors and norms that help us best accomplish our public health, safety and

20   security mission. Next slide, please.

21   Culture sets the tone and expectations for how we get work done to

22   include how we make decisions as well as how we interact, innovate and collaborate with

23   one another.   Given that culture has an influential role in how we do business, we

1   proactively identified culture as one of our transformation initiatives to create a positive work

2   environment where Staff would feel engaged and empowered to lead during times of

3   change and demonstrate behaviors that enable trust.

4   Examining our culture also allows us to foster new ideas for organizational

5   improvement where we encourage continuous learning and thinking big across all areas of

6   the agency. Culture also enhances our adaptability and receptivity to change so that we

7   can maximize our individual performance in organizational effectiveness in a changing

8   environment. Next slide, please. Unlike previous efforts to address feedback in a

9   decentralized way, we have taken a unified, holistic approach to defining and managing our

10   culture. We sought to dig deeper into the norms and expectations that drive attitudes and

11   perceptions about our work environment.

12   Take for example this analogy of the tree, as pictured here on the slide.

13   Similar to the branches and leaves of a tree, our climate refers to the more salient

14   experiences that we often characterize as our attitudes and feelings. These attitudes and

15   feelings are apparent in conversations from the futures JAM, feedback during focus groups,

16   and results from more routine federal surveys like the Federal Employee Viewpoint Survey

17   and OIG's Safety Culture and Climate survey.

18   The results from our climate surveys are outgrowth, or visible extensions

19   of our deeply rooted beliefs and assumptions about what is expected, accepted, and

20   rewarded at the NRC. Similar to the roots of a tree, these implicit assumptions are less

21   visible and we often refer to them as culture. These are the values and beliefs that drive our

22   behaviors and norms. To dig deeper into these more tacit assumptions, we use the survey

23   called the organizational culture inventory. It intentionally measures beliefs and

1   assumptions about behaviors that are expected at the NRC, and allowed us to assess how

2   the NRC's ideal culture compares to current norms and expectations.

3   Both our climate and culture are important to understanding who we are

4   and how we interact with one another. Each source of data tells our story, and it provides

5   us with different, yet complimentary information. Next slide, please.

6   One of our support steps in assessing our culture was to establish a

7   baseline to identify gaps where our current culture is not consistent with our ideal culture.

8   We primarily relied on the Organizational Culture Inventory, which includes two parts -- a

9   measure of our ideal culture, and a measure -- a measure of our current culture. Our ideal

10   culture represents a type of culture that our own members believe would maximize

11   individual performance and organizational effectiveness. In comparison to our current

12   culture, NRC employees believe that in our ideal culture we need to practice more

13   constructive behaviors, such as encouraging others, resolving conflicts constructively, being

14   good listeners, and thinking ahead and planning.

15   We also need to practice less of our defensive behaviors. For example,

16   accepting the status quo. It is evident that when we practice these defensive behaviors in

17   excess, they often come at a cost to growing our constructive ideals, such as creating an

18   environment that encourages innovation. These findings reveal gaps between our NRC

19   ideals and our current operating norms. Next slide, please.

20   Consistent with a holistic approach, we also looked at the results from our

21   agency's routine climate surveys, which show common themes. Our Federal Employee

22   Viewpoint Survey and OIG Safety Culture and Climate survey show that there are areas

23   where we've made progress -- like rewarding innovation, providing opportunities to improve

1   skills, pay satisfaction and work experiences at local levels and branch -- and within

2   branches and teams. Our climate surveys also reveal emerging risks. These surveys

3   reveal opportunities for us to improve aspects of our workforce motivation, employee

4   engagement, human capital management, and management's approach to ensuring a clear

5   line of sight between decisions and the mission, as well as how we get these goals and

6   objectives accomplished and communicated.

7   It is evident that when -- we are not where we need to be and our

8   employee feedback has shown us that there are opportunities for us to improve. All of

9   these surveys were important inputs in the development of our culture improvement

10   strategy. Next slide, please.

11   Our agency culture improvement strategy includes behavior changes and

12   process changes to move us from less productive norms in our current culture, to our more

13   constructive ideal culture. The behavior and process changes are focused on enabling us

14   to achieve key outcomes such as making quality and timely decisions -- and has

15   adaptability and receptivity to change, and maintaining an engaged workforce. Next slide,

16   please.

17   We are able to accomplish this culture shift by focusing on behavior

18   changes and process changes in a connected way. The behavior changes will require that

19   we will model constructive behaviors while also calling out instances where we fall back on

20   some of our more problematic behaviors. These process changes are -- are changes that

21   target areas where we need to make more fundamental changes to how we operate to truly

22   facilitate the behavior shifts that we want to see. At the agency level, we are targeting

23   behavior shifts that are consistent with our leadership model. They promote coaching and

1   empowerment, sharing different viewpoints, seeking innovative approaches, showing

2   mutual support, and brining our whole selves to work.

3   I'd like to take a moment to highlight the behavior shift that encourages us

4   to bring our whole selves to work, as it has become a unifying concept for the Agency in

5   recent months. When we encourage each other to bring our whole selves to work, we build

6   trust -- which allows for more connections and shared engagements with colleagues.

7   Bringing our whole selves to work means showing up authentically, leading with humility,

8   and valuing all of the unique characteristics and diverse backgrounds that make for a more

9   enriching and inclusive work experiences.

10   In these past few months we've been challenged with real world

11   opportunities that have helped us to better connect in more candid and authentic ways on

12   our journey to improvement. During the most recent social unrest that has affected our

13   nation, our agency rallied to create forums to have difficult, yet necessary, dialogues that

14   acknowledged the different realities that are often faced by members of our own community.

15   These forums allow for us to share authentic perspectives that often color our experiences

16   and contributions at work. This has been a learning journey for us, but one thing remains

17   true. When we can be our authentic selves, it builds trust. And we waste less energy

18   concealing important parts of our identities that add value to how we go about

19   accomplishing the mission.

20   Overall, these constructive behaviors are what we want to see and the

21   way we do business here at the NRC. Similarly, in order to institutionalize these desired

22   behaviors so that they become a way of doing business, we must embed structural

23   elements to further sustain these shifts. These process changes therefore amplify and align

1   our behaviors to help us achieve more desired outcomes. It is our intent to focus on

2   changing a few critical behaviors at a time, as well as process changes at a time, so as to

3   energize and engaged our most talented employees and enable them to collaborate more

4   effectively and efficiently. In this strategy we have outlined specific changes that we will

5   pursue agency-wide. But we've also empowered our individual offices and regions to take

6   actions at local levels, and to be catalysts for change. Next slide, please.

7   As we move forward on this journey, it will be essential to measure and

8   monitor progress at each stage of our efforts. Rigorous measurement allows us to course-

9   correct where needed, and demonstrate tangible evidence of improvement which can help

10   us maintain momentum. In order to monitor changes in our culture, we will evaluate agency

11   performance metrics that show the impact of culture on our desired outcomes. We will also

12   measure the critical behaviors that we highlighted to determine if we're making progress

13   with establishing our key constructed behaviors as expected norms.

14   Additionally, we will track key milestones in our improvement plan to

15   ensure that we take action and meet our commitments to implement and adopt process

16   changes. We will also use our employee surveys to continue to assess whether key cultural

17   attitudes are moving in the right direction. Ultimately, successful culture change will be

18   determined by our ability to reduce the gap between our ideal culture and current culture

19   over time. Next slide, please.

20   In order to sustain change, we will focus on fostering shared learning

21   through various forums. Some examples of how we would go about sustaining these

22   improvements include facilitating senior management team check-ins that provide or lead us

23   with a standing forum, and structured to reflect on how they are role-modeling constructive

1   behaviors as leaders. There will also be continued touch points between the Culture

2   Initiative Team and champions in offices in regions -- as well as other transformation

3   initiatives to ensure that they have the support they need for alignment and success.

4   We will also use designated forums to discuss the progress of culture

5   improvement efforts and share success stories so that constructed behaviors are adopted

6   more widely. And finally, we will continue two-way dialogues with management and Staff to

7   provide updates and get feedback on the implementation of improvement efforts. While we

8   make some changes on the journey to living out our ideals, it will be important to honor the

9   strengths of our existing culture by emphasizing the various elements of what makes us the

10   best of who we are. Next slide, please.

11   Before I close, I would also like to briefly acknowledge members of the

12   culture initiative team who represent a cross-section of offices and regions and bring

13   thoughtful perspectives that are reflective of our diverse subcultures across the agency.

14   Their tireless efforts and creative contributions over this past year has helped the NRC in

15   leading the charge to improve our agency culture that -- and to ensure that we promote a

16   work environment that truly reflects one of the best places to work. I will now turn it over to

17   Nader Mamish, who will provide an update on the Signposts and Markers Initiative. Thank

18   you.

19   MR. MAMISH: Thank you, Patrice. And good morning Chairman and

20   Commissioners. Thank you for giving me the opportunity to share with you the progress of

21   the Signpost and Markers Transformation Initiative. Next slide, please. The objective of our

22   project is to enable the agency to proactively address change by increasing awareness and

23   providing access to information about our external environment. By routinely collecting data

1   from reliable, internal and external sources on matters that have the potential to impact core

2   aspects of the agency's work and mission, we believe the agency can be better prepared for

3   the future and better able to make course adjustments as needed. The intent is to enhance

4   decision making during certain key activities such as the environmental scan, during

5   strategic workforce planning, by providing information about our external environment to

6   agency leaders. Next slide, please.

7   Our external environment is changing in a way that directly affects our

8   work. These changes may be incremental or more sudden, with varying degrees of

9   significance. Our ability to monitor and proactively address potential changes impacts how

10 effectively we can prepare for the future. This includes budget formulation, development of

11 the strategic plan, and/or environmental scans which impacts effective, strategic workforce

12 planning. Next slide, please.

13   The futures assessments provided a range of possible scenarios that

14 could represent our external environment in the next 30 years. It also cautioned us that we

15 need to remain aware of what indications exist for our external environment that show

16 whether the direction we're headed is likely to remain constant or to change. They call

17 these indications the signposts and markers of our future.

18   Our project used these signposts and markers as a starting point for

19 identifying key indicators for which data could be tracked on a regular basis to inform the

20 agency's decision making. Next slide, please.

21   Given our goal of providing information to our agency's leaders to enable

22 them to make informed decisions and prepare for our future, we set out to accomplish

23 several core tasks. First, we work to establish a set of key indicators to enhance the clarity

1   of the changing landscape for our agency. The futures assessment provided us 35

2   signposts that consisted of 100 discrete markers that we could monitor. Our team triage

3   these indicators to a manageable set that adequately displayed sufficient information about

4   the indicators most like to yield information about our landscape. Second, we worked with

5   OCIO to develop a dashboard to collect, analyze and display the data in the user-friendly

6   format. Today the dashboard is virtually complete and we will demonstrate it for you in a

7   few minutes.

8   Third, we considered what existing agency processes should incorporate

9   the review of these indicators to facilitate better informed decision making. This includes

10   existing activities such as the quarterly performance review, and strategic workforce

11   planning, budgeting and development of our strategic plan. Next slide, please.

12   So as you can see here, we identified 39 indicators in 16 categories. We

13   tried to balance information across business lines, like materials and reactors, as well as

14   leverage expertise across a number of offices. We also tried to have a good balance

15   between quantitative indicators -- that is data sets that we draw directly from existing

16   sources -- and qualitative ones that require assessment of factors by topical experts. To

17   standardize the data collection process, we identified reliable sources of information and

18   developed specific guidance for each indicator so that data owners have sufficient

19   information to periodically collect their data. Next slide, please.

20   So at this point I am going to turn things over to Jonathan Grieves who,

21   with the support of OCIO, was the chief architect of our dashboard. And he'll give you a

22   demo of the -- of the dashboard.

23   MR. GRIEVES: Thank you, Nader. So there's two products that I'll

1   demonstrate for you today. First is our user interface. So what we -- what we did was

2   create a separate page for each of our indicators. And I'll pull one up right now which is,

3   energy intensity -- the economy. You know, this indicator -- or these indicator pages

4   provide the point of contact from the office -- specific, you know, information on why we're

5   collecting that, why it's important, how we might think it affects -- it would affect our future.

6   So in this case, energy intensity -- the economy -- not only measures the degree of -- of

7   GDP growth, but also how that is correlated to the amount of energy consumption.

8   Obviously, which nuclear is a part of that.

9   It also provides specific instructions for how to collect that data, sources of

10   where they would go to get it, and then a very simple process. Our focus on this user

11   interface was to make it very low resource, you know, requirements for the future. To help

12   enable future, you know, use of the -- of the product. We also created a dashboard -- and

13   really our goal in the dashboard was to try and make it, one, versatile so that folks could see

14   data the way that they want to see it.

15   Generally I think of folks into two different groups. Folks that just want to

16   see the graphs -- want to see the numbers so that they can draw their own insights to it --

17   from that data. And folks that want an analyst to provide the insights. And we recognize

18   that analysis was already don't in the futures assessment. So we really created it in two

19   different ways.

20   So to start -- you know, I'll show you, we have our indicator pages. All 39

21   of those different indicators -- that 1.2 energy intensity of the economy is showing here

22   where we show not only the parts to that -- GDP growth, as well as total end use. But then,

23   what that energy intensity of the economy -- so what this tells me is that even though our

1 economy is growing, it's growing in ways that isn't necessarily, you know, drawing or

2 consuming a lot of electricity.

3 So what does that mean? We -- you know, again, there's 39 of those

4 indicators. And we tried to group them in logical means -- by topical area, by office. So in

5 this case, this tab has a number of both financial and demand side indicators. But if I click

6 over to, let's say Innovation, where we track both R-D and D funding in the electrical sector

7 from both U.S. and foreign sources -- levelized costs of electricity, which is basically the

8 cost to start up and operate different technologies -- provides some indication. Each of

9 these -- within the dashboard itself, you can click on them. It will pull up a description of

10 what that indicator is telling you. Might give some -- it will give some insights on -- you

11 could look at this indicator in conjunction with this to draw some insights out of it. We've

12 tried to make it very user friendly.

13 But as I mentioned, we also tried to create a dashboard that leveraged the

14 analysis that was already provided in the futures assessment. So we created the four

15 futures dashboard. So for example, that 1.2 I talked about where we saw that the economy

16 was getting less and less intense -- or, energy intense -- as we would see that over time and

17 how that projects on the -- the four futures, we recognize that that specific indicator over the

18 last ten years has indicated a drift down in our demand index. Now that's only one, and we

19 need to look at that as a collection of all the indicators. And we wouldn't want to focus on

20 any one, which is why we ended up with a series that adequately balanced across. So if I,

21 you know, un-clicked that and I look at all my indicators for 2019 -- and again, this is

22 zoomed in a little bit, so the changes aren't -- aren't overly large. But you can kind of see

23 the different indicators. I can click on them. See which one -- what that one is telling me. I

1   can -- you know, as I click on them see how that -- those indicators are changing over time.

2   Filter down by groups and really draw the insights out of what that's -- that's telling me.

3   Now what you can see is all of our indicators for 2019 are generally

4   grouped around the center point. That kind of makes sense. The futures assessment was

5   just done, you know, two years ago. So that's where we started. Our reality hasn't changed

6   all that much in a short period of time, and that's what it -- it -- you know, that's what the

7   indicators will be displaying. But we could look and focus down onto specific areas to see if

8   specific areas of our business are changing in ways that we might want to inform decisions.

9   And also look at an aggregate of those. Again, kind of -- you know, highlighting what I just

10   mentioned is that we haven't strayed too far from the center point based on our dashboard

11   information. And we expect that, as new years are added and data is collected year over

12   year in the future, we would see certain areas trend. And that would allow us to inform

13   decisions we're making in some of the key decision-making processes that Nader

14   mentioned.

15   Of course, if I put -- you know, what is that -- what are those insights? If

16   we do start seeing groups of indicators, or the collective marching off into one area, I can

17   just, you know, click and say -- remind myself, what did that future look like? Maybe even

18   do a visualize back to our displays in the RIC where we visualize what those futures might

19   look like. And that would help us to inform decisions that we want to make to hedge in

20   certain directions -- maybe make sure that we're prepared for what that future could look

21   like, and -- and -- you know, ultimately help make more informed decisions at a strategic

22   level. Now is -- that's how I wanted to demonstrate the dashboard. I'll turn it back over to

23   Nader. Thank you.

1   MR. MAMISH: Thank you, John. Next slide, please. We believe that

2   senior agency executives and policy makers will find value in the data generated by this

3   project in their decision making, including as I mentioned, previously integrating the data

4   into existing agency processes such as the quarterly performance reviews and strategic

5   workforce planning, budgeting and development of our strategic plan. Next slide, please.

6   Finally, I'd like to acknowledge the tremendous efforts of the Signposts

7   and Markers Initiatives team members in making this project the success. I know that

8   without their unwavering commitment to the project we wouldn't be where we are today.

9   Thank you for your attention. I look forward to your questions. And with that, I am going to

10   turn the mic over to Reed, who will provide you a briefing on using data analytics to improve

11   the Nuclear Reactor Safety program.

12   MR. ANZALONE: Thank you, Nader. And good morning Chairman and

13   Commissioners. My name is Reed Anzalone and I am a nuclear engineer in the Office of

14   Nuclear Reactor Regulation. And I am the project lead for a data project centered around

15   the reactor oversight process, known as Operation Rango which, I'll show you along with

16   several other dashboards later in the presentation.

17   I am pleased to be here to talk to you this morning about data analytics

18   efforts at the NRC, and more specifically about how we're taking advantage of data to

19   improve the Reactor Safety program. Next slide, please. So making full use of our data is

20   essential for us to operate as a modern business organization. Data allows us to make

21   better informed, better decisions, be engaged in more agile, faster decision making, monitor

22   our own performance in executing the mission -- leading to improved efficiency -- gain a

23   better understanding, and I would say more holistic view of our work.   And when

1   complimented by a comprehensive set of analytics and visualization tools, data allows us to

2   communicate better both internally and externally. And as I will discuss later in the

3   presentation, this is something we're already able to take advantage of for our reporting

4   responsibilities under NEMA and to our congressional oversight committees. Next slide,

5   please.

6   As Margie mentioned in her opening remarks, the agency recognized

7   several years ago that we had a lot to gain by better integrating existing NRC data, and

8   we've made great strides towards integration since then -- particularly for financial data.

9   During the futures, Staff also gave us great feedback about more specific measures we

10   could take to further integrate our data and make it more accessible. And since then,

11   transformation efforts have put a lot of energy into data at the NRC and our progress even

12   in just a short time since then has been exponential.

13   Right now, Staff from across the agency are actively partnering with OCIO

14   to develop and deploy data analytics tools that bring together our existing data sets, analyze

15   them, and allow the analysis results to be displayed. And the data warehouse, which is

16   here on the left side of the slide, is one of the most significant steps the agency has taken to

17   date towards improving our data analytics capabilities. It pulls quality data from

18   authoritative sources and makes it available to other NRC applications, including all the

19   dashboards I am going to be showing later in the presentation. The data warehouse

20   enables us to take advantage of data that's already generated as part of our routine work

21   processes. So we're always provided with up-to-date information with no extra steps for our

22   decision making.

23   Importantly, the data environment that the agency has built is flexible

1   enough to allow users to use the platform they're familiar with. Margie already mentioned

2   the agency's focus on Power BI and Tableau for dashboards, but it also supports tools for

3   more advanced analytics works like Python or R. And even Excel can access the data

4   warehouse.

5   The rest of my presentation will focus on dashboards created by the

6   Reactor Safety Program. But I wanted to mention briefly that there's a lot of work being

7   done in this area across the agency. As you just saw, Signposts and Markers is making

8   great use of data to give us this strategic look ahead. The Futures Core team also created

9   a dashboard to track progress within the futures initiatives. And OCFO, the e-billing

10 program -- which was implemented in fall of 2019 -- integrates several disparate fee

11 systems under a common platform to provide transparency to Staff and licensees on the

12 agency's fee billing and collection practices. Next slide, please.

13   So the Reactor Safety Program considers maximizing our ability to use

14 data through the development of data analytics tools to be a high priority. And as Margie

15 mentioned, we've had very enthusiastic support from our office director in NRR on that front.

16   We're developing tools to monitor and manage new and operating reactor licensing

17 performance and workload, help with budget analysis and assess reactor oversight data.

18 This work is being spearheaded and coordinated by EMBARK Venture Studio and Shaun

19 Anderson will be here in two weeks during the strategic program overview of the operating

20 and new reactor business lines to talk a little bit more about EMBARK and their goals and

21 priorities for data.

22   We recognize that actually integrating data into our decision making can

23 be difficult. But we've pursued a philosophy of, first, empowering Staff to build their own

1   tools so we can build data awareness within the Staff; and second, working with the

2   eventual end-users of data tools to get buy-in and make it easier for them to see the value

3   that can be added. Next slide, please.

4   So first I am going to talk a little bit about Mission Analytics Portal, which

5   isn't a single dashboard, but it's a growing collection of data analytics tools. The first phase

6   of MAP focused on licensing workload management. But we've also developed some

7   budget analysis tools that will help us demonstrate accountability in our resource execution.

8   MAP draws data from the data warehouse, and the MAP team worked

9   with OCIO to make sure that the data necessary for MAP visualizations was able to be

10   pulled from the reactor program system and other sources, including financial systems. And

11   as I mentioned a couple of slides back, this allows us to make use of the data that is already

12   being input by users as they go about their regular work and enables us to update the

13   dashboards in real time as new information is added. Next slide, please.

14   One great example of this is the dashboard that we have developed to

15   track and report on our open licensing action inventory. It provides a high level summary of

16   the open licensing action inventory, as well as our performance in completing actions

17   relative to our metrics. Previously this information had to be manually assembled from RPS

18   and other sources, taking a team of people days or even weeks each quarter to pull

19   together and verify the information. Now it's successful at any time and automatically

20   updated with no extra work required. We've also developed other dashboards to help

21   manage and track performance on licensing actions down at more detailed levels. These

22   dashboards replaced a multi-page Excel spreadsheet for tracking project status at workload

23   management meetings, and it made it significantly more efficient to identify projects that

1   merit additional attention from management.

2   Overall, the MAP dashboards have already improved our ability to track

3   our licensing action reviews, allowed us to manage them more effectively, and enhanced

4   our communications both internally and externally. Next slide, please. Moving on from

5   MAP, Staff and NRR's Division of Reactor Oversight have created several dashboards that

6   provide one-stop access to tool that allow trending and searching of operating experience

7   data. These dashboards consolidate several disparate operating experience data sources

8   including inspection findings, scram data, generic communications, and operating

9   experience data from INPO's IRIS database.

10   The Staff has future plans to incorporate risk information from the SPAR

11   models and the accident sequence precursor program, as well as a broader array of

12   information sources. Next slide, please. So here I am showing a screenshot of the OpE

13   Scrams Dashboard. And before I go into any more detail, this screenshot is like a month

14   old and hasn't been updated. But the actual dashboard has more up-to-date information

15   that shows a slight up-tick in scrams in the month of August. But that's not shown here on

16   this slide.

17   It provides a high-level summary of scrams this year, as well as trends

18   going back in time. On the bottom -- on the upper left there's a ten-year trend in scrams,

19   and you can see that it's generally going down. Though, as I said, there's a slight up-tick.

20   On the bottom left there's scrams broken down by month over time. And typically you can

21   see there are more scrams in the spring. And on the bottom right there's a breakdown of

22   the scrams by system over time. And typically the main contributors are main feedwater,

23   generator and turbine issues. But it varies over time.

1   And while I'm showing the OpE scrams dashboard here -- just for the

2   purposes of talking about it here at this presentation -- there are a lot of other dashboards

3   available related to findings, generic communications, and they've even developed a couple

4   of COVID-related dashboards. Next slide, please.

5   Finally I'll talk briefly about Operation Rango, which was my team, that

6   was sounded by the NRR officer director just before we closed our offices for the pandemic.

7   With the goal of democratizing the reactor oversight process data on the public website to

8   make it more accessible to the public and the Staff. The team developing the project is

9   composed solely of NRC employees from NRR, the Office of Research in Region 2. The

10   website provides a website of the operating reactor fleet's current status and an ability to

11   trend and compare site performance in the ROP over time. And now I will switch over to a

12   quick, live demo.

13   So you can see here, when you first enter the page you get a high-level

14   overview with the map of the U.S. with the operating reactor locations on it. If I mouse over

15   those, you get a little bit of detail about what is at each site. You can also see as I am

16   mousing over those -- maybe -- that the action -- their location in the action matrix is

17   highlighted. So you can see, this is the current action matrix status. And I should say, this

18   is all -- for quarter two. It hasn't been updated with the more recent information. You can

19   see which plants are in column one and which plants are in column two of the action matrix.

20   You also get a roll-up of all the findings -- inspection findings so far this calendar year.

21   So if I were to click on a specific site, let's say Brown's Ferry, it filters

22   down to the findings just for that site and highlights where it is in the action matrix. And you

23   can add additional sites to this to get a quick snapshot of where plants are. If I drop those

1   now, you can see further down on the page -- there's trends in the action matrix over time.

2   That can give you a good, high-level overview of our assessment of plants and how that's

3   changed in the past. And then we also allow visualization of performance indicators. And

4   right now this is where the plant selection really gets to be helpful because -- you probably

5   can't even see this at all. There's a ton of lines there on that plot, but if I -- if I go and select

6   a specific plant, and I swear I am not picking on Brown's Ferry -- you can see that trend in

7   this particular performance indicator, which is unplanned scrams over time. We can also

8   extend that back for a longer period of time. For as long as we've collected data. And you

9   can get a good overview of where the trends have been for that plant -- or a bunch of plants

10   -- for each performance indicator over time.

11   The -- as compared to the current ROP public webpages, which only allow

12   you to go back and look at the past eight quarters. Finally, I'll go down and look at

13   inspection findings -- and I'll get it back just to the recent history. And this allows you to look

14   at inspection findings. And you can slice and dice it in a lot of different ways. Right now this

15   is broken down by site and grouped by cornerstone, but you could also group by

16   significance. And you can see where -- if you wanted to look at just greater than green

17   findings. Or if you wanted to select a specific site again, you could select it. You can also

18   group by region, group by year. There's a lot of different ways to cut this.

19   Down below here, we have a chart that allows you to drill down deeper

20   into the data. So if you wanted to look at findings under mitigating systems, you can look

21   specifically at that and see the breakdown between significance and you can click on those

22   to get further into the details. And also that -- excuse me -- filtering chart filters this table

23   here, which provides access to the publicly available inspection reports.

1   So that is it for my live presentation, which concludes my remarks. And I'll

2   turn it over to Margie.

3   MS. DOANE: In closing I'd like to thank the NRC Staff for their efforts

4   coming with us in this transformation journey, as well as the presenters here with me today.

5   As well as the future score team and everyone that helped us coordinate

6   this. Including Cathy Haney, whose been leading this, the Office of the Executive Director

7   for Operations, Assistant for Organization, Alysia Bone, Aida Rivera and Jackie Storch, who

8   helped really pull these presentations together.

9   And then with that, Commission, I'm going to turn this over to hear your

10   questions.

11   CHAIRMAN SVINICKI: Okay, thank you very much, Margie. We'll begin

12   the questions today with Commissioner Baran.

13   COMMISSIONER BARAN: Thanks. Well, thank you for your

14   presentations. Your enthusiasm and hard work really comes across.

15   And there are a lot of exciting efforts here. The data analytics and

16   visualization, the operating experience, dashboard getting more and better reactor data on

17   the website so that the public can understand what we're finding and so that we can see the

18   trends in what we're finding over time. Developing external environment indicators to inform

19   long-term agency planning.

20   I think these are initiatives everyone can get behind. They're great.

21   Where we get into trouble is when we cut safety inspections to save money. So that being

22   a transformation or a risk-informed label on weaker oversight isn't going to make it a good

23   idea.

1   Transformation can't be about less oversight or weaker standards. It

2   should be about the things we're talking about today. Developing NRC's workforce, using

3   data better, adopting new IT and simplifying cumbersome internal processes.

4   And I think those areas of focus are what we should take away from the

5   IG safety culture survey. Let's face it, the results of the IG survey were grim.

6   Compared to 2015, the 2020 results declined in all 12 categories with

7   significant declines in nine of the 12. These were the largest year-over-year declines in the

8   history of the survey. I think there have been seven in the decades.

9   The IG report found that there were growing concerns. That NRC has

10 changed dramatically in recently years. And those changes are largely perceived as

11 negative. Two of the top concerns were the shrinking budget and talent management

12 weaknesses. Most NRC employees don't think the Agency has been doing a good job

13 recruiting and hiring people for its future needs or retaining our current talent.

14   NRC employees also expressed a real concern about reduced inspections

15 and weakening oversight.

16   Most employees think it makes sense to consider risk but they don't want

17 to lose, to see us lose our focus on safety. They are not as confident as they were in prior

18 years that safety issues are being appropriately resolved.

19   We saw a big drop in the number of employees who believe that

20 management decisions are consistent with our safety and security mission. I suspect those

21 employees are seeing transformation used as a buzzword to justify actions that could

22 negatively affect safety.

23   In today's presentation there was a lot of talk about alignment and desired

1 culture. And I completely agree that we want a culture at NRC that supports innovation,

2 creativity and collaboration.

3 But I worry that the language being used is sending the signal to Staff who

4 have substantive disagreements about some of the proposals for change that they just need

5 to get with the program.

6 Margie, I want to ask you about this. How would you respond to that and

7 are you concerned that the focus on alignment in an Agency desired culture could come

8 across as trying to make everyone think the same way?

9 MS. DOANE: Okay, thanks for that question, Commissioner. There is a

10 lot packed in there so let me start by saying that the culture survey also showed a bit of an

11 uptick, it wasn't much, but a bit of an uptick in Staff's willingness to come forward and tell us

12 about their differing opinion.

13 So I think that gives me assurance, while it was just a slight uptick, in

14 other years, that it had been going down and down and down. So that sees as a steady

15 trend, and maybe even a little uptick, encourages me that people will speak up. So that's

16 the first thing. We need people to express their differing views on these issues.

17 The second thing is, we make sure that every opportunity, included today,

18 I believe every single presentation, that we are always staying focused on our safety and

19 security mission while we are doing this.

20 Our culture, our safety and security culture is focused on our beliefs and

21 our set of behaviors that are moving us toward our strategic goals of ensuring adequate

22 assurance of public health and safety, common defense and security.

23 Our values haven't changed, our principles of regulations haven't

1   changed. Most of our behaviors we're not even looking at. Like, our behavior to be

2   independent or to not be promotional in some of these other issues.

3   We're focused on a very small set of behaviors that have to do with

4   receptivity to new ideas. And that goes with even thinking about risks since we have better

5   tools of analyzing this.

6   We've instituted a number of things to make sure we're going in the right

7   director. And that, even in those two things.

8   So for example, we have the be risk smart initiative, which is absolutely

9   focused on making good decisions. And it's already helped us.

10   So, those are a few ways that we're keeping focused, but we are

11   appreciative and we are working to have, you've heard through these presentations an

12   inclusive environment that gives us checks on this system.

13   COMMISSIONER BARAN: Okay. Well, when I heard some of the

14   language, and I, you know, in terms of, well, there are constructive behaviors and then there

15   are defensive behaviors. And the defensive behavior is one that says, I'm in favor of the

16   status quo. Well, no one wants to be in favor of the status quo, I mean, that just sounds

17   terrible.

18   But on any particular issue, let's say the issue is, I think there is a

19   proposal to reduce inspections in an area. The status quo position may be, no, I think we

20   should keep inspecting at the level we are.

21   If we're characterizing that as a behavior we don't want to see, you see

22   where I start getting concerned.

23   MS. DOANE: Absolutely. And so we talk about these as excessive

1   defensive behaviors.

2   And in our presentations to the Staff we always start out saying, these are

3   good things, as regulators, that we should have. But it was Staff who told us that, but in

4   excess, it prevents them from being empowered and from bringing in new ideas. And from

5   moving forward on issues that could be done differently.

6   COMMISSIONER BARAN: Well, I hope that's how it will be implemented.

7   When I looked at the IG report, one of the findings there was that leaders, and this is a

8   quote, leaders are aware of this fundamental view from employees that the new changes

9   may lead to increased safety risks.

10   However, leaders feel that these new changes are meant to make the

11   agency more efficient while maintaining safety standards, though they feel the point, that

12   that point has not been clearly communicated.

13   But I don't see this as a communications issue. There are a lot of

14   dedicated people in the agency who think it is a bad idea to cut corners on safety. They

15   understand what managers are saying about cutting inspections, and they just disagree.

16   And I do think part of the reason the scores are so low is that managers

17   are simply not listening to inspectors who thing less inspection is the wrong way to go. We

18   should listen to our inspectors and not try to align them around a set of troubling proposals

19   in the name of transformation.

20   But let me shift to something more positive because there is a lot of

21   positive here. In one area where there is healthy alignment is on the need to boost our

22   hiring and improve our employee retention.

23   Can someone talk a little bit about how the new nuclear regulatory

1   apprenticeship program network, NRAN program, is working out and how it differs from past

2   entry level hiring efforts?

3   MS. DOANE: Okay, so I think that question --

4   COMMISSIONER BARAN: It might be me. It might be you.

5   (Laughter.)

6   MS. DOANE: I'm not sure if any other friends want to pipe in, but you've

7   been working with them so you can add to it.

8   So, difference in a lot of ways. But the most, I think important way is, that

9   we brought the NRAN class in. Now, part of that's virtual, right? This wasn't our intention

10   but that's what we had to do.

11   But we brought the NRAN class in and they're staying together for a

12   longer period of time so they can build relationships and get one holistic look at the agency

13   to learn the regulatory craft. Both in materials and reactors, a lot of the principle documents.

14   And they're doing that together.

15   Before they used to be disbursed into the offices right away and then

16   come together. And it was not as effective. Sometimes they would come, sometimes they

17   wouldn't. There were all kinds of different challenges to that. So this is marked difference.

18   And it's been beautiful during this crisis, this public health emergency,

19   because they've been together with each other. Because they've been coming in.

20   Believe it or not they love their space. We've given them space where

21   they can collaborate. And have really taken into consideration the type of space that they

22   would be looking for, for this kind of a program.

23   And then finally, they're going to be going back into the offices in October.

1   And we've worked on mentoring with them and all kinds of different things to make this very

2   successful.

3   And we're doing the best we can under these circumstances to even get

4   them in person, in-person training and connections. But it has been a challenge, but that's

5   something that we're really focused on.

6   Diane Jackson is the branch chief, which is different. We've never had a

7   branch chief. She is completely focused on them.

8   COMMISSIONER BARAN: Great. And one of the areas where there is

9   some focuses, you know, over the years the Agency struggled, I think, with the concurrence

10   process often takes a long time to complete. Sometimes leaves people on the concurrence

11   chain uncertain about what they're responsible for reviewing.

12   What's the Staff doing to improve that process and how those efforts

13   coming along?

14   MS. DOANE: Okay, I'll take it at a high level, but of course we have the

15   executive here that's sponsored. And that is the sponsor for the program. So, do you want

16   to go first?

17   MS. VIETTI-COOK: You can go and then I'll follow-up. Whatever,

18   however you want to do it.

19   MS. DOANE: I've been doing a lot of talking.

20   (Laughter.)

21   MS. VIETTI-COOK: Okay. Okay, I'll give you a break.

22   Okay, so we put together this team of very talented people, first of all, that,

23   Tim Mossman is a branch chief in NRR, lead the team. And we had Jon Harrison who is a

1   black belt and lean six sigma.

2   And then we had people from all over the agency. OGC, NRR, NMSS,

3   that all came together as volunteers because there is a lot of energy around this.

4   So, we looked at the GM comments, all of the different forums. Had focus

5   groups, talked to leadership, all the different leadership. I mean, because it was actually a

6   concern for leadership, not just for Staff.

7   Went to other agencies. GSA was paperless before COVID so we had

8   some insights from them.

9   And we've been looking at this issue since 1995. We found an EDO

10   memo from 1995 talking about concurrence and giving some instruction of how we can

11   improve it.

12   So we tried to look at one of the most complex processes that we have in

13   the Agency, which is SECY paper development process. And we thought if we could

14   address it there, then people could apply it to maybe the lower tiered documents. Some of

15   the recommendations that we had.

16   So one of the first things we did was we looked, the lean six sigma that

17   was done in 2009 on the SECY paper development process was, it was really sound, but

18   Staff had tried to, had gotten, drifted away from some of the best recommendations in there

19   which was, to have the early alignment with the different stakeholders, all the way through

20   leadership, and to document it.

21   So that it was almost like a little contract between the product developers

22   and the folks so that expectations were very clear, execution was more easily done because

23   they knew what to, you know, it empowered them to do the job.

1   And when we say alignment we're not saying on the conclusions for the

2   paper, we're saying a plan of what to look at. And the idea is that you bring in people early

3   in that process so that you get all those views early on and you try to address them in the

4   paper at the front end, plan for, locate it as an option to either consider or reject. But that's

5   all documented.

6   And then you don't, so that when you get to the concurrence phase you've

7   already addressed those issues. I mean, that's the idea of, you know.

8   And then in the end you try to limit the number of concurrences for the key

9   individuals. But that doesn't mean you're cutting people out of the process. Like, you can

10   continue to give people information for awareness, for courtesy reviews. But you're not

11   holding it up for concurrence.

12   Now, if somebody did feel like, hey, I need to be part of the concurrence

13   process they can continue to talk to their, the author, the product developer. They can

14   continue to talk to their management.

15   If they're still not satisfied, they can still avail themselves to the different

16   views program. So we were very sensitive to that issue.

17   COMMISSIONER BARAN: Okay, great. Well, I went a little over on my

18   time but thanks for the update. Thanks.

19   CHAIRMAN SVINICKI: Thank you, Commissioner Baran. Next we will

20   turn to Commissioner Wright.

21   COMMISSIONER WRIGHT: Thank you, Chairman. This is a great

22   meeting and I, again, I share your concern that Commissioner Caputo is not here. You

23   know, I would love, I know we're going to hear for her input on it because I know she's

1   watching and she will share her feelings and her questions with us too, and I'm looking

2   forward to that.

3   Before I get into my questions, Margie, and to the rest of you, because,

4   one, you're awesome. And I've seen, I've had the opportunity to be with some of you and

5   some of your presentations, be through EMBARK or through the Innovate. And I've had

6   dialogues with you and so I know what you're doing and I'm very appreciative.

7   But I feel like I've got to address something right up front. I'm convinced

8   our people, I am convinced that our people know how to transform and how to innovate, I'm

9   convinced of it. I've seen it.

10   I know the value of empowering people. That, to me, empowering people

11   is a really good way to lead. Because if you empower them to do their job and you help

12   them do their job and to be successful, then you find success for yourself. And that's what I

13   think the agency is trying to do, and we're going to get there.

14   I don't look at it, at what we're doing, in anyway as trying to cut corners on

15   safety. I don't see that at all.

16   I do see that, I mean, just in something as simple as the ISFSI thing that

17   we were looking at a couple of months ago, we found that there is duplication. And if you

18   eliminate the duplication that's there, I mean, one, it's a better use of our Staff's time and

19   resources, right.

20   Yes, there is some economies there too, and that's a good thing. That's a

21   real good thing too.

22   And if there is overlap that doesn't need to be there we need to eliminate

23   it. So that's not cutting corners on anything.

1   I just think it's a more effective way of using our Staff and using our

2   people. All right?

3   And there is going to be other areas that we're going to have

4   conversations about this on. And in the transformation arena that is where it's going to, the

5   rubber is going to meet the road is going to be right there.

6   So I'm convinced that we've got 40 years of data and experience and the

7   data analytics that are there and what they're doing using through EMBARK and what you

8   guys are doing with the dashboards. It's incredible stuff.

9   And it's going to provide us opportunities to do better work in budget

10   execution space. It's going to allow us to do better job in inspections, it's going to allow us

11   to do better job in managing our projects wherever they're at. Licensing reviews, you name

12   it. Amendment reviews.

13   So I'm excited, and I know that the people can do it. So, I wanted to start

14   with that.

15   Your presentations were great. Again, it's exciting to see how you all are

16   doing everything.

17   And, Margie, I thank you again for your leadership in leading the charge

18   towards transforming. I mean, you're at the top and we look to you, and the Staff looks to

19   you. And then we look to support you in ways that we can. And to the Staff, I really love to

20   see the concrete ways the're.

21   And I don't just mean the leadership, I mean down in the trenches, people

22   who are doing the work. I want to see them sometimes sitting at this table. Or around this

23   table out here talking to us about what it is they're doing, what they're seeing. What they

1   thought going in and what they seeing coming out.

2   Did they see it the same way, did it happen the same way. I'm learning

3   that no, they have a different view sometimes, right.

4   So, at a high level, and you talked about some of the tools and stuff like

5   that, that's been mentioned. Can you talk to me maybe about how the Staff is translating

6   some of these new tools and processes and how they're using it in their everyday work right

7   now?

8   MS. DOANE: So, important, I guess we can pick any of these, but I think

9   based on some of the conversations coming here I think maybe one of the ones I should

10   concentrate on is, let's talk about the Be RiskSMART initiative for example, that I said, I've

11   already gone over we're using it all over.

12   But during the COVID situation, if you think about what we were faced

13   with, very quick decision making on very real safety issues, they applied it in their decisions

14   about the relief requests, exemptions. We also had to consider inspections.

15   And so, I give you an example from the inspection process, as it was

16   given to me as I was trying to give strategic oversight and make sure that we were centered

17   and going in the same direction. We divided inspections into two areas.

18   Inspections that would be bringing plants back into compliance versus

19   inspections that were routine. And for those that were being brought back into compliance,

20   even with relief or exemption requests or things like that, plants that were coming back into

21   compliance, our inspections, we put boots on the ground. We had some remote working

22   but we put boots on the ground. Those were different issues.

23   For routine inspections we had a little more flexibility. Some of them were

1 in, for example, a three year inspection cycle so we put them off.

2   So this is the kind of, and still stayed within the inspection cycle. Let's say

3 it was a three year cycle in year one, we could put it off but still maintain exactly our

4 inspection program.

5   So these are the kind of real life things you can do with the Be

6 RiskSMART initiative. You can, it's a common language. It's not new tools. We still use

7 the risk policy statement and other issues to make the decisions that reminds them of those

8 documents. But it's the common way of discussing it.

9   And it's an analytical framework to tell everybody how the decision is

10 being made. To have differing views come up and be resolved. So, that's just one initiative.

11   And they've gone out, they're getting ambassadors. It's a tremendous

12 effort. There almost, have so many people involved that they almost have a community of

13 practice.

14   COMMISSIONER WRIGHT: Okay.

15   MS. DOANE: So we are very focused on risks.

16   COMMISSIONER WRIGHT: Thank you. So, and again, you, and then,

17 Nader, maybe you might want to, maybe you can kick in on this too.

18   You know, Tuesday we talked about innovations in licensing and

19 inspection, enforcement and corporate support processes and stuff based on what's

20 happening with COVID, right, and how we're going about that.

21   Which is, again, another opportunity for us to innovate and to transform

22 and to see, be forced into do things we never thought we would be able to do. Or would

23 have to do. And we're seeing successes there, right.

1   Are events like the pandemic included in our sign posted markers and can

2   you tell me a little bit about, has our experienced tracked with what was expected or has it

3   been different?

4   MR. MAMISH: Are you referring to international or just in general?

5   COMMISSIONER WRIGHT: In general.

6   MR. MAMISH: Yes. I mean, everything --

7   COMMISSIONER WRIGHT: And to be honest with you, yes, international

8   too because that has been a big issue too.

9   MR. MAMISH: Yes. So, internationally, Commissioner, there is a great

10   deal of focus now by a number of nations. And in fact, IAEA working with our Canadian

11   counterparts and many nations, including the NRC, are looking at putting together some

12   kind of standards, international standards, for how we might deal with reactor material

13   issues in the post-COVID-19 environment.

14   So, a lot of the things that we, actions that we took here at the NRC are

15   going to be reviewed internationally. Many nations, frankly we were the only nation that had

16   prepared for laptops and prepared for pandemic the way we did. We were leading the world

17   in that aspect.

18   We're also going to be looking at how we conduct our international

19   program in the post-COVID-19 times. Do we have to attend every single international

20   meeting or can we do some of that work virtually? So that's another thing we're going to be

21   looking at.

22   COMMISSIONER WRIGHT: Thank you. Do you have anything to add?

23   Okay.

1   And I've only got a minute or so left, and I'm not going to be able to get

2   into the deep dive I'd like to get with Reed and Jonathan, but you know I've been a part, and

3   I've been watching what you're doing and I want to thank you. And if you have an

4   opportunity to chime in on the question I'm about to, please do, but it's going to be focused

5   more for Amy and Patrice.

6   I heard, earlier I heard the word status quo. And although that's a great

7   word, in a transformation arena sometimes that's not the best word. And I know, and the

8   way you were mentioning it you thought the same thing, okay, so I got that.

9   And innovation is big on everything we're doing. One thing that's

10   concerned me since I've been here is, and learned about the silos that had been within the

11   agency, we get a lot of great ideas that are being bounced around now, right.

12   And EMBARK has been a great area where these have been tested and

13   people are unafraid to come forward with that. I really like that, okay.

14   And I'm just concerned sometimes that they may not all be being shared

15   with the agency the right way. Can you tell me how you are working through that and how

16   you're adopting and taking those success stories to other parts of the Agency?

17   Do you all want to chime in on the last few, on the last minute?

18   MS. REID: Sure, I'll quickly, thank you, Commissioner Wright, for that

19   question.

20   One key approach to us managing our culture intentionally is really to look

21   at it at three levels throughout the Agency. We really have to look at it from the individual

22   level, the organizational level, but also at the group level that you're speaking to.

23   And having and fostering into disciplinary teams is really what's going to

1   get us to that diversity of thought, promoting different ideas, different viewpoints. And we

2   like to use examples like the Innovate 2.0 team to really spotlight what they're doing, what's

3   working, so that we can replicate that and scale that across the Agency.

4   So, that is one of our key efforts in the Agency desired initiative moving

5   forward is to look at opportunities where we can spotlight interdisciplinary teams and how

6   they go about fostering diverse discussions as well as different viewpoints. And then to use

7   those examples and designated forums to share those ideas of what's working.

8   We recognize that we're a unique agency and we like to compare our self

9   to ourselves. So, who better than to actually look at what's working for us and that we can

10   grow those ideas.

11   So we'll be using examples across the Agency. And to start with Innovate

12   2.0 as one of those examples.

13   COMMISSIONER WRIGHT: Amy?

14   MS. D'AGOSTINO: Thanks for the question. So, I think that the Innovate

15   2.0 has actually brought us a long way in sort of breaking down some of those silos. One of

16   the ways that we're doing them, that I've seen, just the success scaler be used.

17   So like I said, there were over 300 ideas entered on the day of the

18   Innovate-a-Thon and over 400 total. And I'll give you one example.

19   In NMSS they've taken a spreadsheet of all of those ideas, gone through

20   everyone and said, okay, what can we learn from the other offices across the agency that

21   we can adopt here at NMSS. Instead of recreating the wheel, right, they're taking a look at

22   what others have done and saying, okay, let's do this too because this seems to be working

23   for them.

1   And so, that's one way that we're breaking down the silos. We're sharing

2   successes and we're really capitalizing on the innovations of our colleagues.

3   Another thing is that before when we had the 16 different Innovation

4   panels and 16 different share point sites, right, that didn't talk to each other, we had the silo

5   issue continue, right. It was great that innovation was happening but it was happening in

6   the silo.

7   Now it's happening in one, a one stop shop in IdeaScale where it's

8   completely transparent. You can see every idea that's submitted, you can see the

9   conversation around every idea, you can see every comment that was made, how things got

10   processed.

11   And so, we're able to have the transparency. We also see the diversity of

12   thought. If an innovation gets implemented and someone is not in agreement, they can put

13   that comment in there. And it allows us to have that diversity of thought.

14   It also makes it a little bit easier, I think, for people to collaborate across

15   the, from the regions. With headquarters there is not that kind of barrier.

16   And also, it can be, everyone from our NRAN folks all the way up to our

17   EDO contributing on the site, which I think it really allows us to share all the, break down

18   those silos, break down those barriers.

19   And then in addition to that, I think the final thing is that we are doing this

20   program expansion where we're getting outside of just the EDO reporting offices and getting

21   representatives from every office that have, you know, because everybody has got a slightly

22   different viewpoint.

23   And so, we're ensuring that those people are coming into our community

1   so that we can share our different viewpoints and get to the most efficient solutions to some

2   of our bigger challenges.

3   COMMISSIONER WRIGHT: Thank you. Chairman, I'm sorry I went over.

4   CHAIRMAN SVINICKI: That's okay.   Thank you very much.

5   Commissioner Hanson, please.

6   COMMISSIONER HANSON: Thank you, Chairman Svinicki. And thanks

7   for the Staff for the presentations this morning.

8   The NRC has really been involved in, now in a multi-year journey to right-

9   size the Staff and re-engineer some of the business and regulatory processes. To adapt to

10   a, really a rapidly changing environment.

11   And that was all before the public health emergency. And I've just been

12   impressed so much with the flexibility and professionalism of the Staff throughout this whole

13   process. And even from afar when I was outside the Agency.

14   The NRC started to transform, it started using its transformation initiatives

15   really in the businesses processes side. And I think that's a great way to get moving.

16   And I really look forward to seeing how the lessons learned from that,

17   some of that business process work is going to influence our regulatory activities as well.

18   I was really pleased to hear Patrice's presentation about the importance of

19   Staff being able to bring their whole self to work. I think that it's critically important.

20   And I want to link that, I think explicitly or probe a little bit, that idea to

21   becoming a modern risk-informed regulator as we consider risk.

22   And, Amy, you touched on this a few minutes ago as well. The

23   importance of a variety of viewpoints, right.

1   Some of those judgments about risk are going to be quantitative

2   undoubtedly. But many of them are going to be qualitative based on the way people see

3   the quantitative information that we have.

4   And I'm just wondering if you could either, or both of you could talk a little

5   bit about culture change, importance of culture diversity linked explicitly to risk-informing our

6   regulations and our processes and the Be RiskSMART initiative?

7   MS. REID: Thanks, Commissioner Hanson, for that question. I can

8   definitely say the culture initiatives approach to really modeling and replicating the diversity,

9   fostering diversity of viewpoints is one in which that we will be looking to highlight into

10 disciplinary teams that I mentioned before. But also to equip them with useful strategies

11 that help to foster diverse ideas.

12   What comes to mind are some potential strategies that might seem just

13 simple in nature but is really powerful and effective. For example, just being able to observe

14 and model the groups that, the teams that will be using technics, such as simply asking, is

15 this the best question, I mean, is this the best answer to address certain questions with

16 regard to how we are risk-informing our decisions. Are going about, are risk-informing our

17 decision making.

18   There are four elements, if you would, in terms of how one would go about

19 that. It's really looking at it from four angles.

20   Have you covered the facts and analysis of that approach, have we

21 covered the human elements of that approach? But also, the other two parts about, have

22 we met the milestones and are really thinking about the big ideas that would really help for

23 us to holistically look at how we go about decision making in the risk-informed way.

1   Another approach, I mean, teams that tend to think alike really get to the

2   same solution quickly. And what we would encourage in terms of a technic that, you know,

3   interdisciplinary teams could use is to think about the next best. The next best option.

4   Because it then gives us an opportunity to really, to truly explore, have we

5   covered those impactful areas that really drill into the facts and analysis, the risk-informed

6   pieces that we may be missing when we're thinking alike. And also, that we're covering the

7   human element to it as well.

8   How is it going to impact the people, the stakeholders? Whether they're

9   internal or external stakeholders.

10   And then the big idea. Is there something that we may be missing? And

11   that kind of reflects, or goes back to the context or essence of, where I was going with the

12   status quo.

13   Is that, you know, sometimes we don't know what we're missing because

14   we're not exposed to a different perspective. Which is often reflective of those backgrounds

15   and the differing contributions that people bring into interdisciplinary teams.

16   So, I would pretty much say that those are two approaches that we would

17   use to really grow those positive, to encourage those constructive habits and to grow those

18   ideas.

19   And Innovate 2.0 is another example of how we would go about doing

20   that.

21   MS. D'AGOSTINO: Yes, and I would just offer that, one of the tools that

22   we highlighted today, the crowd sourcing tool, that's exactly meant for that purpose so that

23   anyone and everyone in the agency can contribute to a challenge that we're facing. Give

1   their view, their thoughts.

2   And that we can go through and look at, okay, what are we hearing from

3   most employees, where are some of the viewpoints that disagree with this, why do they

4   disagree. We can drill down on some of those things.

5   And anybody who is interested and motivated can contribute their

6   thoughts. One of the ways that we do that is through the resident inspector challenge,

7   right?

8   We got a lot of thoughts in there about how to look at in modernizing some

9   of our, some of the things around the resident inspector program.

10   And the interesting thing was, we got people from all over the agency. It's

11   not just the current inspectors, right. We got people who used to be inspectors, we've

12   gotten people from headquarters who have never been inspectors, might bring a different

13   viewpoint.

14   So I think that that's another way that we're able to do this. And it's tool

15   for that.

16   COMMISSIONER HANSON: Yes, thank you very much. I think that's,

17   that's very interesting as a way to bring in as many different kinds of voices as possible into

18   these things.

19   One of the issues you touched on was kind of institutionalizing change.

20   And as a former career civil service employee, one of the most concrete ways to

21   institutionalize change in the workforce is through the annual performance review process

22   and the appraisal process.

23   And I can see ways in which it would be very difficult to incorporate some

1   of these ideas into annual appraisals, but there might be other ways where it's completely

2   appropriate. And could you talk a little bit about that and how that might impact the Staff?

3   MS. REID: So, in terms of our culture change with regard to our desire,

4   moving in the direction of that ideal culture, we've identified that we need the structural

5   elements to include the example of incorporating some of these desired behaviors into

6   performance plans. Starting with our SES and our SLs.

7   And this really gives us an example, an opportunity for them to lead by

8   example. But for also to see how that works. And growing and learning from the different

9   challenges that may come in terms of modeling those behaviors.

10   It's great to have it on paper because it gives us that common reference

11   point. But I harken to say that the challenge would be for us to consistently live out those

12   ideals.

13   And this is where we have the opportunity to facilitate forums and

14   dialogues that gets us to sharing those stories about, how did we address this is a

15   constructive way, how did we coach and lead by example. And then learn from others in the

16   room who have faced some of the challenges to ensure that we are really practicing the

17   ideals, the behaviors, the values in concrete ways.

18   So we do have that set out in our plan. To really start with our SES and

19   SLs. And hopefully in the near future we can partner with the union to bring this to our

20   bargaining employees, as well as to expand this across the agency because change is

21   really everyone's responsibility, but it starts with the leadership and our leadership

22   acknowledges that.

23   MS. D'AGOSTINO: I would also add to that too that one of the most

1   tangible events that I say, and, Margie, you may want to comment on this as well because

2   you mentioned it before, were the workshops that happened this year.

3   We had the workshops for our senior leaders and then we had the

4   workshops for all the branch chiefs across the Agency. You know, while that's not

5   incorporated into their elements and standards currently, what it does do is it sets the

6   expectation for both our senior leaders and our first line supervisors to say, this is what we,

7   this is our expectation that you are contributing to innovation and transformation and

8   motivating your people and giving them, you know, empowering them to also bring, to bring

9   their innovative ideas and their whole selves to work.

10   So, Margie may have more to say on that.

11   COMMISSIONER HANSON: Okay. I was going to try and sneak in one

12   more question. But I appreciate that and I look forward to hearing more about it as we

13   come along.

14   Just real quickly here with the time I have left. We've heard quite a bit

15   about the risk-informed process exemption process and a couple of other higher point

16   initiatives.

17   But I was wondering if one of you could highlight one of the, another

18   example or two of ways in which our licensees are seeing changes as a result of these

19   transformation initiatives?

20   MS. DOANE: Do you want to go first, Jon?

21   MR. GREIVES: Sure.

22   (off record comments.)

23   MR. GREIVES: Great. Yes, I think one of the things I might highlight from

1   a regional perspective, we really focused quite a bit when the public health emergency

2   happened.

3   I think just to demonstrate, Margie talked about how that really showed

4   some of the diversitility, some of our technology adoptions, some of those things.

5   So in the beginning, even my resident inspectors, I have three plants so

6   three sets of resident inspectors at our sites, and very early on before it happened, started

7   interfacing with our licensees to say, how can we access information remotely, what can we

8   do to continue to do our independent oversight but perhaps not necessarily be onsite every

9   day.

10   So we spent very early on quite a bit of time engaging our licensees.

11   They were very receptive to that and very supportive of that. Giving our folks access.

12   It allowed us to maintain our independent oversight and engagement with

13   the licensee while at the same time not necessarily adding the risk of potentially exposing

14   them to what we may have. We looked at that.

15   And Margie talked about the kind of two different pools of inspection. So

16   looking at, when do we need to be on ground. And I think really just that line of thinking for

17   inspectors of, what am I going to the site to do today and why am I there, right.

18   And so, being much more thoughtful. So it's not really, it doesn't have

19   necessarily a negative impact on safety, it actually has a positive impact on safety because

20   we're much more thoughtful about what we're doing to make sure that we're going with a

21   purpose.

22   I'm not just going to be there to sit in my office and I'm going to review

23   documents. I may be able to do that at home, but I go to my site I'm going to be doing

1   something very specific with a very direct link to safety.

2   So that was just one example of, I think how our licensees may have seen

3   some impact of just how flexible and how we've been able to adapt in just really recently.

4   COMMISSIONER HANSON: Thank you. And thanks to my colleagues

5   for letting me run over a bit.

6   CHAIRMAN SVINICKI: Certainly. I think we all happily consumed a little

7   bit of Commissioner Caputo's time today.

8   (Laughter.)

9   CHAIRMAN SVINICKI: So if you're listening in, thank you very much, but

10   we will yield it back to you when you return very soon.

11   Thank you all for your presentations. And for me this is, we've just heard

12   from my colleague who is new and arrives with kind of a lot of first impressions about what's

13   going on here for me. We kind of bookend this because I've been here for a while.

14   I view transformation as just the most recent evolution of NRC's long

15   journey since its creation. And organizations go through a period of maybe less rapid

16   adoption of change.

17   But then there are just change accelerants. As I mentioned yesterday,

18   things like the pandemic, and I think it's very natural.

19   But I will share some reflections because I do have the benefit of going

20   last today so I was listening carefully to the presentation, so I was having my own reflections

21   about things that have happened here in the past.

22   And I was listening to my colleagues as well today. And my colleague

23   made a statement that there are a lot of dedicated employees who believe that reduction in

1   inspection hours is a bad idea, and I agree with that statement.

2   But I would hope that we would all agree that there are a lot of

3   equivalently dedicated and experienced employees here at NRC that think that there is

4   opportunity to look at various elements of programs and do that.

5   And neither of those employees is automatically right from being in one

6   camp or wrong from being in one camp. Until we get a chance to step back and look at it in

7   a really systematic way.

8   We're developing and investing in tools that help us do that. And I think

9   that that's a reflection of kind of starting where we are.

10   It's confused me in my years on this Commission when we talk about this

11   notion of, who cares about safety more than other people. And I said this, but I haven't said

12   it for a few years, so I'll bore everyone by saying it again.

13   I've never met a single NRC employee, whether it was like an in-depth

14   engagement over an issue or an open door policy meeting with me, or frankly even just

15   riding the elevator when we used to be all here meeting each other in the elevators, I never

16   met a single NRC employee that I wasn't completely confident that they are here because

17   they extremely devoted to the mission. In some ways it's kind of a, you know, I've worked a

18   few different places in government, and at state government.

19   I think the clarity and unity of purpose and mission here is one of the

20   unique characteristics about this place. And in a Commission, in an Agency where you're

21   led by a Commission, which is put here purposefully to model disagreeing without

22   impugning each other's motives on things, it's kind of curious to me that Agency Staff don't

23   kind of take that.

1   And they need to look no further than the Commission itself for purposeful

2   different perspectives being brought in to have, as Patrice was saying, that really rock

3   polishing give and take so that you have a strong confidence in integrity and outcomes,

4   comes from bringing that diverse perspective together.

5   I do worry when we reduce it to saying, I am going to kind of characterize

6   your motivate and seeking change or your motivate in resisting change. I think we need to

7   look carefully at not vilifying perspectives.

8   But it can be the cheapest form of debate, frankly. I think a lot of

9   American public is turned off by debate that says not, I'm right and you're wrong, let's have

10   a discussion about it, but I'm right and you're evil and that's the end of the discussion.

11   So, you know, we have a strength and culture here where I think we can

12   have those discussions. But we did need to focus on that. We had the, having difficult

13   discussions, training and things like that.

14   And we do need to look at the IG survey results and other survey results.

15   I know we take that very seriously.

16   Not only because we want to have the kind of culture that people enjoy

17   and that is where you want to be working, but it can have a negative effect on our

18   achievement of mission. And that's why we take it so seriously here.

19   So, I think that starting to look internally and beginning where we are, if we

20   can't work on our culture, and I don't know if Patrice knows this, but when we had the

21   Innovation expos a while back, as I wanted to spend equal time around the room I ended up

22   spending the most time with the culture initiative people just because I found it so

23   fascinating.

1   And I think it can be an enabler to beginning and having an opportunity to

2 swing for the fences on a word as big as transformation. I think we need to begin where we

3 are.

4   But that being said, I do think that the elements of what we're doing do

5 need to be visible to those impacted by the work we do. People outside of our organization.

6   I'm super excited about Operation Rango and I love that their bringing fun.

7   They got to name that themselves.

8   Reed was a classic nuclear engineer. I can say that as one to the other.

9 You brought a lot of kind of low-key description to it.

10   But it's exciting the word that you're using about it is democratizing

11 information about nuclear safety at reactor facilities. And I don't know if you've yet offered

12 even a virtual briefing to NGOs and other groups.

13   I know some of our very active NGO stakeholders in the nuclear safety

14 communities external to us would love, they have had to go through ML numbers, who was

15 mentioning that today, Amy, and fight with ADAMS and try to compile some of that.

16   I won't speak for them, but I can think of a handful of them that would be

17 thrilled to have something that made that so readily available to them. Is that something

18 that you intend to do, Reed?

19   MR. ANZALONE: We have talked to a couple external stakeholders and

20 we're continuing that engagement.

21   CHAIRMAN SVINICKI: Well thank you for that. And maybe it's, I know

22 you still have some of the tools somewhat in, maybe in beta, and you're working through

23 them but --

1   MR. ANZALONE: Absolutely.

2   CHAIRMAN SVINICKI: But I think it is an opportunity, and also then, as a

3   corollary, I don't think there's anything inappropriate about saying it will also manifest and

4   enhance transparency for the regulated community. Either through the billing and invoicing

5   systems or just an ability to come in and know what the status of submitted items is. There

6   is a certain amount of transparency in that. And technology.

7   One of the reasons, I know there's a lot of people against technology, but I

8   think technology, with the conductivity and just the openness that it brings, it really can

9   advance a lot of democratic ideals. That sounds a little high-minded, but I think it absolutely

10   can.

11   And the other thing to think about, it's been mentioned as an example

12   here a little bit about the crowd sourcing of the resident inspector experience.

13   I'm going to take some credit for the birth of that in a very odd way, which

14   is that, that having a very vital and healthy resident inspector program in terms of making it

15   a desirable job, having an entering workforce want to train themselves and apprentice into

16   and become resident inspectors, and eventually maybe senior resident inspectors, this

17   country, in my personal opinion, will never have operating reactors without their nuclear

18   regulator having resident inspectors. It's simply a principle that's been adopted. Not all

19   countries have it.

20   But I don't see it ever going away here. And yet we have had recruitment

21   and retention problems with that.

22   So the Staff provided some proposals to the Commission about how we

23   could further induce it and make it more attractive. And it was a little bit of different

1   perspectives, as I was saying on the Commission.

2   But at the end of the day I think that there was a central Commission

3   concern that all we did was take things we had done in the past and say, well, if we allow

4   the tours to be long let's allow them to be even longer. And what the Commission, in

5   rejecting some of those ideas, and what I said to the Staff was, if there is going to be a

6   resident inspector program in the year 2040 and the year 2050, it will not be attractive

7   based on the things you used in the past.

8   You can't take a program that has attributes of, the Mad Men era of your

9   spouse moves with you to a new city and she doesn't work and because you're obviously a

10   male working as a resident, it needed to have a whole, like, if you were designing it today

11   for 2050, what would be the inducements.

12   I think they include things like permanent and not just project-based

13   telework. But, I mean, those are my opinions. And if I have a few ideas I know that there

14   are a hundred better ideas amongst the NRC Staff because often we are kind of a mile wide

15   and an inch deep at the Commission level by nature of the work we do.

16   So, things like that really excite me. I think that is the way to solve it.

17   And I'm not going to put any kind of a, like a morale judgment on the

18   entering workforce of today. And again, we value and honor our skilled workers.

19   And Patrice talked about the fact that we look at culture, an important

20   element. And I think wrote down what you said was just honoring all the strengths of the

21   culture we have.

22   That's the other thing here is, at the Innovation expose I walked up and

23   overheard some NRC Staff talking about something. And somebody said, well, that's never

1   going to work because it never worked in the past.

2   And I think those are the kind of immediate defensive rejections of change

3   that we're talking about, that we want to challenge, that I think is appropriate to challenge.

4   But changing things is not a repudiation of those who came before.

5   It doesn't mean that the resident inspector's program was previously

6   flawed and who were the people who developed that, and they obviously weren't informed.

7   That doesn't mean it's right for 2040 and 2050.

8   And the Staff that wants to aim towards that, at our meeting on Tuesday

9   we heard about NMSS of the future. I mean, I think that's wonderful.

10   And I've gotten some suggestions very recently. Maybe I'll close on this.

11   But this is maybe a thing I shouldn't say. But the suggestion that to me was, why doesn't

12   the Commission, because the pace of your transformation isn't what something it should be,

13   why doesn't the Commission just grab up the reins and just direct this whole thing.

14   I will say that leadership can do a thing like that. I've not been supportive

15   of that because I think that by design, again, our Commission is to have these different

16   voices and perspectives that will come and go.

17   The Commission didn't, itself, think of and design the ROP to replace the

18   sell (phonetic). The Commission didn't itself, although it contributed to, come up with Part

19   52 and have the one-step licensing process.

20   These things are well formed and well propounded because they do have

21   all these perspectives. And when we want to have, as Margie said, so maybe I'll close with

22   this, she said that the African adage is: if you want to go fast, go by yourself.

23   The Commission could issue, by majority fiat, a whole lot of thoughts.

1 And to sit from its lofty perch and go, this is what 3,000 people need to be doing, and I have

2 such supreme knowledge, and I know that.

3   Or if you want to go far you will really kind of start where you are, work on

4 innovative cultures, work on organizational cultures, work on the sign post to try to make

5 sure that I view it not so much as you have debiting but you're like a sailboat. You know,

6 you're kind of going different ways and you're saying, am I drifting off and do I need to take

7 a different direction.

8   And you are developing these tools because technology gives that to our

9 Staff. And I think at a bare minimum what we can do is, let's not deprive the Staff of the

10 things that will make their job a lot easier.

11   And if those things can enhance public transparency and transparency to

12 the regulated community, that may be in all the more kind of benefit, or gravy to it.

13   But that was my long, and so, Commissioner Hanson, welcome to the first

14 of my 11 and 40, 11 minute and 40 second homilies, but sometimes I just, I listen and then I

15 have things to say. So, I don't know that there was a question in there for anybody. Reed

16 got one question.

17   But again, I appreciate all of the work you're doing. I just kind of wanted

18 to share some observations. And I thank your Commission, to a person, is definitely

19 cheering you on in terms of what you're doing.

20   I do think that it best resides with you. There are things that the

21 Commission does need to decide that you come up with.

22   But I don't think we can take the transformation and just drive you all to it.

23 So, with that, I will at least pause and ask if any of my colleagues have any remarks they

1   would like to make?

2   Okay. Again, thank you all. And thanks for a great meeting. And the

3   Commission has been wanting to have transformation focused meetings at intermittent

4   periods. I don't know when we might.

5   As we caucus think that it would be best to have another one, but I would

6   suggest, certainly at some point in the new year I think it would be ripe and the Staff's

7   activities would have produced, again, a good quantity of things to talk to us about.

8   So with that, all, thank you again. And we are adjourned.

9   (Whereupon, the above-entitled matter went off the record at 11:53 a.m.)